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ERRATUM IN No. 38.

Page 558 (a), line 33, for "Maloczzi," read "Malvezzi."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Tuesday, November 15th, and advertisements should be sent in by the 9th.

NOTICE.—The Offices of the Academy *have been removed to* 14, Henrietta Street, Covent Garden, *whither all communications for the Editor, Advertisements, &c., should be sent.*

OUR FIRST YEAR.

The end of our first volume, and the beginning of another, present a convenient opportunity for considering 1. What were the objects which it was hoped to attain by originating a new periodical? 2. How far have those objects been, how far may they in future be, attained by the Academy?

1. The Academy was set on foot in answer to a widely felt and constantly expressed dissatisfaction with the existing organs of literary and scientific criticism. A critical journal was demanded which should neither praise indiscriminately nor blame from pique or prejudice; one on which the general reader might rely for guidance through the waste of superficial and ephemeral literature by which he is surrounded and through which he has neither the time nor perhaps the ability to guide himself; a journal which should systematically survey the European literary and scientific movement as a whole, and pass judgment upon books not from an insular, still less from a partisan, but from a cosmopolitan point of view; a journal, lastly, in which only permanent works of taste and real additions to knowledge should be taken into account, and in which the honesty and competence of the reviewer should be vouched for by his signature.

2. Of the quality of the criticism which has appeared in the Academy it is the part of others rather than becoming in ourselves to speak. But the circulation which the periodical has attained in this country, and the recognition which it has met with throughout the European world of letters, have, we honestly confess, exceeded our most sanguine expectations. The Editor makes this statement in no boastful spirit, but rather with a feeling of gratitude towards those many eminent men both in this country and abroad, whose willing and sympathetic assistance has rendered such a result possible.

There is another object at which we have earnestly aimed. In accordance with our original plan, we have reviewed the most important theological literature of the year, Catholic, Anglican, Protestant, even Jewish and Mohammedan, in a spirit of complete neutrality. We have offered no opinion as to the truth or falsehood of religious belief, or of any form of it; not because we are indifferent to these questions, but because we considered from the first that we should be performing a more useful part, by quitting the arena of religious polemics, and treating theology purely as a branch of learned literature. That we have not altogether failed in our effort to combine complete freedom of statement with tenderness towards the feelings of every class of believers, may be gathered from the approval with which the Academy has been received by the whole religious press of this country, ranging from the ultramontane *Tablet* on the one hand, through every phase of Anglican or Protestant opinion, to the *Jewish Chronicle* on the other.

Before leaving this point, it may be well to touch lightly on a delicate subject, on which, had it not been open to misconstruction, we should have preferred to be silent. It is this. We have felt it to be our duty to the public to transfer the publication of the Academy to a new firm. This change, while carrying with it the obvious advantage of greater facilities of communication with the Continental world of letters, has really grown out of our theological position. Mr. Murray, to whom the Academy will always be indebted for its introduction to a wide circle of readers, did not call in question the fact of our theological impartiality, but disapproved of it. The Editor, on the other hand, felt that the adoption of the theological principles of the *Quarterly Review*, or of the organ of any given class of the English public, would have involved the surrender of one of the fundamental characteristics of the Academy, one, too, which we had pledged ourselves to maintain. Under these circumstances, Mr. Murray has come forward in the most honourable manner, and offered to resign all his interest in the copyright of the Journal. Holding the principle at issue to be an important one, we have accepted his offer: and we now bid him, not ungratefully, a courteous farewell!

One most unmistakeable sign that the Academy has supplied a want, is the general outcry for its enlargement. To this appeal we give a hearty response. The Academy, as it exists at present, is merely the germ of that which we hope it will become. During the past year we have made it our first duty to establish our competence to treat of those weightier matters which had hitherto been most neglected by English critics. But the purely scientific portion of the Academy being now completely organized, we shall concentrate our attention during the ensuing year on the best means of meeting the wishes of those, who desire a more authoritative organ of criticism than has hitherto existed upon the Fine Arts, and a variety of other subjects of more general interest. Hitherto this department has occupied but one-third of the whole Journal. So soon, however, as the present exceptional depression of the book-trade both at home and abroad shall have ceased—if possible at the beginning of the new year—we intend to publish a number of the Academy every fortnight, and without diminution of our scientific departments, to devote one-half of each number to General Literature. Amongst the new subjects which we hope to introduce, will be Old English Literature; Geography and Travel; Biography, Letters, &c.; Music, Painting, Architecture and Sculpture; Law and Political Economy; as well as some branches of Natural Science which from want of space have been hitherto neglected.

The extension of our space will also enable us to attend to another suggestion, by providing even in our more difficult articles such explanations, that the unlearned reader may derive some instruction from at least a portion of them.

In thus acceding to the wishes which have been so largely expressed, we are developing a new phase of our programme, whilst maintaining in the strictest integrity that portion of it which has been already accomplished.

Editor.

General Literature and Art.

The Mystery of Edwin Drood. By Charles Dickens. London: Chapman and Hall, 1870.

Just as we are warned not to call a man's life happy till we know the manner of his death, we should withhold our final judgment on a writer till we have been enabled to

compare his last work with his first, and both with his greatest. With men of real genius, and, of course, in the case of others the experiment is not worth trying, it is possible to trace all their successes home to some inalienable mental quality, which, through old age and exhaustion, will still maintain the same proportionate importance amongst other faculties. But a weakness in disguise, or a merely fortunate trick, is sure to be discovered and condemned, when, from indolence or habit, the author repeats it once too often, and the original indulgence is then felt to have rested on insufficient grounds. To take the most illustrious instance possible: whilst Goethe was in his prime, it was natural to suppose that the mystifications, which he sometimes prepared for his readers and disciples, had a deep purport to be disclosed in his good pleasure; and people like Diogenes Teufelsdröckh guessed his riddles with more or less ingenuity and good temper, until the encroachment of the spirit of obscurity in the last part of *Faust* and *Wilhelm Meister*, gave credit to the idea that he was only oracular when he did not see clearly himself. It may be replied that when he did not see clearly it was that he had withdrawn to a distance from which he had a wider view; but the illustration will serve to shew in what sense it is fair to fix an author's merits by the degree of resemblance between his best works and his comparative failures—resemblance, not in plot or subject, but in methods or sources of effect.

Dickens's vast and wide-spread popularity has not prevented the question from being raised, whether he had a genuine talent, or were only a skilful master of the machinery of burlesque. The answer lies in the fact that his last books have sentences and sometimes whole scenes equal to anything in his first, and that with him the difference between worst and best is only that between the more or less frequent exercise of a pleasant power, not between power and failure. And yet the doubt is not quite unreasonable, for though we may be certain that Mrs. Gamp and the Wellers are truly comic characters, and may be expected to endure as such, Winkle and Captain Bunsby and the like are on a different footing, though they are scarcely less popular with the mass of readers. They are invented to do what we may call the comic business, and they are often dangerously near the borders of conventional farce. Their escape, when they escape, is due to the double character of Dickens's humour, which has a realistic as well as an imaginative side. Not only is every grotesque incident doubly grotesque to him, but he has the power of setting forth the image in his own mind with such vivid detail, colour, and perspective, that his picture, though neither real nor possible, must, in defiance of nature, be described as life-like. It is these personages, invented with reckless fertility, who make his books a populous world apart; their whole existence is traced out before us, Balzac could not be more minute in describing their clothes and the furniture of their houses; to all outward appearance they live and move, they certainly make jokes, and their death seems sometimes to claim a tear. That they are altogether fantastic and absurd does not of itself affect their right to exist, and it is a remarkable triumph for their creator, that after a few hours in his low-life fairyland they seem as real and as much in accordance with the eternal conditions of human existence as the most commonplace characters of a conscientious middle-class novel. They do not exist, but we are at a loss to say why they shouldn't exist; and while we debate the question, they *do* exist, causing people of all ages and countries to laugh a cosmopolitan laugh of simple amusement, at figures which are no more unreal in one country than another.

Had the manufacture of these oddities been merely a matter of professional dexterity, the illusion would have failed sooner or later, and we should find a grotesque mask instead of a plausible dream; as it is, even so poor a character as the Angular Mr. Grewgious in *Edwin Drood* must have been a reality to the writer before he could be endowed with so many qualities and idiosyncracies; even the misuse of capital letters in his service, indicates a forlorn hope of conveying by mere emphasis to the reader's mind what was already superfluously plain to his companion's. Lower than this Dickens could never sink, nor, on the other hand, could he rise higher than Sam Weller and Little Dombey, for whose mental and moral shapes he performs exactly the same feat that we have described in his dealings with external eccentricities. Here it is that his imagination works most freely and abundantly, and here his greatest triumphs have been attained; but to throw into relief what he has done, we must remember what he never did, and never could have done. He was entirely incapable of describing or representing the inner nature or development of any character that he had not built up limb by limb for himself; and as he never happened to frame an ordinary mortal, those he intended for such were either entirely colourless, or a standing monument to his independence of aid from nature.

The Mystery of Edwin Drood may either be the subject of speculation as a novel, or of study as the last fragment from his fertile pen. In the first respect there are signs of a more carefully-designed intrigue than in most of his earlier works. John Jasper, opium-eater, music-master and murderer, is a villain of the melodramatic type, who is in love with his nephew's betrothed, and arranges, months in advance, how his nephew shall disappear and another young man be suspected of the deed. He has strange mesmeric power, and a remarkable gift of rehearsing in his visions, before and after the event, the crime which we are given to understand he has committed. As in Wilkie Collins's *Moonstone*, the mystery is evidently to be explained by the principal actor in a trance, and a mysterious woman who keeps an opium-shop for Chinamen and Lascars, lies vindictively in wait to betray him. It would be in vain to speculate whether Edwin Drood would have turned out somehow or other not to have been murdered, in spite of such omens as a heap of quicklime to consume his bones (p. 90), a black scarf of strong close-woven silk to throttle him (p. 112), and all the dreadful things that were evidently done while Durdles slumbered, and perhaps Deputy watched, on page 94. The solution of this problem was evidently reserved for the sagacity of Mr. Datchery, agent doubtless of Mr. Grewgious, seconded by the still unexplained animosity of the opium-seller. But Dickens was never very particular as to the possibility of the means by which his characters were made happy towards the last number, and for aught we can tell to the contrary, half-a-dozen principal contributors to the dénoument may have remained uninvented when the work was cut short in the middle.

Of the other personages, some have their individuality defined for them by mere outward accidents, as Edwin Drood by his testamentary betrothal, and others fall naturally into one of the many classes into which Dickens's shadow-world is divided. The charge of sameness and self-repetition in this respect, which is sometimes made against him, is rather unreasonable, for if we try to recall—it is no trifling task—the list of dramatis personæ in his collected works, nothing is more striking than the number of types it contains, except the distinctness of the several individualities which fall under each. In both respects nature is rivalled and in one way surpassed; for though five hundred persons selected with a due regard to variety might, in real

life, be as distinctly known apart as the same number of Dickens's most circumstantial inventions (a number easily made up), yet it is barely within the limits of possibility that a human author should delineate them *as they are* so as to give a complete and distinct idea of so many separate existences. Granted that Dickens represents them as they are not, painters have been proud of the title of "Nature's Ape," and if we take the words seriously, it is perhaps the fittest that could be given him. Whilst the impostors of real life pass half-hidden in the crowd, his Pecksniffs, Barnacles, Bounderbys, and Chadbands, with their absurd grimaces and wild contorsions, are mere caricatures; and yet their monkey-gestures are only the outside exaggerations of what we know must be passing in the mind of any humbug who is so successful as to have concealed every sign of his profession. Mr. Honeythunder, a philanthropist, is the contribution to this class in *Edwin Drood*, but he is brought in rather from the exigencies of the story than for his own sake, and some of his harangues look like padding. Besides a whole gallery of hypocrites, Dickens has favoured us with numerous personifications of cast-iron unamiability, such as Mr. Murdstone, Mrs. Clenham, and the rest, and with numerous personifications of jovial benevolence, sometimes in a whole family of Toodles, sometimes in a corpulent couple like the Boffins; aggressive with Mark Tapley, and latent, it may almost be said, with everybody who is not provided with some other leading and incompatible peculiarity. Mr. Crisparkle, in *Edwin Drood*, is the representative of this amiable fraternity, and he is also an amusing instance of Dickens's instinctive avoidance of commonplace possibility. What can be more natural and familiar than the idea of a private tutor, clerical and muscular, bathing, boxing, and exercising beneficial moral influence upon his pupils? and yet, whether because of his name, or his mamma, or the airs of unworldly wisdom with which he is invested, or some still less tangible reason, the good Minor Canon is no more like his supposed original than Dickens is like Miss Austen.

Then there are whole professional classes which Dickens has created over again, touching up the handiwork of nature where she seemed to have left life too dull a thing to laugh or cry at. The coachmen and ostlers of *Pickwick* are passing away, and the sailor on shore, here represented by Mr. Tartar (a gentleman who, for some inscrutable reason, prefers cultivating scarlet-runners in the city to taking possession of his property), always seemed to us the most mechanical and uninteresting of the author's fancies; but his landladies are admirable, and the sexless Billickin is a worthy successor to Mrs. Lirriper. This worthy's name suggests another class in which he excels, the ladies, namely, who express themselves incoherently, and lest Dickens's fertility in this direction should be perverted into a charge of self-imitation, it is fair to point out that in no case does this amiable weakness form the whole of a character, or else how should we distinguish Mrs. Gradgrind from Flora Finching, *née* Casby? There are many excellent people in real life whose names suggest first and principally the idea of discursive conversation, though they may have no other quality in common; and variety within variety is even more universally the rule with the novelist. Impecuniosity, or the Micawber or Skimpole type, does not appear in *Edwin Drood;* pompous imbecility is represented by Mr. Sapsea, an auctioneer; Miss Twinkleton represents the single ladies of a certain age whom we know so well, sometimes acid and sometimes mild, but always at feud with the nearest matron, who is also sometimes acid and sometimes mild. It is not to be expected that in the first half of a book, which was to be one of its author's shortest, we should find many of his favourite guardian angels of humble station, who are always ready to rush about in an unpractical way setting to rights impossible wrongs. There are no studies of insanity, nor any representatives of a particular abuse to be demolished; for love and opium-smoking, the principle motives of the story, cannot be compared with Bumbledom, Education, Chancery, Debt, and the other Giants who have been wounded with a drop of ink from his pen. The heroes and heroines are perhaps a little weak in drawing, except Rosa who quarrels and eats sugar-plums bewitchingly; but this may be because they attempt to be ordinary young men and women, whilst Dickens's forte is the extraordinary. It is certain that the only successful studies of character he has made are those which have been inspired by an abuse, and are a half-personification of its action and influence, like the Father of the Marshalsea or the younger Jarndyce. Durdles again is of the old comic breed; the imp known as Deputy seems too acute and malicious to have grown up in a cathedral city, but he might have been taken for a sketch from nature if it were not for his hobgoblin game of Wake-cock warning. It is not easy to say why such whims of the imagination are amusing, yet in virtue of them Dickens is to the Briton exactly what a story from the *Arabian Nights* is to the Oriental; it is the invention of a single man against the memory of a generation of grandmothers.

On the whole *The Mystery of Edwin Drood*, viewed as a fragment, shews little falling off from the writer's second-best works; the unfortunate cause of its fragmentary form lends it a peculiar interest, and we welcome these new actors the more because they are the last who will join the company. But after assigning them their places, there is room for a word on the moral and intellectual atmosphere which pervades and surrounds them. The first thing that strikes a reader of Dickens is the absence of all familiar boundaries and landmarks: class distinctions are ignored or obliterated; different ages and sexes assume the prerogatives of their opposites; people transact incongruous business in impossible places; and with it all there is no apparent consciousness that the social order is confused and inverted. It is still more curious to watch this levelling tendency applied to matters of intellect. Dickens has a positive affection for lunatics, and with the exception of the favourites to whom he lends touches of his own imagination, a vast majority of his characters are born fools. In his queer world they fare none the worse for this; they cluster round one delusion or another, and defend it with just as much formality as if they were reasoning beings, and it almost seems as if, *cæteris paribus*, he preferred the thought that travelled by a crooked lane. The only light in this chaos is what falls from a few moral axioms concerning the duty to our neighbour, and these are of such universal application as to be rather indefinite. In such books as *Dombey* and *Martin Chuzzlewit* we seem lost in a millennium of illogical goodwill, in imagining which, no doubt, Dickens was principally influenced by his natural humour. But the only approach to an opinion on things in general that can be gathered from his works, is derived by implication from his moral system. The world, we are given to understand, would be more amiable than it is, and could not be more absurd, if the virtues of Mr. Toots were universally practised. This is by no means a bad position for a humourist to occupy, for though we may have our doubts as to what makes Dickens's characters so much more laughable than life, it is something to have extracted the maximum of amusement out of innocent and even admirable eccentricities.

H. Lawrenny.

Political Ballads and Poems of Germany. [*Die historischen Volkslieder der Deutschen vom* 13. *bis* 16. *Jahrhundert*, gesammelt und erläutert von R. Liliencron. Auf Veranlassung und mit Unterstützung seiner Majestät des Königs von Bayern Maximilian II. herausgegeben durch die historische Commission bei der königl. Academie der Wissenschaften.] Leipzig: F. C. W. Vogel, 1865-1869. Fünf Bände.

It would be superfluous to insist here upon the very great importance of political ballad-poetry and popular songs. That the multifarious value of compositions of this kind is amply recognized, appears from the numerous collections or fresh editions of them which have been recently undertaken in England, Sweden, Denmark, and Germany. Of all those which have hitherto appeared, the one before us is the most comprehensive: although extending only to the middle of the 16th century, it contains 623 pieces, and that without including the Church poetry of the Reformation, which would have belonged to the last period of the collection, but that Liliencron intends to make separate use of it hereafter. This abundance of material is sufficiently surprising, but it is explained not only by the productivity of an eventful time (about 370 pieces are concerned with the interval from 1506 to 1554), and by the circumstance that Switzerland and the Netherlands—and therefore the songs of those countries—then belonged to Germany; but also by Liliencron's having included in his work certain rhymed pieces (Spruchgedichte) which were never intended to be sung. In answer to criticisms on this score, he observes that poems of this class undeniably form part of the material which he had undertaken to collect, though they have the effect of making the title "Popular Songs" unsuitable to the collection. "Political Poems of the People" would be more accurate, but on the whole, he preferred the familiar name. The same view was taken by Hyltén-Cavallius and George Stephens, who admitted several pieces of this kind into the *Sveriges Historiska och Politiska Visor* (Örebro, 1853), an excellent collection, of which, unfortunately, only the first volume has as yet appeared.

The only two qualifications for admission into this collection are, therefore, that the poem under discussion should have sprung up amongst the people or the itinerant poets of the people, and secondly, that it should be of the same date as the occurrence it commemorates; whence it follows that pieces of later origin, composed by the help of chronicles or such like authorities, are, with few exceptions excluded. Similarly, only those poems of a narrative form are admitted which were composed under the impression of the moment, and aim less at narrating and describing than at influencing the popular mind by a coloured and more or less partial account of events. The collection closes with the year 1554, the date of the last events of the first religious war in Germany, forming thus a complete and satisfactory whole; for there already exist abundant collections for the period of the Thirty Years' War, although the political poetry of this as of the intervening time has a character of its own.

In the songs and verses of these three centuries, we see how the people of the time expressed the feelings and opinions which each fresh occurrence called forth from the exhortation to union addressed to Berne and Friburg in 1243, and the battle on the Marchfeld (1273) in which Rudolph of Hapsburg laid the foundation of the greatness of his house, till that battle of Sievershausen at which Maurice of Saxony, the author of the Peace of Passau, was slain 1553. Amongst these, to take a few of the most familiar points, we find songs from the time of the frightful Hussite wars, of the Swiss struggles against Austria and Burgundy, of the great peasant war, of the Munster Anabaptists, of the first siege of Vienna by the Turks, of the war of the Schmalkald league and its consequences down to the treaty of Passau. Here we can trace the struggles between the towns and the princes, and within the former between the patricians and the guilds; here too we are met by those mighty burgomasters of the free imperial towns, who so often played an important part, like Schwarz and Herbrot in Augsburg (1477 and 1548), Waldmann in Zurich (1489), and more particularly Wullenwever of Lubeck (1534), the area of whose influence extended far into the North of Europe.

It is evident, from the first glance, that the work before us is as important as it is attractive, and the merit of the editor is not less conspicuous in the manner in which he has carried out the honourable task which has fallen to his share. We must call to mind the long and laborious researches (involving the help of many experienced assistants) which were necessary in collecting materials scattered through public and private libraries, and sometimes entirely lost sight of, which then had to be sifted, arranged, and subjected to philological criticism. In addition to this, the editor was aware that the complete enjoyment of poems of this kind was impossible without previous knowledge of all the circumstances of the time which gave rise to them; and he has accordingly prefixed to each poem an explanatory introduction of sufficient length, whilst for points of detail, verbal explanations, and various readings, the student is referred to accompanying notes. As all this has been done with the greatest care, the most minute knowledge of the subject, and the most extensive learning, it can easily be imagined what an amount of labour Liliencron has bestowed on this extensive work. The same consideration explains how here and there a trifle should have escaped his notice, or an inaccuracy have been overlooked; as when he explains the expression "Kunst noctoria" by the non-existent "ars unctoria" (i. 239, No. 50, v. 653), when what is meant is the "ars notoria," for which see my edition of *Gervasius of Tilbury* (Hanover, 1856), p. 161; or when he does not observe that "Grippe" (iii. 39, No. 261, v. 105) is the Italian "grippo," cf. Spanish "gripo," or when he transfers the "Kneiphof" (iii. 517, 36) from Königsberg to Dantzig. These, however, are trifles, and there is only one point on which I want to dwell a little longer, the song, namely, exhorting Berne and Friburg to unity, which is referred to the year 1243, because of the alliance then concluded between those towns. It is related, in an allegorical form, how two oxen had made themselves sole masters of a clover-field, and had compelled all the other beasts to remain at a distance from it. These, however, and especially the wolves and the foxes, endeavour to disturb the good understanding of the oxen in order to overcome them separately, and thus take possession of their pasture-ground. The author of the poem, on the other hand, warns the two oxen ("Es ist Friburg und Berne") against these suggestions, as they are able to resist all attacks whilst united, but would succumb separately. This song has been printed more than once before, but neither Liliencron nor any one else has yet remarked that it contains an allusion to the eighteenth fable of Avianus, which tells of four oxen, whom the lion first disunited, and then overcame. Boner has modified this fable in his collection (No. 84), retaining the four oxen, but making the lion into a wolf. He was a native of Berne, and wrote in the first half of the 14th century, and it is by no means improbable that the author of the poem under discussion may have borrowed his allegory from Boner's fable; both alike differ from Avianus in making the enemy a wolf, and Liliencron himself points out that the language seems to indicate a rather later date than that hitherto accepted. Alliances between Berne

and Friburg were concluded in 1307 and 1313, as well as later, and the poem might refer to one of these instead of to that of 1243. But in the song on the Battle of Sempach (i. 119, No. 33, 4, ff.) Avianus' lion reappears, for the allusion is to him, rather than, as Liliencron supposes, to the Order of the Lion, of which Leopold of Austria was a member; and, consequently, the four original Cantons, Lucerne, Uri, Schwytz, and Unterwalden, must be understood as the four oxen of the fable.

As I am on the subject of Liliencron's very welcome and instructive introductions, I should not omit to notice that the poems belonging to the Peasant War might also with advantage have been accompanied by an introduction, not, of course, exhaustive (for none are), but still better than nothing. That to No. 454 (on Wullenwever) occupies four pages and a half, and one or two pages more would have sufficed for a summary of that war. The rigorously conservative prepossessions which Liliencron betrays whenever there is an opportunity, need not have prevented him from doing justice to the poor tortured hinds and their lawful demands: out of more than twenty pieces (284–286, 374-393), only two come from their camp, whilst all the others proceed from their enemies; so that there would be little chance of forming a fair judgment of their despairing struggle, unless we possessed other sources of information. A word of defence, or at least a short account of the course of the insurrection, would have been quite in place: the reference to Zimmermann's History is not enough, because that work may not be in the hands of all educated readers, for whom, of course, the present collection is intended. For the rest, the history of this war is even now full of profitable instruction, and, as the French would say, "pleine d'une actualité palpitante," especially for England. We have just remarked that only two songs on the side of the peasants have reached us; all the others were probably suppressed by the victors, or else had never spread beyond a narrow circle, or perhaps concealed their meaning under an allegory, like the fine expressive song of the Danish country-people, which extolled the "eagle (Christian II.) who smote the hawk" (the nobles and priests) "with his sharp claws, so that all the other little birds rejoiced, and each one began to sing." Of course, this too is a party song, but it gives at least an indirect expression to a voice, then seldom heard, that of the people groaning under the yoke of the nobles: and Svend Grundtvig rightly remarks (*Danmarks Gamle Folkeviser*, ii. 667), "Even if the song does not tell the whole truth, or express an impartial judgment, nevertheless, as Afzelius says, it is truer than chronicles, and more precious than gold."

Many of the songs and introductions have a special bearing on and interest for England. As early as the year 1375 we find *Ein Lied von den Engelschen* (i. 87, No. 25), where the march is described of the dreaded Welshman Jevan ap Eynion ap Griffith, with the army of Ingelram de Coucy to Switzerland; further on in the year 1513 we find *Ein neuw Lied von der groszen Niderlag geschehen vor der Stadt Terwan* (*Terouanne*), *durch unsern allergnädigsten Herrn den Kaiser und Künig von Engelland wider den Künig von Frankreich* (iii. 100, No. 277), and so with many others, as may be seen from the careful index of titles appended to each volume, which, however, now that the work is completed, would be more convenient if thrown into one. Nothing essential is however wanting to the collection, for in the preface to the first volume the editor has explained the historical and philological principles by which he has been guided throughout; a short review of the history of popular poetry shows his deep insight into its nature, and to complete the work, the last and fifth volume contains a historical account of the popular music of the 16th century, together with the tunes for as many of the songs as can be found. By a fortunate chance the song on the murder of the famous burgomaster of Ghent, Jacob van Artevelde, the ally of King Edward the III. of England (A.D. 1345) has been preserved by oral tradition, with the appropriate melody, down to the present time, and is here printed (appendix 4). With this interesting detail we must take leave of this most valuable collection, recommending it at the same time to students of history and the friends of popular poetry. FELIX LIEBRECHT.

Alpine Flowers for English Gardens. By W. Robinson, F.L.S., Author of *The Parks, Promenades, and Gardens of Paris.* With numerous Illustrations. London: J. Murray, 1870.

The Wild Garden, or our Groves and Shrubberies made beautiful by the naturalization of hardy Exotic Plants; with a Chapter on the Gardens of British Wild Flowers. By W. Robinson. London: J. Murray, 1870.

"THE choice jewellery of vegetable life," as Mr. Robinson aptly designates the family of alpine plants, forms one of the great charms to the mountain traveller. Who can describe the delight, on ascending above the level of the trees and bushes of the plain, at the first sight of the pigmy Primrose (*Primula farinosa*), with its graceful lilac flowers, its silvery leaves, and slender powdery stem, or of the vernal Gentian (*Gentiana acaulis*), with its flowers of vivid purple of peerless beauty—a gem-like triumph of life over death, buried, perhaps, for eight months out of the twelve in shrouded snow. Then there is the Cushion Pink (*Silene acaulis*), with its tufted masses, like wide-spreading moss, a cluster of crimson flowers peeping above its leaves, making lovely carpets where all around is desolate, the Rose of the Alps (*Rhododendron ferrugineum* and *hirsutum*), the Sedums, Saxifrages, Campanulas, Pinks, and a host of others, the memory of which stamps itself as deeply upon the mind of the traveller as the snowy waste or the silvery waterfall, specks though they are in comparison with these. The first impulse of the tourist is to dig up these little treasures, and transfer them, as memories of foreign lands, to his garden at home, where, carefully inserting them in the sunless chinks of his clinker rockery, these children of air and light soon wither and die.

The object of Mr. Robinson's little work is to shew that, under proper treatment, "there is no alpine plant that ever charmed the traveller's eye with its brilliancy, that cannot successfully be grown in these islands." Though, in their natural habitation, they are every year covered with deep beds of snow, or fringe vast fields of ice at elevations where they have scarcely time to flower and seed before they are again embedded, yet these conditions are not indispensable to their growth. In the plains and low-clad hills, these little plants are generally overrun by trees, bushes, and vigorous herbs, while in the more elevated regions there is no taller vegetation to stifle them—they have it in fact all to themselves. But if elevated regions are not indispensable to the well-being of alpine plants, full exposure to the sun, abundant moisture and depth of soil are essential conditions to their existence. The great obstacle they meet in garden-cultivation is a false conception of their requirements, and of what rockwork should be. Because they inhabit the interstices of the crag, it is an error to suppose they exist upon little more than melted snow and mountain air, or to imagine they are growing in mere cracks destitute of soil. So deeply rooted are they in the heart of the flaky rock, that after patiently knocking away the sides, Mr. Robinson succeeded in laying bare the roots of a tiny plant, not one inch in height, and found some of its radiating fibres to extend more than three feet in length. The broken stone, sand, and grit tend to prevent evaporation and to create drainage, and allow the roots to penetrate deeply among the fissures, so that they never suffer from want of food and moisture.

How can this set of conditions be said to be copied by stuffing a little mould between the clinkers, "jammed" bricks and cement of a rockery of ordinary construction, and cramming therein a delicate alpine plant, with no room for its roots, probably under the drip of an overhanging stone, which shuts it out from sun and air.

The aim of Mr. Robinson is to correct the whole system of rockwork and rock-gardening, of which he clearly exposes the errors, shewing how the masses of rock should be disposed to form a rockery, assimilated to the natural habitations of alpine plants. He describes the various collections in England, where they flourish in full vigour—convincing proofs that they may be successfully cultivated and acclimatized. The interest of the volume is much enhanced by a lively description of a tour made by the author, in order to see some of his favourite plants growing in a wild state. He ascended the Grande Salève for the silvery Saxifrage, and saw Gentians of the deepest blue in silky beds of Cudweed. In the dark valley of the Saar, he found countless tufts of the interesting Cobweb Houseleek, caves with a golden lining of the yellow Violet and crested with the Alpine Rose, the rare glacial Ranunculus flowering near the sea-green arch of a glacier; and after a diligent hunt on the top of the Monte Campione, he eventually succeeded in finding the rare Elizabeth's Catchfly. The second part of the book consists of an alphabetical list of alpine plants, with directions how to cultivate and increase them. The work is written with all the enthusiasm of a genuine lover of plants, and is full of invaluable practical information on the subject upon which it specially treats.

Closely following on his *Alpine Plants* Mr. Robinson has published *The Wild Garden*, a work in which he takes a general view of the flower-garden ancient and modern. He strongly deprecates the artificial and formal floriculture of the "bedding out" system, in which all energy and experience is devoted to the production of thousands of plants, tender and tropical, solely for summer decoration—"the best possible appliance," he says, "for stealing from nature every grace of form, beauty of colour, and vital interest"—covering the beds for a short season with gaudy masses of colour, and leaving them bare during the rest of the year. This fashion has also produced the evil of eradicating all our sweet old-fashioned flowers, from the stately Lily to the dwarf Hepatica, which adorned the mixed borders of our ancient gardens, and which are now alike dismissed even by the cottager-florist, to give place to Geraniums and tender exotics. Mr. Robinson proposes a plan by which more of the beauty of hardy flowers may be exhibited, than by either the old or modern system. He suggests that the belts of shrubberies, and the rough or semi-wild parts of a garden, should be filled with hardy plants, and that they should there be allowed to grow wild and unrestrained, so that the naked earth should never be shown, but be carpeted by dwarf shrubs, among which the herbaceous plants should rise and bloom in their own wild way. Many flowers, insignificant as single specimens, are of the highest order of beauty when seen in numbers, and these plantations would be attractive in all seasons; whereas a simple border of herbaceous plants, when out of bloom, presents only bundles of decayed stems tied to sticks for support. Mr. Robinson would also dot the lawn with dwarf bulbs and spring flowers, which are seen to greater advantage in their emerald bed than in the border, and would have blossomed before the scythe of the mower cropped them off.

The concluding parts of the work contain an enumeration of hardy plants suitable for shrubberies and wild borders, for hedge-banks, rockwork, walls, &c., arranged also according to the soils best fitted for them; and the work closes with a chapter upon British wild plants, and the way to cultivate them.

F. Palliser.

A Critical Account of the Drawings by Michel Angelo and Raffaello in the University Galleries, Oxford. By J. C. Robinson, F.S.A. Clarendon Press, Oxford.

Raphael Sanzio and Michel Angelo Buonarotti. Burlington Fine Arts Club Catalogue, 1870. London.

Mr. Robinson has accurately described his book in its title. He does not give us a catalogue, but a critical account, of the drawings by Michel Angelo and Raffaello at Oxford. It is not the first time that Mr. Robinson has brought to bear the wide experience which he has acquired as a collector on undertakings similar to this. His *History of Portuguese Art*, and his *Catalogue of the Collections of the South Kensington Museum*, have long been before the public, and on reference to the catalogue of the collection of drawings by old masters at present in the Burlington Fine Arts Club, it will be seen that the very adequate descriptions of the drawings lent by Mr. Malcolm, of Poltalloch, are extracts from Mr. Robinson's admirable catalogue of that collection which, through the liberality of the author and Mr. Malcolm, has been widely though privately circulated. The drawings of the sixteenth century are now all in known hands or gathered together in public galleries, so that the work of the collector being done, the work of the critic can begin. Examination, comparison, and correct arrangement were impossible as long as these drawings were sown broadcast over Europe, or hidden away in neglected portfolios. Under such circumstances the bald and meagre catalogue, barely sufficient for the purposes of sale, was all that was practicable, but now the catalogue, to be of any value, must claim a place in the literature of Art. Such is the character of Mr. Robinson's *Critical Account*; it is a book which must in future be consulted by every one who makes the lives and works of Michel Angelo, and Raffaello, the subject of study and investigation. The notes on Michel Angelo are almost entirely new, and in respect to that portion of Raffaello's work which is represented by the contents of the University Galleries, Mr. Robinson has entirely superseded the cursory and often careless remarks of Passavant. The successful accomplishment of a task such as this requires both taste and learning, for each drawing has to be considered not only as a work of art, but as a piece of evidence which may throw light either on the biography of the artist or the history of his work. On this head Mr. Robinson's book fully satisfies the strictest requirements. He has arranged the drawings chronologically; that is to say, he has grouped together all the studies which clearly relate to any given work in its early and late stages, and has placed each group in carefully ascertained order. There are then remaining drawings not known at present to have any connection with extant finished work. These having been sorted, by strict technical examination, each set is placed in the neighbourhood of that group of sketches to which it appears by its technic to have most affinity. To each drawing is appended not only a most accurate description, the full value of which students alone will appreciate, but its complete history. We can learn at once whether there exists a repetition, if so, of what size and where; whether it has been engraved, if so, by whom; and wherever the authenticity is doubtful, Mr. Robinson weighs the question in honest and well-considered critiques, besides giving in every instance straightforward references to the work of his predecessors.

The Appendix is very full, and all connoisseurs will welcome the list and the engravings of watermarks, and the publication of the 17th-century Antaldi Catalogue presented to the Galleries by Dr. Wellesley, and now for the first

time printed in Note 17. It will be seen that to treat upwards of three hundred drawings in this exhaustive way must have involved great and patient labour. But it has been labour well rewarded, for in more than one instance Mr. Robinson has made what may be almost termed discoveries. For instance amongst the drawings previously withdrawn from exhibition at Oxford as unimportant, he has identified a study for the lost picture of the "Crowning of S. Nicolas of Tolentino," one of Raffaello's chief early works. Up to this moment it has been supposed that a sketch in the Wicar collection at Lille was the only existing record of the destroyed painting; but now, thanks to Mr. Robinson, the hitherto neglected Oxford study takes its proper place. The paper is drawn on both sides: on the one there is the standing figure of an angel, the figure of a saint, or ecclesiastic, and a study for the left hand and arm of a figure holding a crown; on the other side are various studies of hands and arms relating to the same picture. The sketch is of the more value as the picture was never engraved; and although inferior in interest to the Lille drawing, yet, taken in conjunction with it, it not only affords a tolerably correct idea of the composition as a whole, but gives affirmative evidence as to the introduction into the picture of a figure of S. Nicolas of Bari hitherto attested only by a doubtful assertion in Pungileoni's *Elogio storico di Raffaelle Santi.* Two of the Michel Angelo series have long been described as studies for portions of the Pisa Cartoon; to these Mr. Robinson adds three more, making a set of five in all, having well-grounded claims to be considered as studies preliminary to the execution of the cartoon. They are of unequal value as drawings, but one, No. 16, a furious combat of cavalry and foot-soldiers, is instinct with the master's terrible vigour, and issues out of those mysterious shadows peculiar to Michel Angelo, which allure the eye with a strange half-awful charm. All these Oxford sketches are however, but for subordinate portions of the cartoon. The principal group is only preserved to us in the prints by Marc Antonio, Agostino, Veneziano, and that by Schiavonetti, from the chiaroscuro picture at Holkham. In Note 3, Mr. Robinson recalls these facts to us, and enriches them with comment and illustration. He shares the dream of every enthusiastic student of Michel Angelo, that some day the lost portions of the great cartoon will be recovered, and encourages us to believe that at any rate we are not at the end of possible discoveries, even though the crowning triumph be deferred.

In respect of the Medici Tombs, and concerning various other points, a great quantity of new and interesting details will be found in this *Critical Account*, but no part of the work is more worthy careful examination than the comments on the sketches referring to the Vatican frescoes. The inferiority of those on the ceiling in the chamber of Heliodorus has been often a subject of remark. Mr. Robinson attacks their authenticity, and employs the testimony of the Oxford studies with much ingenuity in support of his position. Any one may be easily convinced by slight examination, that neither the design of the "Almighty accompanied by Angels" for the fresco of the Burning Bush, nor the weaker drawing for the Sacrifice of Abraham, both ceiling frescoes in the chamber of Heliodorus, are by the hand of Raffaello, and Mr. Robinson is probably correct in his attribution of them to Giulio Romano. But it is difficult to see in No. 94 catalogued as "Study for one of the flying Angels in the fresco of Abraham's Sacrifice," a "strong impress" of that artist's manner; and its close resemblance to the angel who supports the drapery on the left hand in the Madonna del Baldacchino, suggests that it may possibly be one of the early pen-drawings of Raffaello himself. There is also amongst the Raffaello series the fragment of a cartoon representing a crucified left hand and arm. Passavant has noted it as a copy, and calls it "Fragment des Cartons der Schlüsselübergabe." But in the Charge to Peter we see only the backs of both the right and left hands, whilst here we have the inside of the open palm, the drawing cannot be therefore that which Mr. Robinson following Passavant has supposed it to be. It is suggested that the study may be a portion of the cartoon of the Resurrection for the fifth tapestry of the second series, possibly from the hand of Giulio Romano. The action resembles so closely that of the uplifted right arm of the Christ issuing from the tomb, that it induces the supposition that the composition was reversed for working. But this cannot be positively asserted, for at present even the name of the author of the design in question remains in doubt.

The mere fact that these are the only two points in a work of such extent which can be found open to question, is in itself a testimony to the scrupulous exactness with which the entire undertaking has been carried out. The strictest requirements have been fulfilled. Prefixed to the Catalogue are chronological summaries of the lives of Michel Angelo and Raffaello, which will be found extremely useful for reference by those who are making a critical examination of the drawings, and the Introduction contains a valuable account of the history of drawing collecting in England from Charles the 1st and the Earl of Arundel down to the dispersion of the unrivalled gatherings of Sir Thomas Lawrence, a portion of which constitutes the collection at Oxford. An unpublished sonnet by Michel Angelo will be found in the Notes, which occurs on a sheet of studies presumed for the Pisa cartoon. In short, Mr. Robinson has left nothing undone. Ample materials for work and investigation, both in respect of criticism and archæology, are provided for the student in this unpretending volume, and he will find that in most cases the notes rise far above the usual level of a book of reference.

E. F. S. Pattison.

A Conference of Pleasure, composed for some festive occasion about the year 1592 by Francis Bacon. Edited, from a MS. belonging to the Duke of Northumberland, by James Spedding. London: Longmans, 1870: xxxi. and 54 pp. 8vo.

This book consists of four imaginary speeches, about 30 pp. long, with a preface and notes copious rather than elaborate, but interesting enough.

The speeches are in praise of fortitude, love, knowledge, and Queen Elizabeth; they can hardly be called anything but rhetorical exercises, in the common form of the time, and (except the last, a review of its heroine's character, policy, and fortunes) not so much an expression of Bacon's opinions as dramatic.

The last two were published by Stephens in 1734 from a m.s. of Lord Oxford's (now quoted as Harl. m.s. 6797); the others have not before been printed. The duke's m.s., better than the Harleian, was brought to light by Mr. Bruce in 1867. It has had its edges burned, and the editor has restored many of the words so destroyed by ingenious and learned conjectures, and with such a typographical arrangement that it is easy to judge of their probability. He has also emended several passages in the Harl. m.s. The Northumberland House m.s. he has printed entire.

Here is his emendation of one passage, missing in the duke's m.s.: "The castell of Edenborough . . . wch place [*m.s.* with place] incontinently, without cunctations or cavillations (the preambles of a wavering fayth), she rendered with all honour and sinceritie [*m.s.* securitie]" (p. 20).

Here are two passages restored by conjecture in the Northumberland House m.s., "I seeke b[ut an euen] tenor

of minde" (p. 5). "No p[erson ever saw] at any time the minde of another but in love" (p. 11).

It seems to be taken for granted, though not by Mr. Spedding, as his introduction (p. xxxi) shews, that anything which can be fathered on Bacon was not only written but invented by him, and has an intrinsic value. Such an assumption resembles one which would give Locke a monopoly of political speculation, or Addison a monopoly of moral, or make Warton the only critic of his day. These distinguished writers are of course only representatives of the students of the hour, admirably as they represent them, and given works of theirs may as fairly be treated as *sui generis* as given articles in to-day's paper. R. Robinson.

Intelligence.

The Text of Chaucer.—In the *Edinburgh Review* for July is a most valuable article on the text of Chaucer, containing *inter alia* explanations of obscure terms employed by the poet. From four of the collected texts a final correction is derived for a line in the description of the Temple of Mars (*Knight's Tale*). The Harleian text reads,

> "And therout came a rage *of suche a prise*."

The passage in the MSS. runs thus,

> "There stood the tempul of Mars armypotent,
> Wrought all of burned steel, of which the entree
> Was long and streyt and gastly for to see,
> And therout came a rage *and suche a vese*,
> That it madd al the gates for to rese."

The writer shews that *vese* (glossed *impetus*) is the appropriate word, and explains the meaning of the lines to be "that the furious blast issuing from the temple shook its ponderous gates of adamant and steel." The word—spelt indifferently vese, vise, feese, fiys—comes from A.S. fýsan, *properare*, and especially expressed the rapid and noisy movement of water. Thus Wycliffe, note to John v. 4, characterises a standing pool as water "gaderid togider havinge no fiyss." The comparison of the din of arms to the din of a torrent was familiar both to mediæval poets, and to Virgil (*Æn.* ii. 305; xii. 523). The passage before quoted, with the preceding lines, seems to convey the idea of confused martial discords, which, as they pour through the narrow gateways with the sound and fury of torrents pouring through straits, meet the outside storm. And the conflicting clash of wind and wave-sounds adds force to the implied image, that of the opposing rush of hostile armies. We are indebted for this suggestion to Mr. G. Waring.

Ambrose Bonwicke.—The life of Ambrose Bonwicke, edited by Mr. J. E. B. Mayor, may be expected to appear in the course of November. Besides a reprint of the life written by his father, from the edition of 1729, the volume will contain illustrations of the influence of the Jesuit text-books at Cambridge, and of the course of University studies; authors now so little read as Hierocles and the Golden Verses, seem then to have been part of the staple of instruction, as well as more valuable authors like Quinctilian, now equally neglected. The mode of living was still very primitive, it was part of Bonwicke's duties as a scholar to wind up the college clock, and the institution of "bedfellows" was still in vigour. The above will form the first volume of "Cambridge under Queen Anne:" the second, which will not be ready until after Christmas, will contain accounts of the visits of Burmann in 1702 and Offenbach in 1710, showing, among other things, how one distinguished foreign scholar attended a bear-baiting, and another congratulated himself on the absence of Bodley's librarian, who would have exacted a fee of a guinea while his subordinate was content with ten shillings.

The Library at Strasburg.—We fear the laconic telegraphic announcement that the Library at Strasburg has been entirely destroyed, is but too true. We have written to Heidelburg to make more minute enquiries, but have not as yet received any reply. According to Schweighäuser's account published in a recent number of the *Bibliographie de la France*, the Library contained the collections of Schoepflin, the national historian of Alsace, and large gatherings from the monasteries destroyed at the time of the Revolution. The greatest curiosities were the *Hortus Deliciarum* of the Abbess Herrade of Landsperg, a folio MS. of the 12th cent., with miniatures on almost every leaf, and the volume containing the depositions in the lawsuit between Gutenberg and the brother of his partner Dritzohn, 1439. Many rare works of the early Strasburg printers have also perished. In the entrance of the Library some of the Gallo-Roman antiquities are capable of restoration. The picture-gallery in the Platz Kleber is also destroyed: beyond a capital Ostade nothing of great value. It is strange that the most precious volumes, at least, of the collection were not put into a place of safety. The Librarian, Zeller, has made a most earnest appeal for replacing the lost books. We ought to add that the *Times* correspondent obtained his information about the total destruction of the library from no more authoritative source than the principal bookseller in Strasburg; and that there is, therefore, still room for hope that the worst is not true.

During 1869 the British Museum was increased by 32,013 volumes, including 1100 Chinese works, a magnificent map of the world of the fifteenth century (1457), executed for Prince Henry, the navigator, by the celebrated Venetian cosmographer Mauro, and a French MS. of 1300, enriched with miniatures, *La Somme le Roy*, by the confessor of Philip III., Brother Laurent. The Museum authorities are preparing for immediate publication the catalogue of pamphlets and satirical works printed in England from 1537 to 1688, and the third volume of the cuneiform inscriptions.

Mr. W. W. Story has in hand a work on the history of the Castle of St. Angelo at Rome, and in contemplation a tragedy on a Roman mediaeval subject—the loves of Otho and Stephania.

Mr. Swinburne has been for some time engaged on the *Legend of Tristan and Yseult*. The poem turns largely on the contrast between mediaeval Christianity and ideal human passion.

Mr. W. B. Scott is supplying the critical text to an illustrated work on French artists shortly to be published.

Mr. G. H. Lewes has entirely rewritten his chapter on Hegel for a new edition of his *History of Philosophy*.

Selected Articles.

Scritti inediti di Torquato Tasso, by Attilio Portioli. [They consist of twenty-nine letters, some only a few lines long, two sonnets, and a madrigal found amongst the historical documents of Mantua. The letters are mostly of later date than Tasso's imprisonment, and show an irritability, like Rousseau's, which would have made his life a melancholy one under any circumstances. To these are added one or two other unpublished letters to or about the poet, including one from Bernardo Tasso, telling how his son was nearly burnt to death in 1567, from reading in bed.]—Rivista Europea, July.

Della Tavola di nostra Donna nel Tabernacolo di Or San Michele. Gaetano Milanesi. [This picture, formerly attributed to Ugolino of Siena, is now placed amongst the best works of the middle of the 14th century. Two memoranda (bearing date 1346 and 1347) of payments to Bernardo Daddi (a pupil of Giotto, fl. 1300–1350) for painting "la tavola *nuova* di nostra Donna," suggested to Sig. Milanesi that this work replaced the original Madonna mentioned by Villani, which stood on a pillar in the loggia, then used as a corn exchange. Sig. M. has already assigned the portrait of Dante, known as Giotto's, to this same Daddi, whom he also identifies with a "Bernardo of Florence;" and as some contemporary notices seem to show that the latter was sometimes confounded with Nardo Orgagna (Nardo being short both for Bernardo and Lionardo), he goes on to attribute to him the famous frescoes of Hell, the Judgment, and the Triumph of Death, in the Campo Santo of Pisa; adding, what is certainly true, that if these suppositions were correct, Bernardo Daddi would rank among the first artists of his age.]—The same.

Bastiat, J. E. Cairnes. [Bastiat's theory of value was directed against Socialism, and he is hampered in his reasoning by the foregone conclusion "that, left to themselves, human interests are harmonious." Though he claims to be the first to maintain that natural gifts have no *value*, whatever their utility, he defines value as the "relation of two services exchanged," expressly because the word *service* may be understood either of the benefit conferred or of that received. He admits that the one may be out of all proportion to the other, and does not see that this can only arise from the natural advantages, which he does not recognize as an element of value.]—Fortnightly Review, Oct. 1.

Ancient Japanese Poetry. [Japanese verse is for the most part lyric or descriptive; it is of two kinds, "Shi," of Chinese origin and structure, and "Uta," of purely native growth. The latter consists of lines of five and seven syllables variously arranged, and to fill up the metre meaningless terms called "pillow-words" (like the French *cheville*), are used at discretion. Some of the Ko-uta, or minor poems, translated express a simple image gracefully; the earliest date from before the 9th century, A.D.]—Westminster Review, October.

Joan of Arc, by L. [A new and valuable metre: the thoughts and imagery recall Swinburne, Tennyson, Morris, and Browning, unmistakeably and pleasantly: the general conception, though obvious, is elevated.]—Same.

Florence from 1200 to 1345, by P. N. Müller, in De Gids, Sept. [A sketch of the commercial history of Florence, based on a recent work by the Commodore Peruzzi, and containing some details of interest on the relations of the English kings with their Italian bankers.]

New Books.

Blackburn, Henry. Art in the Mountains: the Story of the Passion-Play. Sampson Low and Co.

Byron's Poetical Works. Edited, with Memoir, by William M. Rossetti. London: Moxon and Son.

Custine, Lettres du Marquis A. de, à Varnhagen d'Ense et Rahel Varnhagen d'Ense. C. Uruquardt: Brussels, 1870.

Kebbel, T. E. The Agricultural Labourer. A Handbook. Chapman and Hall.

Martin, Theodore. Ancient Classics for English Readers. Vol. vi. Blackwood and Sons.

Mazzini, Joseph, Life and Writings of. Vol. vi. Smith, Elder, & Co.

Petrarca, Fr., Le Rime di. Commento di G. Bozzo. Palermo.

Quinet, Edg. de. Œuvres Complètes. Politique et Religion. Paris. Paguerre.

Taillandier, Saint René. Drames et Romans de la Vie littéraire. Paris.

Theology.

The Fourth Gospel: An Attempt to ascertain the character of the Fourth Gospel, especially in its relation to the Three First, by J. J. Tayler, B.A. 2nd ed. London: Williams and Norgate.

The first edition of this work was published in 1867; the present is posthumous. Mr. Tayler had intended (so Rev. J. Martineau says in his preface) to enlarge the book, but nothing was found sufficiently connected for publication. The only insertion is a long small-print note on the Paschal Controversy, mainly concerned with Hilgenfeld's researches. Mr. Tayler was thoroughly acquainted with the state of the question up to within a recent period, and it should be remembered that the original preface designedly omits reference to the later literature on the subject in order to present the conclusions arrived at in a more independent way. From many points of view, this was a distinct advantage. To it we probably owe something of the freshness which is striking in the work of "a green old age." But there are some drawbacks to be set on the other side. The controversy has to some extent shifted its ground from the point at which Mr. Tayler took it up; and the consequence has been, that while all that he has written is of value in itself, it is apt to be less strictly relevant in the aspect which the question is now assuming.

Thus there is significance in the way in which Mr. Tayler's argument is distributed. Omitting the last two chapters, one of which is a recapitulation of what has gone before, and the other treats of the wider religious bearings of the question, we have a total of 142 pages. Of this we may say that 45 are devoted to a consideration of the relation of the Gospel to the Apocalypse, 34 to a consideration of the external testimony to the Gospel itself, and 43 to the Paschal Controversy, leaving 9 for an introductory statement of the question, and just 11 for the examination of "internal indications." Now if we turn from Mr. Tayler to some of the more recent writers upon the same subject in Germany—such, for instance, as M. Wittichen (*Geschichtliche Charakter des Evangeliums Johannis;* Elberfeld, 1868), or Dr. Keim (*Geschichte Jesu von Nazara*, pp. 103–172; Zurich, 1867), the contrast which they present is considerable. In these the Paschal Controversy disappears altogether. The Apocalypse is mentioned only to be dismissed. The external evidence is reduced in one case to a little more, and in the other to a little less, than one-seventh of the whole matter, and the remainder is occupied entirely with an analysis of the Gospel, either of its language and style, or of its theology, or of the historical narrative which it contains. In other words the importance attached to these branches of the argument by Mr. Tayler on the one hand, and by MM. Wittichen and Keim on the other, is in the proportion of 1-13th to 6-7ths, or about 1 to 10.

This change of treatment has not been without its reasons. The Paschal Controversy has dropped into the background because it is seen to be inconclusive. If we allow to the traditions of the second century an authority which they hardly possess, there are still too many possibilities intervening between the premiss that St. John observed the 14th Nisan, and the conclusion that he cannot have represented the Crucifixion as taking place upon that day. We may, if we please, accept the far from improbable theory of Bleek that the Christian celebration grew immediately out of the Jewish Passover without reference in the first instance to the Last Supper. And this theory would only be confirmed, if we thought with Dr. Keim that the date assigned to the Crucifixion in the Fourth Gospel was a deliberate transposition in order to identify it with the sacrifice of the Paschal Lamb. At any rate the tendency among critics is to treat the question simply as one of comparative credibility between the Synoptic Gospels and the Fourth, not as involving any inconsistency with what we know of the Apostle.

There seems to be in like manner a tacit agreement to treat the Apocalypse by itself independently of the Gospel. For supposing it to be proved that the two could not possibly have been written by the same author, it still would not follow that the author of the Apocalypse was St. John. And, however, this may be, Mr. Tayler has somewhat overlooked one important element in the conclusion, viz., the unparalleled psychological revolution that must have taken place in the mind of a Jew exiled to a centre of Greek culture and philosophy, and with the temple and the Jewish system along with it destroyed. We are inclined to think that other writers besides Mr. Tayler have underrated this consideration. Such a complete change of circumstances would tell upon style even more immediately and certainly than upon thought. It would be strange if an Englishman spoke German no better after 10 or 15 years' residence in Berlin, and it would be strange also if he did not more or less imbibe German ideas. The cases of Milton and Dryden adduced by Mr. Tayler are not really parallel, because neither of these writers lived out of England for any length of time.

Lastly, as to the external evidence, we are disposed to agree with M. Wittichen, that it "has in most cases had greater influence upon the final judgment of the critic, than the nature either of that evidence or of the ecclesiastical tradition on the origin of the books of the New Testament generally seems to warrant." The most that the external evidence can be said to prove is that the Gospel was current at a certain time, and not that it either was or was not written by St. John.

If these considerations are to be held valid, it would seem that more depends on an internal analysis than is consistent with the space which Mr. Tayler allots to it. We know that it has been for some time a characteristic of English criticism, to be jealous at least of some of the forms of internal evidence, but it is seen in practice that the subjective element which they imply is not incompatible either with scientific method or definite results.

Mr. Tayler concludes with a suggestion which curiously inverts the not uncommon view that the Gospel was written by the Apostle, and the Apocalypse by the presbyter. He apparently forgets for the moment that what is permitted to those who assign both to the Apostolic age is not permitted to one who places a gulf of nearly a century between them. John the presbyter, if he existed at all, was also one of the immediate "disciples of the Lord," and obviously could not have been the author of a work appearing between 135-163 A.D.

Looking back over Mr. Tayler's work as a whole, perhaps

we might say that it was valuable rather for the vivid and finished picture which it gives of the Christianity of the 2nd century, than for its direct bearing upon the Johannean question. It is written throughout with an elegance and chastened vigour which leave nothing to be desired.

W. Sanday.

Ecclesiastical History of England.—The Church of the Restoration. By John Stoughton, D.D. 2 vols. 8vo. Hodder & Stoughton, 1870.

This is a second instalment of the author's *Ecclesiastical History of England.* Vol. i. was occupied with the "Church of the Civil Wars," vol. ii. with the "Church of the Commonwealth." A fifth volume is promised in which the history is to be brought down to the Revolution. The 18th century is contemplated as among the visions of the future. The present volumes contain the history of Charles II. and James II., a period not so stirring as that which preceded it, yet quite as important to us. For while the Civil Wars passed over without leaving a trace behind in ecclesiastical institutions, it was under the Restoration that both Church and Non-conformity received the shape and assumed the attitude towards each other which they have maintained to our time.

The sources from which the present two volumes have been derived, are partly the standard authorities employed by all Church historians, partly MS. or unused materials.

The staple of the history is necessarily the same for all alike. The volumes in which it is to be found are, the *Parliamentary History of England*, Thurloe's *State Papers*, Kennett's *Register*, Burnet, Baxter, Neal, and Calamy. To these may be added Cardwell's *Synodalia*, Lathbury's *History of Convocation*, the continuation of Clarendon, and the Journals of the two Houses. Besides these the printed biographies, episcopalian and puritan alike, have been diligently used, and more than one interesting fact has been disinterred from a local history, *e.g.*, an anecdote is told (1, 127) of Lord Wharton from Lipscomb's *Hist. and Antiq. of Bucks.*

The MS. sources now employed for the first time are as follows:—The State Papers in the Record Office. Among curiosities entombed in this mass of records are the private letters written by various citizens of London describing the election of members to Chas. II.'s first Parliament, 1661. They were intercepted in the Post Office, and never reached their destination. (2) Some papers preserved in the Archives of Parliament, relating to the passing of the Act of Uniformity. (3) A register preserved in Dr. Williams' Library. (4) A Diary kept by Henry Townshend of Elmley Lovet, Worcestershire, in the possession of Sir Thos. Phillips. (5) The collections preserved in the University Library at Cambridge, the British Museum, Lambeth, Chichester, &c.

From such materials a narrative is compiled with industry, care and impartiality. Besides the regular narrative in chronological sequence of public events, chapters are added or introduced which serve to throw together stray characteristics of the men and the times. Such are vol. i. chap. 25, in which the Bishops of the Restoration are passed in review. The summary with which the review closes may serve to mark the author's point of view as a historian. He pronounces the best of the Bishops to have been men of ability, learning, of unimpeachable morals, hospitable, orthodox and devout. But he asks:—

"Is there one among them to whom posterity can point as possessing, in an eminent degree, the true episcopal faculty, the gift of spiritual overseership, of a deep insight into Christ's truth, into God's providence, and into men's souls? Is there one who excelled in folding the sheep which were lost, one who struck the world's conscience, making it feel how awful goodness is?"

Two or three pages are all that is given to the rural clergy, the account of whom is founded on the same authorities as Macaulay's well-known picture, a picture which Dr. Stoughton pronounces a "humorous one-sided satire." We may here mention that a paper in the hands of the Record Commission has been examined by Dr. Stoughton, and found to confirm Macaulay's clever conjecture that the initials P. M. A. C. F. in the Somers Tracts (8, 428) denoted "Père Mansuete, a Cordelier Friar," who brought the sacrament to the dying Charles II.

Other chapters are devoted to illustrations of religious character in accounts of persons eminent for piety, church or puritan. The Lives of Oliver Heywood and of Philip Henry are windows through which we may discover the domestic habits of the nonconformists. The chapters on the Theology of the period are nothing more than abstracts of some of the principal books, or summaries of the opinions of the leading names. The fairness with which these summaries are drawn reminds us of Hallam; but they want Hallam's precision and literary appreciation.

This *Ecclesiastical History* will scarcely be more fortunate than the many meritorious attempts which have preceded it, which have been read in their day, and then dropped into oblivion. It has no life in it. With entire candour of disposition, there is wanting the comprehensive intelligence. Neither the events, nor the opinions, treated of, are brought within the scope of the great European progress. No law of development is discernible in his pages. History under such treatment is a succession of casualties, and science and philosophy are what people happen to be thinking.

Dr. Stoughton apologising for filling so many pages with mere analyses of books, says, "it would have been easier and more attractive to indulge in broad generalisations on the subject." It certainly is not easy to frame the one generalisation which is of any value in a history of opinions, theological or philosophical — viz. to detect the hidden thread of connection which binds together the opinions of any generation with those of the generation which preceded and the generation which followed it. How far from "easy" this task is, may be seen from the history of philosophy. Many hands have been labouring for many years in bringing into order the developments of philosophical opinion. Though much progress has been made, the history of philosophy cannot be said to have yet assumed a final shape. For theology much less has been done. For English theology, nothing.

Mark Pattison.

Intelligence.

Tregelles' Greek Testament.—We deeply regret to learn that, owing to the severe illness of the editor, the publication of the sixth part of this great work, containing the Apocalypse, is postponed. The revision of the concluding chapters and the appendix are all that remains to be done.

The Site of Paradise.—Among the papers read at the British Association was one by Sir Henry Rawlinson on the site of the Terrestrial Paradise. He supposes the geographical description in Gen. ii. to be derived not from Iranian mythology, but from Babylonian tradition. "Gan-eden," or the Garden of Eden, is in his opinion a Hebrew modification of one of the old vernacular names of Babylonia—"Gan-duni;" "Gan" signifying apparently an enclosure, while "Duni" was the name of a deity. The four rivers are the Tigris and the Euphrates, the Surrapi and the Ukni, *i. e.*, the eastern arm of the Tigris and the western of the Euphrates. Cush (rendered in the Authorised Version, Ethiopia) is one of the primitive capitals of Babylonia. It is needless to add that, as at present stated, this theory is much less plausible than that which connects the narrative in Genesis with Iranian myths, especially as the serpent, and the Tree of Life with its guardian the cherubim, are still unexplained from Babylonian sources.

Contents of the Journals.

Theologisch Tijdschrift. September: James and Peter, by A. H. Blom. [Shows that Peter's conception of the Law differed from that of James in being more ethical.]—Contributions to the history of Israelitish religion, by A. Kuenen. [An answer to three questions connected

with the sacerdotal portions of the Pentateuch and Joshua. 1. They are not by one author only. 2. Those which occur in Genesis are taken from a record complete in itself, though based largely on the Jehovist. 3. After the redaction of the Pentateuch by Ezra (about 450 B.C.), the text received much alteration and expansion for a century and a half or two centuries. But from 250 B.C. onwards the Masora and the LXX., which are often confirmed by the Samaritan recension, prove its substantial integrity.] — Dreydorff's Life of Pascal, by Rauwenhoff. [Highly favourable.]

Göttingische gelehrte Anzeigen, Aug. 31 : Overbeck's edition of De Wette on the Acts, by H. E. [Unfavourable.]—Sept. 7. Grätz's Monatsschrift, by H. E. Sept. 21. Reusch's Bibel und Natur, by Brandes. [Elegantly written, and based on an accurate knowledge of natural science, but weak in exegesis, and totally devoid of philosophy.] —Schäfer on Ecclesiastes, by H. E. [Unfavourable.]— Sept. 28. Olshausen's Criticisms of the Text of Genesis, by P. de Lagarde. [A long and interesting exposition of Prof. Lagarde's views on the history of the Hebrew text, followed by a warm eulogy of Olshausen's treatise. See a quotation from this review in our article on Haug's Essay on Pahlavi, which contains a new development of a well-known theory.]

Theologisches Literaturblatt (Rom. Cath.) Sept. 12 : Recent works on the New Testament, rev. by Langen. [On Scholten and Wieseler.] —Förster on Chrysostom, by Wörter. [Favourable.]—Sept. 26. Hergenröther on Photius, by Ginzel. [Important for the history of dogma.] —Maybaum on Onkelos, by Langen. [Points out that if "Word of God" = "Person of God," the expression was much more likely to lead to anthropomorphic ideas than to prevent them.]—Laurent's edition of Clement of Rome, by Weiss. [Points out many imperfections.]

Selected Articles.

Schulz's Old Testament Theology, rev. by Dillmann, in Jahrbücher für deutsche Theologie, No. 3. [Favourable.]

Chrysostom as an apologist ; in the same.

On so-called Maccabean Psalms, by Himpel, in Theologische Quartalschrift, No. 3.

New Publications.

Meyer, H. A. W. Kritisch. exeget. Handb. üb. den 2. Brief an die Korinther. 5 Aufl. Göttingen : Vandenhoeck u. Ruprecht.

The Same. Kritisch. exeget. Handb. üb. den Brief an die Galater. 5 Aufl. Göttingen : Vandenhoeck u. Ruprecht.

Oosterzee, J. J. van. The Theology of the New Testament. Hodder and Stoughton.

Tregelles, S. P. The Greek New Testament, with St. Jerome's Version. (Matthew to Jude.) Bagster.

Science and Philosophy.

Pre-historic Times, as illustrated by Ancient Remains, and the Manners and Customs of Modern Savages. By Sir John Lubbock, Bart., F.R.S., &c. Second Edition. Williams and Norgate, 1869.

The Origin of Civilization and the Primitive Condition of Man. Mental and Social Condition of Savages. By Sir John Lubbock, Bart., F.R.S., &c. Longmans, 1870.

Researches into the Early History of Mankind and the Development of Civilization. By Edward B. Tylor, author of *Mexico and the Mexicans.* Second Edition. London : Murray, 1870.

[First Notice.]

Within the present year Sir John Lubbock has given us a first, and Mr. Tylor a second, edition of a work on the early history of mankind. Sir John Lubbock's new work, *On the Origin of Civilization*, is an expansion of two chapters in the second edition of his older work on *Prehistoric Times ;* still it is more or less the result of new thought, it aims at a new object, and where it employs old materials, it has put them into new combinations, and so may be looked upon as substantially a new book. The two works of Sir John Lubbock and Mr. Tylor respectively, appear to us to agree as to the main issues of which they treat, both authors being alike opponents of the doctrines which Mr. Tylor has (p. 374) styled "degenerationist ;" the material points of fact and of inference as to which they differ are of but infinitesimal moment, and a large proportion of the arguments employed by the one will, on due search, be recognised as employed by the other. Still in style, in tone, and in the arrangement of their materials, the two works differ widely. Mr. Tylor has written a little more like a historian, Sir John Lubbock a little more like a naturalist ; but as if to supplement these merely relative inferiorities, we have in Mr. Tylor's book those *deverticula amœna* which relieve the attention, whilst the necessity to which scientific meetings have so often reduced Sir John Lubbock of defending his theses *vivâ voce*, and at a moment's notice, have given his writing that dialectical precision which is so rarely found combined with a mastery of complex problems of natural history.

Both these writers are agreed as to the interpretation which ought to be put on the one hand upon the past, and on the other upon the future, of our species ; both alike regard civilization as the result of a long series of slowly accumulating improvements, and savagery as the condition in which the whole species was once involved, and of which we can still form an estimate from looking into the condition in which some less-favoured races still remain ; and to both alike this reading of the history of the past appears to afford reasonable grounds for hopeful confidence as to the future. But they not only see in the languages, arts, customs, laws and rites of modern savages, evidence as to what those of our own forefathers were ; they exchange, from time to time, the process of synthesis and the consideration of possible developments for the process of analysis, and busy themselves somewhat amusingly in pointing out how, even in our complex civilization, traces of a humble origin, and of affiliation to the social and domestic economy of barbarism may be detected, and this even in things no less sacred and serious than marriage.

A curious correspondence, and one which Sir John Lubbock certainly and Mr. Tylor probably will be slow to repudiate, may be pointed out in detail between their speculations and the lines of argument which Mr. Darwin has used in his *Origin of Species.* Mr. Darwin's arguments from the gradations towards perfection observable in structural arrangements, may be paralleled by their arguments drawn from the observation of variations ranging between the lower and the higher forms of customs and practices ; the famous argument from the history of development is paralleled by their elaborate demonstration of the correspondence between the phases of mental progress noticeable in our own nurseries and the operations of the intellect of the savage ; the argument, lastly, which is based upon the existence of rudimentary structures, finds its counterpart in the detection of the persistence still amongst us of customs which are traceable back to the early days of our race, and which, as "standing over" into new eras, have been etymologically termed "superstitions." The multitude of the facts which these authors have amassed is enormous ; but so far as they bear upon the conclusion that "the history of the lower races, as of the higher, is not the history of a course of degeneration or even of equal oscillations to and fro, but of a movement, which in spite of frequent stops and relapses, has on the whole been forward" (Tylor *l.c.* p. 191, 193, and 374), they admit of being marshalled under one or other of these heads, and of having or seeming to have their fitting place rather in a history of progress than in one of degeneration. Amongst the collateral issues which Mr. Tylor raises and deals with, are the question of the geographical points wherein certain widely-diffused myths, and the races believing in and retaining them, took origin and spread (see pp. 206, 331, 338, 369), and in two of his chapters, those namely on the "Stone Age," and on "Fire Cooking and Vessels," he makes incursions into territory more largely treated of in Sir John's other, older, and larger, work.

A very large portion of Sir John Lubbock's book is devoted to a review of the various phases under which the religions of barbarians have shewn themselves, whilst a considerable portion of Mr. Tylor's is taken up by disquisitions on the genesis of language and of writing. But perhaps the most characteristic portion of Mr. Tylor's work, as compared with and in connexion with the object of Sir John Lubbock's, is his chapter on "Images and Names." Both writers are at one as to the principle that the history of a child's mental growth may, as savages are merely grown-up children, be taken as a type and sketch of what the history of the mental growth of the race has been; but it is Mr. Tylor who has most fully worked out the particular point that savages and children both alike agree in falling into that confusion of object and reality with image and representation upon which the practice of magic, so deeply interwoven into the texture of many religions, ultimately rests; and it is Mr. Tylor who most emphatically insists upon the demonstration of this connexion as an argument for the theory of which both he himself and Sir John Lubbock are advocates against the Degenerationists (see Tylor, p. 373-374 ed. 2nd, p. 365 ed. 1st). Happily neither the malevolent nor the erotic passions are commonly so strongly developed in children of the doll-loving age as to impel them to use their waxen images for the same purposes as the Canidia of Horace's Epode (xvii. 82) used her bitumen, or the Simœtha of Theocritus (id. ii. 28) her wax; still images of the former kind do possess for the minds of children even in these days, we are assured, a double personality. We can refer, as we hope, most of our readers to sources whence they can satisfy themselves as to this point at first hand; what we wish to do is to draw attention to the fact that in many savage minds lodged in modern adult bodies the same confusion as to the identity and non-identity or at least the essential interdependence or independence of image or picture and of person represented still persists.

It was but a few weeks ago that we read of a crowd of adult men and women looking on with admiration whilst a *gens-d'armes* stabbed the picture of a fallen potentate in its various "vital parts," as the description ran, with his bayonet; Mr. Quilp, it will be recollected, entertained himself with similarly piercing the wooden figure-head which stood for the man whom he was to see ruined by the perjury of Mr. Brass and the unwilling truth-telling of Mr. Richard Swiveller; and as Persius lived, as we have lived, in the time of a decaying Imperialism, we may take the *Veneri donatæ a virgine pupæ* of his Satire ii. 70, as a third modern instance without caring to enquire whether the practice here referred to can find parallel nearer our own time and country (see Tylor, p. 124). These remarks lead us on to say that though both our authors recognize, and indeed dwell upon the facts of the retention still amongst us of customs which can only be explained as being rudiments and reminiscences of the rites and practices of savagery; neither of them has, as we think, drawn sufficient attention to the fact, essential though it is to this argument, that these rudimentary indications are by no means to be sought or found in one stratum or level of society alone; but are, proportionately at least, as numerous in the higher as in the lower walks of life. If it was amongst the lower classes only that we met with the "Survival" of Superstitions, this survival would tell in favour of rather than against the degenerationist hypothesis; but as a matter of fact, we are inclined to think that practices and modes of thought of the kind in question are, due regard being had to the relative number of the several classes, little less common with the educated than among the uncultivated portions of society.

Without pledging ourselves to the entire validity of Sir J. Lubbock's and Mr. Tylor's argument, even when supplemented as we suggest, we think that they might have claimed for the peculiar practices and views of which we are speaking a greater generality and a wider diffusion than they have claimed for them, and that thus they would have been better able to speak of them as depending not merely upon external and accidental conditions, but upon causes essentially interwoven into the very texture of our being. When and wheresoever education, with the thoughtfulness and self-control which it implies, is deficient, impulses, whether superstitious or passionate, will make themselves seen and felt in action so soon as means for their gratification are present and the counter-check of public opinion is removed. And we can hence understand that it is likely, as we may convince ourselves by examination that it is actually the case, that in those numerically small spheres of society which are largely endowed with this world's goods, modes of thought, and even actual practices, which can be legitimately affiliated to those of savagery, may be proportionately as rife as they are in the secluded and pauperized villages of agricultural and mountainous districts. A proneness to exaggerate politeness into punctilio; a tendency to over-legislation and especially in trifles; an incapacity for sustaining attention continuously, especially when abstract terms are employed, and sometimes even when the matter for consideration is a choice between but two alternatives; an abstinence from all mention of the names or reference to the destiny of the dead, alternating with certain views as to the dependency of that destiny upon the social position held in this world; the employment of certain euphemisms for certain objects, with the view of pushing them out of consideration; are each and all of them points instanced in various pages * of the two works before us as points characteristic either of savages or of children or of both; but it would be easy to show by purely literary evidence, such as that which Swift's conversations, and the mock effusions of other authors, ascribed to "Persons of Quality," that these peculiarities are by no means confined either to savages and children or to the lower strata of society alone.

George Rolleston.

(*To be continued.*)

Lay Sermons, Addresses, and Reviews. By T. H. Huxley, LL.D., F.R.S. London: Macmillan and Co. 1870.

On the Scientific Use of the Imagination. A Discourse delivered before the British Association at Liverpool, by John Tyndall, LL.D., F.R.S. London: Longmans. 1870.

Professor Huxley has chosen, perhaps intentionally, certainly opportunely, the year of his Presidency of the British Association for the publication of a volume of essays which appeal rather to the world of culture and letters than to that of pure science. Pre-eminent in his own special pursuits, Dr. Huxley is careful to avoid the exclusiveness which is the bane of the specialist, and is never satisfied without determining for himself, and exhibiting clearly and forcibly to his readers, the bearing of his own studies on the main currents of thought which characterize the present age. It is true that some of the essays in the present volume—the addresses, for example, to the Geological Society—appeal to a merely scientific audience; but it is obvious that the spirit of the work is to be found in its main title *Lay Sermons*, and that its writer wishes to speak not specially as a man of science, but as the advocate of a new culture, and the apostle of a new gospel.

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* Lubbock, pp. 303, 304, 355; Tylor, pp. 144, 145; Lubbock, pp. 267, 349.

In each of these characters Professor Huxley has much to say that is well worth saying, and it is almost needless to add that it is thoroughly well said. He sees clearly, and argues strongly, that the existing educational institutions have fallen behind their age, and fail to do for modern culture what they did in former times. Fed with the strong meat of modern science, he loathes the sickly training which goes by the name of education in our universities and public schools; but he forgets, it would seem, that this education is only bad because there exists no effective demand for its improvement, not because the scientific study of classical or other antiquity has ceased to be a potent instrument of culture. Classical education, as it now exists in this country, is the feeble offspring of a noble and generous system, and it is scarcely fair to compare it with a system which does not yet exist, and has therefore all the advantages of imposing theory, and none of the drawbacks of degenerate practice. The question is not, as Dr. Huxley virtually puts it, Can scientific education be made a better instrument of culture than classical education actually is? but rather, Is natural knowledge, as it is commonly called, a better instrument of culture than the knowledge of classical antiquity? He well points out, in a passage which we regret we cannot quote at length, that "Science is nothing but *trained and organized common sense*" (p. 86); and if this be so, as we firmly believe, what is the difference between the common sense which investigates the facts of antiquity, and that which investigates the facts of nature? We regret that a writer with whose main purpose of making education real and adequate we entirely sympathize, and who shows in more than one passage that he has a true appreciation of the value of classical culture, should have addressed to working-men such words as the following:—

"I weigh my words well when I assert, that the man who should know the true history of the bit of chalk which every carpenter carries about in his breeches-pocket, though ignorant of all other history, is likely, if he will think his knowledge out to its ultimate results, to have a truer, and therefore a better, conception of this wonderful universe, and of man's relation to it, than the most learned student who is deeply read in the records of humanity and ignorant of those of nature" (p. 195).

Are the records of humanity, then, not a part of those of nature? May we not rather say that if we take the smallest particle of knowledge of any kind, whether of man or of nature, if the two are to be regarded as distinct, and think it out to its ultimate results, we shall be incomparably better educated than if we never think at all? Surely the purpose of all education is to make a man think, and use his faculties, to fit him for that game of chess by which our author so strikingly symbolizes man's relation to the universe. Dr. Huxley thinks that the time has now come when we should recognize that the best training for this purpose is to be found in natural knowledge, and assuredly some natural knowledge is essential to each man's welfare. Nevertheless there are many who are not prepared to relinquish the belief that all true knowledge is natural knowledge, and that while all is good, some particular kinds, and notably that of the antiquity wherein lie buried most of the roots of our modern life, are especially suited to be made the instruments of a wide and humane culture. It is well to know all that can be known about a piece of chalk; it is well too, perhaps better, to know all that can be known about Homer and Aristotle.

It would scarcely be fair to say that not content with invading culture, science is now preparing to assail religion; but the writer of the words we are about to quote would be the last to deny that he is at open variance with much that commonly goes by the name of religion:—

"If the religion of the present differs from that of the past, it is because the theology of the present has become more scientific than that of the past; because it has not only renounced idols of wood and idols of stone, but begins to see the necessity of breaking in pieces the idols built up of books and traditions and fine-spun ecclesiastical cobwebs: and of cherishing the noblest and most human of man's emotions, by worship 'for the most part of the silent sort' at the altar of the Unknown and Unknowable" (p. 20).

The opposition between science and religion is deep-seated and is the expression of the inevitable antagonism between the progressive and conservative forces of humanity; still their goal is one, and no man of fairness and candour, be he the champion of religion or of science, will cherish beliefs that can be proved to be false. Nor is the criterion of truth in religion different from that in science, it is only vastly more difficult of application, and if the man of religion refuses to yield save to the clearest and most irrefragable evidence, he is only exercising that wary scepticism which is the safeguard of science, and practically illustrating the fundamental maxim of Descartes which is so eloquently enforced by Dr. Huxley himself. With positive knowledge the true religious spirit can only be temporarily at variance; it moves slowly and with cautious steps as becomes the guardian of such momentous interests, but it meets science fearlessly on the common ground of reasoned truth. With this spirit Dr. Huxley is in no sense at variance, and few passages in the volume are more striking than those wherein he dwells on the spiritual aspects of scientific culture. It is the more to be regretted that there are other passages of a controversial nature where his usual urbanity seems to forsake him, and where he attacks his adversaries almost with ferocity; the following words, which will be familiar to many, illustrate our meaning:—

"Extinguished theologians lie about the cradle of every science as the strangled snakes beside that of Hercules; and history records that whenever science and orthodoxy have been fairly opposed, the latter has been forced to retire from the lists, bleeding and crushed, if not annihilated; scotched, if not slain. But orthodoxy is the Bourbon of the world of thought: it learns not, neither can it forget" (p. 305).

If the victory has, as is doubtless the case, been uniformly on the side of science, surely science can afford to be a generous foe; there is certainly something undignified in the tetchiness which science exhibits at the unavailing assaults of its oft-defeated antagonist. Time itself is on the side of science, and with truth as its weapon it can safely afford to wait. It is sad to see men of science of the foremost rank, like Dr. Huxley, wasting their time and energies in controversy, as unavailing as it is undignified, with mere bigotry and intolerance. That Dr. Huxley knows how to treat a religious antagonist generously and with dignity the following extract will show:—

It was my fortune some time ago to pay a visit to one of the most important of the institutions in which the clergy of the Roman Catholic Church in these islands are trained; and it seemed to me that the difference between these men and the comfortable champions of Anglicanism and Dissent was comparable to the difference between our gallant Volunteers and the trained veterans of Napoleon's Old Guard.

"The Catholic priest is trained to know his business, and do it effectually. The professors of the college in question, learned, zealous, and determined men, permitted me to speak frankly with them. We talked like outposts of opposed armies during a truce—as friendly enemies" (p. 68).

Perhaps the first paragraph in this extract serves to explain the different treatment which Anglican orthodoxy and Ultramontanism meet with in this volume; the English clergy, for the most part, are not unlike Mr. Matthew Arnold's young man from the country, "serenely unconscious that they are not at the centre of the situation." Ultramontanism places itself at the centre of modern thought in order that it may oppose it; Anglicanism is equally zealous in opposition, but is far removed from the centre. We would suggest, however, to Dr. Huxley, with all deference, that unless his opponents are prepared to meet him on the common ground

of truth and positive knowledge, they are unworthy of his steel, and that where fighting is out of the question, mere railing is undignified.

We have dwelt on what we conceive to be two of the chief points of interest in this book, namely, the bearing of the modern scientific spirit on general culture and on spiritual beliefs; there is a third point, of scarcely less interest and importance, on which space will not permit us to dwell at present, the relation of modern science to speculation. The tendency of scientific enquiry in the present day seems to be towards a new synthesis of materialism and idealism, the conception of which will be familiar to students of the works of Mr. Herbert Spencer. This tendency is well illustrated by two discourses on "The Physical Basis of Life," and on "Descartes," and finally summed up thus :—

"The reconciliation of physics and metaphysics lies in the acknowledgment of faults upon both sides; in the confession by physics that all the phenomena of nature are, in their ultimate analysis, known to us only as facts of consciousness; in the admission by metaphysics, that the facts of consciousness are, practically, interpretable only by the methods and the formulæ of physics" (p. 374).

This fruitful conception that "legitimate Materialism . . . is neither more nor less than a sort of shorthand Idealism" is destined, as it seems to us, to form the basis of a new school of speculative thought; if so, that school will be fortunate in reckoning Dr. Huxley among its leaders, for we know not where else it would find combined, profound scientific knowledge, especially in those biological sciences which glide almost imperceptibly into psychology, keen speculative ability sharpened by adequate training, and a rare power of accurate and subtle thought matched with a still rarer power of precise and graceful speech.

The discourse "On the Scientific Use of the Imagination," delivered last month, at Liverpool, by Dr. Tyndall comes opportunely to illustrate some of the points on which we have already dwelt. There is the same feverish sensitiveness to the antagonism of orthodoxy, and the same sense of the intimate relation between the results of scientific research and speculative thought. As Dr. Huxley had explained to a general audience the analysis which leads to the physical basis of life, so Dr. Tyndall explains to an audience not wholly scientific the analysis which leads to the basis, which cannot but be called physical, of inorganic matter. It is in this analysis which though within the legitimate range of science lies on its extreme verge, that, according to Dr. Tyndall, the imagination is specially called into play. No eye has seen nor microscope revealed the ultimate atoms or molecules of which matter is now regarded as composed; they make their presence felt by unmistakeable sensible phenomena, but they appear themselves to the imagination alone; the conception we are forced to frame of these atoms, symbolic as it may be, is legitimate, for it rests on strong and extensive analogies, and serves to explain as no other hypothesis does the phenomena with which it deals; it is also imaginative for it may not be absolutely true, but imagination here as in other cases lends its aid to science in framing a hypothesis which serves as a basis for further research. This view, which is not perhaps particularly new, is expounded with much wealth as well as freshness of illustration by Dr. Tyndall.

If Dr. Tyndall is not quite Dr. Huxley's equal in the art of expounding in a popular manner the latest results of delicate and abstract scientific research, he is at least a very near competitor: though somewhat diffuse, and perhaps a trifle self-conscious, he has the power which is given to few of carrying his hearers by simple and easy steps into regions which, as he says, "have been hitherto crossed by the pioneers of science alone." James R. Thursfield.

Scientific Notes.

Natural History.

Beetles in Wasps' Nests.—In the last number of the *Annals and Magazine of Natural History*, Dr. T. A. Chapman has settled a point which has been warmly debated in that journal, respecting the relation of the small species of beetle, *Rhipiphorus paradoxus*, generally found in wasps' nests, to the wasp. From analogy, the parasitic nature of *Rhipiphorus* might be concluded, as that insect is very nearly allied to *Meloë* and *Sitaris*, both of which are parasitic in their larval state. Dr. Chapman's observations prove incontestably that the near zoological relationship of these insects is strongly reflected in their mode of life. He has found in a wasps' nest a minute six-legged active larva, closely resembling that of *Meloë* in its structure, and evidently going about in search of a suitable victim on which to feed. He has not seen the attack made by this little creature, but it is clear that the young parasite selects a nearly full-grown larva of the wasp, eats its way through the skin of the body, and lives for a time as an internal parasite. In the situation here described the author discovered a soft fleshy larva, closely resembling those found at a later period feeding from the outside, upon the wasp-grub, *but still retaining the horny head, the six little legs, and the horny plates of the body segments of the minute active larva* first mentioned. At this stage of its growth the young parasite emerges from the wasp-grub by piercing the skin at the front of the fourth segment, and in emerging it appears to leave its skin behind it in the aperture through which it makes its escape. It then acquires the aspect of a mere soft white grub, not unlike that of the wasp, to which it now adheres by its jaws immediately behind the head. The cast skin, which retains the horny dermal plates of the first larval form, probably assists in stopping the effusion of the fluids of the wasp-grub through the wound. The further transformations of the *Rhipiphorus* are described in detail by Dr. Chapman, but the point of most general interest in his paper is the detection of the agreement in their mode of development between this insect and the nearly-allied *Meloë*. The chief point now to be ascertained is the place and time of the deposition of the eggs of the *Rhipiphorus*, and the mode in which the larvæ are introduced into the wasps' nests. The young six-legged larvæ of *Meloë*, as is well-known, frequent flowers from which they are carried by bees into their nests, and the *Rhipiphorus* probably adopts a similar mode of transport.

Parthenogenesis in the Pupa state of Insects.—In vol. xv. No. 8, of the *Memoirs of the Academy of St. Petersburg*, M. O. von Grimm describes a curious instance of Parthenogenesis in a species of the dipterous genus *Chironomus*. Like the well-known case of *Miastor*, discovered by Prof. Wagner, this is an example of reproduction by an insect in one of its preparatory, and therefore sexless stages, called *Pædogenesis* by Von Baer. The formation of the egg-like reproductive bodies commences in the larvæ; but the eggs are not extruded until the insect has passed into the pupa state. It appears that in the spring the larvæ, produced in the ordinary way from eggs, grow rapidly, and after the third change of skin attain their full size, and show distinct traces of the pupa within them. The eggs are produced direct from the pupa in this condition. In the autumn the course of development during the preparatory changes is precisely the same; the pupa, however, changes into the imago, which deposits the eggs, probably after copulation, in the ordinary manner. The mode of development of the eggs and ovaries, and that of the embryo in the egg, are described by the author at considerable length, and illustrated by good figures. The eggs are developed in the same way, both in the spring and in the autumn, although in the one case they will be deposited by the pupa, and in the other by the imago; and as they present no difference in their structure, the author regards them all as eggs, and rejects the distinction into *ova* and *pseudova*. He seems inclined to adopt the notion that the supposed cases of parthenogenesis may be due to self-fecundation.

Physiology.

Dr. Meynert on the Histology of the Brain.—The fourth part of Prof. Stricker's *Handbook of Histology* has passed out of the editor's hands, and will appear immediately. This work will have an especial interest, since it will contain the results of Dr. Meynert's investigations into the histology of the brain. Dr. Meynert, who is chief physician to the great lunatic asylum of Vienna, has been engaged on this difficult subject during the greater part of his life, and his conclusions have not yet, to any great extent, been brought before physiologists. The chromic acid method has been principally made use of, the sections being stained with carmine, and rendered transparent by means of oil of cloves. The investigations have not been confined to the human subject, but have extended to apes and other animals. The following papers have also recently appeared upon this subject, in addition to the well-known researches by Lockart Clarke.—*Bemerkungen über die Ganglienkörper der Grosshirnrinde des Menschen*, von Dr. Rudolph

Arndt, Max Schultze's Archiv, 1870. *Untersuchungen über die Kleinhirnrinde des Menschen*, von Dr. H. Hadtrop.

Epileptic Guinea-Pigs.—In investigating the subject of the hereditary transmission of nervous and other lesions, of which he gave an account at the recent meeting of the British Association, Dr. Brown-Sequard has lately been making a series of experiments upon guinea-pigs, which he has rendered epileptic by artificial means. A guinea-pig is made epileptic either by the section of one-half of the spinal cord or by the division of the sciatic nerve on one or both sides. The fits begin to develop themselves in about nine days after the operation, commencing by a convulsive movement of the hind-leg on the side of the body on which the operation has been performed. The head then twists round towards the same side, the jaws working convulsively. After a short interval the head turns completely round to the other side. At this moment sensation is lost and the fit becomes complete. The fits develop gradually, the successive stages presenting themselves one by one in the same order as they occur in each fit in an animal whose epileptic state is complete. Thus a guinea-pig acquires first a convulsive motion of the hind-leg, then this combined with the first motion of the head, then the perfect fit. The fits may be brought on at will by rubbing between the finger and thumb a portion of skin lying within a certain zone. If the nerves supplying this zone be laid bare, irritation of them will not produce the fit, though irritation of the skin will still do so. The zone includes the face, cheeks, and top of the head, and extends a short distance down the back, but misses the nose and ears. Its limit differs slightly in different specimens, but is always sharply defined by the immense quantity of parasites with which it is infested. This is due to the fact that as the fits develop themselves, common sensibility is lost within the zone. Guinea-pigs in which epilepsy has been produced by section of the spinal cord remain epileptic, but can be cured at will by section of the skin within the zone. Those in which the disease has resulted from division of the sciatic nerve cure themselves in the space of a year or a year and a half. It is a remarkable fact that as the cure takes place the hair on the zone becomes atrophied. During the fits it sometimes happens that the hind-foot gets between the teeth and is bitten. The animal on recovery from the fit tastes the blood, and, if it be one in which the sciatic nerve has been divided, proceeds to nibble off the two outer toes which have entirely lost their sensibility from the operation on the nerve. Dr. Brown-Sequard had several cases in which this happened. In breeding from pairs of this kind, he was astonished to find that the offspring is without the two toes of which the parents have deprived themselves. Moreover in these cases all the offspring have as they grew up become perfectly epileptic. In ordinary cases epilepsy is only rarely transmitted hereditarily. On dissection of one of the hereditarily malformed animals, a node was found on the sciatic nerve corresponding to that formed after section of the nerve in the parent. Epileptic guinea-pigs are also liable to a peculiar dry gangrene of the margin of the ears. The tissue on this spot becomes desiccated and dowdery, and eventually falls away leaving the margin slightly indented. A corresponding fact is the affection of the ears, called Othæmatoma, observed in lunatics, and formerly supposed to be due to ill-treatment by attendants. The fold of the concha of the ear in epileptic guinea-pigs becomes also less pronounced. Both these peculiarities have been found to be transmitted hereditarily in a large number of instances.

Researches on Digestion.—Dr. Paschutni of St. Petersburg, has recently been making a series of investigations on the digestive process, in the physiological laboratory of Prof. Setschenow, with the following results :—First, aqueous infusions of the mucous membrane of the small or large intestine of the dog, when maintained at a temperature of about 100° Fahr. in order that self-digestion may take place, give, in the course of three or four hours, voluminous precipitates of albumen, that remain unchanged till putrefaction sets in; coincidently the alkaline reaction changes to acid, and the fluid is no longer able to reduce the oxide of copper. The infusion of the mucous membrane appears to have no power of converting the fibrin of blood or other albuminous compounds into peptone, and the fats are not decomposed, and only slightly emulsified by it. He found that the juice or secretion of the small intestine, obtained by Thiry's method from a loop of the intestine, possessed no power of digesting fats and various albuminous compounds, and only a slight action on fibrin. The infusion of the mucous membrane of the small intestine can convert starch into sugar, but this power is also possessed by the mucous membrane of the trachea and urinary bladder in an almost equal degree, to a smaller extent by that of the gall-bladder, the cæcum, and large intestine, and to a still smaller degree by that of the stomach and rectum. Secondly, the infusion and secretion of the mucous membrane of the small intestine can alone convert cane into grape-sugar; but this is only the case in certain animals, as in the dog, pig, rat, mouse, and rabbit, whilst it does not occur in the Ruminantia. Thirdly, those infusions that can convert starch into sugar and cane-sugar into grape, contain two distinct ferments, which can be separated from one another by appropriate means, and especially by filtration through an animal membrane. The infusion that effects the conversion of starch into sugar appears to be obtained chiefly from the muscular layers of the intestine. Fourthly, a temperature of over 104° Fahr. operates destructively upon the animal ferments, the effect varying in activity with the duration of its application and the concentration of the ferment. In regard to the saliva it was found that the temperature at which the operation of its peculiar ferment, when diluted with 10 or 12 parts of water, upon boiled starch, is most intense, is from 100° to 106° Fahr. It is more difficult to determine the temperature of greatest activity for uncooked starch; it is certainly higher, but varies in different instances. When the ferment is weak it is probably about 144° Fahr., when the ferment is concentrated it is probably over 149° Fahr. Dr. Paschutni shews that the admission of air at ordinary temperatures to starch-paste causes the formation, in a period varying from a few hours to two or three days, of a material that is capable of reducing oxide of copper. The paste that has undergone this change can act as a ferment on fresh paste, but boiling it destroys its capability of doing so.

Tactile Hairs of Mammalia.—Odenins, who recently investigated this point of histology, has stated that the nerves of the tactile hairs ended, after becoming non-medullated, with terminal enlargements in the homogeneous layer of the papilla. In the annular swelling around their bases he was unable to find any nerves, and considered that it fulfilled only a mechanical function. In a paper in the *Centralblatt für die medicinischen Wissenschaften*, Dr. R. Burkart states that the annular swelling consists, in the hairs of the muzzle of the mouse, guinea-pig, rabbit, and cat, of finely-fibrillated connective tissue, containing cells in its fine meshes. By the aid of a method which he intends shortly to publish, he has been able to stain nervous tissue of a bluish or coal-black tint, without modifying the connective tissue, gland substances, &c. The agent employed is perosmic acid. And he has ascertained not only that the annular swelling is supplied with nerves, but that the source from which it receives its nerves is the innermost part of the compact layer of the papilla.

On the Connective Tissue of the Brain.—Signor Golgi (in *Rendiconti del R. Instituto Lombardo di Scienze e Lettere*, ser. ii. vol. iii. fas. vii. p. 3) has been making some interesting investigations on the structure of the brain after maceration for 24 or 48 hours in osmic acid. Thin sections thus treated exhibit numerous stellate cells, the protoplasm of which gives off a variety of branches, some of which anastomose with those of other cells, whilst others are lost in the grey and finely-granular neuroglia; and others again, and these are the most numerous, pass to the walls of the capillary blood-vessels and larger lymphatics. He makes the observation that in such sections the brain-substance is seen to be in immediate contact with the vascular walls, no intervening space being visible, as in preparations that have been treated with bichromate of potash. This has an important bearing on the histology of the brain, since Eberth, His, and others have regarded these spaces as the lymphatics of the brain. The anastomosing connective tissue cells above described are most abundant near the surface of the brain, and they gradually diminish in the deeper parts, so that in the region of the ganglion-cells, and still more of the white substance, they are very sparingly present.

Development of the Heart.—Professor Rokitansky of Vienna, will shortly publish a work on abnormalities in the heart and great vessels, a subject on which he has long been engaged. From pathological research he has come to the conclusion that the received history of the development of the heart is incorrect in several particulars, and these conclusions have been confirmed from the physiological point of view by Professor Stricker, who will also contribute to the volume. Rokitansky possesses probably the largest collection of specimens of abnormal hearts in existence.

The Organ of Taste in the Tadpole.—F. E. Schultze, in a late number of the *Archiv für Mikroskopische Anatomie* (Band vi.), gives a description of the organs of taste possessed by the fully-developed larva of the *Pelobates fuscus*. The oral cavity of this animal exhibits on minute examination about 200 papillæ, and of these about 80 are distinguished from the rest by their larger size and more conical form. These last receive a supply of nerve fibres, which Stricker believed to terminate beneath the epithelial layer in slightly bulbous enlargements. Schultze however contends that they may be traced to the epithelial layer itself, where they form cup- or chalice-shaped organs that resemble in all essential particulars the gustatory cells described by Schwalbe and Lovén in the tongues of mammals.

Botany and Geology.

Do Plants absorb Moisture through their Leaves?—Two French botanists, Prillieux and Duchartre have recently turned their attention to this question, and their experiments lead to the conclusion that it must be answered, contrary to the belief of all the older botanists, in the negative. M. Duchartre's experiments were made for the most part on epiphytes, plants having no direct communication with the soil, and which are yet found to contain potash, soda, alumina, and other ingredients which plants whose roots grow in the earth derive from that source. If these plants derive their sustenance from the moist vapour by which they are surrounded, it is difficult to understand how they can

procure these materials. But if they absorb not aqueous vapour, but water itself, we can at once account for the possession of these inorganic materials. To ascertain how far this conclusion is just, M. Duchartre placed several of these epiphytes, provided with their aërial roots, in closed vessels filled with moist vapour; the result was to confirm the observation of Prillieux, that under these circumstances the plants lost weight. If, however, from any cause the plants came into contact with liquid water, it was absorbed readily, and the plants increased in weight. When leaves, flaccid from undue evaporation, are suspended in moist air, they recover their freshness, though they do not gain in weight; hence the inference is drawn that the renewed vitality of the leaves is due, not to the absorption of vapour, but to the transference of fluid from one portion of the branch to another. When leaves, however, are actually plunged in liquid water for a considerable time, they do absorb it in considerable quantities. A good account of these experiments will be found in the *Gardeners' Chronicle* for Sept. 17th.

Self-Fertilisation and Cross-Fertilisation of Plants.—Mr. A. W. Bennett reports in the *Journal of Botany* for October a series of observations on this subject. He states that there are now known to be three modes by which cross-fertilisation is especially favoured:—the phenomena of dimorphism and trimorphism, to which Darwin has called attention; special contrivances for effecting the transference of pollen by insects from one flower to another; and the fact, which has not yet received so much attention, that in the same flower the pistil and stamens frequently arrive at maturity at different times. By observing a number of British plants, he has come to the conclusion that the most usual order is for the stamens to ripen before the pistil (protandry); the simultaneous maturing of the two organs (synacme) is nearly equally common: while the ripening of the pistil before the stamens (protogyny) is far more rare. Although protandry and protogyny do not, in most cases, actually forbid the possibility of self-fertilisation, they render cross-fertilisation far more likely. The most striking contrast was found to exist between the common harebell (*Campanula rotundifolia*), in which the pollen is discharged and the anthers wither up long before the stigmata are developed; and the *Scrophularia aquatica*, in which the pistil is mature very much earlier than the stamens.

Colossal Fossil Sea-weed.—From the microscopic examination of the structure of specimens of the fossil trunks described under the name of *Prototaxites Logani*, and which Principal Dawson affirmed in his Bakerian lecture before the Royal Society, to be the oldest known instance of Coniferous wood, Mr. Carruthers has discovered that they are really the stems of huge *Algæ*, belonging to at least more than one genus. They are very gigantic when contrasted with the ordinary Algæ of our existing seas, nevertheless some approach to them in size is made in the huge and tree-like *Lessonias* which Dr. Hooker found in the Antarctic seas, and which have stems about 20 feet high, and with a diameter so great that they have been collected by mariners in these regions for fuel under the belief that they were drift-wood. They are as thick as a man's thigh.

Chemistry.

Oxygen, Ozone, and Antozone.—In a paper recently published in *Liebig's Annalen*, cliv. 215, Nasse and Engler have endeavoured to shew that antozone is peroxide of hydrogen diffused in oxygen. Schönbein's theory, which, however, has not gained general acceptance, is, that ordinary oxygen may be decomposed by electricity into ozone and antozone, and conversely, that the two latter substances may be united so as to make oxygen. Ozone is maintained by the best authorities to be an allotropic modification of oxygen; indeed it has been proved to be such, many years ago, by the excellent researches of Marignac, *Ann. de Ch. et de Phys.* xiv. 252. But antozone was held by Von Babo and Weltzien to be nothing but a small quantity of peroxide of hydrogen diffused through a large volume of air or oxygen. The following experiments of Nasse and Engler confirm this last conclusion. A mixture of oxygen, ozone, and the supposed antozone, was passed through a solution of potassic iodide in order to absorb the ozone. The residual gas, consisting of oxygen and antozone, was then conducted through glass tubes, which were kept by a freezing-mixture at temperatures of about $-20°$ C. By this treatment only pure oxygen escaped from the apparatus, and an aqueous solution of peroxide of hydrogen was found left behind in the glass tubes. This conclusion is also supported by many indirect proofs. It is shewn, further, that this peroxide of hydrogen is not the direct result of the action of electricity on oxygen, but is formed during the passage of the mixture of oxygen and ozone through potassic iodide. The action of the electric discharge on oxygen, and the formation of ozone and antozone are further explained thus: The passage of electric sparks through *pure* oxygen causes a very small portion of the oxygen operated upon to become ozone. The result of conducting it now through a solution of potassic iodide is, that the ozone not only oxidizes the latter but also some of the water, producing peroxide of hydrogen. That portion of the oxygen gas, which takes no part in these processes, passes on, and carries along with it some of the vapours of water and peroxide of hydrogen, acquiring thereby the properties of the so-called antozone.

Classification of Sugars.—The different kinds of sugar may roughly be divided into two classes, those which are susceptible of fermentation, and those which are not. Sugars are compounds of carbon, hydrogen, and oxygen, and can by suitable treatment be converted into acids. Messrs. Hlasiwetz and Habermann (*Liebig Ann.* clv. 120) have shown that the sugars belonging to the first class (susceptible of fermentation) produce under certain conditions acids which still contain all the carbon of the original sugar, whereas those of the second class produce under the same or similar conditions acids which do not contain all the carbon of the sugar from which they were formed.

Physics and Astronomy.

On the Influence of a roughened Surface on the Emission of Heat.—*Poggendorff's Annalen* for July contains a paper by the late Professor Magnus on the effect of roughness of surface upon the power of bodies to emit heat. Magnus found that the emissive power of polished platinum was doubled when its surface was roughened by rubbing it with fine emery-paper, and was increased sevenfold when it was coated with a thin layer of spongy platinum; no difference, however, could be detected between the quantity of heat emitted by a platinum plate which had been made very hard by rolling, and that emitted by the same plate after it had been rendered soft by annealing. He rejected the supposition put forward by Sir John Leslie and by Melloni, namely, that the effect of roughening is due to the alteration of density which it produces in the superficial layers of the substance, and suggested that it is more probably due to the change caused by refraction in the direction of the rays which leave the surface obliquely. It would not be easy to show the precise way in which Magnus applied this idea to the explanation of the phenomena in question without the help of a figure. One consequence of it, which, as he points out, is in accordance with observation, is that a rough surface is more likely to cause increased emission of heat in the case of bodies which are very slightly diathermanous, in which therefore the total radiation is confined to a very small depth below the surface, than in the case of those which are more diathermanous and therefore radiate from a greater depth below the surface.

Dispersive Powers of Gases and Vapours.—M. Croullebois has determined the indices of refraction of several gases and vapours for the fixed lines C, E, and G of the solar spectrum. His method of experiment was based upon the phenomena of interference produced by two small pencils of light which, proceeding from the same source, arrive at the same point by different paths. It was pointed out more than fifty years ago by Arago, that, the lengths of the paths of the two interfering pencils remaining unchanged, the most minute alteration in the index of refraction of the medium through which one of them passes is revealed by a change of position in the resulting interference-bands. In M. Croullebois' experiments, the two portions of light which were afterwards brought to interfere were made to pass through two parallel tubes placed side by side, and containing the gas or vapour to be examined. The observations consisted in determining the effect of a difference of density of the gas in one tube, as compared with that in the other, in producing a shifting of the interference-bands. In one set of experiments, this was ascertained by actually watching the motion of the bands while the change of density was taking place; and in another set, the effect of increasing or diminishing the gaseous pressure in one of the tubes was compensated by diminishing or increasing the thickness of glass through which the corresponding pencil of light had to pass, and the magnitude of the effect was deduced from the amount of compensation needed. Both methods gave sensibly identical results; but it should be observed that the dispersive power of air deduced by M. Croullebois from his experiments exceeds considerably that obtained five years ago by Ketteler, by a method essentially similar.

A Novel Way of Studying the Stars.—In *Fraser* for October, Mr. R. Proctor applies Humboldt's plan of measuring the relative extent of land and water to the celestial globe. Of the 5850 stars of the first six orders, given in the Catalogue of the British Association, 1115 lie within the Milky Way, a space covering between 1-10th and 1-11th of the celestial sphere; whilst in the rest of the sky two districts of the same size are provided with proportions represented by the figures 13,126 and 2361. The conclusion is that there must be some reason for this unequal distribution of stars in streams and reticulations, and that the Milky Way is made up of small rather than exceedingly distant luminaries.

New Books.

Adams, A. Travels of a Naturalist in Japan and Manchuria. London: Hurst and Blackett.

Agassiz, L. Thayer Expedition, Scientific Results of a Journey in Brazil: Geology and Physical Geography of Brazil, by C. F. Hartt. London: Trübner and Co.

Behm, E. Geographisches Jahrbuch. Band III.: 1870. Gotha: Perthes.

Cohn, Dr. F. Beiträge zur Biologie der Pflanzen. 1es Heft. Breslau: Kern.

Corfield, Prof. Treatment and Utilization of Sewage. London: Macmillan and Co.

Dürre, E. F. Wissenschaftlich-technisches Handbuch des gesammten Eisengiessereibetriebes. Band I. Leipzig: Felix.

Ehrenberg, C. G. Ueber die wachsende Kenntniss des unsichtbaren Lebens als felsbildende Bacillarien in Californien. Berlin: Dümmler.

Schellen, Dr. H. Der elektromagnetische Telegraph. Braunschweig: Vieweg.

Schellen, Dr. H. Die Spectralanalyse in ihrer Anwendung auf die Stoffe der Erde und die Natur der Himmelskörper. Braunschweig: Westermann.

Schmidt, O. Grundzüge einer Spongien-Fauna des atlantischen Meeres.

Taschenberg, E. L. Entomologie für Gärtner und Gartenfreunde; oder Naturgeschichte der dem Gartenbau schädlichen Insekten, Würmer, &c. Leipzig: Kummer.

Virchow und Hirsch. Jahresbericht über die Leistungen und Fortschritte in der Anatomie und Physiologie. Berlin: Hirschwald.

History and Archæology.

A History of the Egyptian Revolution, from the period of the Mamelukes to the Death of Mohammed Ali; from Arab and European memoirs, oral tradition, and local research. By A. A. Paton. 2nd Edition, enlarged. London: Trübner.

How far is it true to speak of "the fixed and unchanging East"? A closer acquaintance with China shows anything but an unchanging system, and the religious, philosophical, and political revolutions of India and Persia quite match those of Europe. Probably the Semitic nations are chiefly referred to in this sense, as though being imbued with a strong religious feeling they had all along tended to monotheism. The enduring similarity of manners and customs, too, has strengthened this idea; we are all familiar with the biblical illustrations drawn from the modern life of Syria, Arabia, and Egypt. Mr. Palgrave's book however has woefully diminished the importance of the Bedouins, who appear to be by no means fair representatives of the genuine Arabian tribes. And no one who compares the picture of Arab life in Antar (when Chosroes Nushirvan was ruling in Persia) with Palgrave's account of the Wahabee Puritans of modern Arabia could speak of the race as unchanging. Similarly in Egypt. The climate and the river prevent some things from changing, but in all that makes up national or individual life in the higher sense, the Egypt of Ptolemy or Athanasius is as distinct from the Egypt of the Pharaohs as it is from that of Mohammed Ali in our own days. Mr. Paton tries to show us this modern Egypt from something of the Eastern point of view. He knows the condition of Turkey well, as he showed by his *Researches on the Danube and Adriatic*, and his practical experience in political affairs during the crisis that followed the battle of Nezib, and again during the bloody civil war in Mount Lebanon, has stood him in good stead in the present work. The first volume contains a preliminary sketch of Egyptian history from the Moslem Conquest to Napoleon's expedition, which is described at length, with considerable illustration from native writers. But the second volume is the really important part of the book as it shows what political and social and commercial changes followed the rise of Mohammed Ali. In 1808-10 the new ruler (a native of Roumelia who first came to Egypt as Aga of a band of Albanians and Roumeliotes in the Turkish force attached to Abercrombie's expedition) effected a revolutionary transfer of landed property. By a strict inquiry into titles the Pasha became landlord of nearly all the soil of Egypt, and the increase of the taxes very much impoverished the peasantry. The massacre of the Mamelukes prevented any danger from an armed opposition, and having now the whole resources of Egypt at his command, the Pasha began a religious campaign in concert with the Shereef of Mecca and Medina against the fanatical Wahabees. For this part of the history readers ought to compare Mr. Palgrave's very vivid account derived from Wahabee sources of information.

Meanwhile, Sultan Mahmoud had begun to reform the decaying political institutions of Turkey, and soon found that his Egyptian vassal was intriguing with the feudal chiefs of Roumelia. Hostilities broke out with the Sultan, Mohammed Ali pretending only to attack the Pasha of Syria. The result of two successive wars was that Constantinople was only saved by the Western Powers, who drove the Egyptian forces from Syria. Mohammed Ali had with great wisdom abstained from interfering with our overland communication during the war, and at its close the new traffic assumed large proportions. And now, turning from mere history, Mr. Paton in a series of chapters describes the improvements effected by the new ruler, tells how the roads were made secure by a system of police, and the Bedouins turned into breeders of camels and carriers of merchandize; so that from being one of the most insecure countries for a European to visit, Egypt became a land of safety for travellers. The chapters on Damascus and Aleppo have been added in this reissue as companion pictures to that on Cairo in the first, and these with Mr. Lane's admirable accounts of Egypt will preserve to us a picture of what is rapidly passing away. There is also a chapter on the feudal families and mountain races of Syria, which gives a full view of the complicated Druse and Maronite politics of the Lebanon districts. Here as elsewhere the old order of things is changing, as the pressure of Europe is more and more felt. But the beliefs, prejudices, manners and customs of the native population, will change more slowly and gradually. Even in England strange fragments of the old belief in witchcraft exist, and how much more in the East. Lady Duff Gordon's charming letters from Egypt point out the curious contrast of western and eastern customs in the simplest social details, and show us united in actual life much of what Mr. Paton describes in separate sketches. His picture of the distress of the peasantry under Mohammed's oppressive taxation gives us the reverse side of the picture. In 1844 the cattle-plague brought matters to a crisis. When one village had become depopulated by the flight of the peasants, and could not pay its taxes, the burden was thrown on the neighbouring villages, and the treasury allowed of no arrears of payment or remission of taxation. Where there had been formerly a hundred looms, and hand-weaving had fallen off, so that only a third of the looms remained, this remainder had still to pay for the full complement. The magnificent public works were carried on by labour unpaid for by the government, and this was the chief cause of the depopulation. Probably the Pyramids were built in much the same way by the ancient Pharaohs. The native population seems to have suffered more from the new system than from the old, though this was more barbarous and cruel in special cases. Turkish rule has never been otherwise than bad for the subject populations, but the age of transition is perhaps in some respects worse. Mr. Paton adheres, however, to the views of Lord Palmerston, and on the ground of a bird in the hand being worth two in the bush, thinks it best to uphold the Turkish rule. On the other hand, Philhellenic enthusiasm has died out in Europe, and perhaps it may now be possible to discuss with calmer insight the means of improving the condition of the subject races of Turkey, whether on the northern or the southern frontier. C. W. Boase.

A Life of the great Lord Fairfax, Commander-in-Chief of the Army of the Parliament of England. By Clements R. Markham. London: Macmillan, 1870. xiv. and 480 pp. 8vo.

This book could not have been written but by one who was both a travelled geographer, as Mr. Markham was known to be, and also a learned and critical scholar, as we discover that he is. It may be that, besides the charm of his hero's character, some family feeling, natural and, when not paraded, honourable, led him to this happy choice of a subject. At any rate, we have here an aspect of part of the Civil War fully, and on the whole fairly, presented.

Perfect impartiality in writing about the Rebellion was long prevented by the strength of tradition. And when tradition had practically ceased, the passionate exaggerations of Hume and Horne Tooke were repeated by Disraeli and Brodie. Thoughts suggested by the close resemblance between modern politics and those of the middle of the 17th century, taking the place of tradition, have made Mr. Hallam, still more Mr. Sanford, Mr. Forster, Mr. Goldwin Smith, Mr. Markham, partisans rather than philosophical historians. To an unprejudiced student of the m.s. and printed documents of the time, Mr. Hallam now appears not only to belong to the old world, but to be unjust; nor does his injustice seem more amiable because he ill-treats Cromwell as much as he ill-treats the king: and to such a student Mr. Markham's undercurrent of anger with the royalists and disparagement of their efforts imparts a suspicion of the weakness of his side. However, if party pamphlets illustrated from annals move in a lower plane than philosophical history, they are at least while they live more generally interesting, and Mr. Markham is not very sour but only subacid.

In his portrait of Fairfax he has had good success. He has made him on the one hand independent and not subservient to Cromwell (pp. 194, 399), wise, brave, modest, and accomplished; he has cleared him on the other in these pages (pp. 328 foll.) and in the controversy which they have provoked, from the charge of cruelty brought against him: he has, in short, justified the application to him of the epithet "great," used in the affected sense of great if compared with the others who have borne the title (p. viii.). He admits that Fairfax, though a soldier and a man of honour, had no head for politics; but the age was one in which men were singularly versatile; and, to take a somewhat similar case, the Duke of Wellington's, though, as Mr. Stapleton said in one of his books on *Canning*, he failed in statesmanship through the very qualities which made him a general, his failure was very different in degree from Fairfax's, and argued unsuitability rather than incapacity. (See Markham, p. 400.) The Duke, in short, could never have been called by an opponent, as Fairfax is in *The Rump carbonado'd*, "Tom Fool."

In Lafayette, nominated in 1789, during that brilliant period in French history in which everybody was an enthusiastic reformer, which is so like the period in our own history before the meeting of the Long Parliament—in Lafayette, nominated to the command of the National Guard, his sister-in-law, the Marchioness of Montagu, "beheld another Lord Fairfax at the head of a parliamentary army, which was opposed to that of the king." The parallel is worth pursuing, though the pursuit cannot be long.

One or two mistakes in Mr. Markham's account of the Fairfaxes may be noticed. Speaking of the family (p. 409, n. 1) he says that the Rev. Brian Fairfax "succeeded" as the eighth lord: that is one way of stating that the House of Peers resolved and adjudged that he had made out his claim to the title, *i. e.* that the barony was confirmed to him. We are not told the end of the Fairfax Horn (p. 181, referring to *Archaeologia*, i 168—not 186): it was given by the eighth or by the ninth Lord Fairfax to his godson and connection, Mr. Fairfax Fenwick, from whom when in New Zealand it was stolen. He seems to be unaware (p. 14) how common in Charles the First's time and even in his eldest son's was the sale of titles from baronetcies upwards: this "merchandise of honour" is deplored by Clarendon (*History*, bk. 1: comp. Defoe's *Memoirs of a Cavalier*, pref. to ed. 2); and gifts of "baronetcies," that is, of the right to nominate men for baronetcies, were got by Farrer (Bruce's *Kalendar of State Papers*, 1631-3), by Acland, by Lord Airth and Menteith (Mrs. Green's *Kalendar*, 1661-2). Is our own system so much better?

As to military matters, a few points seem to have been missed by our author. Far as his book is superior to Sir Edward Cust's, in which Charles is treated as a warrior, it fails no less completely to represent in the true light the soldiers of the day: these were of course not a standing army, but for the most part armed citizens—citizens very badly armed and very badly drilled. Such soldiers wished, and therefore thought, with Baxter, "that a very few days or weeks by one or other battle would end the war," "so wise masters of war" were they; and it was some time before they came to treat the thing with the coolness of which he speaks. Nor does Mr. Markham take the hint given by Mr. Pearson (*Hist. Maps*, p. vi.), and shew, as Mr. Goldwin Smith used to shew, as displayed in the war, the connection of the politics and religion of the country with its physical condition. To come to details, the letter from Goring to his son (17th April, 1643), and those from Ferdinando Fairfax and from Stockdell to the Speaker (23rd May, 1643) deserve mention. Mr. Markham's account of affairs at Bristol, though it would admit of more "local colour," is the best which has appeared: Mr. Turnor's memoir is useful, and so are a few other monographs; the difficulty, the impossibility, of restoring the lines from the railway stations, perhaps from the east end of Port Wall Lane, to Prior's Hill, a flat space built over and cut up, might have been stated; the fact that the plague did not attack the besiegers, a phenomenon said by Rabelais to have been observed at Seville (i. 27), the rising of the "clubmen"—a rising such as Rabelais again describes (i. 50), the belief imputed by John Coke to a parliamentary soldier that "Jesus Christ tooke Bristoll," are worth remarking. Gomez (p. 213) may be the De Gomme quoted by Mr. E. Warburton, and so often mentioned in the Carte papers. Mr. Markham gives us the battle of Long Marston Moor in great detail and with great clearness, better than Mr. Sanford: he might have referred to the poem by "*Paganus Piscator* (Payne Fisher) *militum serviens major*," and afterwards Oliver's poet laureate. Fisher, first at Hart Hall and (under Bishop Barlow) at Queen's, Oxford, then at Magdalene, Cambridge, was a prolific writer, as impartial (say rather, as "bipartial") as Waller, though immeasurably beneath him: his authority, though not great, is considerable; the Bodleian copy of the poem, once Bishop R. Rawlinson's, has the Cromwell arms on it. Mr. Markham, indeed, bears hardly on Oliver's conduct as to this battle. Then come a few slips with regard to the movements round Oxford, some of which have been pointed out to me by Colonel Rigaud, who has also favoured me with the loan of his pamphlet (1851) on the fortification of Oxford, one which, with Mr. V. Thomas's (1850) and Mr. Parker's article in *The Gentleman's Magazine* (1861), I venture to recommend. Our author has not explained why the Parks, the name of which is generally connected with the term "a park of artillery," are called by Wood (*Hist. and Antiqq. of Oxf.* 1642), "the New Park": nor what the Old Park was? He rightly says that, the water-meadows being flooded, the city could not be approached

on the north, *i.e.* the Woodstock side; but why does he place Headington on that side? It is of course on the east, and Fairfax chose it as the only place whence his guns would have any "command" or annoy Oxford much (p. 269). Mr. Markham has forgotten, I think, Fairfax's attempt to storm Boarstall House in Buckinghamshire, after what Wood calls "the mock show at Oxford" was over, and the parliamenteers had grown tired of vapouring. It is too much to say, as Mr. Markham does (p. 370 n. 1), in speaking of the Bodleian's debt to Fairfax, that the Dodsworth m.ss., part of his bequest, are more used by students than any others there: "student" is too fine a description of the ordinary genealogist, and these documents are chiefly genealogical. Later on there are a number of letters from and to Fairfax and his army (1647: June 14, 24, 25; July 1, 5. 1648: November 18. 1649: January 1, 15, 20) all published as soon as written, which throw some light on the relations of the military and the parliament, and explain why Butler speaks of Fairfax's behaviour at this time as that of a "great croysads general"—a quixotic politician. It may be added that "Sandford" (p. 48 n. 2), "Masere" (p. 393 n. 1), and "Asterley" (p. 408 n. 3), are misspelt.

Lest any wrong conclusion should be drawn from this notice, it should be said that Mr. Markham's book is not only likely to remain the best on the subject, but in itself good, complete (even to the point of describing the pictures of Fairfax), and readable, that the maps are excellent, and that the criticisms here made upon it are meant as suggestions for a new edition. R. Robinson.

The Man with the Iron Mask. By Marius Topin. Translated and edited by Henry Vizetelly. London: Smith and Elder, 1870.

The legend of the Man with the Iron Mask has long ceased to interest the European public, and retains its hold on the minds of professional scholars simply as an historical puzzle whose solution would at once set a vexed question at rest, and exalt the reputation of some fortunate investigator. M. Topin, a well-known French writer on historical subjects, has confidently announced that the book now before us presents a satisfactory and final solution to the enigma. Prior to the exhibition of his argument for the identification of the prisoner he passes in review the personages, real or hypothetical, whom various authors have professed to discover under the Iron Mask. To each of these a biographical sketch is devoted, which closes with evidence demonstrating that its subject could not possibly have been the masked captive. And as none of the theories thus dismissed would now find a respectable advocate, the negative results of M. Topin's investigations may be considered conclusive. The counter-hypothesis he sets up is one of old date revived by Delort in 1825, but his adopted theory is defended by a line of reasoning both new and forcible, based upon a series of inedited original documents. It identifies Mattioli, the Minister of the Duke of Mantua, kidnapped by Louis 14th in 1679, with the mysterious captive who died in the Bastille 1703. His argument is as follows. In 1679 when Mattioli was brought to Pignerol, that fortress contained only four obscure persons confined for insignificant crimes, none of whom could have been the Iron Mask. The fact that the ex-minister and the dropsical prisoner who died in 1687, at Exiles, were different persons, is fully established by M. Topin's discovery that the former was left at Pignerol when St. Mars exchanged his government for that of Exiles in 1681, and was not again under his charge till 1694. St. Mars at that date had become governor of the *Iles Sainte-Marguerite* where before Mattioli's arrival his prisoners were insignificant and he consequently obtained frequent leave of absence; after that event all precautions were redoubled, and the indefatigable gaoler never again left the Islands until the final transfer of himself and his prisoner to the Bastille. When the latter died in 1703, he was buried under the name of Marchialy—an evident corruption of Mattioli, argues M. Topin.

Strong as M. Topin's position appears at first sight, no doubt remains but that the Mantuan Minister must hereafter join that ingenious author's procession of false Iron Masks. For the theory falls utterly to pieces under the criticism of two writers in the *Revue Contemporaine.* M. Loiseleur and M. Jung produce evidence which clearly identifies the masked captive with a man described by M. Topin as "insignificant and obscure," who was incarcerated at Pignerol, April 7th, 1674, five years previously to Mattioli's arrest. In a letter from Louvois to St. Mars notifying his arrival, he is designated as "un prisonnier lequel, quoique obscur, ne laisse pas d'être homme de conséquence." This nameless captive was to be treated as of inferior rank, but the orders for his safe keeping are marked by a minuteness of detail and an excess of reserve and precaution which at once stamp him as a prisoner of the highest importance, and leave on the mind a tragic impression of the long death in life to which he was doomed. M. Topin's discovery that Mattioli was left at Pignerol would of itself be fatal to his hypothesis, for his critics demonstrate that the Iron Mask accompanied St. Mars both to Exiles and the Islands, and was indicated in the well-known despatch of 1691 as "the prisoner who has been under your charge for twenty years." And finally, Mattioli really did arrive at the Islands in April, 1694, but before the close of the month he was dead, a fact proved by a despatch relating to the disposal after his decease, of a valet who had all along shared the unfortunate Minister's captivity. The Mattioli hypothesis thus set aside, the following facts are established by M. Topin's critics respecting this historical enigma. Two captives guarded by St. Mars with extreme strictness, to whom he refers in his correspondence with Louvois as "Messieurs of the lower tower," were the Iron Mask and a companion prisoner. Both were brought by him from Pignerol to Exiles under express orders from Louis XIV., the reason assigned being that to his hands alone would the king entrust so important a charge. One of these men died in 1686, and consequently St. Mars arrived at the Islands with the masked captive only, who from the hour of his imprisonment at Pignerol to that of his death in the Bastille nearly thirty years afterwards was never out of the keeping of his famous gaoler. George Waring.

Intelligence.

The Egyptian Collection of the late Mr. Robert Hay has been temporarily transferred to the Egyptian Court at the Crystal Palace, where they are now on view. The objects are described in detail in the *Times* of October 12, and a catalogue of them has already been published.

Contents of the Journals.

Von Sybel's historische Zeitschrift, 1870. Drittes Heft.—C. Hegel reviews von Maurer's History of the German town constitutions, and discusses his view that they were developed out of the village arrangements previously existing. The town in fact was organized just like the country, and this was certainly the case also in England during the Anglo-Saxon period. Now it is needless to say the town and the country have entirely different modes of organization.—Usinger gives a summary of Koppmann's edition of the city accounts of Hamburg, curiously illustrating the social policy of the Middle Ages, and showing how a small town in the district of Holstein became one of the great Imperial cities. Many of the original documents perished in the lamentable fire of 1842, but Lappenberg had fortunately taken copies and extracts some time previously.—Von Kronall shows from Kessler's "Sabbata" (written at intervals of "rest") the influence of the Reformation on Swiss religious life from 1523 to 1539; the natural

growth of the opposition to Luther's views on the Eucharistic questions is well brought out.—Kessler gives a sort of history of S. Gallen, where he was at the head of the reformed ecclesiastical system.—A Von Reumont graphically describes the episode of the age of the Revolution, in which Manfredini and Carletti tried to bring about a union between Tuscany and the French Republic, and naturally failed.—Bluhme explains the nature of the "pactum de Leburiis," *i. e.* Terra di Lavoro (called in Pliny "Laboriae"), the splendid district between Capua and Naples, but which in the Lombard times was the "Debateable land" between the Lombards and their southern neighbours. The pactum in question contains conditions about the slaves and the "tertiatores," the latter being probably the free landholders, who had to pay a third of the produce to the German conquerors.—A series of smaller reviews relate to German local histories, and to the latest contributions to Church history; the former are specially valuable as relating to the rise of Prussia. A justly severe criticism on Earl Stanhope's "Reign of Anne" characterises the book as containing little more than a series of compressed Annual Registers without insight into the continuous development of events or the real motives of the leading states and statesmen.

Aarböger for Nordisk Oldkyndighed og Historie, for 1869, Copenhagen, contains some valuable contributions. 1. A small treatise (pp. 185–202) by Kornerup, on the old timber churches in Denmark in the early Middle Ages. All the earliest churches in Scandinavia were of timber, and in a peculiar old style, which may partly have been derived from the old heathen temples, of which only descriptions are extant. The doors, pillars, and windows were ornamented with fine carvings, representing fabulous animals; most of which, however, have long since mouldered away or been destroyed by fire. A fine specimen of a church door from Iceland, preserved in the Archæological Museum in Copenhagen, is among the few remains which are left. Norsemen, as well as their nearest kinsmen, the Icelanders, were skilful carvers in wood and walrus. Some of the old Norse "Stave-Kirks" still exist (Borgum, Hitterdale), but in a tottering or restored state, whereas the Danish are all gone, the last of them having been destroyed about 200 years ago.—2. An interesting essay (pp. 203–217) by Prof. Worsaae on a cairn in Mammen, near Wiborg. This "howe" was for the first time opened in 1868, and is supposed to belong to the end of the Heathen Age. Prof. Worsaae mentions a curious fact hitherto unnoticed, that the grave itself (the burial-room or grav-kammer) is not, as usual, above the earth in the cairn, but is dug nearly nine feet deep beneath the centre of the cairn; this gives some hope that some other cairns, which formerly have been explored in vain, may after all be found to contain remains. In this instance the discovery seems to have been made by peasants, and the fittings of the grave were roughly handled and partly destroyed. But the following day an antiquary was on the spot, and succeeded in saving the greater part. The description of the grave-chamber is important, as illustrating to some extent the furniture of the ancient house, on which we have reason to believe it was modelled. Amongst other objects were found some pieces of wax candle, not cast but kneaded, and weighing about eight lbs.; similar pieces have been formerly found in cairns at Jellinge and elsewhere, but were believed to belong to howe-diggers or cairn-breakers; but this instance, taken from the interior chamber, is quite decisive. There were also shreds of clothing or drapery, woven and embroidered with figures; and also shreds of embroidered silk, a bracelet, a belt of the same material; the blade of a battle-axe, chased with gold; some shreds of fur, shreds of down pillows, &c.—3. An interesting chronological and topographical essay on the battle of Swolder (pp. 283–310), by Herr Jörgensen.

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Oriental and Comparative Philology.

The Pahlavî Language. [*An old Pahlavî-Pâzand Glossary*, with an alphabetical index by Destur Hoshangji Jamaspji Asa; revised and enlarged, with *an Introductory Essay on the Pahlavî Language.*] By Martin Haug, Ph. D. Published by order of the Government of Bombay. Bombay and London, 1870.

The Indian Parsees are a striking example of the degree in which a nation or a religious community is capable of forgetting itself, its history, its religion, and the language of its sacred writings. The Parsees, like the Jews, were destined to be dispersed amongst alien populations. But it is a remarkable fact that, whereas the Jewish dispersion had already taken place for centuries at a time when the Zoroastrian was still the leading power of the East, the maintenance of their specific tradition is at the present moment incomparably stronger amongst the Jews than amongst the Parsees. What is the reason of this? Religious enthusiasm is not wanting among them, and the history of the Parsees in Kerman shows that they could bear as much ill-usage as Christians received at the hands of their Mohammedan, and Jews from their Christian, oppressors. In India, we believe, the great likeness in doctrines and cultus between Hinduism and Zoroastrianism was a chief reason why the Parsees lost sight of the characteristic peculiarities of their own tradition, and adopted in many respects that of the Hindus. Whatever may have been the cause, certain it is that the modern Parsees have lost the key to their religion and literature; and not less so that it can only be regained—if at all—by the efforts of European scholars.

The first impulse in this direction arose in France. Near 100 years ago Anquetil du Perron went to India as a private soldier, and contrived to gather from the priests in Surat a knowledge of the language of the Avesta, of its translations, and an insight into the customs and religious observances of the Parsees. The oldest document of Iranian antiquity, the Bible of Darius and of Xerxes, was thus for the first time opened to the European world. The study became a rage in almost every country of Europe except England; and scholars of all kinds looked forward to important revelations from this quarter. Since that time, and especially within the last forty years, the subject of Zoroastrian literature has been brought within the range of accurate philological research, and is taught generally in connection with Sanskrit studies in almost every German university of importance. The bearing of the study upon European theological research is also not to be forgotten. There is a certain connection between many of the characteristic ideas in the Old Testament and the doctrines of Zoroaster. At present this is more to be guessed than clearly understood, and we are not yet in a position to say in what way, at what time, or under what circumstances, this interchange took place. Ezra, who was so closely connected with the restoration of the old Jewish documents, seems to be a natural medium of communication between the two religions.

What then is the so-called Pahlavî language? This question, the answer to which Dr. Haug has here undertaken to give, is one of the most difficult problems in Iranian philology. To begin with, Pahlavî is the language of the oldest translations of the Avesta. In its written form it is a curious mixture of Semitic and Iranian words. By far the greater part of the vocabulary is undoubtedly Semitic: the grammatical terminations, on the other hand, are as evidently Iranian, which has led Prof. Spiegel to regard the Pahlavî language as an organic whole, and of Iranian origin. As to the original meaning of the word Pahlavî, it seems to be certain that it means the language of Pahlaw, and that this

"Pahlaw" was the name of a tract of country in Arsacidan times more or less accurately corresponding to old Media. In New-Persian, Pahlavî means vaguely "Old-Persian;" and a multitude of books are represented by Muhammadan and Zoroastrian authors, as "translations from the Pahlavî." This however is only a form of expression, with no pretence of being literally true. The recollection of old Persian, and particularly of Sassanian times, is and was always very dim: only a few names have come down to the Muhammadans, and these, like Ardashîr Bâbekân, Adharbâd Mahrasfand, Shapur, Nushirvan, Buzurjumihr, are introduced by later authors for the purpose of giving an antique and venerable aspect to their own compositions; and it became a habit to represent the wisdom which was put into the mouths of these half-forgotten worthies as uttered or written in Pahlavî, For this we could adduce dozens of proofs from the bulk of Persian literature. Originally the name of the dialect of a province of Iran, it is used, as we have said, in general for old Persian. How did this happen? Was the province Pahlaw so all-important that its dialect spread over the whole of Iran and was called Persian *par excellence?* Of this question, the assumption that the chief literature which existed in those times was composed in this dialect,—whilst the Khûzî, Fârisî, and Darî were comparatively illiterate languages, seems perhaps to offer the most satisfactory solution.

But now there is a further question, viz., whether the language of the translation of the Avesta and the cognate literature, hitherto called Pahlavî, is the old Median dialect. P. de Lagarde (*Gött. Gel. Anz.* Sept. 14, p. 1459 foll.) thinks that it is not. But though Neriosengh writes the new Persian form of the word, and uses it probably in the same vague sense which we have already noticed,—this fact, if it does not prove Pahlavî to be the old Median dialect, does not on the other hand exclude the possibility of its being so. Here we speak only of the Iranian part of the language; and against the second argument of Lagarde (ibid. 1461) regarding the Semitic part, we reply, that the language, as it is written, never formed an organic unity. As it is exhibited by MS. tradition, it is certainly not the dialect of Media, simply because in this form it was never spoken by anybody. We may here add a few words against another remark of Lagarde's (ibid. 1467). He observes, firstly, that the Pahlavî-Semitic looks like a *pot-pourri* from a variety of dialects; but this criticism is more applicable to the present manner of treating the subject than to the subject itself. We have already explained elsewhere (see *Zeitschr. der d. morgenland. Gesellsch.* tom. xxiii. p. 509), that the comparison of any other language but Aramaic with Pahlavî is quite out of the question. If, besides, many of the Pahlavî forms look extremely improbable, we must remember that our knowledge of the alphabet is far from being perfect. When we shall have gained an accurate knowledge of the alphabet, of the principles of orthography, and of the nature of the combination between the Semitic and Iranian parts, it is my belief that we shall be able to recognize a dialect purely Aramaic, closely related to those already known, but with certain peculiarities of its own.

Starting from the undoubted fact that the priests, in reading Pahlavî, substitute Persian words for the written Semitic ones, which seem to be utterly unknown to them, and combining this with a statement of Ibn Muḳaffa to the same effect, Dr. Haug thinks with very great probability that the Iranian terminations in the writing were meant to indicate the Iranian words which were to be read; and he regards the Semitic of the true Pahlavî as identical with that, in two dialects of which the celebrated Hâjîâbâd inscriptions are written. There is no doubt that this method is one which deserves to be followed, and is likely to lead ultimately to valuable results.

Whether Dr. Haug's new interpretation of these inscriptions is one which will commend itself to scholars generally is another question, though we willingly admit that he has made appreciable progress. The fact is, these inscriptions, found in the little Mesopotamian village of Hâjîâbâd, have been for fifty years the crux of Iranian scholarship. De Sacy deciphered the first lines containing the name of the king commemorated, and his titles; and further than this, the life-long researches of the best Iranian scholars of Europe has hitherto not succeeded in penetrating. Dr. Haug's explanation of the word ḥatyâ as = Hebrew חַיָּה (of which the Syriac ܚܝܬܐ is the feminine) is interesting, and almost certainly correct. A few minor points which he has made out appear to us probable, or at least possible: but the vast bulk of his interpretations we cannot but regard as more than doubtful.

The Pahlavî Pâzand glossary, now edited for the first time in its original form, is a very valuable addition to our printed stock of this branch of eastern literature. We must acknowledge the combined efforts of Destur Hoshangji and Dr. Haug to make it as useful as possible by a transliteration into Roman characters, a literal translation, and an alphabetical index. It is neither complete nor free from mistakes, but it is inestimable, as exhibiting the traditional knowledge of a great part of the language at present current among Parsee priests. Dr. Haug has attempted an etymological explanation of each word in detail, with what success the learned reader will be able to judge.

The Bombay Government, by whose order this work is edited, certainly deserves great credit for paying so much attention to the tradition of one of the smallest but most enlightened and wealthy portion of its subjects. On the other hand, the duality of authors is by no means conducive to the interests of science. The task of editing works of this kind, too, demands accomplished philological scholarship, and of this the Indian Destur, at least, is entirely innocent.

Ed. Sachau.

PROGRESS OF HEBREW GRAMMAR.

Those scholars who are interested in Hebrew as a branch of comparative philology, have long been anxious to render some part of their results available to the beginner, and thus to convert that congeries of empirical rules commonly called Hebrew grammar into an intelligible system. Of the larger grammars, that of Justus Olshausen (Brunswick, 1861) holds unquestionably the first place, for its fidelity to the comparative method, but the utility of that admirable work is thought by some to be impaired by occasional inconsistencies. However this may be, it is certainly too elaborate for general use, and Prof. Land has done well to abridge and simplify its contents. (See his *Hebreeuwsche Grammatica*, Eerste Stuk, Amsterdam, 1869.) He has succeeded in accomplishing this without detriment either to theory or to practice, in the compass of 182 pages, as against Olshausen's 676; and we envy the students who, with this book in their hands, are spared the vexatious process of unlearning erroneous notions. We trust the second part of this Hebrew grammar, containing the syntax, will not be long delayed. Even after Ewald's magnificent attempt, which constitutes one of his fairest claims to distinction, there are obscurities enough in the subject of Hebrew syntax to tax the patience and the ingenuity of an accomplished scholar.

The work referred to, however, is but ill adapted for those whose minds have been preoccupied by another grammatical system. For the benefit of this numerous class, and especially of teachers of Hebrew, Dr. Land has published a detailed justification of his views in the January number of the *Theologisch Tijdschrift.* He there insists strongly on the fact that the system of vowel-points grew up entirely apart from philological theories. The object of its inventors was a purely practical one,—to preserve the pronunciation of the sacred language from the infection of Aramaic, which for more than 1000 years had been the vernacular of Palestine; and the standard which they adopted was the practice of the most eminent Rabbis. Two or three centuries after the invention of our system of vowel-points appeared the Jewish grammarians, who began to bring the regularly

recurring phenomena of the pointed text under general rules. These phenomena they explained, with various success, by the help of Arabic and of the Arabic grammarians; and this work, which was systematised about the year 1200 by David Kiurchi, became the foundation of all subsequent Jewish and Christian grammars. It is this unhesitating adoption of the theories of the Jewish grammarians which Dr. Land assails in this essay. "The great point of distinction," he says, "between the prevalent and the recent method consists in this:—while other scholars take as their basis the punctuation together with the Jewish exposition of it, and content themselves with amending some details of the latter, I, on the other hand (as Olshausen has not entirely emancipated himself from the earlier doctrine), take my point of departure in the pointed text alone, and subject the work of the old masters to a searching criticism, in accordance with modern philological views." He then lets the reader witness his method of criticism, and comments on the absurdity (as he thinks it) of the prevalent theory, according to which four out of the seven vowel-points (reckoning qibbuç and shureq as one) are of doubtful quantity, and one of them (ˢ) even of doubtful sound, so that the student must have a good knowledge of the grammar to decide between the alternatives, a grammar, be it observed, which had yet to be discovered, when the system of punctuation was introduced. It is plain, too, from various minutiæ of the system, from the metheg, the shevas, and half-vowels, that it was intended for readers who had no idea of language as a study, and for whom it was necessary to prescribe every particular in the pronunciation, to prevent them from stumbling at every turn. Now can any one believe that the inventors of the system would have expressed so important an element of pronunciation as quantity in so inadequate a way, if they had really been acquainted with it? And if they were unacquainted with quantity, it follows that it had no existence in their time, that the distinction between long and short vowels had perished, and that the vowel-signs (as in modern Greek and the languages of western Europe) are marks of sound, *and nothing more.* The reason of this, Dr. Land continues, is not far to seek. The Syriac system of punctuation recognizes only two vowels, an *e* and an *o*, and has abandoned quantity even in the case of consonants (*i. e.* there is no doubling of consonants). Hence, to the powerful influence exercised on Hebrew by Aramaic, we may ascribe the existence of analogous phenomena in the pronunciation of both languages.

But how came the Jewish grammarians, whose work forms the basis of our modern grammars, to imagine that the vowel-points denoted quantity? Simply from their imitation of the Arabic grammarians, and the comparison of apparent analogies in the Arabic language. Among other evidence of this is the circumstance, that they made no distinction between short and long segol, because there was no analogy for this in Arabic, and thus left a hole in their theory, while on the other hand they distinctly recognized a long and a short qameç (כָּתֹב, *kitōb*, -כָּל, *kŭll*). Not that their imitation of Arabic grammarians was a servile one; they tell us plainly that the quantity of vowels in Arabic was dependent on other laws than those which they discovered in the Hebrew punctuation. In the former, the quantity of the vowels is almost always unalterably fixed; in the latter it is liable to change, as soon as the syllable in which the vowel stands undergoes an alteration. And so the Jewish grammarians came to distinguish between vowels essentially long, which remain the same, whatever be the fate of the syllable, and vowels which are long only rhythmically, *i.e.* through the influence of the accent, or through the opening of a syllable. But though in itself nothing is simpler than that in a syllable of two sounds the vowel should have to bear greater stress than when a third sound has to be uttered in about the same time, this does not account for the strange alteration in character which such a vowel undergoes. However much we lengthen *ò*, we can never produce a sound like the *ô* in *nôtre*, let alone an open *ó*, but merely one like that in the French *mort*, *sort*. So too by lengthening *è*, we can only get the *e* of *père*, never that of *tête*, let alone that of *pré*. This part of the prevalent theory, therefore, calls loudly for revision, especially when we see מַלְכִּי arise out of מֶלֶךְ, where no one can account for the segol by a mere lengthening of the patach. We may indeed assert that the lengthening of a vowel involves an alteration in the character of the sound, or perhaps deny the lengthening, and maintain that the accent, or the opening of the syllable, alters the character of the vowel, but in neither case can our hypothesis be justified by argument. There is but one resource, says Dr. Land, and that has been adopted in the new theory, viz., to suppose that the accent or the opening of the syllable brought about the lengthening of the vowel, and that the difference in quantity thus produced was afterwards exchanged for a difference in sound, which is in fact all that has survived. But we may naturally ask, Why has quantity been forced to give way to a new variety of sound? It was inevitable. When the short vowels had been equalized in length to those essentially long, a great danger arose of confusing the two classes of vowels, and so of missing the true meaning of a sentence. This could only be guarded against by giving the lengthened vowel a fresh *nuance* of sound, a *nuance* which gradually expelled that element of quantity, of which it was originally the safeguard. The order of the changes experienced by the Hebrew vowels is thus given by Dr. Land:—1. An original distinction of quantity, of essential importance for the formation of words (primitive vowels, *ă*, *ā*, *ĭ*, *ī*, *ŭ*, *ū*, *ai*, *au*). 2. Lengthening of short vowels in an open syllable or through the accent, and adjustment of diphthongs; the point at which the confusion in the ancient quantity began. 3. Attempt to support quantity by introducing a difference in sound. 4. Difference in sound without quantity (Masoretic vowels, *a*, *è*, *é*, *i*, *ò*, *ó*, *u*). Thus the intricacies of the old theory are disentangled into an intelligible historical process, the commencement of which indeed cannot be determined, though a careful investigation of the data proves to a certainty that the Masoretic pronunciation arose under Aramaic influence. This is the fundamental doctrine of Dr. Land's Hebrew Grammar, supported by a constant reference to the other Semitic languages, in order to infer the original forms of Hebrew pronunciation. It is not thought too difficult for Dutch beginners; whether it is so for English must be decided by experience. T. K. Cheyne.

Intelligence.

An Oriental Literary History.—The late Prof. E. Flügel undertook towards the end of his life to edit the *Fihrist-al'ulûm* ("The index of sciences") by Muḥammad b. Jsḥâḳ, who dated it himself A.H. 377 (A.D. 987). It is a kind of literary history of the East; and the information which it contains is so rich and precious, that an edition of the book ranked foremost among the desideria of all scholars concerned in Oriental researches. After the death of Prof. Flügel, Dr. J. Roediger has been chosen to see the book through the press, under the superintendence, as we understand, of Prof. Fleischer. An enumeration of its contents is given by Prof. Flügel in the *Zeitschrift d. deutschen morgenl. Gesellschaft*, tom. xiii. p. 559.

Contents of the Journals.

Zeitschrift für ägyptische Sprache, September.—On the supposed relics of the stone-age in Egypt, by Lepsius. [Conclusion.]—On a vase of the museum at Turin, by Chabas.—Letter to M. Brugsch on his recent treatise, by Naville.

The Phœnix, No. 2. The Buddhistic Literature of Tibet, by the editor. Notes on Japanese. The Tartar Languages and Chinese, by Rev. J. Edkins. Recent Changes in Japan. On Chinese Poetry, a Review. Le Livre de Marco Polo, a Review.

Selected Articles.

On Comparative Grammars, in North American Review, July. [Commends Mr. Peile, but finds fault with his phonetic theory, and his admission of the increase or intensification of vowel-sounds as a primary means of expression. Prefers M. Baudry's Grammar to that of Mr. Ferrar.]

Buschmann on Traces of the Aztec Language, part ix. rev. in Lit. Centralblatt, Sept. 10.

Ascoli's Corsi di Glottologia, in the same. [Highly favourable.]

Vullers' Persian Grammar, rev. by F. S. in the same, Oct. 1. [Important for comparative philology, as well as for modern Persian grammar.]

Haug's Prize Essay, rev. by Lagarde, in Gött. gel. Anzeigen, Sept. 14, 21. [See review in our columns.]

New Publications.

Burnell, A. C. Catalogue of a collection of Sanskrit Manuscripts. Part i. Vedic MSS. London: Trübner.

Fauche, H. Le Maha-Bharata, traduit par H. F. Tom. x. Meaux.

Janamejaya Mitra. Nuskhá Idilkushá; or, Notices and Selections from the Works of Urdú Poets. Vol. i. London: Trübner.

Land, J. P. N. Anecdota Syriaca. Tom. iii. Leyden: Brill.

Classical and Modern Philology.

The Structure of the Odyssey. [*Die Composition der Odyssee.* Gesammelte Aufsätze, von A. Kirchoff.] Berlin: Hertz, 1869.

The Mythology of the Odyssey. [*Altgriechische Märchen in der Odyssee.* Ein Beitrag zur vergleichenden Mythologie, von Dr. Georg Gerland.] Magdeburg: Creutz, 1869.

Homer and the Odyssey. [*Homer und insbesondere die Odyssee*, von H. Steinthal.] Zeitschrift für Völkerpsychologie und Sprachwissenschaft, vol. vii., pt. 1.

According to Dr. Kirchoff the *Odyssey*, as we have it, is neither the creation of a single poet, nor a series of inde-

pendent "lays" mechanically strung together: it is the result of successive additions made to an original nucleus. There was first of all, he thinks, an ancient "Return of Odysseus,"—not a mere "lay," but a poem of two thousand lines or more—in which the adventures with the Cyclops, Calypso, and the Phæacians held the chief place; then a continuation (the bulk of books xiii.-xxiii.) which carried on the events in Ithaca to the death of the Suitors and the recognition by Penelope. The epic thus formed, which was older than the Cyclic poems and the beginning of the Olympiads, was afterwards recast and enlarged, at some time between Ol. 30 and Ol. 50, partly in order to bring in new matter—especially the fables connected with Circe and the adventures of Telemachus—partly in order to round off the whole by a conclusion after the Cyclic taste of the period. Lastly a few passages were interpolated at the time of the Pisistratidae. In a former work (*Die homerische Odyssee und ihre Entstehung*, Berlin, 1859) Dr. Kirchoff printed a complete re-arranged text of the *Odyssey*, exhibiting his theory to the eye in a clear and convenient form, but without giving more than slight hints of the grounds on which it rested. The papers now collected were published from time to time in different critical journals, most of them dealing with single points of their author's system. It is evident that a work put together under these circumstances is not well fitted to do justice to a view whose value depends wholly or chiefly on its success as a single hypothesis satisfying a number of different conditions. There is some difficulty, notwithstanding the clearness and precision of Dr. Kirchoff's treatment, in making out how much these dissertations are intended to prove, and how much is left to future investigation. It will be convenient to begin with those parts of the book which bear on the main problems of the subject.

The third and fifth dissertations are occupied chiefly with books ix.-xii., in which Odysseus recounts his voyages from the taking of Troy to his escape from the island of Calypso. Dr. Kirchoff makes it probable, by a combination of slight but suggestive traces, that the first brief account which Odysseus gives of himself to the Phæacians (vii. 240-297) has been tampered with; and that in the original version he made himself known at once, instead of keeping his name secret until the second evening. He infers that this second "apologue of Alcinous," which now begins with the revelation (ix. 19) εἴμ' Ὀδυσεὺς, κ.τ.λ., is due to the later redaction. He then endeavours to show—less successfully as we think—that the stories of book ix. (the Kikones, Lotophagi, Cyclopes) belong to the oldest poem, while those of x. xi. xii. (Æolus, the Læstrygonians, Circe, the descent into Hades, the Sirens, Scylla) are probably not earlier than Ol. 30. The grounds for this view are somewhat difficult to estimate, since they have to be gathered from more than one part of the book.

1. In the fifth paper (pp. 107 ff.) he argues that the story which Odysseus tells in books x.-xii. must have been originally told of him in the third person, because he is made to relate things which happened in his absence, and which he had no means of ever knowing; whereas in book ix. there is nothing to disturb the illusion that we are listening to the hero's own account in every particular. The argument is worked out with much delicacy and penetration, but from the nature of the case can hardly be conclusive. We cannot say *à priori* how far a Homeric audience would expect a piece of poetical autobiography to preserve its *vraisemblance* in this respect. Even modern writers who adopt this form are apt to ascribe to their hero the omniscience which properly belongs to themselves.

2. At the end of the third paper (pp. 83 ff.) it is maintained that the *motifs* of these three books are taken from the Argonautic fables. Circe is another form of the enchantress Medea; the Planktai or Wandering Rocks are the Symplegades; the Læstrygonians of the Odyssey are the Doliones; and Artakia is a real fountain in the neighbourhood of Cyzicus. Dr. Steinthal has pointed out the weakness of this argument (p. 85). Such resemblances run through all the Greek mythology, and prove at the most a common origin.

3. In the fourth paper (p. 105) it is argued that the Nostoi recognised a son of Odysseus by Calypso, but no son by Circe, and therefore that the poet of the Nostoi (prob. Ol. 20) cannot have known the version which brought Circe into the adventures of Odysseus. Our knowledge of the Nostoi is surely too scanty to allow such a mere argument *ab silentio* to have much weight.

In the second paper Dr. Kirchoff takes the passage where Polykaste washes Telemachus,

> τόφρα δὲ Τηλέμαχον λοῦσεν καλὴ Πολυκάστη,
> Νέστορος ὁπλοτάτη θυγάτηρ Νηληϊάδαο,

and shows very happily how this, which in Homer is a mere incident of primitive manners, was made the basis of a genealogy in the Hesiodic poems. The observation has an important bearing on the date of the *Odyssey*, especially when taken along with Dr. Kirchoff's opinion that the adventures of Telemachus do not belong to the original poem. Unfortunately this is a part of his theory of which the proof has still to be given. The differences which he notices in the same paper between the geography of Homer and that of Hesiod are of the highest interest.

The proof that books xiii.-xxiii. form an "older continuation"—older than either books ii.-iv., or books x.-xii.—is not fully gone into by Dr. Kirchoff: but we gather some of his reasons from the beginning of the sixth dissertation (pp. 135 ff.). He there points out that there are two very different representations of Odysseus to be found in these books. Sometimes he is still in the prime of heroic vigour and beauty, as in the stories of Calypso and the Phæacians, although for a time, by means of the magic wand of Athênê he appears to be a decrepit beggar. Sometimes the change is real and natural, he is simply the veteran upon whom twenty years of war and travel have left their mark, so that even Penelope can hardly be persuaded that it is the same. The discrepancy, however, is one that lies deep in the original structure of the poem. Two different characters—the Odysseus of the Trojan War, the wise and much-enduring king of Ithaca, and the Odysseus of the purely fabulous regions—are fused into one by the specific development of Greek mythology. This may be traced even within the limits which Dr. Kirchoff assigns to his primitive "Return," in the story of Odysseus and the Cyclops. W. Grimm has shown (*Die Sage von Polyphem*, p. 19) that the behaviour of Odysseus in that story is senseless and foolhardy, utterly beneath the heroic type. He compels his companions to wait in the cave of the Cyclops "that he may see him, and get from him a guest's gift" (v. 229): and again, when they have made good their escape he cannot resist twice calling to the blind monster at the risk of destruction to himself and his ship and crew. Such acts do not strike us as strange in a fairy tale; but their true character appears as soon as we think of them by comparison with the temperate and far-sighted valour which elsewhere belongs to Odysseus. Moreover, the story of Polyphemus is found in many countries, in Norway, in Germany, in Transylvania, among the Esthonians, the Finns, the Servians, even in Persia and Tartary; and that in versions which cannot have been derived from the Homeric story. In the *Odyssey* this pri-

mitive and universal fable is found side by side with the comparatively localised fable of the Trojan War. Hence, although we find different conceptions of character, and even although Dr. Kirchoff is able to trace in the poem a consciousness of such discrepancies and an attempt to harmonise them, yet it does not follow that we have the work of more than one hand. The conflict may be not between two poets, but between two different channels of poetical mythology.

This train of reasoning may be carried farther by the help of Dr. Gerland's comparison of the *Odyssey* with an Indian tale in the collection of Somadeva. The adventures of the Brahman Saktideva offer striking parallels to those which in the *Odyssey* are connected with the island of Æolus, Scylla and Charybdis, and the Phæacians. Saktideva is a suitor of the Princess Kanakarekhâ, who will only marry a man who has been in Kanakapuri, the Golden City. After many other adventures, Saktideva was sailing with Satyavrata, King of Utsthala, who, like Æolus in the *Odyssey*, had received the stranger and given him his best help. On the way they found themselves irresistibly driven towards a great fig-tree, which they saw in the distance, and under which Satyavrata knew that there was a whirlpool. Saktideva was saved by the self-sacrifice of his friend, who kept the ship up long enough for him to escape by climbing into the branches of the tree. He was then carried by a gigantic eagle to the Golden City. There, left in a beautiful garden, he was found by two maidens, attendants of the Vidyâdharî queen, Chandraprabhâ. They at once led him into the city to the royal palace, which was supported on diamond pillars and encompassed by walls of gold. After the queen had entertained him for fourteen days, she said to him that the mother of the gods had told her once in a dream that she must have a mortal for husband. "Many as are the noble Vidyadharîs that my father has proposed to me for husbands, I have refused them all, and am still a maiden." She proposed to go a two-days' journey to her father, who had withdrawn in sorrow to the high mountain Rishabhâ, and to gain his consent to their marriage. In the meanwhile she warned him not to set foot on a certain terrace. As in all such tales, he disregarded the warning, and in consequence found himself suddenly conveyed back to his father's house. He then marries Kanakarekhâ, but loses her again immediately; for she was a Vidyadharî, sister to the queen Chandraprabhâ, and only compelled by a curse to remain upon earth until she found a man who had been in the Golden City. In the end, however, he is the means of restoring two other sisters to their original form, and is himself changed into a being of the same kind. They fly through the air to the Golden City, and he becomes husband of all four sisters and King of the Vidyadharîs.

The resemblances between this tale and the Phæacian adventures of Odysseus are obvious. In some other particulars the original identity of the two legends may be traced. Kuvera, the god of riches, is intimately connected with the treasures of the Vidyadharîs, as Hephæstus is with the wonders of the palace of Alcinous. The Vidyadharîs live on high mountains, and are at war with the Rakshasas or demons: the Phæacians had lived in Hypereia (the high city), "near the Cyclopians who did them wrong and were mightier than they" (Od. vi. 4-6). Both are remote and unapproachable by mortals; both have marvellous power of transporting themselves from place to place; both are distinguished by the splendour and happiness of their condition. The differences are no less characteristic, especially the polygamy in the Indian story contrasted with the conjugal fidelity which is so conspicuous in the *Odyssey*.

The darker side of the elf-world in the *Odyssey* is represented by Circe and Calypso. In Somadeva's collection there is a story of a Yakshinî or sorceress, who by her magic turns the travellers whom she finds into animals and then devours them. A young merchant discovers the secret of the charm and by using it against herself, as Ulysses does with Circe, compels her to beg for mercy and to aid him in his enterprise. The same is told of a witch and two brothers in Grimm's *Household Stories*. Even the magical herb *moly* of the *Odyssey* reappears in Germany as *Allermannsharnisch* (Gerl. p. 36). Calypso, again, seems to answer to a Râkshasî, or Giantess: the name points to the dark world with which the northern dwarfs and giants alike are connected.

In common with other writers, Dr. Gerland recognises in the fable of Odysseus "the battle of the wandering sun with clouds and wind and all the powers of darkness, his descent into the world below and his victorious return" (p. 52). Calypso is "the goddess who receives the sinking sun and keeps him for a time" in her western abode: Circe is "the demon of the underworld, who at first meets the hero in hostile guise, but then yielding to his irresistible power, guides him safely on his way to the depths through which he has to pass." Dr. Gerland, however, offers some conjectures which go beyond this comparatively familiar ground. He observes that in nearly all this class of stories the hero wanders from island to island over the sea; and that this feature is not accounted for either by the natural phenomena on which the myth is based, or by the circumstances of the countries in which it is found. India and Germany show it almost as clearly as Greece and Norway. Were then the original ancestors of the Indo-Germanic races, living, as they probably did, on the Oxus and Jaxartes, sufficiently near any great body of water? It is very possible that this was so. It was the opinion of Humboldt, confirmed by recent researches (see Spörer in *Petermann's Mittheilungen*, 1868, 72), that the Sea of Aral is the remains of a great expanse of sea which at no very remote period included the Caspian and the Euxine. The sun therefore may have set for them in the sea; and this setting, according to the way in which it was regarded by the primitive men, was either a journey to a distant island resplendent with golden light, or a dangerous venture into the realms of darkness.

Without entering further upon the wide field of mythology, it may be worth while to indicate the points in which this view differs from that which Mr. Cox adopts in his recent work on Aryan Mythology. Phæacia, according to Mr. Cox, is Cloudland, especially that of the "eastern or western sky as lit up by the rising or setting sun" (ii. p. 275). The ships that sail without oars or rudder are the Phæacians themselves, that is the clouds, "as they sail at will through the blue seas of heaven." Dr. Gerland distinguishes between the Gandharvas, or clouds, and the Vidyâdharîs, or "light-elves:" and he identifies the Phæacians with the latter. They are the genii of the morning, the growing light, as Calypso represents evening, and the "dark elves" represent the night. The difference between these two points of view is far from unimportant; it is, in fact, the question at issue between the two schools of interpretation which Professor Max Müller distinguished as the meteorological theory, proposed by Professor Kuhn, and the solar theory which he himself supported (Lectures, 2nd series, p. 519). It is evident that the progress of comparative mythology must depend very much on its success in deciding between these theories, or, if both contain portions of the truth, in determining with precision the share which each is entitled to claim.

D. B. Monro.

Clementis Alexandrini Opera ex recensione Gulielmi Dindorfii. Oxonii e typographeo Clarendoniano, 1869.

The student of Patristic literature will naturally welcome these four volumes which have recently issued from the Clarendon Press. Archbishop Potter's edition of Clement, the last of any great pretensions, appeared as far back as 1715, and its critical shortcomings have long been felt by modern scholars. The work before us, therefore, is intended to supply an acknowledged want, and it is no exaggeration, and, indeed, no very high praise, to say of it, that it represents the most considerable attempt at the textual revision of Clement since the time of Sylburg. This valuable result, however, is due, in a very limited degree, to Professor W. Dindorf, the present editor. The important but thankless task of examining MSS. appears to have been undertaken for him by others, principally by that most indefatigable of collators, Herr Joseph Müller of Florence. The voluminous notes at the end of the book are a compilation (or very little more) from Segaar, Potter, and previous commentators. Thus the editor's responsibility is in the main confined to the revised text, and the shorter notes, at the foot of each page, in which he gives us (1) a critical commentary on the traditional text, and (2) the references in cases where Clement borrows from earlier writers. The fact of this part of the work having been ready in 1866 must be duly borne in mind, as it clears the editor from the imputation of neglecting the latest contributions to the elucidation of his author.

It would be erroneous to infer that nothing has been done for Clement since 1715. On the contrary, his writings have been constantly in the hands of scholars whose efforts to emend them have often met with the signal success which comes from special knowledge of special departments of Greek philology and literature. Professor Dindorf seems to have formed no adequate conception of the extent and value of this desultory criticism of Clement. It is true that he makes good use of Doehner's *Quaestiones Plutarcheae* and of Cobet's admirable papers in vol. xi. of the *Mnemosyne;* also that an appendix to his preface embodies the further remarks of Cobet in the Λόγιος Ἑρμῆς for the year 1866, when "a great part of the present work was already in print" (Praef. p. xliv). Professor Dindorf, however, omits to state that some of the latter need not have been added thus, as it were, at the eleventh hour, since they were to be found in the *Novae Lectiones* which appeared in a collected form in 1858. As several of Sylburg's corrections, likewise, are mentioned at the same time in the same appendix—hardly an appropriate place for them at least, seeing that they had been before the world since 1592—we begin to feel a suspicion that Professor Dindorf must be somewhat ὀψιμαθὴς in his knowledge of his critical data.

When authorities like Sylburg and Cobet are dealt with in this fashion, it is not surprising that other scholars are treated with much less ceremony: their labours, indeed, frequently meet with no recognition at all. The editor has forgotten to avail himself of the unpublished notes of Markland now in the British Museum. He seems unconscious of the existence of such a book as Bunsen's *Analecta Ante-Nicaena.* In p. 58 (ed. Potter) he retains the absurd ἐκ πάντων αὐτῶν in manifest ignorance of the ἐκ πάντων τῶν ἀπλανῶν of Davies (ad Cic. *de N. D.* i. 13), which has been stamped with the approbation of Krische and others. In p. 500 we still have ὡς τούτων οὐκ ἄνευ for Zeller's ὡς δ' ὧν οὐκ ἄνευ (*Phil. der Griech.* ii. 1, p. 681); in p. 583 ἕρμαιον ὁ θάνατος is unmeaning where it stands, as Wyttenbach remarked (ad Plat. *Phaed.* p. 338, ed. 1810); in p. 586 we still read the senseless κεκορῆσθαι οὐχ ὥσπερ κτήνεσι instead of Bernays' κεκορῆσθαι ὅκωσπερ κτήνεσι; in p. 711 ἀϊδίως ποιόν is tolerated, when a slight familiarity with philosophical Greek suggests ἰδίως ποιόν, as Bernays showed twenty years ago (*Heraclitea*, Bonn, 1848). In another place (p. 461)—a peripatetic extract of some sixteen lines—the editor incorporates three of Bernays' emendations in the text, but omits to explain on what principle he suppresses all mention of the fourth (ἀγνοήσαι for ἀγνοήσας). He is hardly more fortunate when the difficulty is of a very different nature. In p. 404, for instance, he makes Clement ante-date the Exodus by 1000 years, the true reading being clearly χίλια and not διοχίλια (Clinton, *F. H.* vol. i. p. 291): in reproducing the error in p. 409 he intensifies it by printing a monstrous combination of letters, ,βλκά', which it requires no ingenuity to correct at once, unless one approaches Clement with a Gallio-like indifference to the distinction between sense and nonsense. If the editor's views as to the language of his author may be inferred from the "revised" text, it is clear that our grammars and lexicons also await revision. Ἀντεπίστασθαι (p. 436) is apparently a *vox nihili* (to be supplanted by ἀντεφίστασθαι); Θαλεῖ (p. 396) is not one of the recognised datives of Θαλῆς; it is not generally held that a Greek could say στρατεία (p. 582) when he meant στρατιά, or πρὸς τῇ ἐνεργείᾳ (p. 367) for πρὸς τὴν ἐνέργειαν, or μάλιστα σταθήσεται νόμους (p. 441) for μάλιστα θήσεται νόμους. But enough of this. As a final specimen of the corruptions which still disfigure the text, we must quote at length a passage (p. 402) in which Clement sketches the chronology of Roman history. Having stated that Rome was founded 24 years after the first Olympiad—in B.C. 752 therefore—he proceeds as follows:—

> ἐντεῦθεν ἐπὶ τὴν Βαβυλῶνος ἀναίρεσιν ὕπατοι ἐγένοντο ἐπὶ ἔτη διακόσια τεσσαράκοντα τρία, ἀπὸ δὲ τῆς Βαβυλῶνος ἁλώσεως ἐπὶ τὴν Ἀλεξάνδρου τελευτὴν ἔτη ἑκατὸν ὀγδοήκοντα ἕξ.

Although the absurdity of the passage as it stands is "gross as a mountain, open, palpable," it does not seem to have disturbed Professor Dindorf's editorial equanimity in the least. He prints the above congeries of words without misgiving or comment, in happy unconsciousness of the circumstance that Clinton (*F. H.* vol. ii. p. 379) and others long ago decided to substitute βασιλέων for Βαβυλῶνος. The way is perfectly clear. We must insert ὅτε before ὕπατοι (as Lowth did before ὑπάτευεν, a few lines further on), strike out the ἐπὶ before ἔτη, and change ἁλώσεως into ἐλάσεως. Clement, thus simply restored, tells us rationally enough that 243 years elapsed from the foundation of Rome to the overthrow of the monarchy when Consuls were first created, and that from the expulsion of the kings to the death of Alexander was a period of 186 years. But, whatever our view may be worth, we are curious to learn the interpretation which the editor, in this and similar places, would put on his own text. We assume, of course, that to edit a book implies some theory as to the writer's meaning.

An array of facts such as we have been adducing may possibly suggest a twofold question: Has the editor made any serious and consistent effort to render his author intelligible? Has he availed himself to the utmost of the efforts of others in the same direction? Hesiod thinks that mankind may be divided into three classes; those who discover what is right for themselves, those who take the advice of their betters, and those who do neither the one thing nor the other—the last class being characterised by him with antique plainness of speech as ἀχρήϊος, useless or unprofitable. It is not our fault if our readers ask, Under which category, then, would Professor Dindorf come? We confess to a feeling of some surprise at the grammatical blots which still keep their place in the text, notwithstanding its revision by so practised an editor. One explanation of the fact we

may perhaps venture to set aside as improbable: "Ego sum editor Oxoniensis et super grammaticam" every one will see to be an unscholarly reflection, and a cruel compliment to pay to a university out of Spain.

Let us give Professor Dindorf his due. His experience as one of the editors of the Paris *Stephanus* has certainly enabled him to extirpate a number of solecisms which escaped the watchful eye of Sylburg. His corrections, however, being for the most part of blunders of orthography and accentuation, rarely affect the sense of a passage: difficulties in the sense indeed are constantly ignored. Such a short and easy way of dealing with them has doubtless one advantage, that of securing to an editor immunity from the graver sins of commission. Professor Dindorf has every claim to this negative virtue, but it is at best a poor substitute for the combination of soundness and independence of judgment which is commonly termed competence. We could wish that his usual discretion had not deserted him in certain cases in which he seems to fall into positive error through a misplaced confidence in others. In p. 699 for instance he follows Mullach in perverting τὰ τῆς γνώσεως βάθη into τὰ τῆς γνώσιος βάθεα, as though the words formed part of the Heraclitean fragment which they serve to introduce (!). But as the parallel in Plutarch (*Vit. Coriol.* c. 38) presents no vestige of them, this cheap emendation is already condemned; besides which, an editor of Clement might surely be presumed to know that the expression "depths of knowledge" is Clement's, and occurs elsewhere in Clement. We wonder why Professor Dindorf does not turn τὰ βάθη τῆς θείας γνώσεως in p. 613 into Ionic, if it is only in order to keep Mullach in countenance. Another strange perversion of the text has been adopted ready-made from the old translator Hervetus, or, to speak more charitably, his printer. There is a passage in the *Protrepticus* (p. 5) in which Clement in his fanciful way makes David and Jubal representatives of two types of music, the spiritual and the material. Here Professor Dindorf naïvely takes credit for reading Τουβάλ. We much prefer to think that Clement had a decent acquaintance with the Bible, and knew that Jubal, and not Tubal, is described as the "father of all such as handle the harp and the organ."

With writers of Clement's order, it is their want of originality, their shameless plagiarisms, in short their literary demerits, which render them so precious to the non-theological student. An examination of their "sources," to say nothing of its use to a critical editor, is of the highest general interest, because it helps us to realize the intellectual atmosphere of their age, and reveals, moreover, in many instances valuable remains of a literature now almost entirely lost to the world. Professor Dindorf acknowledges his obligation to point out Clement's debt to older writers, but his treatment of the citations in his author is so strange as to be inexplicable except on one hypothesis, namely, that he had not at starting a sufficient acquaintance with the philosophical literature from which Clement draws so largely. Certainly Aristotle would seem to be almost a sealed book to him. We do not say the same of Plato: Plato's name occurs pretty often in the notes, but, it must be confessed, by no means so often as it might; a characteristic omission is that in p. 654, where the editor fails to detect an extract from the *Republic*, although in the process of transcription Clement has retained the ἔφη and ἦν δ' ἐγώ of the dialogue. Among eccentricities in the way of references we may notice that he assigns a quotation from the *Republic* to the *Alcibiades primus* (vol. iii. p. 84), and would appear from his Index (vol. iii. p. 635) to confuse the Platonic *Timaeus* with the apocryphal work bearing the name of Timaeus Locrus. Careful verification of his references might have saved him from one ludicrous blunder. It will hardly be believed that in p. 732 he corrects the manuscript reading ἀτρεμῆ and ἀσήμαντοι into ἀρτεμῆ and ἀπήμαντοι, through inability to see that Clement is quoting directly from the *Phaedrus*, where the suspected words have been accepted as sound and intelligible by all the commentators from Hermias to Dr. Thompson. Metrical fragments lurking in the text are pointed out as a rule only when Cobet or others have already furnished the hint. The following may give some idea of the editor's procedure when he is left to himself. In editing vol. i. he omits to draw attention to the poetical colouring of the long passage in p. 336, and to the important fact that Clement to all appearance has preserved disjointed portions of, we calculate, at least six or seven lines from some tragedian. We get a ray of light in vol. iv. which comprises the Variorum notes. Heinsius has a discussion on the passage in question, and detects in it *two* lines from some lost drama, a view which Professor Dindorf now perceives to be "not improbable." But why were we not informed of this earlier? What if there are fragments of at least *six or seven* lines to be found? On a point like this the reader of Clement naturally looks for an authoritative decision from one who has been engaged for years on the *Poetae Scenici*.

Here we take leave of Professor Dindorf and his 'Clement.' The new collation of the MSS., besides simplifying the task of the future editor, will doubtless be appreciated by such students as possess the collateral knowledge requisite to turn it to good account. Another valuable feature in these volumes is that they are a répertoire of Cobet's conjectures, and of the learning of the older commentators. We cannot conceal our disappointment at discovering that a veteran Hellenist of Professor Dindorf's eminence has had so very little of his own to impart, and that he so often fails or displays a pitiable helplessness in cases where a duly qualified editor of Clement might almost ensure success. His long connection with the delegates of the Clarendon Press compels us to assume that he has done his utmost for them, but it is impossible to imagine his share in the present work to have been in any sense a labour of love, or one for which he felt any special aptitude. I. Bywater.

A Comparative Grammar of the Anglo-Saxon Language, by Francis A. March. London: Sampson Low, Son, and Marston, 1870.

Professor March tells us in his preface that his work is an expansion of outlines of the general laws of Anglo-Saxon grammar, originally intended for the use of his students at Lafayette College.

"In preparing this outline for the press, love of the work has led me to fill it up into a Comparative Grammar. Other Comparative Grammars have discussed several languages, each for the illustration of all, and of language in general; this book is an Anglo-Saxon Grammar, and uses forms of other tongues and general laws of language only so far as they illustrate the Anglo-Saxon."

This plan has been fully carried out: the history of the language, the laws of its phonology, inflections, derivation, syntax and prosody, are handled in a way that shows a thorough command, not only of the language itself, but also of its relations with the cognate tongues. In this recognition of the comparative or scientific, as opposed to the purely empirical method of studying Anglo-Saxon which has hitherto prevailed in this country, lies the special value of the work for English readers; it is the first in our language in which the latest results of comparative philology as applied to Anglo-Saxon have been made generally accessible. The advance Mr. March has made on his English predecessors is especially shown in the thorough way in which the phonetic laws are treated, strongly contrasting with their neglect in all other English grammars. Mr. March, we are glad to

see, tacitly rejects the barbarous system of pronouncing the vowels, which still prevails to a great extent among English students; he pronounces, for example, *î* as in *deem*, *û* as in *fool*, and *y* as the French *u*. Some of his views, however, seem to call for discussion. In the first place he repeats the old fallacy of a *necessary* distinction between short and long vowels; thus he pronounces *a* as in *far*, but *â* as in *fall*. It is certainly true that short and long vowels show a tendency to diverge, and that in English scarcely any pairs of them are of exactly the same quality. Thus the vowels of *bit* and *beat* are qualitatively as well as quantitatively different; the long sound of the former and the short of the latter vowel are unknown in English. When this was first noticed, and corresponding shades of distinction were found to exist between most of the other vowel-pairs, it was hastily assumed that quantitative necessarily involved qualitative difference. That the distinctive quality of the vowel in *bit* has nothing to do with its quantity is proved by the fact that it can be prolonged ad libitum, and yet remain quite distinct in sound from the vowel of *beat*. There seems, therefore, to be no reason for assuming any qualitative distinction between the long and short vowels in Anglo-Saxon. Besides, if the Anglo-Saxons had really pronounced their *â* as in *fall*, they would certainly have expressed the sound by its nearest equivalent, the letter *o*, possibly with some diacritic to distinguish it from the original *ô*.

As to the accents of the MSS., it may be mentioned that all that has been hitherto written on them—including, we regret to say, Mr. March's own remarks—is next to useless. It is known that the earlier editors omit the accents entirely, and that German and some English editors insert them on theoretical principles. It is not, however, generally known abroad that most of those editions which profess to follow the MS. usage are utterly untrustworthy. The great majority of texts which have been printed during this century we owe to Benjamin Thorpe, and whatever may be the merits of his editing, accuracy is certainly not one of them. In the case of the accents especially, he does not seem even to have attempted to follow the MSS., accenting apparently sometimes at random, sometimes according to the vague analogies of modern English pronunciation. Mr. March says that *me* and *he* are often accented in the MSS.; but if, as is probable, his examples are drawn exclusively from Thorpe's editions, this argument in favour of their vowels being long is more than doubtful. How far the usage of the MSS. themselves can be depended on is a different question, which can hardly be settled till we have a few reliable texts. It is certain that the authority of the MSS. varies greatly, and in many of them the accents seem to be introduced at random, merely as an ornament. Some of the oldest MSS. make considerable use of doubling the vowels, and it is remarkable that this method of indicating the quantity seems to be employed in all cases with the strictest accuracy.

As another instance of the utter want of system which has prevailed in A.-S. editing, the curious fact may be mentioned that not one of Alfred's works has been edited in the language of his period, although most excellent MSS. exist, written during his life, and probably under his personal superintendence; but from later, and, in many cases, inaccurate copies, in which the characteristic forms are almost entirely lost. When it is considered that the poetry has also been handed down to us chiefly in late MSS., southern copies of Northumbrian originals, which, with the exception of a few scattered fragments, have been destroyed, it is evident that materials for chronological and dialectical investigations, which can only be founded on minute distinctions of spelling and inflexion, are as yet almost entirely wanting. Under these circumstances it is not any fault of Mr. March's that his account of the A.-S. dialects and their successive stages is imperfect. He enumerates the leading features of the Northumbrian dialect, apparently without being aware of the fact that it, as well as the classical West-Saxon, has two distinct periods, an early and a late. A comparison of the proper names in Bede, and the fragment of the original text of Cædmon with the Durham gospels, shows that the language underwent considerable changes in the course of two centuries. Thus, one of the most marked features of the earlier period, the retention of original *ct* for *ht*, disappears in the later writings. He has also omitted to mention the well-marked Kentish dialect, intermediate to the Saxon and Anglian (or Northumbrian) dialects.

There are some points in the declension of the adjectives which are not clearly brought out by Mr. March. The endings in *u* do not occur throughout the whole period of the classic language; on the contrary, they are characteristic features of the earlier period up to the early part of the 10th century. It is not easy to pronounce with certainty on this question, as many of the MSS., which are copies of older originals, exhibit a mixture of early and late forms, but it is tolerably certain that at the time of Elfric these terminations were quite lost, the feminine one being dropped, the neuter changed to *e*, which caused a levelling of the three genders in the nominative, both singular and plural. In the gen. and dat. plur. of the weak adjectival declension there is a remarkable fluctuation between weak and strong, which is not noticed in the grammars. Instead of *-ena* and *-um*, *-ra* and *-an* are often found in the best MSS. of Alfred's time. The latter form is remarkable, as it is against the analogy of the substantive declension.

The Syntax is perhaps the most original and at the same time the most valuable part of Mr. March's work, this being a branch of A.-S. grammar which has as yet been little cultivated by German philologists. It is the only department of A.-S. in which English scholars have done any original work. The present Syntax shows a decided advance on that of Mr. Vernon, the best which has hitherto been written. Some of Mr. March's verbal forms, however, are rather dubious: such a collocation as *hi wæron gewordene numene* reminds us rather of the *ich werde gelobt worden sein* of the German grammars than of any regular A.-S. form. It is true that such a periphrase does sometimes occur, but it is doubtful whether it suggested to the Anglo-Saxons the definite idea of the Latin pluperfect. Even the active perfect and pluperfect are as often expressed by the simple *nam* as by the periphrastic forms. So loose is the usage that the periphrastic pluperfect is sometimes used even for the simple preterite, as in the lines of Beowulf:

> "and hi hine ða begen abroten hæfdon,
> sibæðelingas."

It is doubtful whether *ic eom nimende* ought to be compared with the English *I am taking*. It seems to be merely an occasional and unmeaning extension of the simple *ic nime*. Compare the following passage from Thorpe's edition of *Elfric's Homilies* (I. 505): "þa sona on anginne þæs gefeohtes wæs se munt Garganus bifigende mid ormætre cwacunge," and the translation "*was immediately trembling*." Here the idea of continuity is entirely shut out by the word *sona*. Elfric the grammarian did not attach any very definite sense to these periphrases with *habban* and *wesan*, else he would hardly have translated *amatus sum* by the clumsy *ic wæs fulfremedlice gelufod*. It seems therefore probable that the delicate tense-distinctions of the modern English verb have arisen by differentiation from these originally unmeaning and convertible periphrases.

In conclusion we may be allowed to call attention to a

few isolated cases of inaccuracy, which could easily be corrected in a future edition. What authority is there for *gefôn* = *gefeohan?* It is certainly not the regular contraction, which is *gefeôn*. All doubtful and sporadic forms should be made verifiable by a reference. The alternation of *h* and *w* in *geseah*, *gesewen*, is hardly a phonetic change: the Gothic *gasahw*, *gasaihwans*, speaks rather for the dropping of the *w* in the one form, and of the *h* in the other. The regular A.-S. form of the foreign *Christus* is *Crist*, not *Christ*. These are trifling blemishes, which do not impair the general value of a book which can be unhesitatingly recommended to all English readers who wish to acquire a sound and intelligent knowledge of Anglo-Saxon.

HENRY SWEET.

Intelligence.

A series of lectures has been commenced in Palermo by Vigo, Pitrè, and others, for the promotion of the study of the Sicilian dialects, against which the Italian centralizers wage uncompromising war.

The contents of the first three parts of volume vi. of the *Herculanensium voluminum quae supersunt* (Detken, Naples) do not seem likely to add much to our knowledge, as the fragments of Epicurus, &c., are very imperfect: Fasc. i. contains Epicuri περὶ φύσεως, lib. i., xiv., xv., and xxviii.; Fasc. ii., lib. xxviii., et aliorum fragmenta; Fasc. iii., Epicuri περὶ φύσεως, Philodemi περὶ ἐπικούρου, and Colotis πρὸς τὸν Πλάτωνος λυσίαν and πρὸς τὸν Ἐυθύδημον.

The new edition of Hesiod by Köchly and Dr. Kinkel (the son of the poet) has appeared. The useful part of the book has been done by the latter, whose critical apparatus is fuller than any yet published. Dr. Kinkel has, for the first time, collated the important Italian (esp. Florentine) and London MSS. The quality of Prof. Köchly's part in the work may be guessed by those acquainted with the Homeric studies.

Prof. Cron has just published an elaborate essay on Plato's *Gorgias;* it is well written, but too bulky (upwards of 200 pages) in proportion to its result.

M. Gaidoz informs us, by balloon post from Paris, that the second number of the *Revue Celtique* which was to have appeared this month, is already in great measure printed off, but will not be published for the present.

The German Universities must suffer terribly from the present war, and in some cases, we believe, all lectures are suspended for the present owing to the absence of students to fill the lecture-rooms. Hardly a single philological work of importance has appeared since June. The editor of the *Philologus* reminds his readers that in 1815 the French forgot to restore sundry manuscripts which they had carried off, the Codex Mutinensis of Theognis, for instance, and the Italus of Thucydides; and that the occupation of Paris by the German armies would be an admirable opportunity for vindicating international morality by returning these stolen treasures to their rightful owners.

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Philologischer Anzeiger, vol. ii. part 7.—Anon.: Christ's Pindar.—A. O. F. Lorenz: Ziegler's Theocritus, &c.—H. Frohberger: Melander, De anacoluthis Herodoteis.—The same: Fuhrmann de particularum comparativarum usu Plautino.—F. F.: Böttcher's Kritische Untersuchungen über die Quellen des Livius in 21–22 Büchern. [Unfavourable: thinks the writer overrates Livy's debt to Coelius.]—Anon.: Gardthausen's Coniectanea Ammianea.—Richter's ed. of Cicero pro Sulla.—M. T. Ciceronis epistolarum emendationes, scripsit J. Krauss.—Ussing's Darstellung der Erziehungs- und Unterrichtswesen bei den Griechen und Römern. [Awards very modified praise to the book.]—St.: Studien zur Geschichte der römischen Kaiser von G. R. Sievers. [A laudatory notice.]—Schulze de vasculo picto et Amazonis pugnam et inferiarum ritus repraesentante.—Graser's Schiffsdarstellungen auf antiken Münzen.—M. François Lenormant et le trésor de Hildesheim.—Kamp's Anticaglien in Köln.—Giornale degli scavi di Pompei.—E. von Leutsch: Patin's Etudes sur la poésie latine. [Criticised from a purely German point of view: the reviewer thinks it worth while to tell us that M. Patin "als seine führer nur Franzosen nennt, Nisard, Martha, le Clerk (*sic*), *keine* Deutschen."]—Hagen's Antike und mittelalterliche Räthselpoesie.—E. von Leutsch: Ranke's C. O. Müller.—Sainte-Beuve's *Discours* in memory of Dübner.

Philologus, vol. xxx. parts 3 and 4.—Th. Wiedemann: On the age of the historian Curtius Rufus. [Examines the existing theories on the subject, and adduces some new reasons for supposing him to have been contemporary with Seneca.]—E. von Leutsch: Hippocratis aphorismi. [A critical note on a place or two.]—D. Detlefsen: The geography of the province of Baetica, in Pliny, *N. H.* iii. 6-17. [Based on the new vol. of the Corpus Inscriptionum.—C. Meiser: On Vergil's Georgics.—[Suggests *nolle* for *velle* in iv. 448.]—L. Schwabe: On the fourth book of the Verrines. [Points out the quotations from it in later writers.]—H. F. Stobbe: On the Chronology of Pliny's Epistles. The trials of Priscus and Classicus. [A most interesting and elaborate contribution to our knowledge of Pliny's life.]—Chr. Kirchhoff: The word προχαῖος.—J. W. Schulte: On Cass. Dio. 74, 9.—C. von Jan: Greek music. ii. The excerpts from Aristoxenus. [Examination of several of the later compilations, especially the fragments of Kleonides.]—F. Susemihl: On a Paris MS. of Aristotle. [Coislin. 161, i. *b*: Bekker's account of its readings seems faulty.]—H. Heinze: On some places in Plutarch's Moralia.—C. F. Finckh: Greek proverbs which are *not* wanting in the Göttingen edition. [In answer to some criticisms of G. Wolff.]—A. O. F. Lorenz: On Plautus. [Trin. 495, Stich. 594, Capt. prol. 46-9.]—O. Seyffert: On Plautus. [Mil. Glor. 1330.]—P. Langen: On Plautus. [Menaech. 1039.]—O. Drenckhahn: On Ovid, Am. iii. 1, 41-58.—R. Menge: On Cæsar, *B. G.* i. 39.—P. Langen: On Cic. de Orat. i. 37, 168.—H. Düntzer: Corssen and the Saturnian verse.

Rheinisches Museum, vol. xxv. part 3.—K. Dilthey: Archæological raids. ii. The Artemis of Apelles. [On the picture described in Pliny, *N. H.* xxxv. 96, with an ingenious theory as to the way in which the word "sacrificantium" got into the passage.]—L. Müller: Annianus Faliscus and Septimius Serenus.—Th. Struve: Letters from Pontus, ii. iii. [Contains some important inscriptions.]—G. Meyncke: The Paris excerpts from Tibullus. [An elaborate account of the excerpts in Paris MSS., together with some speculations as to their relation to the quotations in Vincentius of Beauvais.]—W. Helbig: Contributions to the explanation of the Campanian wall-pictures. [The writer continues his highly interesting account of the decorative painting of the ancients.]—R. Enger: Critical remarks on the Persæ of Æschylus.—H. Nissen: The *limitatio* of Turin.—J. Sommerbrodt: On the σωμάτιον of the Greek actors. [Discusses the meaning of the word, and the distinction between it and σωματεῖον.]—O. Ribbeck: *Dice* once more. [Emends Quintilian, ix. 4, 39.]—W. Schmitz: On the Tironian notes.—R. P. C.: On Plautine prosody. [Against a view of Corssen's as to the quantity of vowels before *gn* in Plautus.]—R. Grosser: The poet Agathon on the Attic stage. [Comments on Plato, Symp. 194 B.]—L. Müller: The poet Turnus. [Gives a new reason for considering the lines attributed to Turnus the work of Balzac.]—K. Dziatzko: On Euanthius.—Miscellaneous suggestions:—W. H. Roscher on Æschyl. Pers. 209.—F. Martin on Æschyl. Pers. 733.—R. Enger on Sophocl. O. R. 252.—G. Krüger on Sophocl. Aj. 774.—A. Schmidt on Eurip. Orest. 692 and 954.—J. M. Stahl on Thucyd. vi. 47-50.—J. Classen on Thucyd. viii. 46. [Short but very interesting.]—J. Klein on Jul. African. Cest. c. i.—L. Müller on Propert. iv. 3, 1-8, and v. 1, 73-4. [Proposes in the latter passage "*aversis rhythmis* cantas, aversus Apollo" (!!).]—H. Anton on Caes. B. C. iii. 86.—H. Müller on Seneca the rhetorician, p. 194.—L. Müller: On the MSS. of the Latin anthology.—F. Ritschl: On Placidus and Latin glossography.

Selected Articles.

On Heydemann, H. Griechische Vasenbilder. [Is a valuable contribution to the rapidly increasing material for the study of this part of Greek art.]—Göttingische gelehrte Anzeigen, Sept. 28; rev. by Benndorf.

On Rausch, Dr. F. Geschichte der Literatur des Rhaeto-Romanischen Volkes. [Shown to be inaccurate, though laborious.]—Lit. Centralblatt, Sept. 24.

New Publications.

CATULLUS, Tibullus and Propertius. Rec. et praefatus est Lucian Müller. Leipzig: Teubner.

HENSE, OTTO. Heliodorische Untersuchungen. Leipzig: Teubner.

HERODIANI Technici reliquiae. Aug. Lentz. Vol. ii. Part 2. [Completes the work.] Leipzig: Teubner.

HESIODEA quae supersunt omnia. Ed. A. Köchly et God. Kinkel. Pars 1. Leipzig: Teubner.

HEYDEMANN. Griechische Vasenbilder. Berlin: Adolph Enslin.

PHAEDRI fabulae Æsopiae. Rec. et praefatus est Lucian Müller. Leipzig: Teubner.

RAUSCH, DR. F. Geschichte der Literatur des Rhaeto-Romanischen Volkes. Frankfurt-am-Main: Sauerländer.

SCHMIDT, DR. LEOP. De tractandae syntaxis Graecae ratione commentatio. Marburg.

TERENCE. The Andria and Eunuchus, edited by T. L. Papillon, M.A. Rivingtons.

WUSTMANN, G. Apelles' Leben u. Werke. Leipzig.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Thursday, December 15th, and advertisements should be sent in by the 9th.

General Literature and Art.

Traditions and Hearthside Stories of West Cornwall. By W. Bottrell. Penzance: W. Cornish. London: Trübner.

Ever since the brothers Grimm published the German popular stories of the Rhineland (under the title of *Kinder- und Hausmärchen*), nursery tales and popular fiction of all ages have been looked on in a new light. It was soon seen that much of early mythology was embodied in them. The "Sleeping Beauty," for instance, can be traced back to the early myth which symbolises spring being awakened by the sun's touch, doing away the sleep of winter. The process by which a myth became a romance can in many instances be investigated. Wayland Smith, the Vulcan of the North, has been degraded into a travelling tinker in Sir Walter Scott's *Kenilworth*. The red oxen of the sun, that is the clouds round the setting sun, who are carried away by the dark Power of the West, and again rescued from him by the returning Lord of Light, have become in Livy real oxen whom Cacus carried away from Hercules, and the local guides in Rome showed the cave of Cacus with undoubting faith—had not Evander shown it to Æneas when they took that memorable morning walk up the Tiber side so many ages ago? It became therefore a very interesting pursuit to collect these stories in as many distinct localities as possible, and this led to another striking discovery. It was soon found that tales collected in Hindostan or in Ireland, in Scandinavia or in Southern Europe, were in many cases identical. Not only was the Indo-European race proved to be One by comparative philology, but the same conclusion was arrived at by a comparison of popular fables (the proper name of the science has not yet been invented). Of late, however, as the investigation has extended, this conclusion has become uncertain; for some of the popular tales are found to be widely spread among other races not belonging to the Indo-European stock. Thus in Steere's *Swahili Tales, as told by natives of Zanzibar* (just published), we find the story which tells how "the ox began to drink the water, and the water began to put out the fire," &c., in a way not unlike the nursery story we can all remember (see a notice of this book in the Göttingen *Gelehrte Anzeigen*, 19th Oct. 1870). Have such stories been borrowed, or do they date from a still earlier age, and point to a still higher unity of races? The question is not yet settled, and much previous sifting of the evidence will be required. Baring Gould has further tried to show what in most of these stories is the original element, the "myth-radical," which is at the root of all the various forms that poetic imagination can give to the tradition. The Celtic races have done their share of the work; Campbell has collected the tales of the West Highlands; Carleton and others those of Ireland; Britanny has not been neglected, it remained to gather together whatever of the kind might survive in the West of England. Robert Hunt in 1865 published the *Popular Romances of the West of England*, and Mr. Bottrell (who contributed part of Hunt's materials) has here taken as his province the extreme west of Cornwall. We are somewhat surprised to find how little of the purely Celtic element can be found in these two collections, the existing traditions should in most cases perhaps be considered Anglo-Saxon. It is true that the Celtic saints of the Middle Ages play a part in them, and this naturally, for while Irish saints evangelised the extreme west, north-east Cornwall was closely connected with the Welsh Church, and the southern coast with that of Brittany. But these legends of saints are not what we are looking for. Again there are many stories of giants, and that veracious chronicler Geoffry of Monmouth already tells us, writing in Henry I.'s days, how Corinaeus, who gave name to Cornwall, beat the local giant in wrestling. It is to be feared that Corinoran (others read Cormoran), whom Jack the Giant-killer killed on St. Michael's Mount, is no other than Corinaeus, so unfair is tradition, and so often does it invert the parts of the story. But Mr. Bottrell's first story which tells how Tom killed the giant who lived between Marazion and St. Ives, though armed only with his axle-tree and cart-wheel, does but repeat the well-known tale of "Tom Hickathrift," whose tombstone was to be seen at Tylney in Norfolk, with the axle-tree and wheel carved on it—probably a cross, with the upper part inscribed in a circle, a form often found. The reader should refer to the amusing article in the *Quarterly* for January 1819, "Antiquities of Nursery Literature." It is curious to see how legend localises itself here and there. The Celts probably, when flying before the English, took with them the legend of Arthur, and gave it a local habitation in each of their places of refuge. There are excellent reasons for placing King Arthur's court in Scotland, says a modern antiquary, but so there are for placing it in Wales and in Cornwall, and any one travelling in "King Arthur's land" in Brittany had better not express an opinion in favour of any other locality. But although Tintagel has undoubted claims to Arthur, and it is certain that he is yet alive under the form of a raven or perhaps of a chough, yet nothing of him survives in Cornish tradition, and the Cornish antiquaries can only mournfully point to the existing female name "Jenefer" as a reminiscence of Guenevere, just as they quote the not uncommon name Hannibal, to prove that the Phœnicians once traded in the land. But the change of the early Celtic proper names itself shows how much Devonshire and Cornwall were Saxonised after Athelstan's conquest. In the remarkable list of manumissions in the "Bodmin Gospels," dating from the century previous to the Norman Conquest, we find numberless Celtic names, such as Ourdylyc "golden robe," Arganteilin "silver forehead," and men's names like Grifiuth, Modred, Bleidiud, which at once remind us of Welsh; but the famous "Tre Pol Pen" names are mostly of very late date comparatively, being names of places adopted by the leading families. The Celtic language lasted practically to the Reformation, but even then the miracle-plays acted at the monastery of Glasney near Penryn had to be translated into English, and the active mining and fishing population soon lost the old traditions. What remained was chiefly superstitions as to witches, mermaids, fairies, warnings, ghosts; and a glance at Mr. Bottrell's book will show the comparatively modern character of much which it contains. How the Spaniards landed in Elizabeth's reign in Mount's Bay, how the Sallee rovers were a terror to the same coast, the doings of the smugglers, various love stories (one of them has a "spirit ride" like that in Bürger's ballad), these make up the chief part of the book. Many of the stories reflect the wild character of the country; the desolate moors and the lonely hamlets, each in its own sheltered valley opening out to the sea, have their appropriate legends: the miner can

distinguish unearthly sounds, which tell that the lode of metal is near at hand, and the seamen hear voices from the spectre ship summoning the dying wrecker to his doom. The author has inserted too much local topography to be interesting to other than the natives of Penwith, and in fact the stories are arranged as they relate to various localities proceeding from Hayle westward. He gives, however, a very curious account of the semi-professional droll-tellers who were formerly welcomed at all firesides, and feasts, for their recitals of the old ballads and stories of which they knew so many, and of which their audience rarely tired. The variations in the mode of telling the same stories, some of which occur in ballad form, are characteristic; the names and localities are varied to suit the district and the hearers, and perhaps the minstrels who sung the tale of Troy Divine in the halls of the Ionian chieftains did no otherwise. In any case these stories illustrate the social life of our own immediate ancestors in the time when reading had not taken the place of recitation, and public interests were not so absorbing as personal talk and home-side stories. C. W. Boase.

The Courtly Poets; from Raleigh to Montrose. Edited by J. Hannah, D.C.L., Warden of Trinity College, Glenalmond. London: Bell and Daldy. 1870.

The title of this book describes it accurately. In the words of the editor, "most of these poems are little more than the comparatively idle words of busy men, whose end was not writing, even while they wrote." This common quality gives something like an unity of interest to the verses of men so different as Raleigh, Wotton, Bacon, Sidney, Sandys, Lodge, Dyer, Essex, James I., Montrose. We cannot help regretting that Dr. Hannah did not begin his collection with Surrey, Wyatt, and Sackville, in order that the list might have been even more complete and various. But Raleigh is in fact the central figure of the group. Dr. Hannah tells us that it was his special purpose "to do an act of justice to the memory of Sir Walter Raleigh." He has consequently devoted much time and labour to the sifting and authentication of the verses ascribed to this great man, and has succeeded in presenting for the first time to the English public a really critical edition of his poems. Before the publication of this volume the collections of Raleigh's songs were both defective and redundant. While much spurious matter passed current as his composition, critics like Hallam could reject his authorship of "The Soul's Errand." The rest of the book consists of the poems of Wotton, and a selection from the miscellanies of about a dozen rhymsters of the Jacobean and Caroline period. It must be admitted that a great many of these versifiers are but mediocre; the three sonnets of Sir Philip Sidney, which Dr. Hannah has placed among them, some of the grave melodies of Sandys, Dyer's song "My Mind to me a Kingdom is," and Bacon's weighty meditations on "The World," appear *rari nantes in gurgite vasto* of paltry and affected nothings. The Elizabethan style did not admit of respectable mediocrity. It was either great and forcible, or else petty and conceited. Of the truth of this remark this volume offers ample evidence.

Nothing strikes one more in reading the verses of these courtly poets than their weariness of courts and contempt of human greatness. Something must be allowed for fashion; it was thought proper to prefer the country to the city, a life of innocent obscurity to brilliant fame. But the complaints of Raleigh, Bacon, Wotton, and Dyer, are too profound and solemn to be merely affected. They are worth attention, as the words of men familiar with greatness. Raleigh says:—

> "What is our life? The play of passion.
> Our mirth? The music of derision.
> Our mothers' wombs the tiring-houses be,
> Where we are dressed for life's short comedy."

The sweeter muse of Wotton replies with no less bitterness:—

> "Fame's but a hollow echo; gold, pure clay;
> Honour the darling but of one short day."

Bacon is more comprehensive in despair:—

> "The world's a bubble, and the life of man
> Less than a span;
> In his conception wretched, from the womb,
> So to the tomb."

Over all the poetry of Raleigh there rests a cloud of deep melancholy and solemn meditation. We need not quote from "The Lie," that bitterest invective of a wounded soul, or from "The Pilgrimage," that quaintest allegory of a mind surcharged with grievances and wrongs. Both of these poems are the obvious expression of intense and present passion. It is enough to point to the verses found in Raleigh's Bible, or to the "Poesy to prove Affection is not Love." Allowing for some repetition of the same thought, the latter is a very remarkable poem for the depth of its reflection and the force of its expression. The following lines are not unworthy of Ben Jonson's Muse:—

> "Desire himself runs out of breath,
> And, getting, doth but gain his death:
> Desire nor reason hath nor rest,
> And, blind, doth seldom choose the best:
> Desire attained is not desire,
> But as the cinders of the fire."

The sententious and weighty force of Raleigh is exchanged in Wotton for delicate sentiment and exquisite purity of style. A few of Wotton's poems, especially the well-known verses to the Queen of Bohemia, the lines upon a "Happy Life," and the "Farewell to the Vanities of the World," if that indeed be Wotton's, are unsurpassable for ease and elegance. The following stanza, from a poem of an uncertain author in the style of Wotton, may be quoted for the artless piquancy bordering on quaintness by which it adds new grace to an old thought:—

> "Go! let the diving negro seek
> For gems hid in some forlorn creek;
> We all pearls scorn,
> Save what the dewy morn
> Congeals upon each little spire of grass,
> Which careless shepherds beat down as they pass;
> And gold ne'er here appears,
> Save what the yellow Ceres bears."

With one other quotation, this time from the veritable Wotton, we will close. It is an epitaph on Sir Albert Morton's wife:—

> "He first deceased; she for a little tried
> To live without him, liked it not, and died."

J. A. Symonds.

Premières Poésies, Poëmes Modernes; "Le Passant," "La Grève des Forgerons," "Deux Douleurs." By François Coppée. Paris: Lemerre.

About three years ago M. Coppée published a small volume of verses, dedicated to his "dear master," Leconte de Lisle. These, which are now known as his *Premières Poésies*, were divided into three parts. The first he styled "Le Reliquaire" because it enshrined the "dead dreams" of youth; because he wished to make to all his lost illusions

> "Une chapelle de parfums
> Et de cierges mélancholiques."

Written with flowing pen, in forms as various and as unpedantic as the verse of Victor Hugo, this portion of the volume, while far more restrained in its style than are most of the productions of a man's first youth, did nevertheless lack the simplicity and cultivated directness of expression which the poet has since acquired. The second portion, called "Poëmes Divers," showed capacity to deal with very different subjects—passing at a bound from the quietest and most minute description of a painted window in a church, to the impetuous indignation of a Circassian war-song—but it showed at the same time that no one set of themes had yet seemed to the poet preferable to another, and that thus far M. Coppée was moved by his power to say something, rather than by the wish to say anything in particular very strongly. The third portion, called "Intimités," contained many private reflections of little worth but for the neatness and elegance with which they were expressed—reflections interspersed, however, with lines and passages of singular felicity, and with touches true to nature and to art. Here, for instance, is a picture, as vivid and suggestive as it is accurate, of Paris, seen and heard in summer twilight by a wanderer who has strolled out to the ramparts :—

"Au loin dans la lueur blême du crépuscule,
L'amphithéâtre noir des collines recule,
Et, tout au fond du val profond et solennel,
Paris pousse à mes pieds son soupir éternel.
Le sombre azur du ciel s'épaissit. Je commence
A distinguer des bruits dans ce murmure immense,
Et je puis, écoutant, rêveur et plein d'émoi,
Le vent du soir froissant les herbes près de moi,
Et, parmi le chaos des ombres débordantes,
Le sifflet douloureux des machines stridantes,
Ou l'aboiement d'un chien, ou le cri d'un enfant,
Ou le sanglot d'un orgue au lointain s'étouffant,
Ou le tintement clair d'une tardive enclume,
Voir la nuit qui s'étoile et Paris qui s'allume."

One is struck throughout these "Intimités" by an absence of enthusiasm which is atoned for by their air of tender half-melancholy thoughtfulness. They abound in brooding reverie; and when the poet passes out of that mood into phases of excitement, instead of extolling "the roses and raptures of vice," the cry which he utters is for the healing hand that "quiets and retrieves." And if there is one thing more than another unconsciously taught throughout M. Coppée's writings, it is the happiness of domestic tranquillity; the danger of exceptional struggles and exceptional success. He is penetrated with country sentiment—with the yearning for country simplicity—while acknowledging that he is himself the "pâle enfant du vieux Paris." He speaks in the "Intimités" of the poet's longing for a

"bonheur très-long, très-calme, et très-bourgeois."

In the "Passant," Sylvia, a courtezan of the Italian Renaissance—more splendid, more thoughtful, and more wearied than the "Jenny" of Mr. Rossetti's new great book—advises the strolling musician to flee from the life of city and palace :—

"Et, quand le ciel sera trop noir, allez-vous-en
Chez le vieux châtelain ou le bon paysan ;
Et reprenez après votre éternel voyage.
Enfin, si traversant la place d'un village
Par un riant matin de la jeune saison,
Vous voyez, travaillant au seuil de sa maison,
Une humble et pure enfant aux yeux de fiancée,
C'est là qu'il faut borner la route commencée,
Vivez-y les longs jours calmes d'un moissonneur,
Et vous verrez, ami, que c'est là le bonheur."

And the world-worn poet of the "Deux Douleurs," had he but returned to his own country-side, would have found, we are told, "le vrai bonheur, obscur et paysan." This sentiment, changed in form by change of circumstance, is seen again in that perfect idyll "Les Aïeules :" these old women at the age "où l'âme se repose" seeming to care only to sun themselves on the stone seat facing the south, whence they can hear the song of the *laveuses* and see the cattle going down to drink :—

"Leur sourire d'enfant et leur front blanc qui tremble
Rayonnent de bien-être et de candeur ; il semble
Qu'elles ne songent plus à leurs chagrins passés,
Qu'elles pardonnent tout, et que c'est bien assez
Pour elles que d'avoir dans leurs vieilles années—
Les peines d'autrefois étant bien terminées,
Et pour donner la joie à leurs quatre-vingts ans—
Le grand soleil, ce vieil ami des paysans."

I have dwelt upon this feature at some length because it characterizes the later poems not less than the earlier ones, and because this idealization of simple things tells of a tone so different from that of the many poets whose joys are hysterical. In this respect what Alfred de Musset was when spiritually at his best, Coppée is always.

The volume entitled *Poëmes Modernes* was a decided advance upon the work that had preceded it. In it M. Coppée produced stronger situations, and developed more fully that power to "tell a truth obliquely," to

"do the thing shall breed the thought,
Nor wrong the thought, missing the mediate word,"

which a great English contemporary has declared to be the glory and good of art. The "Bénédiction" is a sufficient example of vigorous imagination ; whilst "L'Angelus" seems to me to share the merit of those works whose moral is an aroma pervading all—not a clumsy "tag" at the story's end.

M. Coppée's next work, *Le Passant*—one of those short poetical comedies which have more pathos than wit—does not need the ability of Mlle. Agar and Mlle. Sarah Bernhardt to bring out the contrast between its two characters. That it is a stage-play at all—which its success at the Odéon proved it to be—says much for the intellectual standard of the French theatre. But it fulfils more completely the requirements of a chamber-poem, abounding in happy thought and literary grace. Neither in *Le Passant* nor in *Deux Douleurs* does M. Coppée give evidence of that power of combination, that facility in the weaving of many threads, which is a condition of all great success in the writing of dramas.

In *Deux Douleurs*, indeed, one is struck by what is almost poverty of incident, and the final agreement of the two suffering women, who are united only by their love for one man who is dead, to meet once more, "demain sur son tombeau," is scarcely better than the anti-climax with which "Enoch Arden" ends :—

"The little port had never seen a costlier funeral."

Yet in this very drama there are touches of noble pathos and exquisite simplicity, which are not excelled even in *La Grève des Forgerons*.

In *La Grève des Forgerons*, M. Coppée is more than usually dramatic ; Père Jean, an old man who worked at an iron foundry, telling his own story to the judges, in a way which is thoroughly consistent, impulsive, and vivid. The workmen had agreed to lay their claim for better wages before their master, and Père Jean had been deputed to represent them. Going, he had found the master at dessert, and had put forth gently yet firmly the common grievance while "le patron" was calmly breaking his nutshells and sipping his Bordeaux. The master had said that there would always be a place for Jean ; but as for the rest, they must expect no advance. The *forgeron*—though he had an old wife and two grand-children to support—felt bound to

share the fate of his comrades. But when, after long struggles with poverty, those whom he loved were starving, he made up his mind to go back to work, and first went to say so at the wretched *cabaret* where a committee of the men on strike sat permanently. When they heard of his intention, which was mildly, reasonably, and touchingly told, one of them called him a coward; and for this, Jean, burning with indignation, challenged the abusive idler to a rough duel: the time, that moment; the weapons, the heavy hammers of their craft. The insulter was killed; and Jean, who instantly gave himself up to the police, is now arraigned for murder. The true narrative is his best defence, and he gives it, in the poem, little caring for it to save him.

This short work I regard as the most complete and commendable of M. Coppée's many efforts: it encloses within itself such various excellences. The poet was first fortunate in the choice of subject: this one appealing to no class, but to the race: evoking healthy interest in a problem of our time, instead of ministering to morbid tastes and exciting vitiated palates. The story, vigorously conceived, is also adroitly told: three words spoken half-aside and with the utmost naturalness, often sufficing to put the reader *au fait* with the incidents of the tragedy. The simplicity and directness of the style are maintained from beginning to end: no fine thing is said which might not be struck out of the brain of any honest man in moments of touched feeling, genuine regret, and bitterness of wrath. It is the loyal unreflecting *forgeron* who speaks: the Paris poet is forgotten. Nor is there indeed one line here which I for my part would have otherwise. FREDERICK WEDMORE.

On the Vernon Dante, with other Dissertations. By H. C. Barlow, M.D. London: Williams and Norgate, 1870.

IN this pamphlet Dr. Barlow, who is well known to students of Dante, both in England and abroad, for his diligence in examining the manuscripts and elucidating the text of the *Divine Comedy*, has given us, together with other notices, a complete account of the greatest tribute which England has ever paid to the poet's memory—the great work of Lord Vernon. The first of the three volumes of which that magnificent book is composed, was published in 1858, the same year in which the noble author produced his volume of reproductions of the four first editions of the *Commedia:* the last appeared in 1865. The work is to be found in most of the great public libraries of Europe; but still, from one cause or another, principally, no doubt, in consequence of its having been printed and circulated privately, it is not as well known as it should be. Accordingly Dr. Barlow has done good service in calling attention to it, and giving an account of its contents. We are not certain that he has succeeded in doing this in the best way possible: perhaps a briefer synopsis might in some respects have been more serviceable. As it is, the account is encumbered here and there by discussions of the writer's own views, and we might well have been spared the sketch of Dante's life, and still more the notice of the English mercenaries in Italy, accompanied by a biography of so well known a historical character as Sir John Hawkwood. But at all events almost all the points of considerable interest in the three volumes have been passed in review.

At the risk of appearing to give a summary of a summary, it may be worth while to say a few words about Lord Vernon's work. Though the information it contains is scattered in some measure over the three volumes, yet, roughly speaking, the first is devoted to the text of the *Inferno*, together with a running commentary on it; the second to the documents, notices, and investigations which serve to elucidate the poem; the third, which is called the album, to views, plans, and other illustrations, contributed by first-rate artists, and executed in splendid style. To the formation of this last collection a quarter of a century was devoted; and it may give an idea of the way in which all the arts have been laid under contribution to raise a worthy memorial to the great poet, if we mention that there will be found in one part of this volume an air composed for Lord Vernon by Rossini to accompany the words of part of the story of Francesca, and that the music is given in facsimile from the composer's own writing. In the second volume will be found chronological tables of Dante's period and a historical map of Italy, together with a sketch of its political condition; a minute account of the constitution and topography of Florence; elaborate heraldic illustrations; a genealogical tree of Dante's family; and other illustrative documents, not the least interesting among which are the texts of the three condemnations of the poet. In respect of the first volume, however, some readers will consider Dr. Barlow's praise rather indiscriminating, as he speaks in the highest terms of the running commentary and verbal exposition which accompanies the text of the poem. It is an ungrateful task to criticize even the slightest fault in so great a work, but it cannot fail to be regarded as unsuitable, that while the real difficulties in the sense are not ignored, equal care is devoted to the explanation of the sense of passages and the meanings of words, which present no difficulty except to the unreflecting and the ignorant. Lord Vernon, indeed, tells us in his preface, and no doubt with perfect sincerity, that he designed this part of his work in great measure for inexperienced students, but in doing so he derogated from the dignity of his great design. Much might have been gained, if he had devoted the same pains to the improvement of the text, instead of adopting in the main that of the Paduan edition.

The remainder of Dr. Barlow's volume is taken up with dissertations on the residence of Dante at Verona, and his visit to the great fall of rock in the neighbourhood of Roveredo, called the Slavina di Marco. This remarkable natural phenomenon, which is forcibly described in the twelfth canto of the *Inferno*, forms a conspicuous object to persons entering Italy by the line of the Brenner railway. Dr. Barlow endeavours to prove, that as Guglielmo da Castelbarco, the owner of the castle of Lizzana, which overlooks the ruin, often visited the court of the Scaligers at Verona, he would naturally have met Dante there, and would not improbably have invited him to his residence. It is evident from the poet's description that he had seen the place, and most probably had clambered over it; and, as Dr. Barlow tells us from personal inspection that the most striking view of the scene is obtained from the fragment of the Castle still standing, it is likely enough that he viewed it from thence. The traditions relating to Dante's sojourn at Lizzana, however, are late in date, and weak in authority; and when Dr. Barlow suggests that Castelbarco would naturally desire "to alleviate the hard conditions of his life by the cheering influence of a romantic country," he hardly takes sufficiently into account the intense dislike of the men of that time for mountainous countries, and especially for the neighbourhood of the Alps. H. F. TOZER.

An Epic of Women, and other Poems. By A. W. E. O'Shaughnessy. London: Hotten. 1870.

The Masque of Shadows, and other Poems. By John Payne. London: Pickering. 1870.

THERE is nothing which ought to be more carefully looked after by contemporary criticism than the poetry which, without being weighty or central enough to give promise of permanence, is yet more than mere verse, having something

really to tell us, and telling it with some real excellence of manner. The major gods of the poetical synod may safely be left to themselves, for posterity to assess their attributes and precedence; but it is the special business of the poetical critic not to let slip without record and comment work that is well done although it is scholar's work, and although master's work is all that posterity will have time to concern itself with.

Mr. Arthur O'Shaughnessy and Mr. John Payne have dedicated to each other two volumes that have certainly a title to be classed as excellent scholar's work in poetry. The work of Mr. O'Shaughnessy is here placed first, as bearing the stronger stamp of individuality, as upon the whole better done, and as less decisively referable to specific school influences than the other appears to be. The influences to which we should be inclined chiefly to refer it are those of a section of the French Romantiques, Baudelaire and Gautier at their head, who set themselves with a conscious purpose of art, and with an immense care for the technical execution, finish, and symmetry of their art, to give expression to remote phases of supersubtle feeling or perverse imagination, to produce fantastic and demoralised spiritual exotics of the finest colour and perfume. Mr. O'Shaughnessy is least successful where he is most closely following these prototypes, *i. e.* in the "Epic of Women," which gives his book its name, and which is not an epic but a set of lyrics. There is finished writing in all of them, and in the "Helen" one admirable page, where unaccustomed regret for Sparta and the old days comes over her—

> "And heavy wafts of perfume that was known,
> E'en from those dark familiar laurel trees
> That hid where love and lover were alone,
> Rolled back upon the heart with sore disease:
>
> And from the early home there came no less
> Than the reproach of each remembered gaze
> Of friends, and want of all the happiness
> They gave her in their simple Spartan ways."

But the cynical tone of the prefatory "Creation," and of most of the poems appended to it—notably of that one which is a version of the Homeric song of Demodokos, and that other which is a version of the "Affaire Clémenceau" of M. Dumas—reads like a somewhat youthful sort of second-hand, and is at any rate in false taste. Our author's best work is in other sections. Of the formal art of poetry he is in many senses quite a master; his metres are not only good, they are his own, and often of an invention most felicitous as well as careful. The little lyric called "Lost Blisses" seems to me moving and faultless. Very far from faultless, but interesting and in places even exquisite, is the longer poem early in the book called "The Lover," in the idea of it fantastic and a little repulsive, yet not impermissible nor without its illuminating strokes of nature. In it the religious love which was a part of the early faith, the yearning passion of the virgin saint towards Christ, is transposed into a key not Christian; and a kindred passion, haunting and uplifting the speaker, is referred by her to no known object of worship, but to the divinity diffused in nature and the life of the springtide, and revealing its presence by nameless spiritual seizures, longings, and exaltations. We cite one passage of unimpeachable power from another poem called "Bisclavaret," which is likely to mystify the reader unless he takes note, from its initial Old-French motto, that Bisclavaret is Breton for the Norman Garwall, and can further remember or divine that Garwall is Werewolf. The speaker, then, is a Werewolf, but even that a Werewolf of the poet's own invention, who with a horde of accursed spirits like himself puts off his humanity at night for a stronger and fiercer half-fiendish nature; and they range (but not, as one gathers, in the common likeness of wolves), over all sorts of unmeasured and unimagined regions:—

> Now over intervening waste
> Of lowland drear and barren wold
> I scour, and ne'er assuage my haste,
> Inflamed with yearnings manifold,
>
> Drinking a distant sound that seems
> To come around me like a flood;
> While all the track of moonlight gleams
> Before me like a track of blood;
>
> And bitter stifling scents are past
> A dying on the night behind,
> And sudden piercing stings are cast
> Against me in the tainted wind.
>
> And lo, afar, the gradual stir,
> And rising of the stray wild leaves;
> The swaying pine and shivering fir,
> And windy sound that moans and heaves
>
> In first fits, till, with utter throes,
> The whole wild forest lolls about;
> And all the fiercer clamour grows,
> And all the moan becomes a shout;
>
> And mountains near and mountains far
> Breathe freely; and the mingled roar
> Is as of floods beneath some star
> Of storms, when shore cries unto shore.
>
> But soon, from every hidden lair
> Beyond the forest tracts, in thick
> Wild coverts, or in deserts bare,
> Behold They come—renewed and quick—
>
> The splendid fearful herds that stray
> By midnight, when tempestuous moons
> Light them to many a shadowy prey,
> And earth beneath the thunder swoons.

This wild poem is illustrated by a wild design, which, like others in the book, is a matter of striking and unquestionable vision, but, also like the rest, scarcely as consonant with human proportions as an artist's visions ought to be.

The source of Mr. Payne's inspiration is to be found, I think, in our own mediævalist school of poetry; the spirit of his work is in much akin to that of the earlier writings of Mr. Rossetti and Mr. Morris. The influences of this poetry, and of the French poetry I have named, have before now been found to work in alliance; and melody and material finish are things characteristic of both alike. Thus it comes that in the four narrative poems which make up Mr. Payne's volume we find diction as guarded, and versification as refined, though by no means so original, as in the lyrical work of Mr. O'Shaughnessy. The poem of Mr. Payne's which has most fire and ring in it, is a ballad called "The Rime of Redemption;" one would be glad if others moved as rapidly; but the writer has exhibited a patience which his readers will hardly imitate, let the workmanship of his descriptions be never so praiseworthy, in traversing the monotonous regions of chivalric and saintly miracle where Squire Ebhardt wins and wearies of his mystic love, and Sir Floris vanquishes the seven deadly sins incarnate, and is admitted to the fellowship of Sir Galahad. In escaping the mediæval, Mr. Payne does not escape the mystical; his "Masque of Shadows" is in its intention a sort of octosyllabic "Alastor," only vaguer and less varied, inasmuch as the hero (or patient) of the vicissitudes which it describes is one dead and disembodied.

SIDNEY COLVIN.

Studies on Chaucer. [*Chaucer: Studien zur Geschichte seiner Entwicklung, und zur Chronologie seiner Schriften.*] Von Bernhard ten Brink. Erster Theil. Münster: Russell, 1870.

THE fact that the critical study of Chaucer has now taken real hold of the minds of English, American, and German scholars may be hailed as a tide-mark of progress in the history of our literature. Among Teutonic scholars, Hertzberg, Ebert, and Kissner have already laid Chaucer students under weighty obligations, and with their names the present volume will associate that of Herr ten Brink, whose contribution to our knowledge on the subject may be reckoned more valuable, because of wider range, than those of his predecessors. These studies really are what the author claims them to be; a supply of material for the history of Chaucer's poetical development, and of data towards fixing the chronology of his works. They deserve notice not only as a compendium of received criticism, but also as an embodiment of results obtained through Herr ten Brink's own patient and conscientious research. The main points of the book are: (1), An exposition of the laws of Chaucer's rhyme as deduced from his works; (2), A careful examination of the latter with reference to the various sources from which their subjects or details were drawn; (3), An analysis

of their connection and chronological sequence. Herr ten Brink divides Chaucer's poetic life into three periods. The first, ranging from 1366 (or earlier) to 1372-3, is that of French influence—the period of the "Romance of the Rose" and the "Book of the Duchess." The "Translation" is not rejected, as it has been by Mr. Bradshaw, on the score of false rhymes and other shortcomings, but treated as a genuine, though immature, production of the youthful poet. The death of John of Gaunt's first wife in 1369 fixes a proximate date for the elegy. Sandras regards this merely as a servile imitation of two French poems; his judgment is reversed by our author, who proves that, although Chaucer might have taken the machinery of his piece from Machault's *Fontaine Amoureuse*, yet that the close relationship between the French and English poems in reality points to their common source in Ovid. The second period, that of Italian influence, commences with the poet's first journey to Italy, in 1373, and closes in 1384. To these years belong the "Life of St. Cecilia," the "Assembly of Fowls," "Palamon and Arcite;" also the translation of *Boethius de Consolatione*, with "Troilus and Cressida," and the "House of Fame" (1384). Herr ten Brink's treatment of the five poems as so many progressive steps in Chaucer's development from the fettered line-for-line translator of the *Roman de la Rose* into the great and liberal poet of the "House of Fame," is equally ingenious and suggestive. In this part of his work he has drawn largely from Kissner, but his original criticisms throw fresh light upon the subject, and will greatly aid in determining where the Dantesque passages are taken first-hand from the "Commedia," and where at second-hand from Boccaccio. Herr ten Brink, with Mr. Latham, attributes the enigmatical name "Lollius" to a misinterpretation of Horace's line—

"Trojani belli scriptorem, maxime *Lolli*."

Tyrwhitt's suggestion, endorsed by Kissner, is that "Lollius" was a whimsical pseudonym for Boccaccio, whose true name never escapes the poet's pen. Now the explanations of both being guess-work, it seems more loyal to base the puzzle on a caprice of genius, a touch of shandyism, so to speak, in Chaucer, than to father a monstrous blunder upon him. With respect to the metre of the "House of Fame," we think that most readers will be inclined to consider that the style and versification of that wonderful poem offer in themselves the best refutation of the critic's condemnation of the octo-syllabic measure. Upon Tyrwhitt's hypothesis, that the "Knight's Tale" is a concentrated recast of an early and full translation of the Theseid, an elaborate argument is based for establishing the seven-lined stanza as the first form of the work which included, according to Herr ten Brink, the fragmentary story of "Anelida and Arcite." But highly ingenious as is the whole line of reasoning, his conclusion remains unsupported by any direct proof. And the same difficulty appears to frustrate the attempt to fix assured and correlative dates for "Troilus and Cressida," and the "House of Fame."

The third period of the poet's development—that of full power and complete independence—opens in 1385, and closes in 1400, the year of Chaucer's death. It includes the "Complaint of Mars and Venus," the "Legend of Good Women," the "Astrolabe," "Anelida and Arcite," "Canterbury Tales," and some minor productions. This period is to be treated by the author in the second part of his work, which will also contain an analysis of the laws of Chaucer's metre. The present volume is supplemented by useful notes, and an appendix containing Machault's *Fontaine Amoureuse*, which supplied materials for the "Book of the Duchess," and Froissart's *Bleu Chevalier*, the latter printed from an inedited manuscript. We are glad to learn that an English version of this valuable treatise will be published by the Chaucer Society.

We have now only to add a few words respecting certain works examined and pronounced apocryphal by Herr ten Brink. The prose "Testament of Love" is now rejected by all the best authorities; but we think that until more conclusive evidence can be brought against the following pieces, they cannot be struck off the roll of Chaucer's poems. These are the "Complaint of the Black Knight," "Chaucer's Dream," the "Court of Love," and the "Flower and the Leaf." They are condemned as spurious chiefly because they are neither recorded by name in the prologue to the "Legend of Good Women," nor by Lydgate in his "Fall of Princes," and also because they fail on the application of the proposed touchstone—that of the laws of Chaucer's rhyme. But why should the first objection bar our acceptance of them as forming part of the unenumerated compositions referred to in "Chaucer's Prayer"? And, again, how can Herr ten Brink's test, important in itself, be fairly applied to productions of which we know nothing but as they stand unscrupulously modernised and otherwise manipulated in the early folios? Consequently, only by the failure of such poems on a close and searching comparison with Chaucer's unquestioned work, can their claims be shaken. The "Court of Love" will, we believe, abide this test; its appended stanzas are entirely Chaucerian, not only in their exquisite rhythm and felicitous expression, but even more in that artistic selection and concentration, of which, among the poets of his time, the master alone knew the secret. And the work itself, which reads like a dream of the poet's youth, closes with a set of vivid impersonations, which exhibit, in its early dawn, his matchless power of individual portraiture. Also, the "Flower and the Leaf" will hold its place as a sister poem to the "Prioresses" and "Nun's Tales." The three, taken collectively, form a manual of the more serious thought and feeling current among women of birth and culture in that period. Less robust in form, less changeful and less bright in colouring than his other compositions, these are, in our poet's favourite phrase, "all womanly," through graceful diction, refined taste, and spotless sentiment. And, naturally, the absence of humour and of paraded learning, urged by Herr ten Brink against the best specimen of the group, marks them all. For Chaucer knew that the mixture of incongruous elements must mar their special charm; just as he knew how fitly a meretricious display of second-hand quotations and broad humour would adorn the Tale of the coarse-natured, vulgar-hearted wife of Bath.

GEORGE WARING.

Notes on Literature and Art.

A new charity, the Ventnor Hospital for Consumption, has given occasion for the exhibition of a set of English water-colour paintings of much historical value, at the gallery of the Institute in Pall Mall. The examples lent to the collection are most of them of a solid representative kind; those of David Cox being particularly to be remarked. There are nine Turners, none of the very highest quality; good average works of Copley Fielding, Dewint, and Prout; an exquisite Lewis; many Cattermoles; some Gilberts; and specimens of the latest developments of figure-painting in water-colour, at the hands of Mr. Rossetti and Mr. Burton, of landscape at those of Mr. Boyce, Mr. Hine, and many others. Speaking generally, the student has here a very unusual opportunity of comparing the work done and the reputations gained in this branch of art during the last sixty years.

Mr. C. Hemans' third volume in continuation of his *Christianity and Ancient Art*, and *Christianity and Mediæval Art*, is completed, and will be published in the spring. It will be more generally interesting than the preceding volumes, on account of recent occurrences in Rome.

Folk-lore and the Talmud.—Dr. Perles, an eminent Rabbinical scholar, points out that "many legends and customs, the origin of

which has been assigned to the latter part of the middle age, already occur in the Talmud." Among the instances quoted are the supposed transformation of men into wild beasts; and the notions that the sun rises and sets with a murmuring sound; that no water can be safely drunk from rivers and wells during the transition from one season to another; and that earth marked by footsteps possesses a magical virtue, dangerous to the life of the man who has trodden it.—See Dr. Grätz's *Monatschrift*, Breslau, September and October, 1870.

Some doubts have been expressed as to the existence of Mirza Schaffî, under whose name a well-known collection of Oriental poems has been published by Bodenstedt. We therefore welcome the information supplied by Herr Adolf Bergé, in the *Zeitschrift* of the German Oriental Society, who states that he frequently met Mirza Schaffî in Tiflis, at the end of 1851. He was a highly cultivated man, and died in Nov. 1852. Only he was never known as a poet in his own country, though his friends are in possession of a few unpublished poetical pieces. His fame is confined to Germany, where, however, thanks to his friend Bodenstedt, it promises to endure.

The six subjects for the forthcoming volume of the *Earthly Paradise* are: for December, The Golden Apples (Hercules and the Hesperides), and the Fostering of Aslaug, a northern story from the Saga of Ragnar Lódbrók, and connected with the Völsunga Saga: for January, Bellerophon at Argos (the Story of Sthenobœa), and The Ring given to Venus (from William of Malmesbury): for February, Bellerophon in Lycia (his dealings with the Amazons, Chimaera, &c.), and The Hill of Venus (the old German story of Tannhäuser). A short epilogue, disposing of the Wanderers from Norway, will end the work.

The Heliographic Process.—One effect of the war has been to deprive of the attention due to it, the "heliographic" process, invented and applied in Paris by M. Arnand-Durand for the reproduction of engravings. The nature of this process which, with a fidelity absolutely unapproached, transfers the engraving to a new plate, from which it is reprinted, is as yet undivulged; but its results may be tested by the examples imported at the beginning of the war by the Messrs. Holloway, of Bedford Street. These comprise the first ten only of a projected series of 40 plates, and among them two Marc Antonios, two etchings of Rembrandt, a Ruysdael, a Claude, and others. It appears that the plate employed in the process wears very quickly; the ordinary copies, of which a hundred have been issued, are by comparison fluffy and imperfect; but the thirty proof copies, ten on India paper, ten on old Dutch paper, and ten on vellum, are of respectively increasing excellence, until for the most experienced eye it is literally impossible to discern a difference in crispness and brilliance of line between the original and the copy. M. Edmond Lièvre is the publisher of this last and most successful exploit of art mechanism; the text is supplied by M. Duplessis, keeper of the print department in the Imperial Library.

During the Hungarian War of Independence in 1849, Alexander Petöfi, the greatest Magyar lyric poet, disappeared mysteriously in a skirmish near Schärsburg between the Hungarian and Russian cavalry. After the "restoration of order" a mutilated edition of his poems was published by M. Emich, a bookseller at Pesth, to whom Petöfi had transferred the copyright in his poetical works. It is now intended to bring out a new edition, which will contain the greater part of the poems hitherto excluded on account of their revolutionary tendencies. His most violent effusions, however, vituperating royalty and the Germans in too unmeasured terms, will still be excluded by MM. Jókai and Gregun, to whom is entrusted the work of selection. A critic, favourable to Petöfi, admits that in literary merit the additional poems are for the most part inferior to those already published. Their interest is chiefly biographical, as illustrating the character of the impulsive poet. Petöfi, it may be observed, is the only Magyar poet who has obtained an European reputation.

Mr. Henry Sweet has in preparation, to be published by the Early English Text Society, an edition of King Alfred's translation of Gregory's *De Cura Pastorali*. The text of the two oldest MSS. will be given in full, on opposite pages, with the more important readings of the third-best MS. in brackets, and an English translation at the foot of the page. The original Latin text will be added, together with various appendices containing readings from the numerous late MSS. and notes on the difficulties of the text. The work will be preceded by an introduction, in which the general features of the language of Alfred will be, for the first time, described and distinguished from those of the later period. The amount of new and original matter will be considerable, as this will be first of Alfred's works which has been printed from cotemporary MSS.; and most of the peculiarities of his period which have been preserved in later MSS. have been generally regarded as scribal errors, especially by German editors. The first part of the work will be published at the end of this year.

The latest of Mr. Boxall's purchases on behalf of the nation, hung in the Gallery only two or three days ago, is an admirable example of Cima da Conegliano, of the best colour and preservation. Its subject is the Incredulity of St. Thomas.

New Books.

COURTHOPE, W. J. The Paradise of Birds. Blackwood.
DUPLESSIS, GEORGES. The Wonders of Engraving. Illustrated by 10 reproductions in autotype. Sampson Low and Marston. [A translation, by N. R. E. M., of *Les Merveilles de la Gravure.*]
LÜBKE, W. Geschichte der Plastik. Zweite stark vermehrte u. verbesserte Aufl. 1. Band. (Oriental, Greek, Roman, and Byzantine.) Leipsic: Seemann.
LYTTON, LORD. King Arthur. Revised edition. Tucker.
MÜLLER, F. Max. Chips from a German Work-Shop. Vol. iii. Literary. Longmans.
PALLISER, Mrs. Historic Devices, Badges, and War-cries. Sampson Low and Marston.
PEYER IM HOF, FR. Die Renaissance-Architektur Italiens. (135 lithographic plates: pp. 86.) Erste Sammlung. Leipsic: Seemann.
SEMPER, HANS. Donatello, seine Zeit u. Schule. 1. Abschnitt: die Vorläufer Donatellos (woodcuts). Leipsic: Seemann.

Theology.

A Grammar of the Idioms of the New Testament. By Dr. G. B. Winer. 7th ed. Enlarged and improved by Dr. G. Lünemann; revised and authorized translation by Prof. Thayer. Andover, U.S.: Draper.
A Treatise on the Grammar of the New Testament Greek. By Dr. G. B. Winer. Translated, with large additions and full indices, by Rev. W. F. Moulton, Wesleyan Theol. College, Richmond. Edinburgh: Clarke.

THE merits of Winer's *New Testament Grammar* are well known, and a thoroughly good translation of the work will prove a most valuable addition to the library of the student. Up to this time a translation which deserved this epithet could hardly be said to exist. Mr. Masson's version, published some ten years ago, was a work of very unequal merit, in some portions so careful as to leave little to be desired, in others so loose and inaccurate as to be worse than useless. To take a couple of instances from a single paragraph at p. 568, Winer states that the arrangement of words is so largely regulated by the laws of logic and rhetoric that there is little scope left for any peculiarity in this respect impressing itself as a habitual characteristic on the style of a writer. The translator makes him say exactly the opposite. In a note Winer states that he is not acquainted with any work thoroughly treating the subject; the translator makes him say that he has not himself devoted thorough attention to it. Winer mentions as an exceptional case the habit of Tzschirner who aimed at a prosaic rhythm, and who could not fail to be recognised by means of it in any of his writings; the translator makes him assert that "Tzschirner, who tried to establish a prosaic rhythmus, has not succeeded in any of his attempts." In the same paragraph the German *also* passes unchanged into English, and Kühner's attempt (*Versuch*) is converted into his "Inquiry."

The great work of Winer has now had the good fortune to be rendered with an exactness more worthy of its importance, and of the unique position which it will probably long retain, in two independent versions, which have appeared almost simultaneously, by Professor Thayer of Andover, U.S., and by Mr. Moulton. Their labours will be duly appreciated only by those who know the difficulties and the irksomeness of their task. The American translation is made from the seventh German edition, edited by Lünemann, who has inserted various alterations from Winer's MS. notes, and has added on his own part the readings of ℵ and some references, neither numerous nor important, to the more recent literature. Professor Thayer describes his book as a "revision" of Mr. Masson's translation, and there are not a few traces of the injurious effect of the limitation thus imposed; but the rendering has been carefully corrected, and in various portions so recast as to make it to a considerable extent a new, and in all respects a better, book.

The work of Mr. Moulton is still more valuable. It is a new translation made from the sixth German edition—the last issued under Winer's own care. The Preface frankly states that the translator was not at liberty to use Lünemann's scanty additions; but he has amply compensated for their absence by the more thorough revision to which he has himself subjected the work—correcting errors, and carefully verifying, readjusting, and rendering uniform the references—and by the numerous and elaborate (at times perhaps too copious) notes with which he has enriched it. The statements of the original are supplemented from other sources, and, wherever it seemed of moment to do so, the views of more recent writers, continental and English, are given. He has thus worked in the more important portions of Buttmann's Grammar, and much of the grammatical matter in Meyer, while frequent references to Donaldson, Jelf, Bishop Ellicott and Dean Alford increase the value of the work to the English student. With a somewhat exaggerated estimate of the illustration to be derived from modern Greek, he has subjoined various references to Mullach and other exponents of the language in its more recent form. It is difficult to speak too highly of the conscientious labour and research which have produced Mr. Moulton's book. It seems hardly worth while to have made some slight omissions at the outset, for, though the passages omitted are of little moment, the integrity of such a work deserves to be respected. Both translators have largely added to the indices, which are much superior to those of the original. The indices of subjects and Greek words seem somewhat fuller in Mr. Moulton's, who has added a separate index of passages from the Old Testament and Apocrypha; the American edition contains a more copious, and apparently exhaustive, index of passages from the New Testament prepared by Mr. Warren of Chicago. WILLIAM P. DICKSON.

Biblical Studies, by E. H. Plumptre, M.A. London: Strahan and Co.
The Prophecy of the Old Covenant. [*Das Prophetenthum des Alten Bundes.*] By Dr. Küper. Leipzig: Dörffling und Franke.

"THE papers in the present volume," says Mr. Plumptre in his preface, "have for the most part appeared in *Good Words* and the *Sunday Magazine*." They are certainly of a higher type than the nature of those periodicals would have led us to expect, and it is easy to see that they are founded on the results of conscientious inquiry. Everywhere we meet with a genial style and a poetical fancy, and almost everywhere with that moderation of language which befits the student of such a difficult book as the Bible. Sometimes we are surprised by a critical originality, which refreshes even when it fails to convince, but more often by a restless craving for novel biographical details, deduced from an ingenious combination of scattered passages, without regard to their different degrees of historic credibility. It is only charitable to suppose that some of these essays were written at a distance from books; we may thus account for the critical and philological inaccuracies which too often disfigure the volume.

The best of these papers (it is really a distinguished one) is that on "The Prophets of the New Testament," the substance of which was delivered as a sermon before the University of Oxford; the most faulty that on "The Old Age of Isaiah," which, Mr. Plumptre will pardon us for saying, is equally loose in its criticism, and antiquated in its scholarship. For instance, Hephzibah in Isa. lxii. 4 is stated to be an allusion to the wife of Hezekiah! The third of Isaiah was written in the age of Manasseh! Cyrus is still a titular name of the Persian kings, meaning "the Sun," and might therefore have come to the ears of Isaiah in a natural way! Isa. xiv. 4 is still rendered "the golden city," and xli. 2 "the righteous man from the east!" There were no idolaters (in spite of Ezekiel) among the exiles in Babylon, because there were none among the returned exiles in the time of Ezra!

Only a little less open to criticism are the essays on Immanuel, on the Babylonian captivity, and on Stephen the proto-martyr; the first and the third on the score of inaccuracies in stating the views of opponents, the second on points connected with the history of the Hebrew language. It is really astonishing, after M. de Vogüé's conclusive researches, to find Mr. Plumptre maintaining (p. 258) the Babylonian origin of the square characters, not to mention an almost equal heresy in the next sentence. We trust Mr. Plumptre will correct these errors in a future edition, and at the same time omit the comparison, on p. 21, of the Phœnician word Alonim in Plautus with the Hebrew Elyōn "Most High," the first letter of the former word being an Alef, not, as was formerly supposed, an 'Ain.

We may add that the note on p. 45 might be illustrated by a statement, on the authority of M. Oppert, in Lepsius's *Zeitschrift*, May, 1869; and the paper on the earthquake in king Uzziah's days by an essay on the same subject in Grätz's *Monatschrift für Geschichte und Wissenschaft des Judenthums*, June, 1870.

The work of Dr. Küper may be highly recommended. It is a lucid and dispassionate summary of the arguments and conclusions of "orthodox" criticism, though we cannot help adding that its "orthodoxy" is sometimes pushed to an extreme. There is a carefully written appendix to section iii. on the argument in favour of the unity of Isaiah deduced from the parallel passages in Jeremiah, a subject which the author has already handled in a Latin monograph. On the value of this argument opinions will of course be divided. It appears to us to be essentially a secondary one, as an estimate of the relation between two authors is very liable to be biassed by an admiration for genius. There are several almost identical passages in Tertullian and in Minucius Felix; yet Ebert has conclusively proved that the current opinion in favour of the originality of Tertullian is unfounded. We believe this is the first time that this striking parallel has been adverted to. T. K. CHEYNE.

RECENT WORKS ON THE NEW TESTAMENT.

AMONG recent works on the New Testament, an English reviewer is bound to give a prominent place to the two new translations of Winer's New Testament Grammar. Our estimate of these works, however, has appeared in another column; we therefore pass on to some other publications, too brief or too incomplete to receive a longer notice at present. And first, to two papers of great interest, by Dr. Lightfoot and Mr. Hort, on the questions arising out of the multiform conclusion of the Epistle to the Romans—in the two last numbers of the *Journal of Philology*. In the first paper Dr. Lightfoot, after stating the facts and reviewing previous theories, examines the view of M. Renan, that the Epistle was a circular letter, copies of which, with different endings, were sent to different churches, and that a later editor put these endings together so as to form the common text. With singular clearness and acumen he disposes of M. Renan's objections to the integrity of the letter, and shews that his theory of its composite character is at once unnecessary and inadequate. Dr. Lightfoot then broaches a hypothesis of his own equally simple and ingenious. He supposes that the Epistle was addressed, substantially in its present form (omitting the benediction xvi. 24, which should be excluded from the text as a mere transposition from xvi. 20, and the doxology xvi. 25-27), as a letter of conciliation to the mixed Church of Rome, and that the Apostle afterwards issued an abridged form of it for more general circulation, consisting of the first fourteen chapters, with the substitution of *τοῖς οὖσιν ἐν ἀγάπῃ Θεοῦ* for *τοῖς οὖσιν ἐν Ῥώμῃ ἀγαπητοῖς Θεοῦ* in i. 5, the omission of *ἐν Ῥώμῃ* in i. 17, and the addition of the doxology xvi. 25-27. The theory is a plausible one, taking account of the facts, and seeming sufficient to explain them. But in the following number Mr. Hort subjects the whole facts, real or alleged, to a renewed investigation and searching criticism, and shews, that while they admit of adequate explanation from other causes, they are incompatible with the theory of two recensions. The textual evidence is marshalled with great care and handled with much skill; and the phenomena which it presents are accounted for with singular felicity. Several of the notes contribute incidentally

valuable and interesting results of critical research, such as at pp. 67, 68, on the relation between F and G, and at pp. 71, 72, on the selection of Church lessons; and the whole article stimulates the high hopes excited by the recent announcement of a portion of Professor Westcott's and Mr. Hort's long-expected edition of the N. T.

Professor Hausrath, in a very clever pamphlet (*Der Vier-Capitel Brief des Paulus an die Korinther*, Heidelberg), reopens the question as to the relation of the last 4 chapters of the 2nd Epistle to the previous portion. Starting from the admitted difficulty of explaining the marked difference of tone in these latter chapters, and setting aside the ordinary explanations as insufficient, he reviews the various allusions in the two Epistles to the four points of difference between St. Paul and the Corinthians, and maintains that the vehement polemics of chaps. x.-xiii. clearly have reference to an earlier stage of the controversy than the gentle and conciliatory tones of chaps. i.-ix. It has often been thought necessary, for the explanation of certain allusions in the Second Epistle which find little apparent justification in the First, to assume the existence of an intermediate letter now lost. Dr. Hausrath finds this intermediate letter in the chapters in question; and as the opening words, Αὐτὸς δὲ ἐγὼ Παῦλος παρακαλῶ ὑμᾶς, appear to mark a transition from something preceding which did not, or at least not exclusively, run in Paul's name, he suggests that these fervid words of the Apostle may have been appended to a letter from the Church at Ephesus, which might be expected to take a special interest in the affairs of the Corinthians from their common connection with Aquila. When the Pauline letters were being collected, the apostolic appendix was detached from the letter of the Church and annexed as a fragment to the end of the Corinthian Epistles. The hypothesis is ingenious and striking, and it furnishes a plausible explanation of the phenomena; but in the absence of all external evidence in its support, it can hardly be reckoned as anything more than an interesting speculation.

Ewald has lately issued, by way of appendix to his work on the Pauline Epistles, a similar translation and explanation of the *Sendschreiben an die Hebräer und Jakobos' Rundschreiben* (Göttingen), which he promises to follow up with the remaining epistles. A characteristic preface proclaims, as usual, his arrogant contempt for the Kliefoths and Hengstenbergs, as well as for the admirers of the Tübingen school, Volkmar, and other "windbags." He censures the "bulk" of modern expositors for their besetting sin of filling their volumes with comments on the errors of their predecessors, and declares that he has no desire to write either a big book or a dull one. As might be expected, *his* book is brief, pithy, independent and oracular. As to the origin and destination of the Epistle of James, he is content to refer to vol. vi. of his *Gesch. des Volkes Israel;* but he discusses more fully the questions as to the Epistle "to the Hebrews." It is, in Ewald's view, a homily addressed by one of the younger disciples of St. Paul, after the latter's death and before the outbreak of the Jewish war, to some Church in Italy which had frequent intercourse with Palestine (not Rome, perhaps Ravenna). It was written to counteract the zealous efforts which in that troublous time the Essene or "Christ" party (see *Gesch. Isr.* vi. 505) put forth to induce a rejection of the teaching of St. Paul, and at least a partial return to the old religion as a means of safety. The writer is deeply imbued with the Alexandrian culture represented by Philo, and with the doctrine of the Logos; he is a Christian Philo, in whom Philo and Paul meet. The Philonian character of the work as contrasted with the letters of St. Paul, is visible in its general tenor, in its proofs so constantly based on the Old Testament, in its artificial allegorising interpretation, in its fondness for round numbers, in its artistic rhetorical structure, and smooth and polished Greek style. Ewald makes no attempt to determine its authorship more exactly. The writer (who was well known to those whom he addressed) was led by the circumstances in which he wrote to abstain from giving any definite key to himself or to his readers; possibly he perished early, and, if so, there is the less reason for wonder that his name and authorship should have been early forgotten. But the value of the work was speedily recognised, especially in Rome and the Western Church; it is largely used by Clement of Rome; it was, there is reason to think, already in his time attached for its better preservation to the collection of the Pauline Epistles, but it was not on that account reckoned Paul's, as is plain from its being usually placed at the end of the list. When the knowledge of the original recipients had passed away, it was not unnaturally entitled "to the Hebrews" or Jew-Christians, on whom its arguments seemed specially to bear. A note at p. 30 contains a curious conjecture, "There is no necessity, from the book of Acts, to expect much good afterwards of Apollos; and it is not improbable that he is ultimately to be identified with Apollonius of Tyana." The running comment which carefully traces (or at times invents?) the somewhat artificial links of transition, is full of freshness and vigour.

Dr. Vaughan has, after an interval of ten years, revised and much enlarged his *Epistle to the Romans with Notes* (Macmillan). This work resembles that of Ewald in abstaining almost wholly from reference to the views of others. It is the result of independent study, which has aimed at tracing the meaning chiefly by the light of parallel expressions in the Apostle's other letters or elsewhere in Scripture. In the new edition these illustrations are greatly extended; and the conclusions arrived at, though in substance the same, are expressed sometimes with greater fulness, sometimes with more precision. The book—obviously in its patient elaboration a work of love—is admirably adapted, as it was specially intended, for the use of the upper classes in schools, and of laymen who are repelled from the ordinary commentaries by their array of conflicting opinions and their polemic tone.

It must suffice simply to note the progress of Tischendorf's eighth edition, which, in its 7th part, has now finished the Acts and entered on the Catholic Epistles. We regret to learn that the completion of the great work of Dr. Tregelles is unhappily delayed by the state of his health. The *Bibel-Lexikon* of Schenkel, which is especially valuable as exhibiting in a definite form the views of the more "advanced" school of German theology, has now reached the letter J. Among the more important articles in the recent Nos. are those on Hermas by Lipsius, on Herod and the Herodian family by Keim, on the Epistle of James by Holtzmann, and an elaborate one still unfinished on Jerusalem.

WILLIAM P. DICKSON.

Intelligence.

It will be fresh in the recollection of our readers that the University of Oxford has instituted an honour-examination for the encouragement of Theology. Without any disrespect to that learned body, we may venture to inquire how far that desirable object is likely to be attained. A provisional answer is furnished by the published examination-papers; we fear it will only be satisfactory to those who are indifferent to all sorts or kinds of theology. Opinions may differ as to the merits of the text-books prescribed, or as to the wisdom of prescribing any text-books at all, but no reader can fail to be struck by the absence of all questions tending to excite a spirit of inquiry in the student. The examination-papers, which err by their excessive length, are for the most part mere analyses of the text-books, or where, as in the case of the purely Biblical subjects, no text-book is prescribed, unobjectionable questions relating to facts are intermixed with leading questions involving a definite set of theological, *i.e.* Anglican, opinions. The only exception is the paper on Hebrew grammar, which is scarcely up to the standard of the Little-go grammar-paper in Latin and Greek. We hope that the standard will be gradually raised to such a point as to promote something like a serious study of the sacred text.

The Council of the University of Cambridge has elected our valued contributor, the Rev. B. F. Westcott, D.D., to the Regius Professorship of Divinity.

The Rev. James Martineau is about to publish a new volume of sermons.

Contents of Journals and Selected Articles.

Zeitschrift für wissenschaftliche Theologie, vol. xiv. No. 1.—On the form and contents of the religious idea, by A. E. Biedermann. [A recognition of the distinguished merits of Pfleiderer's work on the philosophy of religion, and a discussion of the points on which the reviewer (author of the 'Christliche Dogmatik') differs from him. We hope to return to this article.]—The Jewish Sibyls and Essenism, by A. Hilgenfeld. [An expansion, with considerable additions, of the writer's article in the *Academy*, pp. 126, 7. The section on the Essenes is devoted to a criticism of recent attempts to prove the purely Jewish character of Essenian doctrine.]—The Leptogenesis (or Book of Jubilees), and the Latin fragment of it found at Milan, by H. Rönsch. [Partly philological, partly critical. Shews that the Milan fragment is translated from the Greek, not from the Hebrew; and that the Book of Jubilees exercised considerable influence on the Samaritans, as appears from the Samaritan Chronicle published last year by M. Neubauer. Dr. R. promises a new work on the subject.]—Paul and the Corinthian dissensions, by A. Hilgenfeld. [A criticism of the recent works of Klöpper and Hausrath. The "Christ-party" = the immediate followers of Christ, who were the prime movers in the Corinthian troubles. Hence the abruptness with which 2 Cor. x. begins. After making up the quarrel with the church, the apostle turns to its guilty authors.]—The Acts of Alexander of Rome, and the festival of the "vincula Petri," by R. A. Lipsius. [On some obscure points in the traditional history of the Roman bishops.]—REVIEWS: Ehrt on Maccabean Psalms, by A. H. [Unfavourable.]—Tischendorf's 6th edition of the New Test., by Egli. [Severe.]—Sevin on the Chronology of the Synoptics.—Sepp on the Gospel of the Hebrews.—Overbeck on the Acts. [Favourable.]—Hitzig on the Pauline Epistles. [Remarkable, as the testimony of an Old Testament scholar to the scientific value of the Tübingen criticism.]—Ewald on the Epistles to the Hebrews and of James. [Unimportant. The last-named reviews are by A. H.]

Geiger's Jüdische Zeitschrift, 1870, Nos. 2 and 3.—Chief Biblical articles: The Repetition in Gen. xxiv. [Defends the view that verses 35-48 were added by a later editor, and points out that the older Midrash in Bereshith-rabba illustrates every verse in the chapter *except*

these. The later Agadah, on the other hand, is profuse in its comments]. —The Targum on Chronicles, by Rosenberg and Kohler. [Important for the history of Biblical criticism and exegesis.]—More about the Epistle to the Hebrews. [Apparently by the editor. The conclusion arrived at is that the Epistle was written by a priest, probably of the Sadducean party, and probably after the destruction of the Temple. Heb. v. 11, 27, x. 11, are explained by the Talmudic exposition of Levit. vi. 13. Comp. *Jüd. Zeitsch.* vol. vii. p. 121, &c.]—Renan's Saint Paul. [Appreciative; denies the existence of a definite Pauline system of doctrine.]—An ancient corruption in the text of Nehem. v. 11. [Reads וּמֵשֵׁאת (cf. v. 7) for וּמֵאַת הַכֶּסֶף; a self-evident but original conjecture.]

Theologische Studien und Kritiken, 1870, No. 1.—Researches connected with the life of Luther, by Köstlin.—Wieseler's Beiträge, rev. by Düsterdieck. [The remaining articles call for no special mention.]

Stray Thoughts on Comparative Mythology, by E. A. Freeman. [Criticism of Mr. Cox's book from a scholar's point of view. Shows that the method is defective unless the comparison of myths is combined with comparison of languages; and that conclusions which are true for myths of the gods ought not to be extended at once, and without reserve, to similar myths of heroes.]—Fortnightly Review, Nov.

Literarisches Centralblatt, Oct. 29.—Pressensé's History of Dogma. [Brilliant, but one-sided.]—Nov. 5. Overbeck's edition of De Wette on the Acts. [Contains an important modification of Baur's hypothesis, similar to one proposed by Ritschl.]

New Publications.

Bleek, F. Einleitung in das Alte Testament. Dritte Aufl. besorgt v. A. Kamphausen.

Dictionary of Historical and Doctrinal Theology. Edited by J. H. Blunt. Part. 2. Rivingtons.

Hengstenberg, E. W. Geschichte des Reiches Gottes unter dem Alten Bund. Zweiter Periode, erste Hälfte. Berlin: Schlawitz.

Hengstenberg, E. W. Das Buch Hiob erläutert. Theil 1. Berlin: Schlawitz.

Kauler, F. Handbuch der Vulgata. Mainz: Kirchheim.

Keil, C. F. Biblischer Commentar üb. die nachexilischen Geschichtsbücher. Leipzig: Dörffling u. Franke.

Rothe, R. Theologische Ethik. Zweite Auflage. Band 4. Wittenberg: Koelling.

Wedgwood, J. John Wesley and the Evangelical Reaction of the 18th Century. Macmillan.

Science and Philosophy.

Pre-historic Times, as illustrated by Ancient Remains, and the Manners and Customs of Modern Savages. By Sir John Lubbock, Bart., F.R.S., &c. Second Edition. Williams and Norgate, 1869.

The Origin of Civilization and the Primitive Condition of Man. Mental and Social Condition of Savages. By Sir John Lubbock, Bart., F.R.S., &c. Longmans, 1870.

Researches into the Early History of Mankind and the Development of Civilization. By Edward B. Tylor, author of *Mexico and the Mexicans*. Second Edition. London: Murray, 1870.

[Second Notice.]

We proceed to indicate certain fallacies which may affect the value of some in the enormous array of their facts; though we would wish to guard ourselves against being suspected of hinting that if some of these facts should be set aside on examination the whole argument must be looked upon as thereby vitiated. And, firstly, a so-called fact may be wholly and even multifariously incorrect, owing simply and solely to literary negligence. A statement of this character was used by Archbishop Whately as an argument, and is given by Mr. Tylor, p. 163, as follows: "The New Zealanders," according to the archbishop, "whom Tasman first discovered in 1642, and who were visited for the second time by Cook, 127 years after, were found by him exactly in the same condition." After this statement we read in Mr. Tylor's words, "*Now Tasman never set foot in New Zealand*, and saw its natives only from and on his ship." It is perhaps more to the purpose to state that the present writer has been informed by a person who now spends his life in Melanesia that some of the accounts which we read in the voyage of the *Astrolabe* of certain islands in Oceania, have just the same and no better basis of fact than Tasman had for writing about New Zealand; and that Whately's example has in its turn also not lacked its imitators, our readers can with very little difficulty and literary comparison convince themselves. Secondly, histories and descriptions may be, and often are, untrustworthy, for the simple reason that they are given by men who, as is often the case, cannot, or, as happily is less commonly the case, will not, give truthful and accurate accounts of what they actually have seen. We speak under this second head simply of narrative statements as to matters of fact, quite irrespectively of errors of interpretation; and for our own accuracy we need only refer to the conventional meaning which is attached to the phrase "Travellers' Tales," and to the force which a reference to Mandeville's labours carries with it. Thirdly, travellers may be purposely deceived by the natives they visit. Herodotus is a stock instance in point; and Labillardière is likely to become another by virtue of the following story, which Sir J. Lubbock tells of him, p. 3, "When Labillardière enquired of the Friendly Islanders the word for 1,000,000, they seem to have thought the question absurd, and gave him one which apparently has no meaning; when he asked for 10,000,000, they said, 'looole,' which I will leave unexplained; for 100,000,000 'laounoua,' that is to say, 'nonsense;' while for the higher numerals they gave him certain coarse expressions, which he has gravely published in his table of numerals." Fourthly, travellers may deceive themselves as to the interpretation and explanation of some well-observed facts, and even in cases where what is observed is kept quite apart, as all good observers do keep it, from what is inferred. It is only a little less difficult to judge of the feelings and views of a savage without being a savage one's self, than it is to judge of the mental processes of one of the lower animals, without being received into its sensorium, and yet escaping identification with it. Swift, if we mistake not, has this source of fallacy before his mind, in putting into Captain Lemuel Gulliver's mouth certain very natural, but as it happens, entirely delusive interpretations of transactions which that navigator witnessed. Fallacies, of course, of interpretation, and fallacies of observation, or simple inspection, are not as distinct in actual practice as they can be made in a work on logic; indeed, as a matter of fact, they are often genetically connected, *chimaera chimaeram parit*, and preconceived prejudices as often spoil observations, as "false facts" give rise to false theories. Again, in recording the performances and processes of savages, as indeed those of any and all living animals, it is of primary importance to secure completeness, and to omit none of the circumstances of the case. The most trustworthy, as well as the least trustworthy, of observers have made their greatest mistakes through shortcomings in the way of filling up the full tale of the conditions; an adequate interpretation presupposes an exhaustive enumeration of facts. If Humboldt had known (see *Tylor*, p. 190) how the entire lifetimes of two Indians may be taken up in a simple and savage process of perforating a hard stone cylinder, the glory and beauty of such a cylinder when worn by the chief on the Amazons or Oronoko, would not have led him to speculate as to the existence in former days of a higher civilization. A savage has as little to do with his time as Sir John Chester is represented as having in *Barnaby Rudge*; and Mr. Wallace has observed and recorded that one of the ways in which that spare time is got rid of on the Rio Negro is by boring out rock-crystal cylinders with sand, water, and a plantain leaf-shoot for a drill. Our

knowledge again of the one fact that much intercourse has in times past taken place between the inhabitants of Australia and those of Malaysia and Polynesia, saves us from interpreting the other fact of the discovery in the former of those localities of polished green jade celts (*Tylor*, p. 203-204), the highest type of the Stone Age weapons, as being evidence of the existence there also of a higher phase of civilization in former days, or as showing that stone implements, even when all precautions are taken, are nevertheless but uncertain indications as to stages of culture. And, to give a third instance, by which in a few words we may enforce the absolute necessity of combining linguistic with other physical science,—if Captain Wilkes had consulted his ethnographer's, Mr. Hale's, vocabularies, he would not have misinterpreted the terror which the Bowditch Islanders shewed when flint and steel were made to produce sparks, and cigars made to produce smoke, before them, into an evidence that these people had no acquaintance with fire, for which they happen to use the same word as many other inhabitants of Oceania (*Tylor*, p. 232-233, ed. 2nd; p. 229-230, ed. 1st.).

Persons who belong to that numerous but ill-informed class who hold that every natural historian must necessarily confine his attention to the material and overlook the moral conditions in any problem which he may enquire into, will not have to read far in either Sir John Lubbock's or in Mr. Tylor's works without being disabused of this prejudice. It is, of course, neither unnatural nor unlikely that any expert should have a tendency to specialism, and on this account it is well to give a particular instance of the way in which a real anthropologist can come safely out of this temptation. Sir John Lubbock (p. 354) gives at some length excellent instances of the fact, now well established, but requiring certain qualifications if it is to be truthfully expressed, that amongst the lower animals reversion to the original type, and so by consequence not rarely to savagery and untameableness, are phenomena often noticeable in mongrels and hybrids. Now no less authorities than Darwin, Livingstone, and Humboldt, have either employed this analogy for the purpose of explaining, or have simply stated that there are, similar facts observable amongst men. Sir John Lubbock, however, does not limit himself to a consideration of the physical side only of our compound nature, but confesses himself inclined to account by reference to the unfortunate (moral and social) circumstances in which half-breeds are generally placed, for the abject or other repulsive characteristics which so often have been attributed to or observed in them. "The half-breeds between the Hudson's Bay Company's servants and the native women being well treated and looked after appear to be a creditable and well-behaved set." Sir John Lubbock cannot surely be acquainted with the *Bericht über die Zusammenkunft einiger Anthropologen in September* 1861, published in that year by Voss at Leipzig, out of which, as we think, the *Archiv für Anthropologie* has developed itself, or he would have referred to the very valuable and closely similar remarks of Von Baer therein contained (p. 18-25) upon this very subject. The Red Indian Chiefs who are elected into the presidency of their tribes by virtue not of descent but of merit, and who must therefore be considered to be picked men,—Von Baer tells us (p 22, l. c.), on the authority of Baron Sacken, an entomologist of some repute,—are in 90 cases out of every hundred mongrels and hybrids between Indian mothers and Anglo-American fur-traders. These male parents are, like the animals they trade in, migratory; neither do they stay themselves nor do they leave white wives in the regions where their bastard progeny is begotten and born. These latter, says V. Baer, remain in the country of their mothers, are not looked upon as inferior beings, and are not corrupted as are other hybrids by being habituated early to a style of living and luxury in a father's house, which, like Ishmael of old, they have sooner or later to exchange for rougher surroundings if not for the wilderness. This positive instance Von Baer has made into a crucial argument by the addition to it of the following interesting history which is drawn from a region much nearer home, and which, while making us acquainted with, makes us also able to account for, the singular fact of the absence of any persistent hybrid race as a result of the constant intercrossing of the German and Esthonian populations in the Russian-Baltic Provinces. The German inhabitants of that part of the world are socially the superiors of the Esthonians; the intercrossing which takes place between the two races is extra-matrimonial, and it is always by the mother's side that the illegitimate offspring is Esthonian. There are no purely physical causes to account for the absence of a distinct hybrid race, the offspring of these unions being ordinarily vigorous, indeed more vigorous than children of German blood on both sides; and Von Baer explains the paradox, as such paradoxes are often to be explained, by a further detail of the facts of the case. These run thus:—The German father does not ordinarily furnish forth his bastard son with sufficient means to enable him to fight the battle of life on equal terms with pure-blooded Germans; whilst at the same time he has endowed him with ambitions, and accustomed him to habits, which make the serf-like life of the pure-blooded Esthonian distasteful to him. Having thus the advantages of neither, and the disadvantages of both races to contend with, these unhappy half-breeds never form a compact mass, but are either absorbed in the town-populations, or swallowed up in the ranks of the Russian army. The somewhat similar history of the mulattos, arising from the intercrossing of Anglo-Americans with negroes, Von Baer explains somewhat similarly (*in loco*, p. 21), speaking of "*der Anglo-Amerikanische Stolz*," words which may be rendered perhaps as "the Anglo-American hardness and pride," whilst the precisely opposite condition of the many varieties of hybrids resulting from the intercrossing of the French and Spanish with negresses and Indian women, with which condition Mr. Bates has made us so well and so amusingly acquainted (see *Naturalist on the Amazons*, vol. i. p. 240), Von Baer explains by what some might call the "greater alacrity in sinking," but what others would call the greater kindliness of the Latin races. "Die letzteren Nationen haben weniger Selbsterhebung" are Von Baer's words.

Sir John Lubbock's views as to the origin of our moral sense (p. 270) are in unison neither with those of Mr. Herbert Spencer, nor with those of the philosophers who hold that it is an originally implanted instinct of the mind. He differs from Mr. Herbert Spencer in holding that it is not experiences of utility to the individual, but public opinion as to certain lines of action being the interest of the many, or at least of some, whilst they are for the moment at least contrary to the interest of some others,—which by dint of repetition established primarily the distinction between that which is advantageous and that which is incumbent. Honesty, he observes, our ancestors must have noticed to be connected with happy consequences to one set of parties in every contract; and respect for old age he instances as being something which the aged would not fail to impress as an injunction upon the young, *praising* those who conformed and *condemning* those who resisted. It is strange indeed that Sir John Lubbock does not see how his method of accounting for the genesis of the notions of right and wrong, like that of all other utilitarians, actually presupposes their existence! How could the old men "praise" or "condemn" except by reference to some pre-existing stan-

dard of right and wrong? how could the parties injured by the violation of a compact "naturally condemn" it except by a tacit or articulate reference to some "naturally" implanted, or at all events to some already existing, standard of virtue and vice? Language which in matters of this kind faithfully reproduces the convictions and feelings, and even to some extent the history of our race, will not lend itself to the support of these theories, and gives the dialecticians for once a real victory over the Natural Historian.

We must also express our surprise that Sir John Lubbock should not have drawn attention to the difficulty which in early stages of our history must have beset the collection of those "experiences of utility," of which Mr. Herbert Spencer speaks as the foundation of our so-called moral intuitions; and secondly, to the exceeding unfitness of the "nervous organization," which Mr. Huxley calls "the thoughtless brains," of a savage—to act as a storehouse for such experiences when obtained. For firstly, the wicked often remain in a state of great prosperity for periods commensurate with the lifetimes of an entire generation of civilized, not to speak of the notoriously shorter-lived savage, men; and a life-long experience would neutralize the results not merely of tradition but of hereditary transmission. And secondly, as Sir John Lubbock himself tells us (p. 70) with reference to the practice of infanticide, the "distinction between the sexes implies an amount of forethought and prudence which the lower races of men do not possess." We commend this estimate of the faculties and capacities of our ancestors to the careful consideration of those philosophers who suppose them to have been capable of processes of stock-taking, which must *ex hypothesi*, have enabled them to anticipate the epigram "Honesty is the best policy."

Whilst Sir John Lubbock has forborne to exhibit this weak point in the argument of utilitarians of Mr. Herbert Spencer's school, we think he has allowed himself to be unduly swayed (pp. 269-274) by the old and weak argument for the non-existence of an intuitive moral sense, which the variations of the moral codes of various nations and tribes furnish. We may press upon Sir John's attention an argument, analogous as we think to those in deference to which he has given us, as he tells us (p. 269), his original opinion,—in every point except in being more obviously fallacious. The writings of Sir John himself (see *Prehistoric Times*, p. 312, ed. 2nd.) and of other archæologists, have made us familiar with the fact that various races have at various times and in various parts of the world buried articles of food and drink, and recently killed domestic animals and slaves with their deceased friends. The inhabitants of prehistoric Aurignac are supposed with some probability to have placed parts of a prehistoric rhinoceros, of a prehistoric bear, and of some other extinct, as well as of some still extant, animals in the grotto which Sir Charles Lyell (*Antiquity of Man*, p. 182) and Sir J. Lubbock (*l. c.*) have both treated of, side by side with their dead; and the inhabitants of Europe are known to have done the like within quite recent times with articles as distinctively historic as spirits and tobacco.

If Mr. Longfellow's account of the burial of a horse with an American-Indian Chief be authentic, the inhabitants of America put to a similar use a gift which they owed in their turn to Columbus. All these practices are referred with all but perfect certainty to the working of one and the same principle—the wish, namely, to send the deceased friend or relative well furnished and fitted out for the new world he was to enter upon; all of them, in a word, presuppose the belief in a future state. Some of these practices would be certain to appear absurd to some tribe or other of mankind, as each and all of them appear to be absurd to us. But from these grotesque variations in the mode of indicating a belief in immortality, we should not be justified in arguing to the non-existence of any such belief at all—and we submit that to argue from the existence of variations in the moral code to the non-existence of any intuitive feeling as to the existence of right or wrong as things to be striven after or avoided, is a process not less illegitimate.

In conclusion, we must say that no writers on the natural history of our species carry so large a load of learning so lightly as Sir John Lubbock and Mr. E. Tylor. We are happy to see a new work announced as forthcoming from the pen of the latter, and we shall rejoice to be able to say the same once more for the former of our authors.

George Rolleston.

The Gulf Stream. [*Der Gulfstrom, und Standpunkt der thermometrischen Kentniss des Nord-Atlantischen Oceans und Landgebiets im Jahre* 1870.] With Charts. By A. Petermann. Geographische Mittheilungen VI. and VII. Gotha: Justus Perthes.

Ocean Currents. Part I., in relation to the distribution of heat over the globe, and Part II. to the physical theory of secular changes of climate. By James Croll, of the Geological Survey of Scotland. Philosophical Magazine, Feb. and Oct. 1870.

For five years Dr. Petermann has laboured unweariedly to aid in removing that which he considers a blot in the fame of his country, that as far as scientific expeditions by sea are concerned, Germany remained as backward as Turkey or Greece. His efforts have been so far successful that two German expeditions, both directed towards the fascinating and unknown area which surrounds the North Pole, have already been fitted out; and though these ships have not been able as yet to penetrate further into the icy region than the barriers reached by several of the British navigators, yet they have returned rich in most carefully-conducted scientific observations. In preparing the instructions for those who are about to undertake another campaign in the north, Dr. Petermann has deemed it advisable to investigate thoroughly the subject of the ocean-currents in the North Atlantic in the light of our present knowledge, as bearing upon the choice of a way towards the Pole. The truest indication of the direction and power of an ocean current is given by the temperature of the water which it transports, the curves of the lines of equal warmth or coldness giving the exact form and distribution of the waters of the stream. In following this method Dr. Petermann has collected, it is believed, every recorded observation of the temperature in the North Atlantic, and from these has prepared the admirable treatise which is now before us, which must henceforth be considered as the starting-point of any account of the thermal relations of this area.

Dr. Petermann claims to have been the first to show that the Gulf Stream is a deep, slowly-moving, and permanent warm current from Newfoundland, not only to the coast of France and the parallel of 45° of N. lat., to which limits most of the former hydrographers had confined it, but to the British Isles, Scandinavia, Iceland, towards Greenland, Bear Island, Jan Mayen, and the west coast of Spitzbergen, to Novaia Zemlia and the Polar basin, passing the northmost capes of Siberia as the "Polynia" of Wrangell, its influence being felt even as far as Cape Jukon near Behring Strait. This view he still maintains, supporting it upon the vast number of observations which he has collected. His opinion, however, has not remained unchallenged in the scientific world, and foremost among those who have differed from it is the English hydrographer Findlay, who held, in a paper read before the Geographical Society in February, 1869, that the Gulf Stream proper, in the volume in which it issues from the Florida channel, is insufficient in power to reach

the European coast or to exercise any influence upon its climate; that the Gulf Stream is completely destroyed near Newfoundland by the southward polar stream, and is not traceable further; and that the mild climate of North-Western Europe is due to a general drift of the whole North Atlantic Ocean. To this Petermann replies that the absorption by the Gulf Stream of a drift-current flowing in the same direction is probable, but that at the same time it is indubitable that the Gulf Stream forms the source of the whole movement of the North Atlantic at all seasons of the year. A river on land is said to rise at a certain point and to fall into the sea at another, but by this it is not meant that the little rill of the source supplies the whole of the waters which pour out of its mouth. The Florida stream is like the head of a river which in its way is strengthened by tributaries, and it is impossible to say where the stream really ceases, or where and how many tributaries it receives. Findlay, however, did not deny the existence of a warm stream to Europe, and that remains the most important point, whether it be called a drift-current of the south-westerly winds or a continuation of the Gulf Stream, but Carpenter and Jeffreys, the naturalists of the North Atlantic deep-sea expeditions, do so. Carpenter considers it as still an unsolved question whether the greater heating of the North Atlantic on the west coast of Scotland and Ireland is entirely solar, or to any degree dependent on the extent of the Gulf Stream; and states that if the Gulf Stream reached so far, which is very doubtful, its influence could only extend over a very shallow stratum of the sea-surface, and that only on account of the prevalence of south-west winds. The molluscs of this part of the ocean, says Jeffreys, are for the most part arctic, which fact is against the supposition of the Gulf Stream reaching to the coast of Scotland; but on the other hand the observations made by these gentlemen show that the temperature of the ocean in this region is higher at depths of 1000 and 2000 fathoms than it has been found to be in some parts beneath the equator at corresponding depths. The upper warm stratum of water between Ireland and the Faroe Islands was estimated from the observations taken during both of Carpenter's expeditions at not less than 700 to 800 fathoms in depth, so that if Carpenter and Jeffreys deny the extension of the Gulf Stream to this point, they bring with them the most striking proofs against their own conclusions.

The Hon. Charles Daly, President of the American Geographical and Statistical Society, in his annual address of 1870, quoting the opinion of Mr. Blunt, the American chartographer, spoke of the falsely-represented Gulf Stream, of the inventions of Maury, and the assumptions of meteorologists; stating that the only trustworthy observations which we possess are those made under the direction of Professor Bache; that the Gulf Stream has no existence beyond the Azores, and that its influence on the climate of the British Isles is entirely hypothetical. In Germany the Gulf Stream is better known, as the works of Berghaus and Muhry testify; but there also the extent of its influence has been questioned. These doubts culminate in the "death of the Gulf Stream," in the *Cornhill Magazine* of July, 1869, where a writer says with confidence, "I was truly pleased at reading the other day that the Gulf Stream had been proved to be a delusion. The Gulf Stream was almost as great a nuisance as Macaulay's New Zealander, or the German who evolves things from the depths of his consciousness."

The first portion of Dr. Petermann's work contains the citation of the various sources whence he has drawn the material upon which the charts are based, references to the greater published works, and the actual figures observed at many stations on the coasts of the Atlantic, in light-ships, and in vessels crossing all parts of the sea. These authorities are too numerous even to name; but it may serve to give a notion of the labour connected with such an inquiry if we notice that the eight sheets of the wind and current charts of the North Atlantic drawn up by Lieut. Maury, which have been used, contain no fewer than 27,485 observations of temperature at different parts of the ocean, and at different seasons, whilst the tables compiled by the Royal Meteorological Institute of the Netherlands for this region contain 44,747 separate readings of the thermometer. To show the Gulf Stream completely in all its phases, a chart for each month is necessary, and the conclusions arrived at in this paper have been made from twelve such charts drawn on a large scale; those which accompany the paper are reductions from the two of these which represent the extremes of extension and contraction of the Gulf Stream, in July and January respectively. In the July chart the heart of the Gulf Stream appears as a double tongue of hot water (81° F.), stretching out from the American coast south of Newfoundland, halfway to the Azores; but in January this has shrunk to a narrow single point, reaching no further than the American coast near Philadelphia. Near the Newfoundland coast, where the Gulf Stream first comes into collision with the ice-bearing polar current of Labrador, the isotherms show the cold water like a vast wedge pushed into the stream at right angles to its course. The state of the currents at this meeting-point of the two great streams of the North Atlantic has given rise to the most varied opinions among hydrographic authorities. We have seen that Mr. Findlay believes in the complete annihilation of the Gulf Stream at this point; whilst the Pilot chart of the Atlantic Ocean published by the Admiralty indicates, with apparent precision, that a large part of the Labrador current is deflected by the Gulf Stream into its course to north-eastward, holding the warm stream several hundreds of miles away from the south coast of Greenland. Now, although the observations of temperature in this waste region of the ocean are naturally few, yet a sufficient number have been taken to show that, in the coldest as well as in the hottest month, the Gulf Stream is completely victorious at this point, so as to carry the warm isotherms sharply round the polar current, to northward, towards South Greenland and the entrance of Davis. Again, to the east of Iceland the polar current, interrupted in its course by the barrier of the island, seeks to press into the warm stream, and a third time near Bear Island meeting it from the north-east divides the warmer waters which have reached this latitude in summer into two branches, one of which passes northward still along the west coast of Spitzbergen, the other turning eastward to Novaia Zemlia. The fluctuations of the stream are not less marked in its extreme branches than nearer its fountain-head. In July the isotherm of 59° F. reaches the British Isles, but in January hardly attains the latitude of Spain in the centre of the North Atlantic; and whilst in summer the sea round Iceland and the north coast of Scandinavia is warmer than 50° F., in winter this temperature does not reach beyond the Shetland Islands and the North Sea. Again, in the warm month, water at a temperature of 36° F. is traced on these charts to beyond Spitzbergen on its west coast, and to Novaia Zemlia; but in the cold month this line has contracted to near the North Cape of Norway at its furthest, in the line of the axis of the Gulf Stream.

The course of the Gulf Stream north of Iceland and Europe is more complicated than south of these coasts. After the doubly victorious strife with the polar currents, the waters of the Gulf Stream become more and more cooled to northward, until they are reduced to a tempera-

ture of 39·4° F., at which point they reach their maximum density and weight. At this temperature the Gulf Stream sinks beneath the opposing polar stream; in July this change takes place north of Iceland and Spitzbergen, and on both sides of Bear Island in January, much further to the south. The boundary between the two streams is variously marked; the Gulf Stream water is of a beautiful azure blue so far as it extends, and fin-whales which do not remain in the cold water accompany vessels to its edge; the polar stream on the contrary appears of a dirty-green colour, and is filled with slimy microscopical algæ.

A further portion of this essay examines the evidence of the driftwood of the polar seas in its bearing upon the currents; next the deep-sea temperatures from the time of Scoresby to the present day, with the remarkable sections of the North Atlantic given by the observations of Carpenter and Thomson; lastly, the specific gravity of the sea is discussed, as an excellent aid in the examination of currents.

It is true that there remains much to be done to complete the hydrography of the North Atlantic, but in this admirably thorough work Dr. Petermann has laid a sure foundation of fact upon which future observers may safely build.

There is no longer any shadow of doubt as to the existence of a movement of warm water, be it called a drift or a stream, from the tropics obliquely across the Atlantic Ocean towards the arctic regions. What end and purpose, then, does it serve, and what influence has it upon the condition of the globe? This question is ably answered by Mr. Croll, who, in the opening of a series of papers on Ocean Currents, has been the first to attempt a solution of the problems of the absolute amount of heat or cold conveyed by means of these agents, and the effect of this transference upon climate. His investigations have led to very wonderful results. Selecting the Gulf Stream as the best known, he shows by an apparently reliable chain of evidence that this current alone carries as much heat from the tropics as is received by the globe within sixty-three miles on each side of the equator, an amount which probably equals the entire quantity of heat received by the whole arctic regions from the rays of the sun. Mr. Croll estimates that the stoppage of the Gulf Stream would deprive the Atlantic Ocean of a quantity of warmth equal to one-fourth of all the heat received from the sun by that area; that if all currents ceased to flow, and each place were dependent upon the direct rays of the sun alone for its heat, the equator would be 55° warmer than at present, the poles 83° colder. The mean temperature of the latitude of London would be only 10°. This city then, its present actual mean temperature being 50°, is benefited to the extent of forty degrees of heat by the Gulf Stream.

Basing upon Mr. Croll's estimate of the temperature (10°) of the latitude of London if deprived of the warmth of the Gulf Stream, this seeming paradox must be true, that an ice-bearing current may raise the temperature of a region. Labrador has really a warm friend in the icy current which clings to its shores; for though the mean annual temperature of that country is but 32°, still, according to Mr. Croll's showing, this would be reduced by no less than twenty-two degrees were the polar stream to fail. Though considerable uncertainty necessarily exists regarding the data used yet the general results arrived at of the enormous influence of ocean currents on the climatic conditions of the globe in distributing the heat received from the sun cannot be materially affected, and almost warrant the conclusion come to by Mr. Croll, that without ocean currents the earth would not be habitable.

These discoveries appear to Mr. Croll to throw a new light on the mystery of geological climate. Were the warm currents from the equator northward to be turned off, the northern hemisphere would speedily pass into a state of general glaciation. Such a deflection of the currents, it is believed, might take place by a change in the eccentricity of the earth's orbit. A high condition of eccentricity would tend to produce an accumulation of snow and ice in the hemisphere whose winters occur in aphelion, whilst exactly the opposite effect would take place in the other hemisphere which has its winter in perihelion. Then, since the trade-winds owe their existence mainly to the difference of temperature which exists between the polar and the equatorial regions, it follows that the trade-winds of this colder hemisphere would greatly exceed those of the warmer in strength; and would impel the warmer waters of the tropics entirely over into the opposite hemisphere, in the same manner as the south-east trade-winds of the present state of the globe, from the southern (colder) hemisphere, now overcome the north-eastern; and aid in transferring a larger share of the equatorial waters to the warm currents of the northern hemisphere. A similar condition of things to that which prevailed during the glacial epoch would then exist in the one-half of the earth, whilst a climate equal to that which geologists know to have prevailed in this hemisphere during a part of the Miocene period, when North Greenland enjoyed a climate as mild as that of England at the present day, would reign in the opposite hemisphere.

KEITH JOHNSTON, JUN.

Scientific Notes.

Geology.

A new Siliceous Deep-Sea Sponge.—At the meeting of the Royal Microscopical Society held at King's College on Nov. 9th, Mr. W. Saville Kent, of the British Museum, described and exhibited drawings of a new sponge, for which he proposed the name of *Dorvillia agariciformis*. Its skeleton is siliceous, and while it, in certain respects, agrees in structure with *Pheronema* and other representatives of the Hexactinellidae, in others it is closely allied to the family of the Tethyidae. This, with the forms taken in the "Norna" expedition (and described by him in the *Monthly Microscopical Journal* for this month), makes the fourth new genus of the deep-sea-inhabiting Sex-radiate-spiculed sponges, which Mr. Kent has considered it requisite to create. In the same journal Mr. Kent records having obtained examples of nine out of the fourteen known genera belonging to this interesting group. During his dredging-cruise in company with Mr. Marshall Hall, and from the large amount of material collected, he has found it necessary to slightly modify the scheme of classification hitherto accepted. *Dorvillia agariciformis* was obtained from a depth of 540 fathoms, but the exact locality is at present unknown to the describer.

On the Embryology of King-Crabs.—It is now thirty years since Van der Hoeven made his observations upon the young of *Limulus*, sketches of which will be found in Cuvier's *Règne Animal-Crustacés*. Mr. Woodward pointed out, some years ago, the great interest attaching to this subject, as likely to throw most important light upon the fossil genera allied to the King-crabs. Two very interesting papers have appeared in the *American Naturalist* upon this subject, by the Rev. S. Lockwood and Dr. A. S. Packard, Jr., which shed much light on this old living type of Crustaceans. The eggs are laid in great numbers loose in the sand, and are fertilized by the male after they have been deposited. Passing over the earlier and gradual development of the embryo from the simple yelk, we see in a later stage that the oval body has increased in size; the segments composing the head-shield are indicated; the legs are grown in length, and are doubled upon themselves. The rudiments of the future branchial plates are observable, not coalesced, but budding in pairs. A further advance is signalized by the increase of the head-shield and the development of nine distinct segments, proving that the anterior shield is only the head, and the posterior portion represents the thorax and abdomen, as pointed out by Mr. Woodward from a comparison of the adult living *Limulus* with its fossil allies. It is interesting to observe in the young *Limulus*, in this its penultimate stage before leaving the egg, that the telson is absent, and that the body-segments appear to be free (not anchylosed together), as is clearly the case in several Carboniferous and Silurian forms. In general aspect they recall the Trilobites, *e.g. Trinucleus* and *Agnostus*: the head too has a strong resemblance to the genus *Hemiaspis*, a fossil form of *Limulus* with free body-segments. One other fact re-

corded by Dr. Lockwood is interesting, viz., that some eggs which were believed to be bad, and which were put aside in a dark place, proved to have retained their vitality for nearly twelve months. This tenacity of life in the eggs of *Limulus* no doubt explains the fact of the long geological life of the genus.

Duration of the Cretaceous Epoch.—In *Nature*, No. 52, for Oct. 27th, Dr. Carpenter details at some length the grounds of his assent to Professor Wyville Thomson's statement that "we may be said to be still living in the cretaceous epoch." He says, there can be no question that a formation corresponding with the chalk of the cretaceous epoch, alike in its material, and in the general character of its fauna, is at present going on over a large part of the North Atlantic sea-bed. This similarity is marked, not by the occurrence of a few types of life (like the *Lingulae* and *Terebratalidae* of the older formations), but by the persistence of those which constitute the formation itself, viz., the *Globigerinae*, the Coccoliths, and the Coccospheres; as also of numerous types of Echinodermata that were formerly considered as essentially cretaceous, and of a great variety of those Sponges (including *Xanthidia*) and Foraminifera, whose abundance in the white chalk is one of its most important features. The explorations carried on by Prof. Agassiz under the direction of the United States Coast Survey in the Gulf of Mexico, have furnished results entirely coinciding with those of the *Porcupine* expedition in many of these particulars.

Bathybius.—In a recent pamphlet, analysed in *Nature*, No. 53, for Nov. 3rd, Dr. Gümbel, of Munich, has put forth some further results of his microscopical examination of the deep-sea mud of the Atlantic, in continuation of the researches recorded in the *Academy*, No. 8, p. 208. He first cleared it, by long-continued washing, from all sea-salts soluble in water, and then divided it, by filtering, into three parts. In the first Foraminifera and larger organisms predominated; the second consisted of a sediment easily distinguished from the first, fine but heavy; the third was fine and flaky, remaining lightly suspended in water, and consisting almost exclusively of *Bathybius*, Coccoliths, Coccospheres, together with other organisms of the smallest kind (Diatoms, Radiolaria, Sponge-spicules, and a very few of the smallest Foraminifera). In opposition to the older statement that *Bathybius* thrives only at a depth of 5000 feet, Dr. Gümbel asserts that it occurs in all seas and in all depths. This deprives, he says, these minute bodies of a certain air of mystery with which they were surrounded, as the offspring of the profoundest and most secret depths of the ocean; but by their astonishingly wide distribution and their vast numbers, which stamp them as one of the most essential members of rock-forming substances, they gain infinitely in scientific interest.

An existing Coral of Palæozoic Type.—Mr. W. S. Kent has described a singular species of coral closely allied to the Palæozoic genus *Favosites*, but embodying the structural characters of the two families Positidæ and Favositidæ. He names it *Favositipora Deshayesii*. He has also discovered a fossil coral, belonging to the Palæozoic series, and probably derived from the North American Devonian or carboniferous strata, which forms a second species of the same genus (*F. palæozoica*), and he remarks that the close relationship of these Tabulate corals to the living genus *Alveopora* throws considerable doubt upon Professor Agassiz's hypothesis, that the Tabulate corals are all produced by hydrozoa. (See *Annals and Magazine of Natural History*, Nov. 1870.)

Physiology.

The Structure of the Cornea.—The new volume of the *Arbeiten aus der physiolog. Anstalt zu Leipzig*, 1869, contains some highly interesting observations of Prof. Schweigger-Seidel on the structure of the cornea. By the action of certain reagents on the cornea there are brought into view, under the microscope, a series of irregularly stellate, multiramified, and nucleated bodies, which have been hitherto regarded as essential constituents of the corneal tissue, and are known as "connective-tissue corpuscles." These corpuscles appear under the microscope dark on a light ground, and have received the further appellation of "positive images," to distinguish them from a series of negative images, appearing light on a dark ground, which are observed when the cornea is treated with nitrate of silver, and which were discovered by Recklinghausen. The negative images exactly resemble the positive in form, and are considered by Recklinghausen to be spaces from which the lymphatic canals take their origin. He calls them "Saftkanälchen," and has described other similar ones in the central tendon of the diaphragm. He further considers that the connective-tissue corpuscles lie within the "Saftkanälchen," each process of the former being contained within a corresponding process of the latter. Schweigger-Seidel, who has already combated the reality of the "Saftkanälchen" of the diaphragm, brings forward evidence to prove that the negative images are not spaces but masses of albuminous substance, and that they are identical in nature with, and not external to, the positive images. Further both these images are not due to any structure pre-existing in the cornea, but are artificial products caused by the action of the reagents employed. Since the cornea corpuscles have been made use of by Stricker and others as a means of investigating the changes produced by inflammation, these observations will have a special interest for pathologists.

Schweigger-Seidel believes in the existence of interstitial spaces from which the lymphatics originate, and has succeeded in injecting a series of wide anastomosing canals into the cornea, confirming Bowman's and C. F. Müller's results in this matter. He finds that the deeper side only of these canals is lined with an epithelium. The cells composing this are flat, join one another by broad edges, and closely resemble those lately described by Ranvier as existing in the tendons (*Quarterly Journal of Microscopic Science*, Oct. 1870). A more intimate connection is thus shown to exist between the structure of the cornea and that of ordinary connective tissue.

Under the flat epithelial cells lies a gluey albuminous substance which also extends into the interspaces between the felted fibres of which the mass of the cornea is composed. It is the aggregation of this substance in irregular masses round the nucleus of the superincumbent cell under the influence of reagents, to which the positive and negative images are due. Schweigger-Seidel has further discovered a remarkable geometrical structure in Descemet's membrane, or the posterior elastic layer of the cornea, which is brought into view by the use of a solution of common salt as a reagent.

Physiology of the Pancreatic Secretion.—It is well known that in order to obtain an accurate knowledge of the secretions produced by glands situated in the interior of the body, physiologists have been in the habit of making either temporary or permanent fistulæ—in other words, of dissecting out the duct of the gland under examination, and inserting a small silver pipe furnished with a stop-cock, the external wound being allowed to close and heal up around the pipe. Under these circumstances the secretions may either be allowed to flow continuously or at longer or shorter intervals, and its chemical nature and physiological properties accurately investigated. The great French physiologist, M. Claude Bernard, who made an elaborate series of investigations on the Pancreas and its secretion, employed only temporary fistulæ, maintaining that when the pipe was long retained in the duct it set up irritation, which extended itself to the gland-substance, and led to the secretion of a thin watery matter wholly differing in its qualities from the fluid secreted by the healthy gland which was thick and mucilaginous. In the new vol. of the *Arbeiten aus der physiolog. Anstalt zu Leipzig*, 1869, Dr. Bernstein contributes a paper setting aside, to some extent, the objections raised by M. Bernard. He thinks that after the health of the animal has been restored, the secretion obtained from permanent fistulæ is perfectly natural, and can readily convert starch into sugar, oily substances into an emulsion, and albuminous substances into peptone—the three great duties which it is now very generally acknowledged that the pancreatic fluid has to perform. His experiments have been made on the dog, an animal that is well adapted for treatment, as it has two excretory ducts belonging to the pancreas, into one only of which the pipe is inserted. The general results obtained by Bernstein from his experiments are—(1) That the activity of the gland undergoes variations which stand in direct relation to the ingestion of food, the quantity of the fluid discharged increasing immediately after food has been taken, and attaining its maximum about two or three hours after a full meal. It then diminishes to the 5-7th hour, when it again increases slightly, and finally falls to zero at the 15th hour. (2) That in regard to the influence of the nerves on the secretion, the production of nausea by any means, greatly diminishes the flow of the secretion, whilst vomiting almost entirely arrests it, the effect lasting for a considerable period. He believes that *centripetal irritation of the vagus arrests the flow of the pancreatic secretion:* he was unable to determine, however, whether this action directly affected the cells of the gland, or indirectly through the vessels. (3) That placing the animal under the influence of woorara accelerated the flow of the secretion.

Connection of muscular labour with the elimination of Nitrogen.—We have already (*Acad.* vol. i. p. 184) spoken of the arguments in favour of and against Liebig's view, that the function of nitrogenous articles of food is to produce mechanical labour, that is, motion. This view has been contested by Bischoff and Voit, but a paper that has just been written by Dr. Austin Flint, of New York, furnishes a strong argument in favour of the older view, that in the generation of muscular force the muscular substance itself becomes oxidized. Mr. Weston, a New York gentleman, undertook to walk a hundred miles in twenty-two hours, without preparatory training. Dr. Flint happened to be present during the last three hours, and at once utilized the experiment by carefully examining and analysing the renal secretion eliminated during the walk, which was accomplished without extraordinary fatigue within the time specified. The results of the analysis were some months afterwards compared with analyses of the same secretion obtained whilst Mr. Weston was in perfect health and remained at rest throughout the day. The comparison shewed clearly that the nitrogen discharged on the day of the violent exercise was much more than double of the normal amount, being in fact 142 per cent. more. The phosphates and sulphates also underwent great increase, whilst the chlorides remained almost unchanged.

Botany.

Fertilisation of Compositæ.—Prof. Hildebrand (*Botanische Zeitung*, 1870, No. 30) states that all plants belonging to the very large and important order of Compositæ are protandrous. In order to effect fertilisation, the style increases in length and before the development and expansion of the stigmata, brushes the pollen from the anther-tube by means of the hairs which clothe its surface. It is then carried off by insects to other stigmata which are already developed. Hence the great importance of the subdivision of this order, which has been so much insisted on by all systematists, based on the characters of the stigmata and jointing of the style.

The Fluid of Pitcher Plants.—The liquid contained in the singular pitcher-like leaves of *Nepenthes* and other allied plants has been popularly supposed to be simply a collection of rain-water for the nourishment of the plants during the dry season. In this country, where these plants grow under unnatural conditions, it is very difficult to obtain the genuine secretion free from water, which has become mixed with it in the process of watering. Mr. G. B. Buckton records in *Nature* (No. 54, Nov. 10th) an examination of the constitution of the liquid found in the pitchers of *Coryanthes*, a species of Orchid. He found it clear and somewhat glutinous in consistence, possessing a high refractive power, and a specific gravity of 1·062. It had a pleasant but faint odour, was very mawkish to the taste and unpotable, was neutral to test-papers, and became milky on concentration in the water-bath, yielding finally a transparent gum insoluble in alcohol. Oxalates produced no precipitate of lime, but basic lead acetate gave a curdy precipitate, and hot concentrated sulphuric acid blackened the liquid. Analysis showed that 100 parts of the liquid contained 98·51 of water and volatile oils, 1·49 of nonvolatile residue.

Chemistry.

Avogadro's Law.—Avogadro's hypothesis concerning the constitution of gaseous matter, viz., that equal volumes of different gases contain an equal number of molecules, has within the last twenty years received much confirmation from the researches of chemical investigators. By a freak of the human mind, not uncommon in the history of science, the majority of scientific chemists have been led to take the said hypothesis as a general law. If it were such, its importance could not be overstated. Accordingly, attempts have been made to find other testimony in its favour besides chemical facts. Professor Alexander Naumann, of Giessen, has published in the *Berichte der chemischen Gesellschaft zu Berlin*, ii. 690, a paper which, in his opinion, contains a proof of Avogadro's hypothesis, founded on the principles of the mechanical theory of heat. The *Phil. Mag.* and other influential journals have since reproduced Prof. Naumann's proof. This, and the importance of the subject, induces us to mention a paper just published in the *Berichte der chemischen Gesellschaft zu Berlin*, iii. 820, by Prof. Julius Thomsen, of Copenhagen, which exposes an error in Naumann's proof. Prof. Naumann concludes—"Because arbitrary volumes of gases of different chemical constitution can be mixed without change of temperature, therefore, the vis viva of the molecules of these gases must be the same, viz.: $mc^2 = MC^2$"—whereas he ought to have said $nmc^2 = NMC^2$. Now, by assuming $n = N$, it follows, that as final result of Prof. Naumann's mathematical reasoning, n must come out = N. This equality, however, he undertook to demonstrate.

The Water of the Nile.—O. Popp has furnished an analysis (*Ann. d. Chem. u. Pharm.* clv. 344) of the water of the Nile near the palace of Chonbrah, about six miles from Cairo. The water was found to contain in suspension a comparatively large quantity of clay, organic matter, and ferric oxide. After filtering off this matter, the clear liquid gave on analysis:—

	Grmm.		Grmm.
Carbonic acid	0·03146	Magnesia	0·01467
Sulphuric do.	0·00390	Soda	0·02110
Silicic do.	0·02010	Potash	0·00468
Phosphoric do.	0·00054	Organic matter	0·01720
Chlorine	0·00337		
Ferric oxide	0·00316		0·14238
Lime	0·02220	In one litre of water.	

In consequence of the large amount of organic matter, the water represents a fluid in a constant state of decomposition. In fact, it may be considered as a native liquid manure, and its renowned fertilizing influence on the soil of Egypt thus finds its natural explanation. The inorganic substances are supposed to be chiefly derived from the mechanical action of the water on the primitive rocks at the Cataracts, the organic from the tropical vegetation of the country through which the river takes its course.

On Ccollpa.—In winter, when the rivers on the eastern slopes of the Cordilleras become partly dry, a white efflorescence, called Ccollpa by the natives, is frequently observed on the parts from which the water has receded. Ccollpa collected in the river Rio de Hualfin by Schickendantz, and analysed by him (*Ann. d. Chem. u. Pharm.* clv. 360), was found to consist principally of sodic bicarbonate = $Na_2CO_3+2H_2O$. Another quantity, collected at another time, contained one more molecule of water,—$Na_2CO_3+3H_2O$. The occurrence of this salt under the conditions named is not without considerable interest, in connection with the large deposits of soda salts in some of the southern parts of South America.

On Tollylene-Glycol.—Wurtz discovered in the year 1856 a new class of alcohols, which are known by the name of Glycols. Members of this family have hitherto not been obtained from the so-called aromatic hydrocarbons. Grimaux announces (*Compt. rend.* lxx. 1363) that he has succeeded in preparing from Tollylenic Chloride, $C_8H_8Cl_2$, the corresponding Glycol, $C_8H_8.2HO$, simply by digesting the former with 30 times its weight of water at 170° to 180° C. The Tollylenic Chloride is obtained by the passage of chlorine through Toluol-Dimethyl = C_8H_{10}. Another link is therefore added to the analogies between the fatty and aromatic series.

Physics.

The Spectrum of the Aurora.—Opportunity was fortunately taken of the recent magnificent auroral displays to examine the brightest regions by means of the spectroscope. The results of this examination have been most interesting. In the former observations of Ångström, Wenloch, and others, made with feeble auroræ, the only lines visible have been those in the region which is always brightest with feeble gaseous spectra—namely, the yellow-green. But the light was so vivid at times during the recent displays that lines in the red and blue-green were noticed by several observers. One observer, in a letter to *Nature* (vol. iii. p. 6), records "one strong red line near the C, one strong pale yellow line near the D, one paler near the F, and one still paler beyond." This for the red aurora. The greenish gave the yellow line alone, with traces of continuous spectrum. A proof that the red aurora was due to hydrogen or aqueous vapours, as foreshadowed by these observations, would be a vast step in advance; for its spectrum has been stated to contain iron lines! and on the strength of this the sun's corona has been called a solar aurora!

The Aurora and Earth-Currents.—Mr. Preece, in a letter to *Nature* (vol. iii. p. 15), records an observation of great importance. It has long been known that auroræ are accompanied by "earth-currents," that is, by a rush of electricity through the earth's crust, which seizes upon the easy paths offered by the wires, and produces deflection of the instruments. Mr. Preece has determined that these earth-currents ceased when the auroral display commenced—that they were at their minimum when the displays were at their maximum.

Determination of the Mechanical Equivalent of Heat.—One of the earliest methods employed by Mr. Joule for determining the mechanical equivalent of heat was founded upon the comparison of the quantity of heat evolved in the circuit of a magneto-electric machine with the quantity of mechanical work spent in driving the machine. A new determination of the same important physical constant has been recently made by M. J. Violle (*Comptes rendus*, June 13th), by a method which, in principle, is closely allied to the one we have referred to. M. Violle's process consisted in causing a small thick copper disc to revolve rapidly round an axis perpendicular to its own plane and parallel to the lines of force of a magnetic field of great intensity; and in the measurement, on the one hand, of the amount of work required to maintain the rotation at a known speed for a definite length of time, and, on the other hand, of the quantity of heat produced by the rotation in the copper disc. The result of the experiments gave 435·2 mètre-kilogr. as the mechanical equivalent of one centigrade thermal unit—a value which, considering the number and complexity of the corrections involved in the reduction of the experiments, may be considered as sufficiently near to Joule's number.

Determination of the Ratio of the two Specific Heats of Gases.—If a given quantity of heat be imparted to a given mass of air, the pressure on which remains constant, the air will expand; while if the same quantity of heat be given to an equal mass of air, the volume of which remains constant, the pressure will increase; and in the one case the relative increase of volume, and in the other the relative increase of pressure, will be a measure of the rise of temperature which takes place. Consequently, since the rise of temperature produced by a given quantity of heat is inversely proportional to the specific heat of the body to which it is imparted, the comparison of the expansion of the one portion of air with the increase of pressure in the other will measure the ratio of its specific heat when kept at a constant volume to its specific heat under constant pressure.

An experimental method of measuring this ratio, founded upon the very simple principles that have been indicated, has been put in practice by MM. Jamin and Richard (*Comptes rendus*, Aug 8th), the heat being produced by the passage of an electric current of constant strength through a wire of definite resistance, and the increase of volume or of pressure in the gas surrounding the wire being measured by appropriate methods. The mean of several results gave for the ratio of the specific heat for constant volume to the specific heat for constant pressure, in the

case of air the number 1·41, for carbonic acid 1·29, and for hydrogen 1·41.

A New Method of Calorimetry.—Professor Bunsen has described (*Poggendorff's Annalen*, 1870, No. 9) a calorimetrical method, depending on the melting of ice, which seems greatly to surpass in delicacy any of the methods hitherto employed, and allows of accurate determinations of specific heat being made with at most four grammes of the substance under examination. The process differs essentially from that of Lavoisier and Laplace, in which also the fusion of ice was employed, inasmuch as the quantity of ice melted is ascertained, not from the weight of water produced, but from the diminution of volume which accompanies the conversion of ice into water. The accuracy of the measurements which can be made in this way depends to a great extent upon scrupulous care and exactness in manipulation, and the method would therefore probably be less trustworthy in the hands of ordinary experimenters than in those of one who has gained so well-deserved a reputation for these qualities as Professor Bunsen; but used as he uses it, it is clearly capable of giving very good results. One important application of the process is to the determination of the specific heats of substances which cannot be obtained in quantities sufficiently large to admit of their being examined by the ordinary methods. In illustration of this application, Bunsen has published determinations of the specific heats of metallic calcium, ruthenium, and indium. The specific heat of the last metal he finds to be 0·057, indicating that the atomic weight of indium is 56·7 (or more correctly 113·4), and not 37·8 as has been hitherto assumed; or, in other words, that the yellow oxide of indium is a *sesquioxide* and not a *protoxide*. Bunsen's determinations of the specific heats of silver, zinc, antimony, cadmium, and sulphur, differ on an average by about two per cent. from Regnault's numbers for the same elements, and are all less than his; apparently, however, Bunsen has calculated his results on the assumption that the mean specific heat of water between 0° and 100° C. is 1 instead of 1·005 as found by Regnault, a circumstance which would account for about a quarter of the difference between the two sets of numbers.

Attraction and Repulsion caused by Vibration.—The *Philosophical Magazine* for this month contains a full account by Prof. Guthrie of his experiments on "Approach caused by Vibration," the main results of which were given in vol. i. p. 104 of the *Academy*. The same phenomena have also been examined by K. H. Schellbach, who has arrived at a general result in relation to them which he thus announces in *Poggendorff's Annalen* for last July:—"The sonorous vibrations of an elastic medium urge specifically heavier bodies towards the centre of disturbance, and specifically lighter bodies away from it." This was proved experimentally by means of little balloons of goldbeater's skin, which could be filled with various gases. A balloon filled with air was attracted, while one filled with hydrogen was repelled, by a vibrating tuning-fork, when both were suspended in air; and a balloon filled with a mixture of air and coal-gas, in proportions such as to make it just float in an atmosphere of carbonic acid, was also repelled when surrounded by this gas.

New Books.

DUENING, H. H. A. De Metrodori Epicurei vita et scriptis. Accedunt fragmenta collecta digesta illustrata. Leipsic: Teubner.

HAECKEL, E. Biologische Studien (über Moneren u. andere Protisten). Leipzig: Engelmann.

JAHRBUCH DER EMPFINDUNGEN u. Fortschritte auf den Gebieten der Physik u. Chemie v. Hirzel u. Gretschel. Leipzig: Quandt u. Händel.

JAHRESBERICHT über die Fortschritte der Chemie u. verwandter Theile anderer Wissenschaften, v. Engelbach, Naumann, Städel, u. Stricker. Giessen: Ricker.

KABSCH. Das Pflanzenleben der Erde. Hannover: Rümpler.

MIKLUCHO-MALAY, N. v. Beiträge zur vergleichenden Neurologie der Wirbelthiere. Leipzig: Engelmann.

History and Archæology.

The Story of Coriolanus. [Theodor Mommsen's *Kritik der Erzählung von Cn. Marcius Coriolanus.*] By Dr. J. J. Bachofen. Heidelberg: Mohr.

CORIOLANUS, according to Mommsen, is the hero of one of the family legends which grew up with the class of "plebeian nobles" in the Roman Republic. Admitted at length, not merely to the public privileges but also to the social distinction of the older order—initiated, as a Tribune in *Livy* says, to the same mysteries—they are known to have been eager to disown their plebeian birth, and to trace their descent to some fallen star of the patrician race. Of the new houses, as Mommsen points out, the Marcii were among the foremost: C. Marcius Rutilus (Consul, A.U.C. 444) was one of the four plebeians who first had places in the college of the *pontifices*. The plebeian Volumnii and Veturii become noble nearly at the same period. These families, he thinks, had long known the story by which their names have been made immortal, and that not as a mere tradition, but in a finished poetical form, the work of an unknown "Roman Shakespeare." As yet it had no place in the recognised "Annals of the City:" but when a Marcius became one of the body which more than any other influence gave shape to the early Roman history, he was able to get it adopted into the older and, so to speak, patrician body of record. Such are, in a few words, the outlines of the theory which Mommsen has recently proposed in one of those brilliant papers which unite the artistic charm of his larger work to the full statement of evidence and authorities required for the purposes of philology.

Dr. Bachofen begins his examination of this theory by explaining a passage in Dionysius of Halicarnassus which has hitherto been a riddle. At the trial of Coriolanus by the Tribes we are told that nine out of twenty-one voted for his acquittal: "so that," says Dionysius, "if two tribes had gone over to him he would have been acquitted through the equality of votes (διὰ τὴν ἰσοψηφίαν) as the law required." In the case supposed he would have had eleven Tribes (or votes) against ten. What then is this "equality of votes"? Simply the equal value which all votes had within the several tribes, as opposed to the inequality which was the principle of the Servian constitution by Classes and Centuries, Dr. Bachofen shows from the context that this is the meaning of Dionysius: and he then proceeds to turn his discovery against Mommsen's theory, founded, as it partly is, on the supposition that ἰσοψηφία meant an equal division of votes. Unhappily in the exultation of success he is led to write in a strain of triumphant irony through which it is sometimes hard to follow the thread of his reasoning. Mommsen saw in the passage of Dionysius the trace of an earlier version, belonging to a time when there were only twenty local tribes, and he combined this with the other indications first noticed by Niebuhr, of want of harmony between the story and the events amid which it is placed. It remains to ask, how much of Mommsen's theory necessarily falls with the argument from the supposed equal division of votes in the Comitia Tributa. The primitive number of tribes being given up, we are no longer able to claim for the story the distinction of being a poetical fragment of the very earliest times. Enough however remains to bear out the essential part of Mommsen's conclusions. The romantic character of the incidents, the isolation in which the legend appears, the anachronisms and contradictions which it involves, and above all the names and associations on which it turns—all these considerations point to the new and vigorous elements by which, in the fifth century, the Roman governing class was recruited.

Dr. Bachofen makes one curious mistake: he speaks of Marcius and "his three patrician colleagues," in the college of *pontifices*, after the Lex Ogulnia. D. B. MONRO.

Henry VIII. and the "Eastern Question." [*Gabriel Salamancas, Grafen zu Ortenburg, Gesandtschafts-Berichte über seine Sendung nach England im Jahre* 1527.] Mitgetheilt von J. V. Göhlert. Wien: aus der k. k. Hof- und Staats-Druckerei.

AMONGST the historical documents of the Austrian archives lately published, are three ambassadorial reports of the year 1527, of special interest to Englishmen. They are addressed

to King Ferdinand of Hungary, by Count Gabriel Salamanca of Ortenburg, who had been sent on an extraordinary mission to Henry VIII. of England, with the object of inducing that monarch to give his aid against the Turkish invasion.

Scarcely had Ferdinand I. assumed the government of Hungary, after the death of King Lewis in the battle of Mohatsch, when he was attacked, on the one hand by John Zapolya, the woywode of Transylvania, who claimed the crown, and on the other by the Turks, who took Buda, and threatened the German frontier. At this critical period the Emperor Charles V., Ferdinand's brother, was involved in war. Germany had just passed through the great popular movements of the Reformation, and the War of the Peasants; from her, therefore, no help could be expected. In this difficulty, the hard-pressed Ferdinand sent his trustiest councillor for succour to the "Defender of the Faith," in England. It is to this embassy that the reports refer which the Academy of Sciences at Vienna has recently printed in volume xli. of the *Archiv für Kunde österreichischer Geschichtsquellen.*

The quaint letters of the ambassador are a valuable contribution to our knowledge of the character of "bluff King Hal" and the "pompous Cardinal." The Hungarian Embassy was from the beginning destined to come to nothing: a feeling of jealousy against the House of Austria swayed the English monarch to such an extent as to render him unwilling to act in its favour, even against the Mussulman. At the same time, Henry could not lose his reputation as a Christian ruler. The dilemma in which he and his *alter ego* were thus placed, drove them into wily practices of pettifogging dilatoriness which make the perusal of those apparently dry reports "as good as a play."

Count Ortenburg arrived in this country with a royal councillor, Hans von Silberberg, and an *attaché*, Dr. Johann Fabri, who seems to have been the real brain of the mission. In the first interview, after the presentation of the credentials, the Cardinal expresses at considerable length his "sympathy for the sufferings of fellow Christians;" adding, however, that, "since the chief heads of Christendom were engaged in war against each other, it would not be possible for the King of Hungary or anybody else to resist the Turk, unless universal peace ('ain gemainer frid') were first restored among them; in that case, his own king would put forth all his power against the Turk ('wollt sein Kunig all seine macht wider dem Turckhen darstreckhen')." On this establishment of a Universal Christian Peace, the subsequent negotiations hinge; Wolsey's endeavour being, to get up a "London Conference" between the Papal, French, Venetian, Hungarian, and German envoys—a conference in which the German Imperial interest would from the beginning have been in the minority.

This plan, the representative of the brother of Charles V. had no difficulty in seeing through. He met it at once by the remark that he "had no mission to the other embassies, but only to the King of England." Wolsey, nevertheless, recurred to the idea several times, until Count Ortenburg plainly declared that "the *oratores* (envoys) of the Pope, of the King of France, and of Venice, are disagreeable to us." Afterwards we find him and the Hungarian envoy concerting quietly, sometimes humorously, to foil the Cardinal. Thus, when Henry was to receive both envoys on the same day, the Cardinal had intended doing special honour to the one from Hungary, by sending a court chamberlain to meet him. But the Imperial ambassador coming towards them on the way, Count Ortenburg "took the latter in the middle between himself and the chamberlain, keeping for his own part the right-hand side;" and so the three ride together to court, the representative of Charles V. thus getting the lion's share of the honour.

Amidst great pomp, in the presence of lords spiritual and temporal, the envoy of Ferdinand is received by Henry in person, when the credentials are once more presented. There, Dr. Fabri pronounces a set diplomatic lecture of an hour and a half, "the heads of which had been placed in the hands of the Cardinal, at his desire, three days before." The royal reply, drawn up in advance, is then read by a secretary; being the same as that which the Cardinal had given beforehand on his own responsibility. There is an undercurrent of irony in the report Count Ortenburg gives of both this reply and the following diplomatic tournament which he had with the King. Henry had promised his assistance under condition of a general Christian peace, "although England, with her inhabitants, might by nature defend herself very well against the power of the Turk, from whom she was situated rather far away." But during the ensuing discussion, Henry mentions that the woywode, Ferdinand's rival for the Hungarian crown, "had made an offer to France, to the Pope, and to him (Henry) also, that *he* would do great things against the Turk." Count Ortenburg replies that it was Zapolya himself who had brought the Turk into Hungary, and had still secret dealings with him; upon which the King breaks in: "Audiatur et altera pars!" Henry insists that the woywode had been regularly elected King of Hungary; and when the ambassador endeavours to explain the delusive character of that election, Henry, fortified with stock quotations, replies, "Omne regnum in se divisum desolabit!" He also gives the envoy to understand that the pecuniary aid which was asked from him might "the next day be used for sending troops to Italy to drive away a Christian prince"—a hard hit against the Italian policy of Charles V. Here, Count Ortenburg tries to parry the blow by suggesting that Henry might make a draft of subvention-money payable only for the contingency of a new attack by the Turks; whereupon the King says he "would take counsel with his advisers." The ambassador then retires; but Henry retains Dr. Fabri, with whom he enters into a theological discourse about Luther and his adherents.

In a second interview, the long-winded speeches of Wolsey are vague as before. He receives with apparent glee the announcement that Fabri was to be specially despatched to Charles V. to urge pacific measures upon that monarch, and eulogizes Ferdinand for "having shown himself as firm against heretics as he now does against infidels." The talk seemed to grow friendly; and when the ambassador, thinking there was now a chance, pressed his point, Wolsey said, that "rather than leave the King (of Hungary) in the lurch, he himself would get together 300,000 ducats," with which warriors should be enlisted, and he in his own person would take the cross. He also said that "his King was a Defender of the sacred Faith; that he had written against the heretics and ordered others to do the same; that he would do so as long as he lived, preserving his own realm from heresies and rebels; and that it would not become him therefore to refrain from protecting the Christian creed against the Turk." Waxing more and more intimate, the Cardinal treats the ambassador to a long tale as to "how He had risen in life; how He managed the King; how He governed; how his King heard three masses a-day; at what time he heard the sermon, and when he received the sacrament; and how he did not allow any heresy to get the upper hand." The word "*Er*" (He), signifying Wolsey, is here always written with a capital letter, although the German language was very sparing of capital letters at that time. "*Er und sein Khunig*" (He and his King) also occurs in the report.

In the same conversation the Cardinal observed that his

sovereign would "treat *separately* with some of the Prince-Electors" of Germany, that they might give immediate aid to Ferdinand. This endeavour to enter into relations with the German princes, irrespective of the emperor, was as characteristic of Henry as of the French kings, who worked for a disruption of the German Empire.

The conversation with Wolsey had lasted not less than four hours,—"to our joy," as Count Ortenburg writes. Yet, doubts as to the Cardinal's real intentions continually crossed his mind. On Wolsey asking what sort of succour King Ferdinand demanded, the ambassador replied, "that they wished the King of England would pay some 15,000 to 20,000 soldiers as long as the war should last."

From a third report we learn that Henry VIII., after having received the ambassador, led him into another apartment, where the Queen was, when some talk occurred about family matters, and afterwards a formal exposition of the Eastern Question was made to Henry's Queen, in the absence, it seems, of that jealous monarch. The Queen also promises to do her best to make her husband give all possible aid in this Turkish difficulty; but, "as it was already late, and the repast had been placed on the table," the envoy takes leave. Count Ortenburg is then entertained in another room of the palace, where Wolsey presides at table. Among the guests is the Papal Nuncio. The conversation taking a turn somewhat dangerous for the interests represented by the Hungarian ambassador, the latter warns Dr. Fabri not to enter into any dispute, but "rather to start some other subject, viz., the writings of Luther and their interpretation." After dinner, however, the Turk, the woywode, and the 25,000 ducats, are again discussed, until Wolsey is summoned to attend the King.

During the foregoing interview, Henry had been informed that, though a general Christian peace was not yet possible, still, by the exertions of King Ferdinand, a truce for five years had been arranged between Russia and Poland, and that, on the other hand, the Turks were marching forward in force. Henry replied that he could not help His Majesty of Hungary, "inasmuch as he knew well that *Lutheranism had grown so strong, and exercised such seduction upon the mass of the people, that, wherever the Turk appeared, they would rather go over to him and drive away the Emperor, Your Royal Majesty* (King Ferdinand), *and all the Christian princes, than help in beating the Turk.* Now, if that happened, he (Henry) would have to defend himself both against the Turks and the Lutherans." In this manner they continue wrangling about Christian duty, and royal legitimacy, and what really happened at the battle of Mohatsch, &c.; Count Ortenburg entering sometimes with *naive* earnestness into questions about which Henry evidently did not care in the least. The ambassador then asks that the King should at any rate not send the 25,000 ducats to the rival woywode; and this demand is graciously granted. But bickerings immediately recommence. Still Henry protests that he "dearly loves" Ferdinand, "on account of the brotherhood of the Order of St. George, on account of relationship," on account of Ferdinand having "displayed such valour against the damned heresies of Luther ('wider die verdampten Kezereyen des Luthers');" and he declares that, if a General Peace were established, he would "not only give aid against heretics and infidels, but enter with his whole realm into the contest, that is, with his people and treasure, and risk even his own body and blood."

But for all these promises, the embassy could not get the King to give them even a line to that effect in writing. When pressed for it, Henry said he would "himself send ambassadors, whose message would be the more joyful," if *they* in person brought the good news in writing. Count Ortenburg, nothing daunted, requests the King that he might at least "give *this* reply in writing." Henry calls the Cardinal in. After a confabulation with this experienced man, the reply is, that "the embassy had only brought written credentials, but no written exposition, with them, and that King Henry therefore would also favour them with credentials, and transmit his answer afterwards at some length."

Finally, Wolsey, taking the envoy aside, confides to him the secret of the aversion King Henry feels in the matter; saying, that the King thought it wrong that Ferdinand had "spent money in Italy against the Christians, and then came to ask aid from others against the Turks." He, the Cardinal, however, would, "if his king gave no aid, rather sell his coat from his body than forsake" the King of Hungary. Wolsey then asked about the way of transmitting the money which was to be collected. The envoy, wishing to see the money as soon as possible, proposes to have it transmitted to Malines, from which place it could be further sent on. But the Cardinal thinks it best to transmit it to the English envoy in Hungary, whenever it is sent.

With great thanks, Count Ortenburg thereupon takes leave and goes on board ship at Dover, from which town his last letter is dated, April 7, 1527. I need scarcely say that all the elaborate talk of Henry and Wolsey was simply intended to deceive: and the impression left on the mind by these reports is similar to the one we gather from some pages of *Reynard the Fox.* KARL BLIND.

Hallamshire: the History and Topography of the Parish of Sheffield. By Joseph Hunter. New edition by the Rev. Alfred Gatty, D.D. London: Virtue. 1869.

THE *History of Hallamshire*, originally written by Joseph Hunter, but republished last year with large and valuable additions by the Rev. Dr. Gatty, Vicar of Ecclesfield, possesses a unity of interest which topographical works can seldom pretend to, whatever be their other merits. This arises from the fact that instead of dealing with a wide area,—it treats of one city, one family, and one industry. It is the picture of the development of the moral and material civilization of the town of Sheffield under the auspices of the lords of Hallamshire. Passing over the dim vestiges of British and Roman occupation, the first well-ascertained fact is, that Earl Waltheof, son of Siward the famous Earl of Northumbria, owned "Hallun" or Hallamshire before the Conquest, and held his "aula" (castle and court of justice) in this manor. So much we learn from Domesday book. At the date of the survey, Roger De Busli held Hallamshire of the Countess Judith, Waltheof's widow; his castle stood at the junction of the Sheaf and Don, in what is now the heart of Sheffield. Before long, but by what steps, of forfeiture, or marriage, or escheat, is unknown, the De Buslis gave place to the De Lovetots, a humane and church-building race. They ended in an heiress, whom Henry II. bestowed on young Gerard de Furnival. These Furnivals ruled in Hallamshire for two hundred years; and the last of them owned a messuage in Old-bourne (Holborn), where now stands Furnival's Inn. They too ended in an heiress, Joan, who married a Nevil; her only child, a daughter, married the famous John Talbot, Earl of Shrewsbury, who fell at Chatillon in 1453. The Talbots built the Manour in Sheffield Park, parts of which are still standing; here Wolsey lodged, on his way to die at Leicester, and here Mary Queen of Scots passed fourteen weary years of captivity. Again there was a failure of male heirs; and, through an Alethea Talbot, Hallamshire passes, early in the 17th century, to the Howards of the ducal house, who hold it still.

The material civilization of Sheffield, depending chiefly

on its industry of sharp-edged tools, is explained by its situation. Five rivers, the Don, the Sheaf, the Porter, the Loxley, and the Rivelin, join their waters at or near the town, and by their frequent rapids supply that abundance of available *power*, which the brooding minds and cunning hands of a capable race, encouraged generally by the lords of the soil, turned effectually to account. Also most things that concur in the manufacture of steel are found within easy reach; Hallamshire itself teems with iron-ore, coal, woods of young oaks for charcoal, the best grit in the world for grindstones; while limestone to any amount is found in the moors just over the Derbyshire border. Sheffield knives, or "whittles," were famous in the time of Edward III.; as we learn from Chaucer in the "Reve's Tale:"—

> "A Scheffeld thwitel bar he in his hose;
> Round was his face, and camois was his nose."

In modern times, the invention of cast-steel in the middle of the last century by Benjamin Huntsman, a Lincolnshire man, has led to a great expansion of the trade of the town. In its most recent aspects, this expansion is ably described by Dr. Gatty, who devotes a special chapter to the purpose.

Here we are told of the honourable history of the firm of Rodgers, whose knives are known all over the world, and whose family have been in the business these two hundred years; of the immense demand for railway-springs, buffers, and all descriptions of railway-iron, which has lately come upon Sheffield, and led to the establishment of a host of new iron-furnaces; of the incorporation of the city in 1843, and the bursting of the great Bradfield reservoir in the Loxley valley in 1864; lastly, our editor, with firm but gentle hand, traces the lamentable story of those "trade outrages," of which a few years ago we heard so much.

T. Arnold.

Saint Anselm. By R. W. Church. Macmillan.

There are some men in the history of the Middle Ages whose lives and characters stand out before us with singular clearness, and in a way remarkably attractive to the historian. S. Anselm and S. Thomas à Becket are obvious instances. The greatness of S. Thomas is evinced by the mass of legend which at once gathered round his name; and the numerous letters of the time, both of friends and enemies, attest the interest felt in the struggle which he maintained, almost single-handed, with the greatest monarch of the age, a struggle which became of European interest, and made the pilgrimage to the shrine of Canterbury so popular among all the nations of the West. But his course is stained with too much of worldly passion and mixed motives to have the charm which attaches to the life of Anselm. The true-hearted, pure-minded man, the man whom the Conqueror most wished to see when on his death-bed, drew strongly to himself the love of those who were the worthiest in that generation. The affectionate biography of him by Eadmer, his friend and companion, contrasts strongly with the biographies of Becket; we seem to breathe in a sweeter and finer atmosphere; and though the sounds of strife were all around, Anselm lived a charmed inner life, less affected by outer troubles than was possible for Becket,—a man whose life had been almost entirely one of the hard outward world. And yet Anselm had to fight out the great question of Church and State, first with the brutal soldier William Rufus, and then with Henry Beauclerk. The quarrel was in both cases inevitable; neither side could give way. The State could not withdraw its claim on the allegiance of the Bishops and Abbots who held large lands, and were really great Barons, capable of raising a civil war, as Stephen had found to his cost. On the other hand, the Church had partly been urged on by events, and partly it had been forward to assume a position towards the State, which had now obtained a theoretically firm basis in the forged Decretals, and which was justified, in the eyes of most men, by the injustice and corruption of the civil power. We may use the prevalence of monasticism in any age almost as a barometer by which to measure the state of civil society. Good men fled to the cloister because a true religious course was impossible in the world of daily life. All the finer and better natures therefore were to be found among the monks; for such as Anselm no other course was possible, and the theory of a theocracy which should cause justice and right to prevail on the earth had irresistible charms. The discovery that a spiritual autocracy was as liable to abuse as a temporal one, was not yet made, and we must judge Anselm by the spirit of his own times. It is this fair and candid criticism that forms a chief merit of Mr. Church's book. Dr. Hook, in his *Lives of the Archbishops of Canterbury*, would be fair to Anselm if his theory would but let him; but he is too true a modern Churchman for such a thing to be possible. It is thus instructive to compare the two narratives.

We would call attention to Mr. Church's chapters on the "Monastery of Bec," and the "discipline of a Norman monastery," and "Anselm at Bec" as specially illustrating the fairness which is able to see that different modes of action suit different ages which yet have the same great end in view.

Anselm, however, was something more than a combatant for the Church against the State. His subtle Italian nature was far more eager to master the world of thought than the world of action. He took up the great argument of natural theology, the proof of the existence of God, in the *Monologion* and *Proslogion*—in the first, showing that the existence of good in man and in nature can only be accounted for by their derivation from the one Good Being; in the latter anticipating the argument of Descartes, that the idea of God in the human mind of itself necessarily involves the reality of that idea. In the *Cur Deus Homo* he considers the inner necessity of the Christian scheme. On his death-bed he was turning over in his mind the question as to the origin of the soul. The impulse thus given to thought constitutes to us his real greatness. The cause for which he fought was not in reality the cause of England or of Europe, and something of doubt and hesitation must attach to any attempt at defending him; but Anselm the solitary thinker who was before his age, and still more Anselm the true-hearted and sympathizing man whose life all men read as that of a friend, still lives to us as one who was a light to England in its darkest times. That many such men as Ch. de Rémusat in France and Mr. Church among ourselves, have felt towards him as Eadmer did in his own days, witnesses to his real greatness and is part of his reward.

C. W. Boase.

Contents of the Journals.

Archivio Storico Italiano, tomo xi. parte 2, 1870.—Bezzoni continues his account of the Venetian Inquisitors of State to the time when Bonaparte destroyed the Republic. Their chief care was to watch over the officials, and see that the resolutions of the government were kept secret; but they also watched over public morals, and suppressed any novelties of thought. The cases detailed are very instructive. Nothing but the storm of the French Revolution could have swept away the small isolated Italian systems, and prepared the way for Italian unity.—Banchi gives a history of the little port of Telamon, in the Sienese Maremma, as illustrating the period before the war of Pisa began, and the rise of Florence altered the political state of central Italy.—A life of Domenico Cirillo, the eminent botanist, the friend of John Hunter in London and Franklin in Paris, illustrates the advance of Italian

science in the last century.—There are good reviews of Parthey's ed. of the Mirabilia Romae (the 'Handbook' of the Middle Ages), and of Berlan's ed. of the 'Liber consuetudinum Mediolani' (the customs of the early *Commune* of 1216).—Claretta's history of the Regency of Cristina of France, Duchess of Savoy, is shown to contain evidence contrary to Claretta's own view of her innocence.—The second vol. of Bentivoglio's letters while Nuncio in France, just after the assassination of Henri Quatre, describes the wretched intrigues which made the meeting of the States General useless.—Caffi makes some corrections in Varni's list of the celebrated early artists in wood-carving.—There is a severe critique by Bongi on the Geography published as a supplement to Brunet's Manuel du Libraire: the Italian part is shown to be carelessly done, and some omissions are supplied.—A small catalogue of original documents illustrating the history of Friuli comes from the Collection of Count L. della Torre Valsassina: they chiefly relate to the Della Torre family.

In the *Literarisches Centralblatt* for Oct. 15, A. v. G[utschmid] reviews Lepsius *Ueber den chronologischen Werth der assyrischen Eponymen und einige Berührungspunkte mit der ägyptischen Chronologie.* The cuneiform inscription containing the list of Eponymi has given us a clear basis for Assyrian chronology, fortunately independent of the many difficulties which attend the deciphering of parts of the inscriptions, and especially the names of the kings. Oppert's supposition of a lacuna in the list is a mere tampering with the evidence. Gutschmid agrees with Lepsius' view, except as to the reigns being dated from the year *after* the accession; the Chinese way of reckoning is the only one that follows this plan, and it is accounted for by the Chinese ordinance of the "year of mourning." The reign of Sennacherib is perhaps the most difficult to synchronise. Gutschmid suggests that the 18 years assigned him in Berosus belong to the time of his being Over-king in Babylon, and correspond to the 19 years (699–680 B.C.), which Ptolemy's canon gives as the interval between the accession of Aparanadios and that of Esarhaddon. Again Berosus allows Esarhaddon only 8 years, while the canon gives him 13. But here Alcydenus helps us by inserting a 5 years' rule of Esarhaddon's brother Nergil-Sharezer, so that there was probably a contest for the succession. The statements about Pul (Poros in the canon), which occur in 2 Kings, xv. 19, 1 Chron. v. 26 (the first Assyrian king mentioned in the Bible also cause great difficulty. The whole enquiry has been complicated by premature and useless attempts to reconcile all the statements in Kings and Chronicles with those in the inscriptions, and the tendency to find biblical names everywhere in the Assyrian annals. Nor have our decipherers been sufficiently careful in distinguishing between what is fairly made out and what is mostly guesswork, *e.g.*, is it quite certain that Miluchcha is the classical name Meroë? Naturally this has led to some distrust of their whole scheme, as the article in the July number of the *Edinburgh* shews, an article the tone of which cannot be justified even by the somewhat exaggerated pretensions of Assyrian scholars, for it allows next to nothing for the progress actually made, or for the very great difficulties attending the work of interpretation. Gutschmid also agrees with Lepsius that the only synchronism certainly made out between the Assyrian and Egyptian annals is that in the reign of Tirhakah. It is to be wished that more of the vast collection of inscriptions in the British Museum could be published, and more rapidly, so as to be more generally accessible to scholars.

New Publications.

ARCHDALL, MERVYN. Monasticon Hibernicum. Ed. by Rev. P. F. Moran, &c. Publishing in monthly parts. Dublin: Kelly.

BEDE'S ECCLESIASTICAL HISTORY of the English Nation; a new Translation by L. Gidley. Parker.

BIANCHI, N. Storia documentata della Diplomazia Europea dall' anno 1814 all' anno 1851, vol. vii. (1851-8). Turin.

BRAY, MRS. The Revolt of the Protestants of the Cevennes, with some account of the Huguenots in the 17th century. Murray.

BULWER, SIR H. L. The Life of Henry John Temple, Viscount Palmerston. 2 vols. London: Bentley.

COURET, M. La Palestine sous les Empereurs Grecs. Paris: Durand.

CREASY, SIR E. History of England. Vol. ii. London.

DIRCKS, H. Perpetuum Mobile; or, a History of the Search for Self-Motive Power, from the 13th to the 19th century. London.

ERSKINE, THOMAS (Lord), Speeches of. Ed. by E. Walford. 2 vols. London: Reeves and Turner.

FREEMAN, E. A. History of the Norman Conquest. Vols. 1 & 2. Ed. 2. (Somewhat re-cast and enlarged.) Oxford Clarendon Press.

GILBERT, J. T. Historic and Municipal Documents of Ireland, 1172-1320) from the archives of the City of Dublin, &c. London: Longmans. (Rolls Series.)

GORD, EUDEL DU. Recueil de Fragments historiques sur les derniers Valois. Paris: Didot.

HUTTENI, ULRICHI equitis operum supplementum. Epistolæ obscurorum virorum. Ed. E. Böcking. Tomi posterioris pars altera. Leipzig: Teubner.

KRAUSE, J. H. Die Eroberungen von Constantinopel im xiii. u. xv. Jahrhundert. Halle: Swetschke.

LORENZ, O. Deutschland's Geschichtsquellen im Mittelalter. Berlin: Hertz.

MAURER, G. L. v. Geschichte der Städteverfassung in Deutschland. 3ter Band. Erlangen: Enke.

PASSY, M. H. Des Formes du Gouvernement, et des Lois qui les régissent. Paris: Guillaumin.

PROUDHON, P. T. Histoire du Mouvement constitutionnel au xixe siècle. Paris: Lacroix.

SCHLAGINTWEIT-SAKÜNLÜNSKI, HERM. v. Reisen in Indien u. Hochasien. 2ter Band. Jena: Costenoble.

SQUIER, E. G. Honduras: Descriptive, Historical, and Statistical. London: Trübner.

STUBBS, PROF. W. English Charters and other Documents relating to the early History of England. Oxford: Clarendon Press Series.

Oriental and Comparative Philology.

An Assyrian Dictionary, by Edwin Norris. Vols. I. and II. London: Williams and Norgate, 1868, 1870.

THE Assyrian researches of English and French philologists have now reached a stage at which it seems appropriate to sift and arrange results. It is the merit of Oppert (by birth a German) to have taken the first step in this direction by the publication ten years ago of the first Assyrian Grammar. The still more difficult task of forming a lexicon has been undertaken by Mr. Norris, so well-known to Orientalists by his excellent dissertations on the cuneiform inscriptions of the second class, and by his share in the editing of *The Cuneiform Inscriptions of Western Asia* (London, 1861, 1866). A friend has generously contributed to the expenses, and the two large volumes before us are an instalment of the work.

Only those who have to some extent gone over the same ground as the author can fully appreciate the combined courage and conscientiousness to which every page in these volumes bears witness. We earnestly trust the work may soon be completed in the same admirable style. At the same time it is our duty to point out a few defects (as we venture to think them), in the hope that the author may to some extent avoid or remedy them in the succeeding volumes.

One of our principal objections is a formal one. Contrary to the usage in Semitic lexicography, Mr. Norris has arranged the words and roots, not upon etymological principles, but as they are written in the Assyrian texts. To account for this seemingly capricious arrangement, the reader should remember that each Assyrian character has more than one value, and hence the same word may be written in very different ways, added to which the characters are partly syllabic, partly ideographic. Thus, if we wish to write *samas* (שמש) "sun," we can either employ the characters for *sa* and *mas*, or else two others pronounced *an* and *ud* respectively. We can therefore place the word under A, under D, or under S. The rule adopted by Mr. Norris is to arrange the words in accordance with the texts, *e.g.* the word just mentioned is placed under D, because it is generally written *an-ud*, and besides *an* is merely a so-called determinative ideogram. This example will be enough to show how much the application of this method depends on the fancy of the lexicographer; in fact, we have often failed entirely to discover the motive for the particular arrangement adopted. Of course, a plan once adopted in a work of this sort cannot be abandoned; we can only urge upon the author the desirableness of an index at the close of the whole work, to contain all the words, arranged according to the roots, and transcribed in Roman characters, with references to the pages on which they are explained. The

index to the Khorsabad inscription, published by Oppert in the *Journal Asiatique* for 1865, might be taken as a pattern, omitting, of course, the explanations. Such an idea, if closely printed, would hardly occupy more than three sheets.

Two other points may be briefly noticed. We venture to think that Mr. Norris is hardly thorough enough in his comparison of the cognate languages, and has not given sufficient weight to the laws which regulate the interchange of sounds. Thus on p. 234, at the word *idlu*, "warrior," we are surprised to find the derivation from the Arabic عدل (*'adala*), rejected, and at the word *qardu*, which so often accompanies the former, to miss a reference to قرض, "to oppose." In the catalogue of syllabic characters, the equivalents are not always fully given, *e.g.* the character for *si* and *lim* should also have the value *pan*, which is wanting too in the *Addenda* prefixed to Vol. II. And among the characters for compound syllables we miss in No. 15 the value *kir* (*Syll.* 544).

In conclusion, we heartily appreciate the fullness of the quotations from the Assyrian texts, which are given in the cuneiform characters, and followed by a translation; as well as the essential service rendered by Mr. Norris's *Dictionary* to Biblical studies. An instance of the latter is the list of Assyrian months on p. 50, which throws an unexpected light on the origin of the Hebrew names of the months.

E. SCHRADER.

Field's Edition of the Hexapla. [*Origenis Hexaplorum quæ supersunt: concinnavit, emendavit, et multis partibus auxit Fridericus Field.* Tomi ii., Fasciculus iii. Ezekiel, Daniel, Prophetæ xii. Oxonii: e Typographeo Clarendoniano, 1870.]

AMONG the most complicated tasks of textual criticism, is the correction of the Septuagint; and among the most important aids in the accomplishment of this, is Origen's *Hexapla.* The same difficulties which beset the modern editor were already in existence in the time of Origen. The caprice of transcribers, and the desire to assimilate the Septuagint to the current Hebrew text or to the other Greek translations, had produced so great a variety of readings as to extort the complaint from Jerome, "Toto orbe diversa est." To correct this deplorable condition of the text was the object of the *Hexapla.* Written, as its name indicates, in six columns, it presented side by side the Hebrew text in Greek as well as Hebrew characters, together with the versions of Aquila, Symmachus, the Septuagint, and Theodotion. But the chief attention of the editor was devoted to the Septuagint, the additions to which in the other versions were distinguished by the mark —, and the omissions by ※.

Unhappily the *Hexapla* has ceased to exist except in fragments scattered through the works of the Fathers, and first collected in 1714 by Montfaucon, who added a certain number of various readings. Montfaucon's work, however, excellent as it was for its time, fails to satisfy the requirements of modern critics, and is indeed but rarely to be met with; while Bahrdt's edition is useless, as he omitted all Montfaucon's notes. There is therefore ample justification for Mr. Field's new revision of the text, which has been accompanied by an independent collation of the best MSS. The critical notes are especially valuable, containing as they do, not a few patristic quotations, and, where necessary, conjectural emendations of the text offered by previous scholars. Mr. Field has also attempted to restore the Hebrew text as read by the several Greek translators in cases where their version is not in accordance with the Masoretic text, and these readings are often very plausible, as for instance, in the fasciculus before us, בֹּגְדִים for בַּגּוֹיִם (Hab. i. 5), where O′ has ἴδετε οἱ καταφρονηταί; comp. Hab. i. 13. The reading, לְכִנְעֲנִי for לכן עניי (Zach. xi. 7), where O′ has εἰς τὴν Χαναανῖτιν, is fully confirmed by a fragment of a ninth century MS. at St. Petersburg. In some other passages Mr. Field's conjectures seem less judicious; *e.g.*, Ezek. xxi. 10 (15), where O′ has ἑτοίμη εἰς παράλυσιν· σφάζε, ἐξουδένες, and Mr. Field proposes (after Hitzig) the reading שְׁחֹט בְּיִי for שבט בני. The passage is certainly difficult; the Vulgate has quite a different version, "Qui moves sceptrum filii mei, succidisti omne lignum," which points to the reading, נשיא מאסתי. Perhaps the Septuagint translator read אל נשם, from שסם, "to plunder." So, too, in Amos vii. 14, where Σ. renders ἔχων συκομόρους, reading perhaps בעל שקמים; and Hab. ii. 17, where O′ renders πτοήσει σε, and the Peshito תרלחך, "exagitabit te;" and we should have expected to find Mr. Field proposing to read יְחִיתֶךָ for the Masoretic יְחִיתֵן, an emendation which occurs in the margin of the St. Petersburg fragment. In the note on Zech. xiv. 5, Mr. Field rightly gives וְנִסְתַּם as the Hebrew equivalent of the Septuagint's καὶ φραχθήσεται (our editions of the Hebrew have וְנִסְתֶּם). But he should have mentioned that this reading is one of those on which the Masoretic schools of Babylon and of Palestine differ (Madinḥai and Ma'arbhai), and ought not to have omitted the rendering of the Targum, ויסתתים. These points, however, are but of secondary importance; and the numerous extracts from the Syrian translation of the *Hexapla* are of great value to the student. For although the Syriac in question has been already edited by Masius, Norberg, De Rossi, Bugatus, and, above all, by Middeldorpf (from MSS. in Paris and Milan), Mr. Field has furnished some more accurate readings from the Milan MS., through the kindness of the well-known Syriac scholar, Ceriani of the Ambrosian Library. In short, Mr. Field has made the best use of the critical apparatus at his command; and his work will probably remain the standard edition, unless some fortunate discoverer should one day present us with a complete copy of the original *Hexapla.* AD. NEUBAUER.

An Arabic Reading-Book, compiled by Dr. W. Wright, &c. Part First. The Texts. London: Williams and Norgate.

THE first requisite in a good chrestomathy is a practical selection of classically written texts, in which the various literary styles shall be fairly represented, and the stages of the beginner's progress made as gradual and easy as possible. The passages selected should as a rule be short, as it is a refreshment for the learner to pass quickly from one lesson to another, instead of plodding wearily through an extract of many pages. The second is that the text should be correct, and as free as possible from errors of the press, a point in which some of the older chrestomathies, as for instance those of Freytag and Arnold, leave something to be desired. Dr. Wright's *Reading-book* may safely challenge examination in both these important respects. It supplies a copious selection of texts written in various styles and on various subjects. Beginning with fables, it proceeds to historical, biographical, and geographical descriptions; and these are followed by specimens of the grammatical and philosophical style, the language of the Koran and rhymed prose. The conclusion is formed by some specimens of ancient Arabic poetry, accompanied by a commentary. None but masterpieces of classical style are admitted, *e.g.*, Ibn Hishâm, Almubarrad, Ibn-al athîr, Ibn Khallikân, Zamakshari, Ḥarîrî, and among the poets, Imruulḳais, 'Alḳama, &c. The punctuation is complete and accurate. That no unpointed text is given seems to us quite reasonable. Advanced scholars must in time accustom themselves to do without points, but the best preparation for

this is the reading of carefully-pointed texts. We have no doubt this Reading-book will soon be as much appreciated as the excellent Arabic Grammar by the same author. The second part of the work will contain a glossary. Our only regret is that the cost of Dr. Wright's *Reading-Book* will render it practically inaccessible to many students of Arabic in the German universities. ED. SACHAU.

THE MOABITE STONE.

Although M. Ganneau still withholds his photographs, dissertations on the Moabite stone continue to flow in. The last month has brought us an article in the *North British Review*, which we can hardly be wrong in assigning to the competent pen of Dr. Wright. Almost simultaneously appeared an elaborate work on the same subject by the well-known Hebrew scholar Dr. Ginsburg. Both writers begin with an account of the discovery, and of the previous attempts to decipher the inscription, followed by the text itself, an English translation, and grammatical, geographical, and historical notes. Dr. Wright's transcript of the text is particularly useful, being pointed; his notes are illustrated by the other Semitic languages, and concise though clear. Dr. G.'s commentary is, in our opinion, too prolix, and contains statements familiar to every advanced student. It is true that the author claims credit on this very ground in his preface, but the necessity of emending the text by conjecture scarcely enables him to fulfil his pledge of guiding "every ordinary reader" to the correct meaning. A peculiar feature in Dr. G.'s work is the very useful glossary at the end. Both writers are eclectic, but both have proposed some new interpretations, or new arguments in favour of previous conjectures. We shall only mention the most important ones. Dr. Wright, on the authority of Eusebius, pronounces Daibon instead of Dibhon, and observes that Qarḥa and its variations are names of places in Arabic. Dr. Ginsburg suggests, in l. 4, עמרי מלך, and considers *Omri* to be dependent on הראני, which is contrary to the Hebrew idiom. The examples he quotes are scarcely in point, as they present three substantives together, a case in which the ו may properly be omitted, and these substantives are not at all dependent upon verbs. Besides ויענו, in l. 5, presupposes a verb in the clause referred to. Possibly we should read עמ[רי הו]י מלך ישראל. In l. 8, Dr. Ginsburg argues, with Dr. Weir, that the monument was erected in the reign of Jehu. This opinion was first broached by S. Sachs in the *Revue Israélite*, as we stated in the *Academy*, vol. i. p. 217. But, not to mention that the second book of Kings is against this view, the lacuna must *ex hyp.* be filled up with the words "by his son, his son's son, and his son's son's son," for which there is certainly no room. In l. 9, אֲשׁוּח, as Dr. Wright reads, is no doubt the true form, and not Dr. Ginsburg's אֲשׁוּחַ. In l. 13, the latter scholar reads שבן (= Sibmah), for שרן; and we have no doubt that the true reading of the Targum of Jerusalem is שבן, and not שרן. But while we award Dr. Ginsburg the praise of ingenuity, we cannot deviate from the reading of the inscription, which is clearly שרן. May we venture to take Dr. G. to task for asserting that שרן does not occur in the Scriptures? we have already pointed out in the *Academy*, vol. i. p. 272, that it is mentioned in 1 Chron. v. 16 as belonging to the tribe of Gad. On l. 17, Dr. Wright suggests that the Syrian deity Atergatis is to be explained as עתר עתא, "the 'Attar of 'Athé." A similar derivation had been already proposed by ourselves in the *Géographie du Talmud*, p. 305. In l. 23, Dr. G. would translate "the prison of men . . . ;" but why should Mesha boast of having constructed prisons? Here we are inclined to accept Schlottmann's כלאי האשדת מין, and translate "reservoirs for water." Mesha is speaking of the want of water in Qarḥa. In l. 25, Dr. Wright adopts Neubauer's reading, with an improvement, substituting באסרי for באנשי. Dr. Ginsburg reads בחורי, but unsuitably. In lines 27 and 28, Dr. Wright's way of filling up the lacuna, "for I left behind in it men of Dibon, fifty [in number]," is very attractive, but the three parallel כי seem to require separate antecedent clauses. We may remark that עצר gives the same sense as עזב; see Deut. xxxii. 30, &c. The same objection applies to Dr. G.'s suggestion, "for it was cut down by the fifty men." We are curious to know in which passage עצב means "to cut;" to get this sense the root עצד (Isa. xliv. 12) would be preferable. In l. 28, Dr. G. supplies, "And I saved from my enemies Bikran." He should rather have rendered "from the hand of my enemies," for מישנאי alone may be Moabitish, but cannot be Hebrew. As for the word מלא, in the sense of "fortress" (proposed by us), which Dr. G. denies to be Biblical, we must refer him to the Concordance for nine passages in which it occurs, especially for 1 Chron. xxx. 5, where מלא is explained by "the city of David." That the plural may be either מלאת or מלאים is clear: the author of the suggestion did not affirm that the verb מלא is to be found in the sense "to construct a fortress," but that in the Semitic languages a verbal form can be derived from every substantive. We have only to add that Prof. Schlottmann's latest views on the Moabite Stone, based on Ganneau's new readings, are to be found in the current number of the *Zeitschrift der deutschen morgenländ. Gesellschaft.* Professor S. now renders line 8 thus: "And Israel dwelt in it (Medhebha) in his time, and the time of his sons (*i.e.* Omri) and Ahab) 40 years." But the parallelism would rather require "Jehovah dwelt in it." We have already mentioned his reading of l. 23. Dr. Geiger's article in the last number of his periodical is little more than a reprint of that inserted by him in the *Zeitschrift der d. m. G.*

An important conjecture proposed by Mr. Bensly, Sub-Librarian of the University Library, Cambridge, has reached us at the last moment. On l. 15, where the present text reads רקע, he would substitute בקע; comp. Isa. lviii. 8, יבקא כשחר. AD. NEUBAUER.

Intelligence.

It is with deep regret that we hear of the death of the distinguished Italian historian and Orientalist Michele Amari. He was born at Palermo in 1806, and lived there till 1842, when the attention of the Neapolitan Government was attracted by his work *La Guerra del Vespro Siciliano*, and he received a summons to appear at Naples. Instead of obeying the order, Amari fled to Paris, where he brought out a second edition of the History of the Sicilian Vespers in 1843. It has since passed through several editions, and been translated both into German and English. During his residence in Paris, Amari devoted himself with much success to the study of Arabic. The German Oriental Society undertook the publication of his *Biblioteca Arabo-Sicula*, a collection of extracts from Arabian authors regarding the history, geography, and Mahommedan literature of Sicily. He also wrote a translation of Ibn Zafer's *Solwán al-Motá*. After Victor Emmanuel became king of Italy, S. Amari returned to his native land, held office for a time at Florence as Minister of Public Instruction, and was appointed Professor of Arabic in the University. Since then he has edited, with a translation and notes, the Arabic documents in the royal Archives at Florence (*I diplomi Arabi del R. Archivio Fiorentino*, 1863, Appendice, 1867), and a catalogue of the small collection of Oriental MSS. in the Lucchesiana at Girgenti. But his great work, which we fear he has left unfinished, is his History of the Musulmans of Sicily (*Storia dei Musulmani di Sicilia*, vol. i. 1854, vol. ii. 1858, vol. iii., part i., 1868). Personally M. Amari was a most amiable man, beloved and respected by all who knew him.

Mr. E. H. Palmer has presented his first report to the Committee of the Palestine Exploration Fund, on his researches in the Tîh and the country of Moab. His sojourn in Moab was "expensive and unsatisfactory." He is convinced, that "above ground at least, there is not another Moabite stone remaining." On the other hand, he has copied a large number of Hebrew *graffiti* at Jerusalem, and hopes great things from some inscriptions found at Hamáh (Hamath), which have not yet been deciphered. The report is given in full in the *Times* of Nov. 7.

Trübner's American and Oriental Literary Record has entered on its sixth year, and maintains its character for exact bibliographical information. The October number contains, *inter alia*, the text of the congratulatory address to the founders of the German Oriental Society, a notice of the Catalogue of Sanskrit MSS. in Bengal, the first part of which has been lately published, and a further communication from Mr. R. C. Childers on the meaning of Nirwána.

Contents of the Journals.

Göttingische gelehrte Anzeigen, Oct. 19.—Weber's Indische Streifen, vol. ii., notice by Benfey.—Oct. 26. Brasseur de Bourbourg on the Troano MS., rev. by Benfey. [Questions the soundness of the author's system of etymology and interpretation.]—Merx's Grammatica Syriaca, rev. by H. E. [Criticises the disproportionate space allowed to very precarious conjectures.]

Literarisches Centralblatt, Oct. 8.—Bickell's Hebrew Grammar, rev. by Th. N. [Appreciative, though from an opposite point of view.]—Oct. 15. Baudissin's edition of an Arabic translation of Job, rev. by Th. N. [The MS. is in the British Museum; it is of no value to the Biblical critic, but interesting to Orientalists, as a specimen of the vulgar Arabic of the end of the second century.]—Lorinser's edition of the Bhagavadgîtâ, rev. by Wi. [An attempt (of small philological value) to derive the relative ideas of the poem from Christianity or from the "primitive tradition."]—Oct. 22. Thibaut's Jatapatala, rev. by A. W., [Favourable.]—The Poems of Tukârâma, vol. i., rev. by A. W.

Zeitschrift der deutschen morgenländ. Gesellschaft, 1870. No. 3. First letter of James of Edessa to Johannes Stylites, by R. Schröter.—Two hymns of the Rigveda, by R. Roth. [Metrical versions, with a collation of the opposite renderings of Max Müller.]—The 21st chapter of the ancient Canarese Jeimini Bhârata, by H. F. Mögling.—On the history of Arabic translations from Indian sources, and their influence on Arabic literature, by M. Steinschneider.—On Jyotirvidâbharaṇam, by A. Weber.—Contributions to Semitic epigraphy, by K. Schlottmann. [Remarks on the third Maltese Phœnician inscription, based on Baron v. Maltzan's photographs.]—The numeral systems in the Ethiopic group of Hamitic languages, by F. Prätorius. [Traces of an original quinary system, &c.]—Mirsa Schafft, by Ad. Bergé. [See under *General Literature*.]—On the column of Mesha, by A. Geiger.—The Bactrian camel and the land of Musri in the cuneiform inscriptions, by E. Schrader. [A reply to Nöldeke, shewing that Musri is the name of a people in the neighbourhood of Nineveh, and not = Mizraim.]—The Inscription of Mesha, by K. Schlottmann.—Extract from a letter of Dr. Socin.—Beal's Travels of Fah-Hian, notice by A. W.

Monatschrift für Gesch. u. Wiss. des Judenthums.—Joseph ben Aquin, by Ad. Neubauer. [Shews that two persons bearing the same name have been confounded.]—The second translation of Saadiah's book, "Emunoth wedeoth," by P. Block.—Rabbinical Studies, by J. Perles.

North British Review.—The Moabite Stone (see above). M. Oppert's Les Inscriptions de Dour-Sarkayan. [Is the dogmatic tone of this article legitimate?]

Pischel on Kâlidâsa, rev. by A. W. [A work of great promise.]—Lit. Centralbl. Nov. 5.

New Publications.

BAUDISSIN, COMES DE. Translationis antiquae arabicae libri Jobi quae supersunt ex apographo codicis Mus. Britann. nunc primum edidit. Leipzig: Doerffling u. Franke.

BENFEY, TH. Ueber die Entstehung u. Verwendung der im Sanskrit mit *r* anlautenden Personalendungen. Göttingen: Dieterich.

GINSBURG, C. D. The Moabite Stone, with a Facsimile, &c. Longmans.

HERMES Trismegistus. An die menschliche Seele; arabisch u. deutsch. Herausgeg. von H. L. Fleischer. Leipzig: Brockhaus.

LAO-TSE. Taò tě King. Aus d. Chines. ins deutsche übersetzt . . . von Victor von Strauss. Leipzig: Fleischer.

LUDWIG, A. Der Infinitiv im Veda. Prag: Calve.

PISCHEL, P. De Kâlidâsæ Çakuntali recensionibus. Partic. prima. Breslau: pp. 67.

Classical and Modern Philology.

The Characters of Theophrastus: an English Translation from a revised Text, with Introduction and Notes, by R. C. Jebb, M.A., Fellow and Assistant Tutor of Trinity College, Cambridge, and Public Orator of the University. London and Cambridge: Macmillan, 1870.

THE present state of the Greek text of the book known as *Theophrastus' Characters* is a noteworthy illustration of how much has been effected for the classics by the labours of many generations of critics. It marks with the accuracy of a thermometer how much has been done in the past, from how much still remains to be done; and it indicates, but more obscurely, how much there is which can never be hoped for.

If we take the book as we now read it in the current editions, and compare it with itself as it stood in the Ed. Pr. 1527, it may almost be said that our book has been written by the critics. But though a modern Hardouin might amuse himself by using this book to prove that the classics are books written by the Germans, yet, when we come to take it to pieces, we shall rather be surprised at the high degree of probability which belongs to much of the results of their labours. Scepticism as to the validity of our critical canons, and to the general prudence with which they are applied, is not justified by the current text of *Theophrastus*. On the other hand, there is in the current text a large margin of emendation outside the points that can be considered settled. This variable or unsettled portion of the text, indeed, bears so large a proportion to the whole, that we can scarcely, with strict propriety, speak of a "Vulgate" text of *The Characters*; each edition offering, as the work of Theophrastus, a book of very different contents.

The tradition has come down to us in an unusually large number of MSS. Thirty-six are already known. This is a larger number than most Greek classics can show. But in this instance, as in others where a large number of MSS. are found, collation discloses the fact that number is no guarantee of correct text. In the latter half of the last century (1763, not 1767 as Mr. Jebb says) J. F. Fischer published an elaborate collation of MSS. and early editions. Fischer's *apparatus criticus* supplies a striking example of the futility of the accumulation of various readings before the relationship of the MSS. to each other has been accurately determined.

In the case of the *Characters* this relationship is now certainly known. But in arranging our thirty-six MSS. into families, we come across another distinction among them which gives a peculiarity to this case. The distinction is that they present the text in three degrees of expansion or contraction. This fact is material in the history of the transmission of the book. There are three texts: (1) the fullest text; (2) the abridged text; (3) the intermediate between the fullest and the most contracted.

The mass of the thirty-six MSS. belong to the third class, and offer a text which is intermediate between the full and the abbreviated. The second, or abbreviated, text is represented only by one MS. of late date, 15 sæc. The first, or the full, text is also found in only one MS., now usually designated as the *Palatino-Vaticanus*. It is, according to Cobet, of cent. 14. It is subject to two defects: (1) it contains only the last fifteen characters (out of thirty); (2) it offers the text in a most corrupt state, having many words which are not even Greek at all, and many lines of Greek which are not intelligible.

The *Palatino-Vaticanus* is the only MS. which exhibits the fuller text. It discloses a fact, which but for it could never have been known, that the book, as read in the mass of the MSS., is an abbreviated book. The light thus thrown on the origin of our book is even more important than the additions actually made to our text by the *Palatino-Vaticanus*. Yet these additions are considerable. They amount to one whole character (char. 29), and to about 125 lines in the remaining fourteen characters. The total number of lines (typographical) of which the whole book consists, in the Vulgate recension, may be taken as 760. The total number of lines which the *Pal. Vat.*, had it contained the whole thirty characters, would have added to the text, would have been 250. The epitomator, therefore, who wrote the Vulgate, has retrenched about 250 lines out of 1010, *i.e.* about one-fourth of the whole.

By what principle was the epitomator guided in abridging? Did he desire to reduce into shorter compass a book already so short? This was not, or was not his only, view in abridging. The omissions in the Vulgate are, mainly, omissions of the unintelligible.

Was the Vulgate text abridged from our *Pal. Vat.*? It was not; for the *Pal. Vat.* is of the 14th century. But we have two copies of the epitomised text which are as early as the 10th century at least, the Paris A. and B. The abridged text is therefore at least as old as the 10th century.

On the other hand it can be shown by evidence too minute to be here detailed, that the Paris A. and B. of the 10th century, and the *Pal. Vat.* of the 14th century, are derived from a common source. They had, not a common father, but a common ancestor. This common ancestor

must have been dilapidated and greatly illegible in the 10th century.

This is all the evidence which is attainable from the condition of the MSS. as reported. This condition raises various questions which the evidence does not answer. In particular, the circumstance of two abridgments having been made, naturally suggests the question, Was the archetype itself, the common parent both of the *Pal. Vat.* and the Paris A. and B., a work of Theophrastus, or was it already an abridgment or extract from a larger work or works? Much ingenious combination has been expended on this enquiry. It is by no means to be asserted that the enquiry leads to nothing. Something like evidence has been collected by the laborious researches of Usener and Petersen. As the argument stands at present there appears to be a probability that in the fullest text of the *Characters* we have only an excerptor's book. The *Characters* are fragmentary extracts of striking bits from a general treatise on Ethics. Theophrastus followed, in the arrangement of this treatise, the order of topics in his master's *Nicomachean Ethics.* He inserted in it sketches of character in which he allowed himself much more dramatic play than is found in the severer delineations of the fourth Book of the *Nicomachean Ethics.* Excerpts from these sketches, combined into a book by a spiritless preface and nonsensical head and tail-pieces, form our book of *Characters.* This is a theory of which the probability will be likely to recommend itself more and more as the subject is dwelt upon. But it is only a probable theory. It affords no basis for an editor to proceed upon. The problem proposed to the textual critic is not at all to attempt to restore *Theophrastus.* To the condition of the archetype no criticism can now penetrate. The diplomatic tradition goes back to the 10th century. We have no means of passing this limit, still less of filling up the vast chasm of twelve centuries which separates Paris A. and B. from the time of Theophrastus. We cannot even aim at ascending to the common ancestor of Paris A. and B. and the *Pal. Vat.* The definite aim of an editor of *Theophrastus* must be to render so much as the abridger or copyist in cent. 10 could decipher. In other words, to give the text of A. and B. for the first fifteen characters, and of the *Pal. Vat.* for the last fifteen. The remaining MSS. are valuable as affording the evidence on which rests the unique character of sole authority attributed to the other three, and have no further use.

The doctrine here laid down that an editor must make it his object to reproduce the 10th cent. A.D. and not the 4th cent. B.C., is condemnatory at once of many proceedings of many editors. *E.g.*, a very favourite mode of dealing with *Theophrastus* is transposition. The application of transposition to *The Characters* is favoured by the circumstance that one certain instance of displacement is diplomatically established. In char. 11, βδελυρίως, there is found, not only in the inferior MSS., but in Paris A. and B., a paragraph, forming in bulk half the character—the concluding half. The contents of this paragraph seem to us to be anything but a description of the βδελυρὸς. But inappropriateness can go for nothing in this book, if the principle be conceded that we are to reproduce not *Theophrastus*, but an excerptor, and an excerptor who was capable of writing the definitions which head each character. This irrelevant paragraph, therefore, must have retained its place in char. 11, had it not happened that when the *Pal. Vat.* was discovered in 1786–88, this very section which stands in every other MS. to the credit of the βδελυρὸς, was found in a place where it is entirely appropriate, viz., in the last character, char. 30, that of the αἰσχροκέρδης, embedded in the middle of remarks which form with it a consistent and unmistakable whole. Here is a case of transposition, which would have been suggested by irrelevancy, and is diplomatically established. Upon this hint the transposers proceed, and wherever they detect inappropriateness, or even disconnection, claim a right, founded on this precedent, to replace a sentence in a better position. Otto Ribbeck has characteristically caught at this straw, and has proposed transpositions in the characters to a large extent (*Rhein. Museum*, Jan. 1870). Granting that these transpositions are all "improvements of the sense," yet they are all excluded by the view of an editor's duty here contended for. All these transpositions assume as their justification that such a collocation of paragraphs could not have proceeded from Theophrastus. Granted that it could not. But we have not Theophrastus's book. Our book is a set of excerpts collected in the 10th cent., or not later than the 10th cent. That is the book which we have to reproduce in type. The removal of the paragraph which in Paris A. and B. stands in char. 11 to char. 30 is right; not because it is appropriate in the one place and not so in the other; not because Theophrastus must have so placed it, but because it was so placed in the excerpta. This is the fact, as we now know from the *Pal. Vat.* How it got into char. 11 in all the other copies, we may conjecture. It was the outside fold of the roll, or the last leaf of the volume, and so liable to become detached, and then inserted in the wrong place. Its case is peculiar, and affords no analogy for the justification of other transpositions.

The same view of an editor's duty will condemn another arbitrary procedure to which Mr. Jebb has resorted. The 30 characters, as they have come down to us, follow each other at haphazard. There is no transition of style from one to the next, no sequence of thought, no arrangement. This is what we should have expected in a book of excerpts. But the order, or want of order, in which they follow each other, is uniform in all the MSS. It is part of the tradition. Mr. Jebb has substituted, in his edition, a classification founded on ethical principles. This novelty is also to be lamented as a drawback to the utility of the book. Reference to the new numeration is a business so tiresome as to become practically impossible. But the practical inconvenience of a new arrangement must be submitted to when the re-arrangement is commanded by a critical demonstration. In the present case there is not only no demonstration, there is no evidence for a rearrangement. That Theophrastus' treatise, Τὰ ἠθικά, may have observed a better psychological method is possible. A historian of philosophy endeavouring to draw up an account of Theophrastus' remains may dwell on this possibility. To the historian properly belongs the "freiere Behandlung des Ueberlieferten" which Otto Ribbeck claims to exercise. An editor of *The Characters* cannot proceed upon such a basis, or attempt to consider "what Theophrastus may have written." Prof. Ribbeck is dissatisfied with Petersen's edition. He calls it "ungeniessbar," and classes it with Ussing's, a very inferior book. Not to mention the valuable Prolegomena which are prefixed to Petersen's book, his text seems to be based on a sound principle, though he has adopted individual conjectures which he would now recall himself.

It may be unfair to try Mr. Jebb's edition, which only professes to be a schoolbook (it is expurgated for the purpose), by a critical standard. A scholar like Mr. Jebb would, no doubt, have himself preferred to give a scholar's book. If the conditions of publication in a "practical" country have forced him to do inferior work, he deserves sympathy rather than blame. Yet by adding to an Introduction, and illustrations of a very slight and popular character, a body of "Critical Notes," his book brings itself within the

range of philological criticism. The critical notes are almost wholly a selection from the previous editions, though they offer some original conjectures of Mr. Jebb. Of these conjectures one deserves mention. In char. 28 (21 Jebb) the *Pal. Vat.* has καλεῖται γοῦν ἡ ψυχὴ κρινοκόρακα. For the monstrous collocation of letters κρινοκόρακα, Mr. Jebb proposes Κορινθιακῶς, "she is called 'my life' in the language of Corinth." This is very ingenious, nay, witty. But it cannot be right, for several reasons. One is sufficient. The γοῦν shews that the word wanted is an epithet which should be the reason of the previous assertion that "his mother was *well-born*."

MARK PATTISON.

The Fragments of Plautus' Vidularia. [*Ind. schol. in universitate litteraria Gryphiswaldensi per semestre hibernum anni* 1870-71 *habendarum.*] By W. Studemund. Greifswald, 1870. pp. 26. 4°.

THE newly-appointed professor at Greifswald, W. Studemund, already well known to all students of Plautus by his treatise *De Canticis Plautinis* (1864), and his subsequent important contributions to the *Hermes* and *Rheinisches Museum*, gives here a complete edition of all that exists of the *Vidularia*, the twenty-first of the comedies considered genuine by Varro. As early as the time when the old MS. of Camerarius was written (saec. xi.), this play seems to have been lost, as the MS. in question concludes in this manner, "Truculentus explicit, incipit Vidularia," though it seems evident that nothing more was ever contained in it, thus leading to the conclusion that by some mishap the *Vidularia* had been torn off in the archetype from which the MS. *B* was copied. From the few citations of isolated passages from the *Vidularia* in the grammarians, but very little could be ascertained, and they were even apt to lead to very erroneous suppositions, as Professor Studemund shows by the example of my own assumptions concerning some features of the plot of the *Vidularia*, based of course on such imperfect knowledge of its fragments as we possessed in 1864. It is true, some new fragments had been published from the Ambrosian palimpsest by A. Mai in 1815, but owing to Mai's great carelessness, very little could be gained by them. Professor Studemund has now succeeded in recovering and deciphering seventy-three lines, and by their help has reconstructed the plot with considerable certainty. In the first scene, consisting of thirty-eight lines, Nicodemus, a young man who was shipwrecked, lost his "vidulus" (whence the name of the play), and had found a shelter in the house of a poor fisherman, Gorgo, offers himself as servant to a rich old man, Dinia. In the second scene Cacistus and Gorgo quarrel about the vidulus, which had been found by the latter, but appropriated by the first. Gorgo finally carries the vidulus away, Cacistus remains, and Dinia and Nicodemus appear, the first being now acquainted with Nicodemus' misfortune, and promising his assistance. The rest can only be guessed. Cacistus informs Dinia where his vidulus is, it is now delivered into Dinia's hands, and on its being opened a ring found in it proves Nicodemus to be the son of Dinia. There seems also to have been a love-intrigue with a certain Soteris whom Nicodemus finally marries, after she has also been proved to be of free birth and descent. Here we feel inclined to supplement Professor Studemund's conjectures as to the plot of the play, by assuming that the *Leno* mentioned in the twenty-first fragment was the one in whose power Soteris originally was; a supposition strengthened by the parallel plot of the Rudens, to which the *Vidularia* bears the most striking resemblance. This may be admitted, though it shall be candidly confessed that Professor Studemund interprets the fourteenth fragment more justly than I did in my treatise on the *Aulularia*.

As concerns the text given here, we cannot but speak very highly of the editor's sagacity in reading and emending his palimpsest, and of his caution in abstaining from mere metrical corrections. It is surprising—and to the professed hiatus-haters, no doubt, annoying—to find in about seventy new lines two decided instances of hiatus, admitted as legitimate by some critics, but persecuted by others. Professor Studemund is, I am glad to observe, of the same opinion as developed by myself in my introduction to the *Aulularia*, p. lx. sqq., in admitting hiatus in the cæsura penthemimeres of a senarius; fr. ii. v. 29, "quam me óravísti | út darem tibi faénori;" ib. 34, "defaéneráre | hóminem egentem haud áddecet" [so we should write, the MS. having "hau decet"]; but then it is true that we have also two other passages with inadmissible hiatus; fr. i. 7, "dare póssum, opinor, sátis bonúm operárium" (where the editor proposes "bonum me op."), and ii. 32, "qum míhi, qui vivam, cópiám inopí facis," lines which will have to be added to the instances collected by C. F. W. Müller in his *Plautinische Prosodie*, p. 537, sq.

We purposely refrain from adding conjectures on the lines now first published by Professor Studemund, but observe that in the thirteenth fragment it is absolutely necessary to scan "nesció qui seruos é myrteta prósiluit," ⏑ ⏑́ ⏑ –, thus making the whole an octonarius iambicus. Query: fr. ii. 10, ought we not to fill up "myrtos" or "myrta"? The whole line was perhaps "vérbero illic ínter myrta ástute insidiás dedit."

In his notes on the text the editor gives valuable and exhaustive observations on "unus," seemingly used as an indefinite article by the comic writers, on the construction "impertire alicui aliquid," on "em" in an apodosis = "tum," and on the spellings "mercennarius," "quallus" and "qualus" (the latter adopted by Mr. Munro in Horace, *Od.* iii. 12, 4), and "narare" (cf. "gnarus").

In conclusion I recommend the present treatise as an excellent specimen of sound and methodical investigation and disciplined research.

W. WAGNER.

On the Influence of the Germanic Languages on those of Finland and Lapland. [*Ueber den Einfluss der germanischen Sprachen auf die finnisch-lappischen.* Eine sprachgeschichtliche Untersuchung.] By Wilh. Thomsen. Translated from the Danish by E. Sievers. Revised by the Author. Halle, 1870.

IT very seldom happens that the investigation of foreign words imbedded in any given language can be made of interest and importance for the study of the language from which they are borrowed, over and above the ordinary aim of such enquiries, viz., the etymological sifting of the vocabulary of the language which borrows them. We have, however, one instance of this in the large number of words of Germanic origin, which have been taken up into the Finnish and Lappish languages. These words reach back to a time coeval with, and even anterior to, the oldest monumental relics of Germanic speech. Withdrawn in this manner from the main stream of development in the language to which they belong, and preserved in the texture of a foreign language which has changed but little, these words have retained, even to the present day, their ancient form and character, which have been long lost in their original German home. They thus present an extremely interesting example of relics of old Germanic language preserved in the mouth of an actually existing population. This subject has already attracted the attention of Norse scholars (Ihre, Rask), and more recently, of some of the great Germanists, F. Dietrich, J. Grimm, and L. Diefenbach. Hitherto, however, no scholar has been found with a sufficiently perfect and thorough knowledge of *both* of the groups of language con-

cerned, to treat this question in an exhaustive and comprehensive manner. In the work before us, Dr. Thomsen has shewn that he possesses this requisite knowledge; and his careful digging out of the necessary materials, as well as his conscientious and methodical account of the results which he has arrived at, give this first work of his a permanent value.

The author is quite right in clearing the way for his inquiries by a short description of the two main branches of the Finnish race, including the Lapps and Finns (*Suomalaiset*) in the narrower sense, of the development of the original Finnish-Lappish language into its Finnish and Lappish varieties, and by a precise comparison of the corresponding sounds in each. This last often furnishes the means for determining the original form of the embedded Germanic words. For the variations of the Lappish system of sounds from the Finnish leave their mark upon the German words which exist in either language; and it is necessary to bring the different Lappish and Finnish forms of any given word into some sort of agreement, before any conclusion can be arrived at respecting the Germanic original which preceded them both. On the whole it appears that the Finnish system of sounds is at once of earlier date and better preserved than its Lappish sister, especially in the case of vowels. Hence it follows that the Finnish form of a word of Germanic origin is in general the more genuine, *i.e.* the less modified, these modifications consisting only of certain peculiarities of the Finnish sound-system in general, such as the simplification of the groups of consonants at the beginning, and the frequent addition of a vowel at the end, of a word.

The fundamental assumption upon which the enquiry is based, is that all those words in Finnish-Lappish and in German which are obviously coincident, really owe their origin to the Germanic languages. Beyond the strong presumption in its favour which is furnished by the fact of the rarity of the opposite process (the neighbouring Germanic languages of Swedish and Norwegian being the only ones into which a few Finnish words have been taken up), this generalization cannot be said to be strictly *proved*. Indeed, it would have been impossible for the author to prove it without giving in the case of every single word all the pros and cons of the claims of the two languages to its parentage. To one, however, who is acquainted with both the languages in question, this assumption commends itself mainly for the following reasons: (*a*) because the majority of these words are widely connected in the Indo-Germanic family, whereas they are not traceable in other Ugrian languages; (*b*) because there is a large number of cases, in which the Finnish languages are known to have taken up already existing words, and modified them according to their own laws of sound; (*c*) because there exists a certain number of formations, *e.g.* the nominative, the feminine, and a variety of stem-terminations, which continually appear in the Finnish, but which are only explicable upon the supposition that they belong to the Indo-Germanic family of language, and therefore to the German branch of it. The whole of the remainder of Dr. Thomsen's essay consists of the confirmation of the above principle, more particularly with reference to (*b*) and (*c*). In some few cases, perhaps, the itch of discovering the traces of German in the Finnish language has led the author to assume connections between words which are questionable and cannot be proved satisfactorily. This, however, is a pardonable extravagance; and the author does not conceal the doubtful nature of some of his instances. And, on the other hand, we may be sure that Ugrian philologists will not be slow to reclaim their alienated property.

The author lays special stress on the modifications of sound which have been superinduced by the Finnish and Lappish upon the immigrant foreign words. The quality of the German vowels seems to be preserved with the utmost fidelity, if we except some unimportant interchanges of *e* and *i*, or *o* and *u*. And even the quantity of vowels which has been lost in the existing Germanic languages has been preserved in Finnish in its primeval purity. The German diphthongs have been especially well-preserved, which proves the remote antiquity at which many of these words were borrowed, reaching back beyond the old Norse, in some cases even beyond the Gothic languages. Thus, for instance, Finn. *ai* = Goth. *ai*, which has become in Old Norse *ei*, or even *á*: *ainoa* (only) = Goth. *ainaha*, Old Norse *eink*, *einn*; F. *raippa*, Lapp. *raippe* (rope) = O. N. *reip*, Swed. *rep*; F. *airut* (messenger) = G. *airus*; F. *airo* (oar) = O. N. *ár*; F. *laina* = O. N. *lán*. So, again, *au* corresp. with G. and O. N. *au*, which in the latter language afterwards passed into *ö*: F. *autuas*, L. *audogas* (blessed) = O. N. *auðugr*, G. *audags*; F. *laukka*, L. *lavkke* (leek) = O. N. *laukr*, Swed. *lök*, which was again received by F. as *lyökki*. It is remarkable, too, that the Finnish has not yet acquired the modification of vowel (umlaut) by *i*, which appears in many O. N. words, whilst it preserves the *i* and *j*, to which the "umlaut" owes its origin: F. *kaltio* = O. N. *kelda* (fountain); L. *ruonas* (green) = *groenn*. The presence of this "umlaut," on the other hand, seems to be a sign that the word has been borrowed at a later period, as F. *penkki* (bench) = Schw. *bänk*. In the same way again the "umlaut" produced by *u* of the O. N. finds no representative in the Finnish: L. *garves* (ready) = O. N. *görr* (Old High German *garo*, Anglo-Saxon *gearu*).

In their treatment of the German consonants the Finnish languages necessarily exercised a greater freedom, as they possess only certain mute consonants (hard *k*, *t*, *p*, or soft *g*, *d*, *b*), and no double consonants at all, at the beginning of words. On the other hand, in the middle of the word the original *tenuis* in German is still indicated, at least in Finnish, by a double tenuis; an original media is indicated by a single tenuis in F. or by one of its later substitutes. F. *nuotta*, L. *nuotte* (net) = O. N. *nót*, on the contrary *paita* (shirt) = Goth. *paida*. The group *ns* is preserved more closely than in O. N., as F. *ansas* = Goth. *ans* (ansa-) O. N. *áss*.

For the Germanist scholar the following section is decidedly the most instructive, in which the author shows how the Finnish has retained in some of its German words a certain grammatical form which has no meaning except in Germanic languages. From the analogy of foreign words which are derived from the Lettish languages, the author shews that the Finnish has taken up into itself in a large number of instances foreign nouns in the nominative case, and still exhibits the characteristic Indo-Germanic *s* with a completeness of form, which even the Gothic does not any longer retain (in the old Norse it has already changed it into *r*, and it afterwards vanishes altogether). And he shews further that at least the primitive differences of stem-termination of nouns is reproduced in a distinct manner, even indicating the modification of the feminine termination; thus we find *o* (*u*) in Finn. = O. N. *u*, originally *â*. It is interesting to notice here the retention in a great many cases of the complete stem-termination *ja*, e. g. in F. *lattia*, L. *latte* (floor) = O. N. *flet*, which points to a German basis **flatja*; F. *patja* (mattress) = Goth. *badi*, O.N. *beðr* (**badja*).

This strictly methodical treatment of the Germanic words in the Finnish languages throws some light upon the primitive history of the Germanic and Finnish races. The fact that the Lappish and Finnish (with its dialects) have borrowed

the same words, and that in a form which is older than the old Norse and to some extent also the Gothic of Ulfilas, and the further fact that these borrowed words are the names of a great variety of objects and relations (dress, dwellings, politics and law, agriculture, parts of the body, &c.), and embrace besides no small number of abstract qualities (as dear, blessed, zealous, righteous, beautiful, sick); all this seems to show that the Finnish race formed a closely compacted ethnographical unit, between 1500–2000 years ago, and must have lived in close and prolonged intercourse with a neighbouring Germanic people. And secondly that the seats of this Germanic people in whom the Goths may easily be recognised from historical indications, if one takes into account the movement of the Finns westward, which may be proved to have taken place later,—must have extended from middle Russia to the Baltic provinces. Then the traces of a peculiar Norse influence upon the Finnish language may be explained in a satisfactory manner by prolonged immigrations from Scandinavia, like the later Swedish settlements in Finland and Esthonia.

At the end of his book Dr. Thomsen gives a very convenient glossary of Germano-finnish words of ancient date in all forms which concern the subject in hand, and with references to the passages of his book, where these are treated of. It is here also that the author himself expresses his doubts on some Finnish words still produced as words of Germanic origin. He would have done better if he had not used these doubtful words as proofs in the course of the investigation itself. (Comp. the articles on *epä*, *kansa*, *kartano*, *kunta*, *lafea*, *mato*, *ota*, *paljo*, *rakennan*, *sairas*, *solki*, *surku*, *utar*, *viesso*). Those on *aika*, *ansaitsen*, *kakra*, *karvas*, *kiusa*, *narka*, *buojdde*, *tila*, *vahto*, seem still to admit of some doubt.

JOS. BUDENZ.

Intelligence.

The Bodleian has recently purchased a MS. of Propertius, assigned by Mr. Coxe to the middle of the fifteenth century. It is a small volume, containing Propertius alone, divided into four books. The average number of lines in a page is twenty-three: the writing appears to be not quite uniform. At the end is a distich which states it to have belonged to Petrarch; but this is impossible, as it must have been written long after his death. Amongst other readings of interest are *fulvis* for *fluviis* π. 9, 12; *Rorida* for *Roscida* π. 30, 26; *crethei* π. 34, 29; *inflatis omnia*, *ib.* 32; *restabit erūnmas*, *ib.* 55; *Accersis lachrymis cantas*, iv. 1, 73; *rorida*, iv. 4, 48; *droroxatum*, iv. 5, 21; *Fac similes puros sidens esse* deos *dies*, *ib.* 34.

Mr. Skeat is preparing an elaborate edition of the Anglo-Saxon Gospel of St. Mark, from all existing MSS. The work will practically be a continuation of Kemble's A.-S. Matthew, and, like it, will give the most important text in full, in parallel columns, with the readings of the less important MSS. at the foot of each page. Owing to the inaccuracy of former editions, Mr. Skeat finds it necessary to work up all the texts from the MSS. themselves.

Mr. J. A. H. Murray's Treatise on the Dialects of the South of Scotland, forming Part II. of the Philological Society's Transactions for 1870, will be issued at the end of this year, or the beginning of next. Mr. Murray not only gives a full account of the modern language and its numerous dialects, especially his own—that of Teviotdale, but traces the history of the language,—its Anglian origin and gradual separation from the old northern English—from the earliest times to the present day. The author possesses qualifications which are not often found united in one person: he is an experienced phonetician, both theoretical and practical, a scientific philologist, and, it need scarcely be added, is thoroughly familiar with his native dialect.

The Third Part of Mr. Ellis's work on Early English Pronunciation will be ready early in 1871. It will contain a critical text of the Prologue to the Canterbury Tales, in which the orthography of the Harleian MS. will be normalized, especially with regard to the treatment of final *e*, with the pronunciation in Palæotype. Then will follow specimens of Gower and Wiclif. The rest of the volume will consist of some of the phonetic treatises employed in the investigations contained in the First Part, a Pronouncing Vocabulary of the 16th century, an examination of Shakspere's rhymes and puns, and a specimen of his pronunciation, &c.

A recent paper by F. Miklosich, in the *Zeitsch. für die österr. Gymnasien*, "On the Slavonic Elements in Modern Greek," is important from an ethnological as well as a philological point of view. When Fallmerayer broached the theory, forty years ago, that no Hellenic blood flowed in the veins of the modern Greeks, one of his arguments in support of that position was derived from the influence exercised by Slavonic languages upon the Greek tongue. He maintained that the absence of an infinitive mood, and other peculiarities, in modern Greek, were caused by contact with Slavonic forms—a point which was still further developed by his contemporary, Heilmaier, in his *Entstehung der Romaischen Sprache unter dem Einflusse fremder Zungen*. At the same time a number of words in that language were adduced, which were represented as being of Slavonic origin. The question has never been satisfactorily investigated up to the present time, for it requires a critic who is possessed of a competent knowledge of the languages of European Turkey, sufficient to prevent him from being led astray by chance similarities, and to enable him to discover the original source of a word which is found in several languages; and together with this, an absence of prepossessions on the subject, and of bias in favour of the claims of any particular language. M. Miklosich, who unites all these qualifications, professes to enter on the question with the view of testing the value of Fallmerayer's argument; and the conclusion at which he arrives is, that while both the sounds of the modern Greek language and its syntax are free from all traces of Slavonic influence, the individual words which have been imported from that source are not numerous, and that some supposed instances are really derived from Albanian, Turkish, or the Romance languages, while others have either become the common property of many of the races of the peninsula, or have passed into the Greek from the Slavonic through the medium of some other language. The catalogue of words, accompanied by discussions of the etymologies proposed for them, will have an independent value for the critical students of modern Greek.

Contents of the Journals.

Hermes, vol. v. part 1.—U. Köhler: Studies on the Athenian psephisms iv.—M. Haupt: Varia.—A. Kirchhoff: On the history of the Attic epigram. [Attempts to explain the presence of dialectical forms in these epigrams.]—V. Rose: Commentaries on the Ethics of Aristotle. [An elaborate account of the MSS. which contain the commentaries ascribed to Eustratius, Aspasius, &c.]—R. Schöll: MSS. of Plutarch at Florence.—Th. Mommsen: An Athenian "deed of foundation." [On an inscription in the church of the Panagia Pyrgistissa at Athens, with an explanation of the ancient way of expressing sums of money.]—H. van Herwerden: Ad veterum orphicorum fragmenta. [Emendations, many of which have very little to recommend them.]—P. Krüger: Ciceroniana. [On the Turin palimpsest.]—C. Aldenhoven, fil.: On Victor de viris illustribus.—B. Müller: On Plutarch περὶ ψυχογονίας. [Appendix to article in vol. iv.]—V. Rose: Suidas in Latin. [On a London MS. of the medieval Latin version of Suidas.]—P. Jaffé: On the doubling of consonants in writing.—M. Haupt: A paleographical fable.

New Publications.

AELIANI, CLAUDII, varia historia ex recog. Rud. Hercheri. Leipsic: Teubner.

CÆSARIS, C. JULI, Commentarii cum A. Hirti aliorumque supplementis. Recog. Bern. Dinter. Vol. II. Comm. de Bell. Civ. Leipsic: Teubner.

CIHAC, A. DE. Dictionnaire d'Etymologie daco-romane. Eléments latins comparés avec les autres langues romanes. Frankfurt, A. M.

ELLENDT, DR. F. Lexicon Sophocleum. Ed. alt. Em. Cur. H. Genthe. Fasc. VI. Berlin: Bornträger.

HORATIUS H. E. Opera recens. O Keller et A. Holder. Vol. II. Fasc. 2. Leipsic: Teubner.

HOMER'S ILIAS. Für den Schulgebrauch erklärt v. J. La Roche. 4 Thl. Gesang 13–16. Berlin: Ebeling u. Plahn.

PEIPER, R. Praefationis in Senecae tragoedias nuper editas supplementum. Leipsic: Teubner.

RUMPELT, H. B. Die deutschen Pronomina u. Zahlwörter, historisch dargestellt. Leipsic: Vogt.

RUTILII NAMATIANI Cl. de reditu libb. II. Accedunt Hadriani Flori Apulei Anniani Sereni aliorumque sacc. a.u.c. X. poetarum reliquiae. Rec. et praef. est, Lucianus Müller. Teubner.

THEOCRITI IDYLLIA. Comm. crit. atq. exegeticis instr. A. T. A. Fritzsche. Accedunt adnot. sel. Chr. Wordsworthii. Ed. II. parabilior, uno vol. compreh. (pp. 707). Leipsic: Teubner.

THEOCRITI IDYLLIA. Ex. rec. Fritzschi. Ed. I. parabilior (pp. 168). Teubner.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, January 14th, and advertisements should be sent in by the 8th.

General Literature and Art.

The Earthly Paradise. A Poem. By William Morris. Part IV. London: F. S. Ellis, 1870.

Mr. Morris, in the verses to the reader which opened the first volume of his long poem, as well as in the *Envoi*, which closes its last volume now before us with an accent the most intimate and winning, has on his own account disclaimed alike ambition and prowess for the deeds that befit heroes. For other people, however, it will be difficult to avoid thinking of him as the hero in truth of a notable material exploit; inasmuch as he has in little more than three years carried his great undertaking safely through, and beyond all danger of falling, like so many poetical undertakings, into the category of things unaccomplished.

Another risk proper to the work of art which grows slowly, and takes long from projection to completion, is the risk of losing unity through change of sentiment in the artist, or through new modes of treatment or conception growing upon him unawares. It seems as if this contingency might be traced as having, within certain limits, actually befallen the progress of the *Earthly Paradise.* There is much, certainly, to maintain in the book from end to end a prevailing harmony of impression. Above all there is one never-forgotten key-note; there are the conscious love of life for living's sake, and the realised detestation of death because it puts an end to life, which at all moments of imagined festivity or delight recur with wistfulness to deplore that such things must pass away, and to desire for them immortality in the midst of denying it. All this indeed takes, if possible, a greater explicitness and importunity in the last than in the earlier volumes. In this lay the lure which first drew the Northern voyagers from their homes, and in this lies the sadness of their latter days. After the last tale of the twelvemonth's cycle is told out, the epilogue dealing with their remaining life is very short, and is addressed chiefly to their vindication against a conjectured charge of vain hope and cowardice, in seeking to escape from fate:—

"Cry out upon them, ye who have no need
Of life to right the blindness and the wrong!
Think scorn of these, ye who are made so strong
That with no good-night ye can loose the hand
That led you erst thro' love's sweet flowery land!
Laugh, ye whose eyes are piercing to behold
What makes the silver seas and skies of gold!
Pass by in hate, ye folk who day by day
Win all desires that lie upon your way!
Yet 'mid your joyous wisdom and content,
Methinks ye know not what those moments meant
When ye, yet children, 'mid great pleasure stayed,
Wondering for why your hearts were so downweighed;
Or if ye ever loved, then, when her eyes
In happiest moments changed in suddenwise,
And nought ye knew what she was thinking of;
Yet, O belike, ye know not much of love
Who know not that this meant the fearful threat,
The End, forgotten much, remembered yet
Now and again, that all perfection mocks."

Again, and in a vein less intense than the above, where in the *Envoi* the author personifies his book—despatching it, in a half-laughing manner of delightful simplicity, on its dubious journey towards "the land of Matters Unforgot," and dictating a discourse which it is to hold with the shade of Chaucer on the road—one of the first things it is instructed to say of itself and its writer is this:—

"Death we have hated, knowing not what it meant;
Life we have loved thro' green leaf and thro' sere.
Tho' still the less we knew of its intent."

And once more, in the story of *Bellerophon in Lycia*, where Philonoe urges her lover to leave her father's city because of plots laid against life, her last resort of persuasion is to a passionate amplification of the question—

"*Of the dead* what hast thou heard
That makest thee so rash and unafeared?
Can the dead love?" &c.

But it would be endless to complete the tale of instances in which this dominant sentiment asserts itself. And it remains to signify what are the points of change, and what the novelty of strain, of which we have spoken as perceptible beneath this spiritual unity, and notwithstanding the further and technical unity of a style easy and voluble in one place as in another, and calling for little castigation if perhaps it gets less, of a diction always appropriate in simple fecundity, a versification neither aiming at finish nor missing music and variety. At the beginning, then, it seemed that this story-teller was going to content himself, for sources of interest, with the primary and simplest elements of story-telling; moving his figures through incidents foreknown in the main to all of us, and, although with deliberate pause and affectionate delay devising and filling in such visible details as the mind loves to linger among, yet not working up the turns of his narrative or the inward processes of his characters to any advanced pitch of dramatic or human intensity. The work thus conceived was a new thing in modern literature, an inspiration carried out to clear and admirable success. But by degrees there have come other elements into some of the tales told,—deeper poetical motive, greater complexity of incident, greater force and subtlety of emotion, more of the conscious and sensitive modern self mingling with the ancient direct nature and all-adorning fancy. And with these has come the loss of something of the old melodious equality, and gentle maintenance of delightfulness. The fuller and more intense poems, like those of *Gudrun* or *Bellerophon*, are both better and worse than the quieter and more external or pictorial poems, like those of *The Man born to be King* or *Acontius and Cydippe.* They are full of strokes and passages that indicate ample command over whatever lies deepest, ample knowledge of passion and the heart, full imaginative and rhetorical mastery. But these things seem to need for their expression a poetical medium more concentrated and more highly wrought than this is, except now and then for some half-dozen lines; they do not, I think, lend themselves with complete propriety to that method of descriptive *cataloguing* (if one may use so ugly a word for so pleasant a thing) which is full of charm when employed on matters of lighter import.

The tale of Bellerophon is the leading one of this last volume, and is divided into two parts told by two different elders, and with a Northern tale coming between them. The former part has most of tragic intensity, dealing with the difficult subject of the passion of Sthenobœa:—

"Ut Proetum mulier perfida credulum
falsis inpulerit criminibus nimis
casto Bellerophonti
maturare necem refert."

The latter part has most of narrative complexity and suspense,

dealing with the love of Bellerophon for Philonoe, daughter of Jobates, his victories over the Solymi, the Amazons (conceived not as Attic art conceived them, but as grimly hags by mere hideousness a terror to their enemies), and the Chimæra; and some further adventures, invented in the spirit of the most vivid modern romance, in which the conqueror with the help of his love frustrates the wiles of a jealous captain of Lycia. This is a poem in its author's very best manner, full not only of sentiment and action, but of all that is most his own in sustained sweetness and minute visionary veracity, and equal affection for things homely and heroic. The poem placed between these two tells a version of the well-known tale of the bronze Venus closing her finger on the ring meant for the finger of a mortal bride—a tale employed, among others, by M. Prosper Mérimée for his *Venus d'Ille*. Note in it admirable loveliness of the following passage of nature; where Laurence, the spell-bound bridegroom of the bronze instead of the mortal lady, is on his way to an appointed encounter with a nightly train of heathen spirits:—

"At first on his left hand arose
Great cliffs and sheer, and, rent from those,
Boulders strewn thick across the sand,
Made weary work for foot and hand;
But well he knew the path indeed,
And scarce of such light had he need
As still the summer eve might shed
From the high stars or sunset dead.
Soft was the lovely time and fair,
A little sea-wind raised his hair,
That seemed as though from heaven it blew;
All sordid thoughts the sweet time slew,
And gave good hope such welcoming
That presently he 'gan to sing,
Though still amid the quiet night
He could not hear his song aright
For the grave thunder of the sea,
That smote the beach so musically,
And in the dim light seemed so soft
As each great wave was raised aloft
To fall in foam, you might have deemed
That waste of ocean was but dreamed,
And that the surf's strong music was
By some unknown thing brought to pass.
And Laurence, singing as he went,
As in some lower firmament,
Beneath the line that marked where met
The world's roof and the highway wet,
Could see a ship's light gleam afar
Scarce otherwise than as a star,
While o'erhead fields of thin white cloud
The more part of the stars did shroud."

But note also a certain vagueness and dreaminess of the senses coupled with a certain exaltation of the spirit, and constituting a subjective state for the reception of the landscape impression in this case, such as is alien from the ordinary temper of the writer. Ordinarily his landscape is the precise and delicate record of observation by perfectly alert senses free from all preoccupation, trouble, or impediment; and of this there is no better instance than the return of fishing-boats at morning seen by Laurence after his adventure is over:—

"Then from that drear unhallowed place
With merry heart he set his face.
A light wind o'er the ocean blew,
And fresh and fair the young day grew;
The sun rose o'er the green sea's rim,
And gave new life and joy to him;
The white birds crying o'er his head
Seemed praising all his hardihead,
And laughing at the worsted foe;
So, joyous, onward did he go.
And in a little sheltered bay
His weariness he washed away,
And made afresh on toward the town;
He met the fishwife coming down
From her red cottage to the strand,
The fisher children hand in hand
Over some wonder washed a-shore;
The old men muttering words of lore
About the wind that was to be;
And soon the white sails specked the sea,
And fisher-keel on fisher-keel
The furrowed land again did feel,
And round them many a bare-foot maid
The burden on her shoulders laid,
While unto rest the fishers went
And grumbling songs from rough throats sent.

In this poem we find a weakness at a critical point, in the shape of somewhat indistinct and dubious narration of that upon which the story hinges, the misadventure of the bridal night under the curse of the goddess: and in the *Bellerophon* what seems a similar lapse makes a little shadowy the fight of the hero with the Chimæra. The other tales of the volume are of Aslaug and Ragnar, of Hercules and the Hesperides, and of Tannhäuser. Of these the Scandinavian story of Aslaug, the child of Sigurd and Brynhild, and her evil fostering by a carle and carline until Ragnar comes sailing to woo and win her, is full of the brightest grace and freshness; that of the Venusberg, I think, is again a little too vague in its most critical enchantments, and upon the whole falls perhaps into something of tediousness and surfeit. The intervening three-stanza lyrics of December, January, and February, are as full as their predecessors of tender and various pathos; and so the whole delightful book comes to an end, and leaves all readers the richer for itself.

Sidney Colvin.

Canti popolari siciliani, raccolti ed illustrati da Giuseppe Pitrè. Preceduti da uno studio critico dello stesso autore. Volume primo. Palermo, 1870.

The author and editor of the volume before us has already won an honourable name by various works upon the language and literature of his native island, but his most important work is a series of studies on Sicilian proverbs and popular songs. The last of these, namely the songs, have already been collected by other accomplished Sicilians, such as L. Vigo, in the *Canti popolari siciliani*, Catania, 1857; and S. Salomone-Marino, *Canti popolari siciliani in aggiunta a quelli del Vigo*, Palermo, 1867; and here we have in addition to the 1300 songs of the first, and the 750 of the last, not only a new collection of about 1000 hitherto unpublished poems, but also a reprint, with corrections and additions, of an essay on Sicilian poetry, published some years ago, in which Pitrè fully discussed its nature and spirit, as well as its many points of scientific interest. He devotes a separate section to its various forms, of which the *canzuna* is the most widely spread, and corresponds to the Tuscan *rispetto;* almost all the pieces here published, and collected from different parts of Sicily, belong to this class. They consist of stanzas of eight eleven-syllabled lines, with only two alternate rhymes, which is the main point of difference between the *canzuna* and the common *ottava rima*. Sometimes, however, instead of eight lines, we find six and four, or as many as ten and twelve, but still with only two rhymes or assonances, not unfrequently the latter. As a specimen of the Sicilian dialect, which, however, varies much in the different districts, we may give the following *canzuna*, the first of those from Borgetto, in the province of Palermo:—

"Quannu nascisti tu, stidda lucenti,
'N terra calaru tri ancili santi;
Vinniru li Tri Re di l' Orienti,
Purtannu cosi d' oru e di brillanti;
Tri aculi vularu prestamenti
Dannu la nova a punenti e a livanti;
Bedda, li to' billizzi su' putenti!
Avi nov' anni chi ti sugnu amanti."

"When you were born, O star of shining light!
Down to the earth three holy angels flew;
And carrying store of gold and jewels bright,
There came out of the east three kings to you.
From heaven three eagles came with rapid flight,
To bear to east and west the tidings new.
Beauty! thy beauties are most full of might:
These nine years long I've been thy lover true."

Besides the *canzuna* we have *ciuri* or "Flowers" (the Tuscan *stornelli*), consisting of one five-syllabled and one or two eleven-syllabled lines, in the first of which a flower is named; *arii* or *arietti*, longer or shorter stanzas of seven- and eight-syllabled lines, *diesilli*, laments for the dead, which take their name from the well-known hymn *Dies iræ, dies illa*, &c. &c.

After describing the form in which these songs express different human feelings and passions, amongst which love naturally takes a foremost place, though religion and satire are not forgotten, Pitrè proceeds to point out the historical allusions and reminiscences in which the poems abound, and their use to students of the manners and customs of Sicily, and especially of the history of civilisation in that island. In this connection the following passage is characteristic of the religious state of Sicily, though no doubt the same might be said of other parts of Italy.

"Their religious songs," according to Pitrè, "certainly express the praises of God, the Creator of the universe, but far less warmly than those of the Virgin Mary, the Desire (*sospiro*) of every heart. In praising her whom no human tongue can describe or celebrate aright, the theological *Hyperdulia* changes into *Latria*. Moreover, each locality exalts its own patron-saint to the skies, and ranks him higher than the guardian of the neighbouring village; and these praises often go so far that God Himself has to make way, if, indeed, He is not placed lower still, after the souls in purgatory and the executed (*corpi decollati*), who are the objects of a veneration bordering on idolatry. Indeed the poet is sometimes so far carried away by misplaced religious zeal as to introduce the monsters of human society into the company of the saints and the blessed."

As an instance of this, Pitrè relates how the inhabitants of Paceco, in the province of Trapani, attribute a singular virtue to the grave of an executed matricide, Francesco Frustari (which happens to be placed in a church dedicated to Saint Francis of Paola), and go there to pray and seek special boons.

The last section of the introduction, a comprehensive treatise of 170 pages, is devoted to the peculiarities of popular poetry in the remaining provinces of Italy; this is followed by a careful bibliographical notice of all the studies, collections, and translations of Italian popular songs which have appeared in Italy or elsewhere. Pitrè's own collection contains in twenty-one parts the grounds of the views maintained in his essay, which are naturally also supported by Vigo's and Salomone-Marino's publications. As a second specimen of the *canzuna* we give the following, because Vigo considers it one of the oldest extant, placing it as early as the year 1000:—

"Bedda, chi aviti picciulu lu peri,
D' oru e d' argentu la scarpa v' hê fari;
Si vi scarisci Gran Conti Ruggeri
Di ssu piduzzu s' avi a 'nnamurari:
Pigghiatimi lu 'ncensu e lu 'ncenseri,
Mintitimi la bedda 'nta un artari;
Nenti fazzu pri tia, mè duci beni,
Comu 'na santa ti vogghiu adurari."

"Maid, whose little foot I'd cover
With a little shoe of gold,
Great Count Roger were your lover
If those feet he might behold.
Nay, let incense burn before thee;
On the altar set my love;
Love's too little; I'll adore thee
Like a saint in heaven above."

Here, again, is a *ciuri*, which seems, as Pitrè remarks, to contain a proverbial expression, but the play on the words is untranslateable.

"Ciuri di fenu.
Mentri chi semu Papa papiamu,
Cu' sa si 'n, autra vota papa semu."

"Flower of the hay! While we are Pope, let us enjoy ourselves; who knows if we may be Pope another time!"

From the above examples it will be sufficiently plain that the Sicilian dialect is not easy to understand, and requires very careful study, for which a special vocabulary is almost indispensable. Of these there are several, and a new one by Antonio Traina is just appearing. The notes appended to Pitrè's collection seem only intended for the use of Sicilians, and in the case of linguistic difficulties do not therefore go as far as a foreigner might often desire; but they give considerable assistance, and the illustrative notes are always amusing or instructive. Amongst other legends Pitrè tells the following: A Sicilian lady had died at Constantinople, and her lover, who did not know how to perpetuate her memory and soothe his own devouring grief, caused her skin to be made into parchment, upon which he wrote the thoughts and sentiments she inspired; he prepared her eyes, and preserved them as shining mirrors; he made the bones of her arms and legs into a seat, her hair into a necktie, and her skull into a drinking vessel. The last detail of course refers to a very widely spread custom, for which see, *inter alia*, Grimm, *Gesch. der deutsch. Spr.* p. 143. But though our quotations testify to the varied excellence of the work before us, it cannot be denied that, like other Sicilian collections, it contains a considerable number of pieces of only local interest. As these are for the most part lyrical poems, consisting generally of a single stanza, we learn with satisfaction from Pitrè's preface that his second volume will contain a larger proportion of narrative verse, both legends (*orazioni*) and ballads (*storie*), which will afford various parallels to the similar compositions of other nations, besides containing much that is entirely new; at least so we gather from different indications, which lead us to look impatiently for the promised continuation. Felix Liebrecht.

THE GIOTTO PORTRAIT OF DANTE.

TO THE EDITOR OF *THE ACADEMY.*

56, *Euston Square, N.W., 6th Dec.* 1870.

Sir,—On seeing, in your paper of the 22nd October last, a statement that "Signor Milanesi has already assigned the portrait of Dante, known as Giotto's, to Bernardo Daddi, whom he also identifies with a 'Bernardo of Florence,'" I made mention of this matter in writing to the Barone Kirkup, in Florence, the venerable discoverer of the portrait in question. Many of your readers will remember that this likeness is painted on a wall in the chapel of the Bargello of Florence; and had been totally lost for centuries, until rediscovered thirty years ago, mainly owing to the exertions of the Barone (then Mr. Seymour) Kirkup. In reply the Barone has sent me a few details, which appear to me interesting, both in themselves and on account of the general subject; and, as he says "You may make any use of these facts and of my name," I beg to lay them before you and your readers.—Your faithful servant,

W. M. Rossetti.

"Signor Milanesi is an under-librarian in Siena. He proclaimed the *real* likeness of Dante to be a bad drawing in a MS. of the Quattrocento, in the Riccardian Library; very ugly and old, taken from the mask badly—beneath criticism. A shield with the arms of the Podestà Fieschi, who was Podestà in 1358, is painted at the foot of the group by Giotto, who died in 1336; *ergo* he was not the painter. But it was found that the shield was in tempera, and had partly peeled off the fresco: so *that* mare's nest failed. They then found another equal to it. In a dark part of the chapel, between the two small windows, is a small figure of two or three feet; Giotto's are all life-size or more (see the print of the tracing of the face of Dante, published by the Arundel

Society). This little figure is of Saint Venanzio, patron of the city of Camerino, and under it is this inscription: 'Hoc opus factum fuit TPR POTAȚIÆ [tempore potestariæ] magnifici et potentis militis domini Fidesmini de Varano civis Camerinensis hon̄ potes . . . [honorabilis potestatis].' I find that he was Podestà in 1337, the year after Giotto's death; and *therefore* the whole chapel could not be the work of Giotto, as 'hoc opus' must mean 'hæc capella'! Now, as they had no clue, they sought for the name of some one to whom to attribute these magnificent and extensive paintings (of which the great altar is the chief part, and of which there is a print in Lord Vernon's *Inferno*). They pitched on the name of an obscure painter, of whom almost nobody has heard—a poor hand, if he painted this little San Venanzio; and, as Signor Milanesi has committed himself against Giotto, he has found out that Dante's portrait could not have been allowed to appear there until after the sentence of banishment had been cancelled, many years afterwards, in favour of his descendants. Milanesi forgot that the portrait is *young*, and was painted *before* Dante's banishment in 1302. As for his judging of the fresco, I question whether he ever saw it; as it is now thirty years since the genuine original was blotted out by that horrible daub which now conceals it. The original was visible only for about six months after its discovery, when Milanesi was in Siena, I suppose—that is, in 1840.

"This is but one of the memorials of Dante of which I have seen the injury or destruction—the front of his house, his bench ('il sasso'), the portrait in the Duomo, the tomb of his general in the battle of Campaldino, his villa, his busts, &c.! I have urged three ministers and three secretaries-general to save them. Nothing but promises! Florence is sadly indifferent—truly *mater parvi amoris*.

"Milanesi's random guess is opposed to the testimony of Filippo Villani, Giannozzo Mannetti, the editor of Filelfo, Landino, Alberti, Vasari, &c., and the beauty of the portrait, and its fine style.

"Seymour Kirkup."

'THE COURT OF LOVE' AND CHAUCER.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—Being very unwilling that the *Academy* should be held to support the most doubtful doctrine of its last number, p. 34, col. 2, that *The Court of Love* is Chaucer's, I ask space to say that only one MS. of the work is known to us—and that does not ascribe the poem to Chaucer—and that there is no external evidence whatever in favour of the genuineness of the poem, except old Stowe's having put it into his edition of Chaucer's (and other people's) works in 1561. This evidence may be safely held worthless.

The internal evidence, I venture to declare, is dead against the genuineness of the poem. For, setting aside the rime-test, we have the writer, when apologising for his poor verses—and poor they really are—saying—

> "Poemys of Virgile taken here no note,
> *Ne crafte of* Galfride *may not here sojorne.*"

That the man here refers to his great predecessor, Chaucer, is quite possible, as another successor calls him, "fader Chaucer, maister Galfryde" (Caxton's *Book of Curtesye*,* ed. Furnivall, 1868, p. 35). It is true that one modern edition, at least in the first passage quoted, has followed Speght's stupid error of making Galfryde, in the second quotation, to be Geoffrey of Vinesauf, to whom Chaucer refers in *The Nun's Priest's Tale*; but there is no evidence that Vinesauf held the rank of a great poet in England in the 15th century. Further, the phrases and words of the poem, like "a *figge* for all her chastité" (l. 685), "religiosité" (686), "metricienis" (30), &c. &c., and the run of the verse, show the work to be after Chaucer's time. Mr. Waring's assertion that "its appended stanzas are entirely Chaucerian, not only in their exquisite rhythm and felicitous expression," &c. &c. I venture to compare with the Comte de Chatelain's calling *The Tale of Beryn* "this gem of Chaucer's Tales," and with the dictum of those who declare this Envoye of *The Cuckoo and the Nightingale* to be, with the poem, Chaucer's:—

> "Aurore of gladnesse, and day of lustynesse,
> Lucerne a nyght with hevenly influence
> Enlumyned, rote of beauté and goodenesse,
> *Suspiries which I effunde in silence!*
> Of grace, I beseche alegge let your writynge,
> Now of al goode, syth ye be beste lyvynge."

* We have a MS. of this, printed in F.'s edition of about 1460 A.D.

It is just as possible that Chaucer wrote the italicised line as that he wrote *John Gilpin*, or Tupper.

If, too, the following lines from those at the end of *The Court of Love* are "in exquisite rhythm and felicitous expression"—

> "Then seide the fawcon, owre owen hartis welth,
> *Domine Dominus noster*, I wot,
> Ye be the God that done us brenne thus hote"—

then the sooner we give up calling Chaucer a poet, the better.

17th Nov. 1870. F. J. Furnivall.

Sir,—Mr. Furnivall, in the *Athenæum*, May 1, 1869, p. 606, writes respecting *The Court of Love and other poems* thus:—"At my suggestion Mr. Morris, when preparing his edition of *Chaucer's Poetical Works*, went up to Cambridge and saw Mr. Bradshaw, who told him his views as to the works he held to be spurious, besides much other Chaucerian matter. On Mr. M.'s return he and I both thought it better to wait till Mr. Bradshaw had printed his reasons and proofs for considering the above-named works as spurious, so that we could test his arguments fully, and that meanwhile Mr. Morris should print the poetical ones as genuine, though I believe I urged mention of Mr. Bradshaw's opinion, but Mr. Morris decided not to raise the question then." Mr. Bradshaw not having yet published his arguments, the evidence remains in precisely the same state as at the date of this paragraph. I hold the *Academy*, therefore, to be in no way compromised by the opinion on the *Court of Love* expressed by me—an opinion given under the distinct reserve, "until more conclusive evidence can be brought," &c., and based entirely on internal proof, which I believe to be afforded by that poem. Before answering Mr. Furnivall's objections, I must premise that the main argument against its genuineness, raised by Herr ten Brink and others, is that they find in it rhymes and words which are not Chaucer's. And I say that I find in this poem Chaucer himself, through each and every one of his characteristics, ranging from his powers of picturesque description and pathos, down to his familiar trick of banter.

Mr. Furnivall's objections are as follows:—(1) Want of external evidence. Stowe and the other early editors were not critical, but whatever weight can be accorded to traditional evidence is on their side; consequently, each piece accepted by them claims a right to close examination from every point of view, before modern criticism reverses their judgment. The MS. R. III. 20, Trin. Coll. Cambridge, of the *Court of Love*, from which Mr. Morris printed in 1866, offers some better readings and a more archaic orthography than the text of Bell's edition, 1855. Mr. Morris does not describe the MS., but Mr. Furnivall assigns its date at "about 1450, perhaps earlier."

(2) Certain words and phrases. This question involves too much detail for present discussion. I freely admit that the *Court of Love* presents a few expressions which seem foreign to Chaucer's English. But the objector must be prepared to show that these are absolutely incompatible with the state of the English language in Chaucer's time, and also, even if this point can be proved, that they are home-grown in the text, and not grafted upon it by the scribes.*

(3) *Galfride.*—Caxton's words prove that Chaucer, like other Geoffreys in Early English literature, was called Galfride; that they identify him with the Galfride of the *Court of Love* is anything but clear. Fifteenth-century versifiers, if I am not mistaken, commonly rank our poet, not with the ancients, but with Gower and Lydgate. But the passage in the *Court of Love* specifies Cicero's rhetoric, Virgil's poetic faculty, and "crafte of Galfride;" Tyrwhitt † and Bell therefore both conclude that the writer here meant was Geoffrey de Vinsauf, who, as the author of the *Nova Poetria*, was in Chaucer's time *a high authority on the art of poetry*.‡ Where is the evidence of this?

(4) The *Court of Love* not Chaucerian either in style or merit.—Tyrwhitt, whose judgment is to be respected, pronounces on it, "I am induced by the internal evidence to consider it one of Chaucer's genuine productions." I may add that a man of Tyrwhitt's acknowledged taste and acuteness would perhaps hardly say so much for the tentative efforts of some modern writers; *e. g.* for Balzac's early novels as compared with his masterpieces; for Wordsworth's *Idiot Boy* judged by the *Ode to Immortality*. Both the merits and defects of the *Court of Love*

* For the reckless havoc bad taste was making at the close of the 13th century in Chaucer's text, see Skelton's indignant protest, *P. Sparrow*, l. 788 *et seqq.*

† *Gloss.* Tyr. s. *v.*

‡ Wright, *Bibl. Brit. Lit.*, A. N. period, p. 398. Also note the style of the ironical apostrophe in the *Nun's Priest's Tale*—

"O Ganfride, dere maister souverain," &c.

appear to stamp it as the production of a young poet working under peculiar difficulties, and also under influences alien to his true nature. Weakness, bad taste, and the tokens of unfledged genius; verbal coarseness and high moral feeling, "poor verses" yet such verse as this—

"Sorrow and thought, they sitte me wonder nigh;

all such incongruous elements meet in this strange poem. And the same inequality of course characterises its appended episode, the *Bird-matins*.* Thus the stanza from which Mr. Furnivall has quoted runs:—

"The egle sang, '*Venite*, bodies all,
And let us joy to love that is our health';'
And to the desks anon they gan to fall,
And who came late he pressed in by stealth;
Than sayed the faucon, 'Our own hertes wealth,
Domine Dominus noster, I wote,
Ye be the God that done us brenne thus hote.'"

Nothing can be worse than the quality of the closing lines. But mark the Chaucerian skill of the couplet, which saves all undue expense of detail by setting at one stroke the crowded choir full in the reader's eye. For our poet, be he who he may, is no mere plagiarist from the *Assembly of Fowls*. In each composition the artist presents a distinct and clearly defined picture; in the one that of a congregation, in the other that of a choir. Again, to understand the value of that selection and concentration which mark off this trifle from post-Chaucerian pieces kindred in subject, we have but to compare it with compositions, in themselves not without merit, as the *Harmony of Birds* or better, perhaps, the Dirge in *P. Sparrow*. Contrast the languid effect produced upon the mind by Skelton's ornithological muster-roll with the lively presentment to the fancy called up by the poet in whom were the growing elements of dramatic power. And now let us set two consecutive stanzas by the side of Mr. Furnivall's spurious (and moveable) Envoy,† as he suggests, the handiwork of some fifteenth-century Tupper.

"'*Te Deum amoris*' sang the throstel cocke;
Tuball‡ himselfe, the first musician
With key of armony coude not onlocke,
So sweté tewne as that the throstel can.
'The Lorde of Love we praysen,' quod he than,
And so done al the foules, great and lite
'Honour we May in fals lovers dispite.'

'*Dominus regnavit*,' said the peacocke there,
The Lord of Love, that mighty prince ywis,
He is received here and every where;
Now *Jubilate* sing;'—'What meaneth this?'
Said then the linet; 'Welcome lord of blisse.
Out sterte the owle with, *Benedicite!*
What meaneth all this merry fare?' quod he.§

Juxtaposition will not, I think, bring out a strong family likeness between the Envoy and the above lines. In our curious bit of painting *en genre*, the work from first to last is made up of realistic, yet subtle touches, each individualising an accessory, and bringing, at the same time, life and colour into the picture as a whole. As, *inter alia*, the storm-cock's invective, the parrot's verse, the magpie's iteration of the choral amen, the natural action of the wren and robin, the line which emphasises the lark's shrillness, the kite's cry, and also renews the impression of a full choir. I repeat that I am quite prepared to give up the *Court of Love* as an early Chaucer poem whenever conclusive proof shall be brought forward of its spuriousness. But, in the present state of the evidence, it is no literary heresy to hold that the "man" who wrote it may be none other than "A Man of great auctoritee."—*H. of Fame*, b. 3, l. 1068.

One word more. The question, which has here been scarcely touched, whether certain poems shall or shall not hereafter count as works of Chaucer is in reality an important literary problem. The solution is at present in the hands of our best Early English scholars, but it equally claims the attention of our best poets, and the care of our most accomplished critics.

George Waring.

* In accordance with mediæval taste, a choir of birds sing matins to the God of Love. The initial verses of Psalms, &c., are all taken from the Breviary Office for Trinity Sunday.

† In MS. Bodl. 638 of *Cuckoo and Nightingale*, the Ballad and Envoy do not appear. In MS. Fairfax, 16, they are not appended to its copy of that poem, but to the *Book of the Duchess*.

‡ See *B. of Duchess*, l. 1161.

§ The initial word of the Canticle serves as an exclamation for the owl. The quotations are from Tyrwhitt's edition.

Intelligence.

The re-arrangement of the Parthenon friezes in regular sequence—the lacunæ among the marble fragments in British possession being so far as possible filled up with casts of such as exist elsewhere—is now approaching completion in the enlarged Elgin room of the British Museum. In the adjoining room also the remains from the tomb of Mausolus, together with a few analogous remains from the temple of Athene Polias at Priene, are finally set up. Fragments of the nave and the axle-box have given the measure for a complete restoration of a wheel of the *quadriga lenta* which surmounted the mausoleum; and this wheel is placed in relation with the superb fragments of equine sculpture—including the complete fore and hind quarters of two separate horses—found in the same place. The colossal female figure, broken in two at the knees and mutilated in the face and forearms, which is supposed to have stood as chariot-driver beside that of Mausolus, has been set up, with a reparation of the lost portions about the knees, such as seems not quite satisfactory. Side by side with this has been just placed the cast of a complete conjectural restoration of the same figure, for which the nation is indebted to the zeal and generosity of Mr. W. W. Story. The knees are here spread wider than in the repaired original, with the clear advantage of a firmer plant for the figure and a more expressive junction and carrying out of the original draperies. The straight fold descending from the left hip seems also to take its place with great felicity; the driving action of the fore arms and hands commends itself again; but it may be doubted whether Mr. Story has not Romanised unduly in the character of his head, and whether the single folds of the stola falling towards either shoulder have not undue heaviness.

The forthcoming exhibition of Old Masters at the Royal Academy promises to be not less admirable than the last. In addition to further selections which it is hoped to obtain from the collection of the Queen, the Marquis of Bute and Mr. T. Baring have again offered contributions; the gallery of Lord Dudley has been placed at disposal without reserve; so have those of Lord Ashburton and the Dowager Lady Ashburton; and besides these and others, the collection of Mr. Wynn Ellis supplies a rare choice of the Dutch and Flemish masters.

Mr. Millais has for the first time painted a picture in the class of landscape proper—a large study of a scene in Perthshire. He has also advanced with the Biblical subject of Aaron and Hur staying up the arms of Moses at the battle with the Amalekites.

Mr. Poynter has in hand the subject of Atalanta's race, besides a pair of decorative designs of fruit-gatherers, the one of two male and the other of two female figures.

The recent enlargement of the gallery of pottery and porcelain at South Kensington coincides with the announcement of a history of those arts by Mr. William Chaffers, to be published in six elaborately illustrated monthly parts, under the title of "The Keramic Gallery."

De Gids for December contains an able critique on Julian Schmidt's Pictures from the Intellectual Life of our Time, which lately formed the subject of an interesting essay in the Contemporary. The literary merits of the work are amply recognised. The author is a German Taine; his style has a brilliancy and precision which can only have been derived from a French source, just as M. Taine's predilection for the classification of phenomena under fixed formulæ can only be explained by his profound German studies. But as an attempt to prove the beneficial action of the Prussian State on German literature, the Dutch critic pronounces the work less successful. The forces which influence the development of literature are for the most part to be sought in the sphere of literature itself. Virgil and the Provençal poets have a larger share in the origin of the Divina Commedia than the political events of Dante's own time, and probably the plays of Shakspeare have had fully as much influence on German literature as the campaigns of Frederick the Great.

The Excavations at Cevetri.—W. Helbig gives in the *Grenzboten* of Oct. 21 an account of the terra-cottas discovered in the neighbourhood of the ancient Caere, which have been acquired for the Berlin Museum. The first excavations resulted in the discovery of a square room, hewed out of the solid tufa, and filled with terra-cotta fragments of all ages and descriptions. W. Helbig supposes the cavity to have been intended for a rain-water tank, and that the remains found in it were thrown in at the date of the latest, as pieces of all periods are mixed together. Many of the tiles are ornamented with female heads, showing Asiatic influence, and having most affinity with Hellenic work of the time of Alexander. The other terra-cottas are distinguished by differences of style, especially of colour, the earliest using few tints, of which yellow ochre is the prevailing one. To this period belongs one of the pieces at Berlin, an earthen mural covering, painted with two figures, a man and a woman with joined hands and a bird hovering between them, the latter of the much discussed egg-form. Some plates, with chariots and horsemen finished in relief, are the earliest of the kind yet discovered; the ground is yellow ochre, the figures alternately reddish and greenish grey. One group, about three feet high, has evidently served to finish the point of a gable; the composition is primitive, the

upper part of the female figure being taken in front and the legs in profile. The later polychromous tendency is represented in a series of colossal akroteria, heads of women, fauns and satyrs forming the centre of each, with ornamentation of lotus flowers, &c., corresponding in style to the freest period of Hellenic art; some brilliantly coloured designs are evidently modelled on Greek bronze-work. The fragments show that what may be called the terra-cotta style of architecture lasted in Rome till the 2nd century B.C.; and Helbig conjectures that the custom of illumination may have been introduced as early as that time, for some of the akroteria are perforated and furnished with spikes in a way that could serve no other purpose but that of supporting candles. The excavations are still proceeding.

The Marseillaise.—In a German volume called *Zwanzig vaterländische Gedichte*, F. M. K. asserts that the music of the Marseillaise is stolen from an old German air, which the writer has heard sung in Bavaria in 1842 by an old peasant woman, who had learnt it from her mother and grandmother. A German ballad, beginning "Stand ich auf hohen Bergen," was set to it. This is not very new. It has long been known that the melody of the great French war-song existed in the archives of the cathedral of Salzburg, and was played there as a chorale in the last century. But for all that Rouget de l'Isle's claims to the authorship of the Marseillaise melody would remain the same even if he had got the first impulse to it from the German tune. In music we find many examples of great men recreating existing melodies. So the theme of the chorus in Beethoven's ninth symphony occurs in an accompaniment to a sacred chorus of Mozart; and this same composer took as theme for the prayer, in the overture of the "Flauto Magico," a melody which is to be found in Clementi's sonata in *b* flat.

Gustav Freytag, the well-known novelist and litterateur, announces in one of the last numbers of the *Grenzboten* that he has retired from the editorship of this periodical, in consequence of an attempt on the part of his publisher to introduce his own religious opinions into the paper. Gustav Freytag is considered, besides his great name as a novel writer, one of the best journalists of the national-liberal party, and we have no doubt that the new organ, *Im neuen Reich*, which he has started, will have all the sympathies of this party and its friends. We heartily congratulate Herr Freytag on his firmness in this matter, and hope that his new periodical may prove a success "in the new Empire."

Hungarian Popular Poetry.—We are informed from Pesth that there is a prospect of the long promised collection of Magyar popular poetry and stories being at last published. In the years 1846–48 M. John Erdélyi published three volumes of popular songs and stories entitled *Népdalok és mondák*, under the auspices of the Kisfaludy Society. There the matter rested until 1860, when M. Paul Gyulai, a member of that society, urged the publication of a more complete collection. He was accordingly entrusted with the work of editing the additional materials which had been collected; and in 1867 M. Ladislas Arany, son of the well-known poet, was associated with M. Gyulai as editor of the prose portion of the work. In the meantime (1864) M. Kriza, superintendent of the Unitarian church in Transylvania, published one volume of a collection of songs, tales, proverbs, &c., in the peculiar dialect of the Székels (E. of Transylvania), entitled *Székely vad Rózsák* (Székel Wild Roses). The second volume of this has not appeared. A large quantity of materials had been got together by various collectors, but the great difficulty was to find a publisher. At last in 1869 the *Athenäum*, a joint-stock publishing society, agreed to publish two volumes of 30 sheets each, which are presently to appear. The second volume contains M. Charles Török's collection of the popular songs of the *Alföld* or Great Hungarian Lowland. The first volume contains a selection from the materials of various collectors, divided under four heads: 1. Christmas and Twelfth Night Pieces. 2. Ballads. 3. Songs, and 4. Tales. A leading principle adopted by the editors is to insert only important variations from the versions given in the collections of MM. Erdélyi and Kriza, or pieces wholly omitted by them. In a meeting of the Kisfaludy Society, M. Gyulai pointed out the two great defects of the collections (including that about to be published)—that in but few instances the melodies are given with the words of the songs, and that neither the songs nor the tales are given in all cases in the dialect of the locality in which they were collected. In the few cases in which this has been done, the dialectical peculiarities have not been so accurately rendered as were to be desired.

An American Professor is publishing in the Williams Review, the organ of his university, the college exercises of Hawthorne and Longfellow, and other distinguished men which have remained in his hands.

An (incomplete) autobiography of Lamartine is to appear in Paris when circumstances become more favourable to such enterprises.

We are sorry to have to stigmatise Sir Digby Wyatt's *Lectures on Fine Art*, just published, as thoroughly unscholarly. The style is difficult, and the theory vague or obsolete. We have names named and little told about them, many authorities mentioned, particularly such as are bad or exploded, and the subject left without real illumination in any of its parts. Any reader moderately acquainted with Greek art may, by turning to p. 130, discover a perfect nest of blunders.

Selected Articles.

Byron; by John Morley. [Directed to the estimate of his works in their political significance: Byron the poet of the Revolution for Europe at large: his concern with practical and immediate movements contrasted with the abstract humanitarianism of Shelley.]—Fortnightly Rev. for Dec.

Hand and Soul, by D. G. Rossetti. [A short and vivid tale or romance of an imaginary mediæval painter of Pisa making a picture of his own soul, which comes to him in the likeness of a woman. Originally published in the "Germ," an early organ of the pre-Raphaelite movement. From a note in his *Early Italian Poets*, we know that the author had never been in Italy. Conceived with a most striking quality of humour as well as poetry.]—The same.

More Roba di Roma: Castle St. Angelo; part i.—Blackwood's Mag. for December.

On Progress, by the Editor in Fraser for Dec. [Very striking. See criticism in Sat. Rev. Dec. 10.]

On the Theory of the Human Soul, by Rev. J. B. Dalgairns, in the Contemporary. [The Soul is the seat of the force which constitutes the Body: a non-existent or hypothetical mind points a non-existent or hypothetical world.]

On Infinity, by Rev. F. Garden.—Same. [An acute endeavour to discard the conception.]

Franco Sacchetti. By Raffaello Fornaciari. [A review of recent reprints of Sacchetti's writings in prose and verse. His satirical poems are blunt and vigorous, but less known than his *ballate* (of which the one beginning

"Passando con pensier per un boschetto"

has been well translated into English). His *novelle* had a still wider popularity, being written in the lively idiomatic Florentine of Cellini's life; they resemble the more realistic stories of the Decameron, and their humour is to the full as broad as is desirable.]—Nuova Antologia, October.

Profili di Scrittori Italiani viventi. By L. Morandi. [A short notice of the poems of Enotrio Romano (Giosue Carducci), a young government employé, who gets into trouble with his superiors for dedicating verses to Mazzini, and has written an eloquent "Hymn to Satan." Baudelaire and Swinburne are the writers with whom he has most affinity.]—Rivista Europea, November.

Alcune Questioni di Poesia popolare. By Giuseppe Pitrè.—[Argues that popular songs are always composed at the time of the occurrences to which they allude. The author found a poem in MS. dated 1666, and on quoting it to a blind woman who was his principal authority, she was able to continue it correctly. His opinion is also supported by the fact that the Sicilians have already composed popular verses on the introduction of paper money (1866), of railways (1863), the campaign of Mentana (1867), Garibaldi and his Thousand (1860), and such trifles as a new municipal form of hearse (1868).]—The same.

New Publications.

Barham, Rev. R. H. Life and Letters, and unpublished verses, edited by his Son. Bentley.

Belcher, Lady. Account of the Mutineers of the Bounty, and their Descendants in Pitcairn and Norfolk Islands. Murray.

Brevia. By the Author of Friends in Council. Bell and Daldy.

Brunel, J. K., The Life of. By J. Brunel, B.C.L. Longmans.

Conze, A. Zur Geschichte der Anfänge Griechischer Kunst, mit 16 Tafeln. Wien: Gerold's Sohn.

Dante, Divina Commedia of, transl. into English Verse by James Ford, A.M. Smith and Elder.

Gottschall, R. Porträts u. Studien. 1ster Band. Literarische Charakterköpfe. 1ster Theil. Leipzig: Brockhaus.

Jansen, A. Leben u. Werke des Malers Giovannantonio Bazzi von Vercelli, genannt il Soddoma. Als Beitrag zur Geschichte der italienischen Renaissance. Stuttgart: Ebner u. Seubert.

Klein, J. L. Geschichte des Dramas, Bd. VIII. Das Spanische Drama (I.). Leipzig: Weigel.

Lessing's Briefe u. Actenstücke. Herausg. von O. von Steinemann. Leipzig: Hirzel.

Lessing u. seiner Frau, Briefwechsel zwischen. Neu herausgegeben von Alfred Schöne. Nebst einem Anhang bisher meist ungedruckter Briefe. Portrait u. Facsimile. Leipzig: Hirzel.

Milman, The late H. H. Erasmus and Savonarola. Essays contributed to the Quarterly Review. Murray.

Pope, Alexander, Works of. New Ed., including unpublished Letters and Materials, coll. in part by the late J. W. Croker. With Introd. and Notes by Rev. W. Elwin. Vol. I. Poetry: with Portraits, &c. Murray.

Schumann, R. Gesammelte Schriften über Musik u. Musiker. 2nd ed. Leipzig.

Scott, W. B. Gems of French Art. Routledge, 1870.

Tennyson, A. The Window, or Loves of the Wrens—a Song-Cycle: with Music by Arthur Sullivan. Strahan.

Varnhagen von Ense, K. A. Tagebücher. 13ter u. 14ter (Schluss-) Band. Hamburg: Hoffmann u. Campe.

. . . . . Biographische Portraits von. Nebst Briefen von Koreff, Clemens Brentano, Frau von Fouqué, Henri Campan u. Scholz. Leipzig: Brockhaus.

Theology.

Fragmenta Evangelica, quae ex antiqua Recensione Versionis Syriacae Novi Testamenti (Peshito dictae) a Gul. Curetono vulgata sunt, Graece reddita, etc. Pars Prima, Curante J. R. Crowfoot, S.T.B., Coll. Gonv.-Cai. Cantab. olim Socio. Cambridge University Press, 1870.

When Dr. Cureton published in 1858 his *Remains of a very antient Recension of the Four Gospels in Syriac*, the critical value of the publication was very sharply contested. Dr. Cureton himself claimed for it no less than that it "to a great extent retained the identical terms and expressions which the Apostle St. Matthew himself employed (p. xciii);" and though this claim has not been substantiated, still both Tregelles and Tischendorf concede to it an antiquity greater than that of even the Peshito text (in its present form). Its antiquity is in fact rendered certain not only by the date of the MS., about the middle of the 5th century, but also by its being quoted in several places, though not constantly, by Aphraates, whose remains have lately been edited in Syriac by Dr. Wright (see *Academy*, vol. i. p. 54), and whose Homilies were composed partly in A.D. 337, and the rest in A.D. 344. The very title, rendered erroneously by Cureton, "The *distinct* Gospel of Matthew," has also been discovered in the Lexicon of the famous Nestorian physician Bar-Bahlul, who flourished at the court of the Abassidae, at Bagdad, about A.D. 960. He mentions a different reading as given by this version in Mat. xxvii. 17; and as Ignatius, patriarch of the Jacobites, also describes a copy which he was obliged to sell in A.D. 1396, to procure means for repairing his monastery, which had been devastated by Tamerlane (see *Assem. Bibl. Or.* ii. 230), we have proof that it was recognized as an independent, though possibly obscure, version of the Gospels by the Syrians themselves.

The value of a version certainly in existence in A.D. 337 is evident. Thrust aside by the Peshito, it was not so liable as that popular version to the mistaken emendations of scribes based upon a later Greek text. As therefore the Curetonian fragments represent a text older than that even of the Sinaitic MS., Mr. Crowfoot has set himself to a work of manifest utility in endeavouring to give us their Greek equivalent. At the same time he has had to encounter difficulties of no ordinary extent, for the older the translation the looser and more periphrastic its method. The older translators were very indifferent to verbal accuracy, and allowed themselves great licence in adding or altering words, if thereby they could bring out the meaning of a passage more distinctly. The Peshito itself constantly paraphrases, and gives us the sense rather than the words: and, to speak plainly, if the Curetonian had not been a bad translation, it would not have been so easily thrust aside by the Peshito. For even the latter, precious as it is in many ways, is so inaccurate that the Syrians themselves regarded it with great dissatisfaction. As early as A.D. 508, Philoxenus, bishop of Mabug, published a more literal version of the Greek; and just a century later Thomas, bishop of Hharkleia, collated this version with the best Greek MSS. then extant at Alexandria, and corrected in it whatever was amiss. Henceforward this became the translation current in the Syrian Church, and Bar-Hebraeus often contrasts its accuracy with the looseness and negligence of the Peshito. This is the work edited by Dr. White in 1778 for the delegates of the Clarendon Press at Oxford, and which is usually quoted as the Philoxenian because so described by its editor in the title page. The accurate Tregelles gives it its proper name.

Intensely literal, sacrificing everywhere the Syriac idiom to verbal accuracy, and even then constantly compelled to write the Greek word in the margin in Syriac characters, the Hharkleian version is capable of being reproduced in Greek. In attempting this feat for the Curetonian fragments, we cannot but think that Mr. Crowfoot was undertaking an impossibility. Where different readings exist in the Greek MSS., there it is generally possible to see which has the support of the Curetonian and Peshito versions: where no such diversity exists, we protest most earnestly against the introduction of new readings from versions confessedly periphrastic. Mr. Crowfoot set himself to a labour which involved at every step the decision between what was possibly a new reading, and what was an error of the translator; and we can nowhere see any indication that he was aware that his whole work was vitiated by his erroneous conception of the nature of the materials with which he had to deal. At the cost of infinite pains, he has produced, not a work that will benefit the critic, but a curiosity only.

But, further, Mr. Crowfoot's Greek is not an accurate representation of the Syriac original. We had marked many crucial texts where his Greek would lead the critic astray. Upon the whole, however, it has seemed best to take unimportant passages, as involving no theological bias. The opening words, then, Mat. i. 1, ἡ βίβλος γενεσέων (a reading supported by no Greek MS.), involve two serious mistakes. First as regards the article. Mr. Crowfoot, we presume, has added it because the word for *book* in the Syriac is in the emphatic form. But had he studied the Hharkleian version, which does try to mark the presence of the article, he would have found that it does not do so by the use of the emphatic and absolute forms. Besides this, the presence or omission of the article is a nicety dependent almost more than anything else upon the idiom of the language. An article may often be requisite in a translation where there is none in the original. Here, however, the case is otherwise, for the Syriac puts *book* in the emphatic form simply in obedience to a rule of Syriac grammar. And next, as to γενεσέων, we grant readily that the Curetonian word is plural, but it should be remembered that it answers to the Hebrew תולדת (Gen. v. 1, &c. "a genealogy"), and therefore does not involve a plural in the Greek. The Peshito and the Hharkleian actually have a noun in the singular, but the latter of these versions alone gives the precise equivalent for γένεσις; the word in the Peshito means "nativity." But this is not all. We venture to ask on what principle Mr. Crowfoot expresses the pleonastic pronoun in v. 23, ὁ θεὸς ἡμῶν μεθ' ἡμῶν, but omits it in v. 1, where the literal rendering is, "Book of his births of Jesus Christ?" It is well known that this pleonasm of pronouns is the rule in Syriac. The Hharkleian alone among Syriac versions gives us the right reading, "with us God," but by so doing violates the idiom of the language. No Greek MS. has any such reading as ὁ θεὸς ἡμῶν, neither had the MS. employed by the Curetonian translator.

Passing by the genealogy, we come to verse 18, in which Mr. Crowfoot has carelessly omitted Μαρίας. But this slip is a trifle: we have a more serious objection to the new reading he offers us. All the MSS. read πρὶν ἢ συνελθεῖν αὐτούς. The Curetonian literally is, "when they had not

approached one to one," "one" in both places being masculine. We feel sure that "one to one" is nothing more than an awkward attempt at rendering the σὺν in συνελθεῖν. Mr. Crowfoot extracts from it the impossible reading ὡς οὐκ ἀλλήλοις προσῆλθον.

So in verse 20. Every MS. reads "in a dream." So do the Peshito and Hharkleian. The Curetonian has "in a vision of the night." Does this justify Mr. Crowfoot in substituting ἐν ὁράματι νυκτός for κατ' ὄναρ? To us it is nothing more than a periphrasis, which suggests not the slightest idea of a different reading. We might go on thus verse by verse. Even where the Syriac is a fair rendering of the Greek, we find some extraordinary novelty. Thus "our daily bread" is no longer ἄρτον ἐπιούσιον, but ἄρτον ἐνδελεχῆ τῆς ἡμέρας.

Before attempting so very difficult a task, we think that Mr. Crowfoot should first have examined into the nature of the Curetonian fragments, to see whether they offered so accurate a translation as to be capable of being literally rendered back into Greek, with any chance of giving us a trustworthy text. Had he been satisfied of this, he should then have studied the Hharkleian version, in which the attempt was confessedly made to give the Syrians an exact equivalent of the best Greek text then to be found. He would thus at all events have made his Greek approach more nearly to the true intent of the Syriac. But the misapprehension of the value of the Curetonian fragments would still have vitiated his labours. What would be the value for textual criticism of a translation of our authorized version back into Hebrew when there are in it twenty-three different Hebrew words rendered by the one English term *Branch?* Yet our version is accuracy itself compared with the looseness of the Curetonian renderings. There are in fact two methods of translation, the one which endeavours to give the sense, the other which aims at literal accuracy. Early translations all belong to the former kind, and even then so constantly wander off into exegesis, and so perpetually substitute what the translator thought "ought to be written" for what is written, that the greatest caution is required in their use. The translation of Onkelos and other Chaldee "Paraphrases," the Septuagint, the old Italic version, and so on, are all most valuable monuments of antiquity; but all require great care in the handling. So in Syriac. The Hharkleian version might be translated back into Greek. It is purposely literal, sacrifices idiom and often sense to verbal accuracy, and has its own awkward methods of representing the article, tenses, compound words, and so on. But neither the Peshito nor the Curetonian admit of this treatment. Mr. Crowfoot would be performing a really useful task if, confining himself to the various readings offered us by the best Greek MSS., he would show which of them have the support of these most ancient versions.

Should he undertake this task, we trust he will dismiss Scholtz' edition of the Greek Testament to the obscurity into which it has long retired. Useful in its day, its day has long passed. Lachmann's would have been the most handy for use, because confining itself to a few ancient texts, or, for the same reason, Hansell's edition of the most ancient texts themselves. For fuller readings, surely, Tregelles and Tischendorf should have been used. After the great activity of modern scholars, and the valuable results in textual criticism at which they have arrived, we cannot understand why all their work should be ignored, and Scholtz reinvested with a now antiquated authority.

R. Payne Smith.

Messias Judæorum, libris eorum paulo ante et paulo post Christum natum conscriptis illustratus. Edidit Ad. Hilgenfeld. Leipzig: Fues, 1869.

What were the characteristics of the Messianic idea current at the Christian era? The question is important in its bearing on the fundamental idea of Christianity, since the various answers returned to it correspond to as many various estimates of the originality of the latter. Ewald, for example, with whom Hilgenfeld, Keim, and the majority of critics agree, supposes Jesus to have found a fully-developed conception of the Messiah already in existence, whilst others, such as Bruno Bauer, Volkmar, and W. Lang, think that the idea of a personal Messiah had been slumbering for centuries, when Christianity recalled it to the consciousness of the age. The interest, but also the difficulty, of the subject has increased owing to the new form which the question has assumed. It has become a controversy as to the date of the great apocalyptic writings of later Judaism. According as we assign the books of Enoch and Ezra (IV. Esdras) to the age before or after Christ, will be our view of the manner in which the title "Son of Man" was applied by Christ. Dr. Hilgenfeld, to whom students of the early Christian period are so deeply indebted, believes that Jesus did but follow the example of the Jewish apocalyptic writers, a view which he maintained with much energy in *Die Jüdische Apokalyptik* (1857), and which can be traced unmistakably in the volume before us. He now presents us with three remarkable and little-known works, all of which, in his opinion, were written between the conquest of Jerusalem by Pompeius and its conquest by Titus, *i.e.* between B.C. 63 and A.D. 70.

The first of these works consists of the so-called Psalms of Solomon, eighteen in number, which stand in much the same relation to the old Hebrew Psalms as the poetical pieces in the 1st chapter of Luke. They were introduced into the West from Constantinople in 1615, and first edited (but incorrectly) by La Cerda (1626) and Fabricius (1713). Hilgenfeld himself maintains the originality of the Greek, while the majority of recent critics (Movers, Dillmann, Ewald, Delitzsch, Langen, Derenbourg), with perhaps more reason, regard it as a translation from the Hebrew. However this may be, the researches of Hilgenfeld as to the date of these Psalms (B.C. 48) are conclusive, *e.g.* when he proves from Psalm ii. the reference to the end of the sacrilegious Pompeius. It is satisfactory to find Volkmar, generally a pronounced opponent of Hilgenfeld, coinciding in this view.

The critical questions relating to "IV. Esdras" are of a much more uncertain nature, as indeed might be expected from its enigmatical contents. The author of this apocalypse is depressed and confused by his consciousness of the strange contrast between Israel's mission and her actual circumstances. It is no small merit to have given the first trustworthy text of such a work, as Dr. Hilgenfeld has done. Not only has he edited the Latin version with greater critical precision than Volkmar (1863), but, through the kindness of three eminent Orientalists (Praetorius, Steiner, Petermann), he has given us accurate renderings of the Arabic, Æthiopic, Armenian and Syriac versions, and these are preceded by a reconstruction of the original Greek text, attempted with the assistance of Professor Lagarde and Dr. Rönsch.

The contents of the book are throughout of an eschatological nature, and remind us, in many points, of similar discourses of Jesus in the synoptic gospels. Hence the question presses for solution, whether the book was written before or after Christ. Volkmar adopts the latter alternative, and supposes that "IV. Esdras" was written under Nerva A.D. 97, a very plausible hypothesis, which has of late been

the favourite one among critics. It must be owned, however, by impartial readers, that the reasons adduced by Dr. Hilgenfeld for a pre-Christian date are of very considerable weight. This, we think, is the case with the very careful researches into the relation of "IV. Esdras" to the writings of the New Testament in a higher degree than with the explanation of the famous Vision of the Eagle. Indeed, even after mastering the long controversy between Hilgenfeld and Volkmar, we are obliged to confess that the events of history must have been reflected in the mind of this unknown writer quite otherwise than they appear in our historical manuals. How else can we account for the utter perplexity of such experienced critics in respect of the century in which the three-headed eagle sets his twelve great and eight small wings in motion? It is not very easy to realize even Hilgenfeld's result, according to which the eagle must have had Roman sympathies in his three heads, and Syrian proclivities in his twenty wings, since, according to our editor, the heads represent Cæsar, Antonius, and Augustus, and the wings the line of the Seleucidæ!

With regard to the sixth Book of Moses, or the Ἀνάληψις Μωυσέως, the results of Hilgenfeld, as opposed to Volkmar, will probably meet with still wider acceptance. Our information respecting it has been until lately confined to a few passages of Origen and Œcumenius, and the acts of the second synod of Nicæa. Ten years ago Ceriani discovered a connected fragment of it in an old Latin translation at Milan, and in the third part of the *Messias Judæorum* the editor has attempted to reconstruct the Greek original. The Latin text had already been published by Hilgenfeld in 1866, by Volkmar in 1867, and by M. Schmidt and Merx in 1868. The theory that this apocalypse was written at Rome A.D. 44 is made by Dr. Hilgenfeld in the highest degree probable. In fact, the last historical personage whose form can be traced in it with certainty is Herod the Great.

We have still to collect the results of Dr. Hilgenfeld's inquiries relative to the Messianic belief of the Jews at the time of Jesus. So much is beyond the shadow of a doubt, that the last two Psalms of Solomon, written before the birth of Christ, sketch the outline of a Messianic ruler, who should subdue the heathen, and afterwards as the Prince of Peace, sinless and holy, should reign over a righteous people of Israel. The chief modification of this portrait introduced in "IV. Esdras" is one that is found also in the Christian apocalypse (that of John), viz. that the Messiah is for the first time placed *before* the great catastrophe, and therefore *before* the final judgment, in a happy time at the end of the present æon. Still more remarkable is the form under which the Messiah appears in this apocalypse. If the pre-Christian origin of the book could be fully established, this would be the most direct evidence of the absence of originality in the Christian Messianic idea. It is impossible to mistake the influence of the book of Daniel, when the Messiah of "IV. Esdras" is made to ascend out of the sea in human form, and thereupon to fly with the clouds of heaven, while the earth quakes, and its inhabitants perish, wherever he turns his countenance. He is further represented as remaining in the highest paradise in company of the translated prophets Enoch, Moses, and Elijah, until at the end of the days he appears on Mount Zion, to kill the besieging hordes with the flames of his mouth, to bring back the ten tribes, and to reign over the elect. But even this description of the Messiah is but transient and occasional, the distinctive name for him in "IV. Esdras" being "Son of God" (comp. xiii. 37, 52, xiv. 9). The combination of all these notions,—Son of God, Son of Man, Pre-existence, and Davidic Birth, is discussed with admirable clearness by Hilgenfeld in p. 103 of the *Messias Judæorum*, and p. 316, &c., of the volume for 1870 of his own periodical. On the other hand, he will certainly be alone in his reference of the "gematrical" number of this apocalypse τξγ (ix. 24, comp. the well-known χξσ Rev. xiii. 18) to the Messiah (p. 467). Without accepting the solution of Volkmar, who interprets this number of Rabbi Akiba, we cannot but agree with that critic in his assertion that the apocalypse of Moses contains no indication of a personal Messiah. For a further development of this important subject the reader may still be referred to a paper on "the Messianic idea at the time of Jesus," in the *Jahrbücher für deutsche Theologie*, 1867, p. 389, &c.

H. J. Holtzmann.

SOME EMENDATIONS IN ISAIAH.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—As far as I am aware, no one has yet offered a tolerable explanation of the words בְּלֻתִּי כָרַע תַּחַת אַסִּיר in Isa. x. 4; and no wonder, for the text has been altered. It should, I think, be read, בֵּלְתִּי כֹּרַעַת חַת אסיר. Whither are you to flee? "Belthis is sinking, Osiris has been broken;" the idols have been found so utterly worthless, that they are allowed to lie among the bodies of the slain. Belthis is Βῆλθις ἡ Ἥρα ἢ Ἀφροδίτη in Hesychius. Bar Ali explains בלתי by "Aphrodite, the star known by the name of Zuhara;" see Selden's *De diis Syris*, 156; Lagarde's *Gesammelte Abhandlungen*, 16, and his *Analecta*, 137, 22. The ת is softened by the influence of the lost vowel of the preceding consonant (בלתי for בעלתי): comp. the Syriac יָתְבִין = *yâth-bhîn*, and the Hebrew שֹׁטְפִים = *shôt-fîm*, Isa. xxviii. 2. As for Osiris, we know him to have been worshipped at Byblus (Plutarch on Isis and Osiris, 15, 16); and as Egypt in the time of Isaiah was the natural bulwark of the smaller Asiatic powers against Assyria, it is not unlikely that the principal deity of Egypt should have been known and even adored amongst the Jews. If Jeremiah could mention Apis (xlvi. 15, נָסְחָף = ἔφυγεν ὁ Ἄπις, LXX. = נָס חָף, see Spohn, ii. 321), why should not Isaiah have known Osiris? I have left the א in אסיר without a vowel, as I am not sure which is the right one. Compare the whole passage with the Hebrew of Isa. xlvi. 1, Jer. l. 2.

There seem to be two other faults close to the verse emended. In ix. 16, יִשְׂמַח ought to be יִפְסַח, and וַיִּגְזֹר, ver. 19, וַיִּגָּרוּ. The former of these corrections is self-evident. As for the latter, I am convinced that גזר is a root of far too precise a meaning to be employed as a synonym of אכל, while גרז in Arabic is the proper word for eating gluttonously.

Göttingen, Nov. 14, 1870. Paul de Lagarde.

Intelligence.

It does not seem to be generally known that fifteen years before the publication of the great Complutensian Polyglott, the elder Aldus projected a work which would have been an interesting proof of the zeal of the Italian renaissance for Biblical studies. The volume known as the *Astronomici Veteres* (Ven. 1499, fol.) contains a letter addressed to Aldus by one of the most distinguished Hellenists of the age, the Englishman Grocyn. He writes as follows:—"Noster item Linacrus nuntiavit mihi te rem multo magis admirandam moliri, iamque statutum habere ut libros sacros veteris quidem testamenti trifariam, latine, graece et hebraice, Novi autem bifariam graece et latine imprimas, Opus plane arduum et christiano viro dignissimum. In quo, si modo perficere licebit, non modo caeteros omnes, qui unquam in hoc genere floruerunt, sed etiam te ipsum longo intervallo superabis. Age igitur, mi Alde, auspicare tandem opus, quod cogitas, et quod iamdiu parturis, aliquando parias. Non enim adduci possum ut credam, posse opus tam divinum secundis carere successibus."

A small but valuable contribution to the critical study of the Septuagint has been made by Dr. Reusch, a Roman Catholic professor at Bonn, in an academical programme published last August. The object of it is to show that the Greek text of Tobit exists in a threefold recension, represented, 1. By the Vatican and Alexandrine MSS.; 2. By the Sinaitic; and 3. By the cursives numbered 44, 106, 107, &c.

A solid basis for inquiries as to the mutual relation of the various texts of the Masorah will be provided by Dr. Ginsburg's forthcoming work on the Masorah. It will consist of three parts: 1. The Great Masorah in alphabetical order, according to the printed edition, but with greater fulness, and carefully collated with the MSS.; 2. The

Small Masorah, edited entirely from the MSS.; and 3. A kind of Concordance to the texts of the Masorah in the various editions of the Bible. The work is in a forward state of preparation, and will be published on the author's return from the land of Moab, whither he intends to proceed next month.

Contents of the Journals.

The **Theologisches Literaturblatt**, the organ of the R. C. theological faculty at Bonn, is remarkable for the comprehensiveness of its contents and the impartiality of its criticism. The most important articles in the recent numbers are two by Dr. Reusch on works relating to the Old Testament (Nov. 21, Dec. 5), and a still unfinished one by Alfred von Reumont on Dean Hook's Life of Cardinal Pole (Dec. 5). The praise awarded in the former to Bleek's Introduction to the Old Testament, Schulz's Old Testament Theology, and Dillmann's Commentary on Job, and even, with some qualifications, to Hitzig's History of the People of Israel, is a proof of candour which is most encouraging. The latter article is mainly devoted to a narrative of those parts of Pole's life which were inadequately treated in Dean Hook's work. Several *lacunæ* are pointed out in the author's list of authorities; *e.g.* Albin's collection of the despatches of the Venetian envoys, most of the works of Beccadelli, and Ranke's Englische Geschichte, not to mention the stores of manuscripts which, even after Lämmer's publication (neglected by Dean Hook), exist at Rome and elsewhere. Articles by Prof. Langen on some recent books on the Epistles, by Dr. Kössing on Pfannenschmid's Das Weihwasser, and by Michelis on Prantl's "monumental" History of Logic, are also well worth reading.

The **Theologisch Tijdschrift** for November contains papers by D. Loman on the composition of St. Matthew's Gospel, and by M. N. A. Rovers on 2 Cor. xii. 12, which the writer regards as interpolated. Also the usual reviews. C. P. von Tiele draws attention to two important but very obscure dissertations by Dr. A. Pfizmaier in the Transactions of the Vienna Academy, on the Tao doctrine of Immortality. It appears that this Chinese doctrine stood in the same connexion with the course of the celestial bodies as the Egyptian and the Turanian.

The **Literarisches Centralblatt**, Nov. 26, contains a severe review of Heinichen's new edition of his Commentary on Eusebius.

New Publications.

Delitzsch, F. Commentary on the Hebrews. Vol. 2. Edinb.: Clark.

Delitzsch, F. Paulus des Apostels Brief an die Römer in das Hebräische übersetzt u. aus Talmud u. Midrash erläutert. Leipzig: Dörffling u. Franke.

Gess, W. F. Christi Zeugniss von seiner Person u. seinem Werk. Basel: Bahnmaier.

Heinichen, F. A. Commentarii in Eusebii Pamphili historiam ecclesiasticam. Leipzig: Mendelssohn.

Nitzsch, C. J., Gesammelte Abhandlungen von. 1ster Band. (From the Theologische Studien u. Kritiken.) Gotha: Perthes.

Ritschl, A. Die christliche Lehre von der Rechtfertigung u. Versöhnung. Erster Band. Bonn: Marcus.

Rönsch, H. Das Neue Testament Tertullians aus Tertullians Schriften reconstruirt.

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Science and Philosophy.

Observations on the Geology and Zoology of Abyssinia, made during the progress of the British Expedition to that Country in 1867-68. By W. T. Blandford, late Geologist to the Abyssinian Expedition. With Illustrations and a Geological Map. London: Macmillan and Co., 1870.

This work is divided into three parts: Personal Narrative, Geology, and Zoology. The author is the Deputy Superintendent of the Geological Survey of India, who obtained permission from the Indian Government to accompany the Abyssinian Expedition; and he has given us a very clear account of the geology of the country visited, although this, the most valuable portion of his work, only occupies about one eighth of the volume. Some very fine woodcuts (from photographs) give an excellent idea of the general character of Abyssinian scenery, and a large coloured geological and physical map enables the reader to connect the external features of the country with the distribution of the several formations.

The greater portion of Abyssinia consists of an undulating table-land of 6,000 or 8,000 feet elevation. Above this rise numerous precipitous hills and mountains, often reaching a height of 10,000 or 12,000 and sometimes even 15,000 feet; while enormous ravines and gorges of many thousand feet deep, carry off the drainage to the Red Sea on the east, or to the Nile Valley on the west. The course of the British expedition lay, for about 300 miles in a north and south direction, along the central ridge or watershed of the plateau, and thus afforded great facilities for the study of its physical features and geology.

The fundamental rocks over a large part of Abyssinia are metamorphic, consisting generally of finely crystalline gneiss, but varying to a slaty rock in which the lines of original bedding are apparent. These form the mass of the table-land, and are exposed in every deep valley. Above 8000 feet the rocks consist mainly of bedded traps, while between these and the metamorphics are a series of sandstones and limestones. These latter are the only rocks that contain fossils, which prove them to be of jurassic age, and the sandstones probably belong to the same formation. The metamorphics are very much older, the dip being nearly vertical; and their surface had been greatly denuded before the sandstones and limestones were deposited horizontally upon them. The traps, which are various in character, and are in some places interbedded with clays and sandstones, are of the same or more recent age.

In the gneissic districts the hills are characterised by huge cliffs which have curved surfaces, and by crags which consist of more or less rounded blocks piled upon each other: these features depending upon the weathering of the rock, which takes place only in those cracks and fissures where the moisture can be retained. The strike of the rocks is north and south, and this has caused the ravines leading up to the plateau to run parallel to the coast of the Red Sea, and thus afford a gradual ascent to the interior. The horizontal beds of sandstone and limestone produce long ranges of cliffs along the sides of the valleys, as well as flat-topped hills, and by their varied colours—brick-red, lilac, grey, or ochreous—form a very characteristic feature in the landscape. The trap rocks, including trachyte, basalt, dolerite, and volcanic ashes, constitute the materials of all the higher mountains and abrupt rocky elevations of the plateau, including most of the Ambas or mountain forts of the natives. These traps probably once covered all the intervening country to the thickness of about 4000 feet, the whole of which, with the exception of isolated patches, has been removed by denudation.

Mr. Blandford is decidedly of opinion that the present form of ground in Abyssinia is wholly due to subaërial denudation. The great ravines, 3000 or 4000 feet deep, and often only about the same width, are certainly due to the action of rain and of the rivers that have flowed in them; while the terraced hill-sides exhibit forms due to the subaërial disintegration of the rocks of which they are composed. He believes that the comparative importance of fresh-water and marine denudation is quite misunderstood by English geologists, owing to the fact that they live in a country where the former is exceptionally weak, the latter exceptionally powerful. In tropical regions, on the other hand (which, it must be remembered, now constitute a large portion of the globe, a belt of 30° each side of the equator being about equal to the remainder of its surface), the reverse is the case. Tropical rainfall is not only much greater than with us, but it is generally concentrated into three or four months

instead of being distributed throughout the year, so that its denuding power over the surface of the country is enormous. During floods, which are of frequent occurrence, the rivers are liquid mud rather than water. The enormous amount of sediment thus carried down to the sea, acts as a barrier to marine denudation, and protects the coasts from destruction; while, where this does not occur, coral reefs answer the same purpose. The result is, that along the shores of tropical continents there are comparatively few signs of that extensive marine denudation which is so characteristic of the sea coasts in temperate and northern regions. If to this we add the consideration, that the climate of almost all the temperate zone has in past ages been more like that of the tropics, with intervening glacial epochs equally favourable to subaërial denudation, we shall be led to conclude that it is only by the study of the geology of the intertropical and glaciated regions combined, that we shall be able to obtain an adequate notion of the power of meteorological causes to mould, to furrow, and to destroy the surface of great continents. It is to be hoped that the Geological Survey of India will undertake to furnish a basis for an estimate of the rate of denudation, by accurately determining the amount of sediment carried down annually by the chief rivers of India, not only at their outlets to the sea, but at several points of their course, especially at their exit from the mountains into the plains.

The lakes of Abyssinia are a very puzzling problem. The only one Mr. Blandford was able to examine was Lake Ashangi, which is 103 feet deep, while the rim of the rock-basin rises about 150 feet above the water. No signs of glacial action were discovered anywhere in Abyssinia; but this may perhaps be due to the rapid disintegration of the basaltic rocks which form so much of the more elevated parts of the country.

The volcanic hills and cones which abound on the shores of the Red Sea, and are sparingly represented on the west side of Annesley Bay, are mostly of recent date, while in some places the disturbance of sedimentary beds, interstratified with volcanic products, indicates comparative antiquity; but no fossils have been found by which their age can be determined. Geologists will find suggestive remarks on many other interesting or disputed questions, on which Mr. Blandford's experience in India often throws light. We may indeed expect, that the science of geological interpretation will be much advanced by the observations of the Indian surveyors, who have the great advantage of studying the denuding action of rain and rivers in a country where these agencies are so much more powerful than they are with us, and where they produce effects far beyond the power of the more placid meteorology of Europe.

The zoological part of the work consists of a systematic catalogue of the species of mammals, birds, reptiles, and molluscs collected, with notes on the synonymy, and on the habits of the species. There is also a short introduction, giving an account of what has been done by previous naturalists, and discussing the range of the species in altitude. The catalogue occupies considerably more than half the volume, which is thus rendered more bulky than necessary, and less convenient for reference, as well as less interesting to the general reader. The personal narrative abounds with notes on the quadrupeds and birds met with; and if all the obtainable information on their habits had been there incorporated, the catalogue might have been printed much more compactly in an appendix (with references to the narrative), and the weight of the volume considerably diminished. A striking example of the inconvenience of the arrangement adopted is seen at p. 102, in the mention of "that most lovely bird, *Pholidauges leucogaster*," found while descending the pass from Senafé on the return journey, at from 2000 to 5000 feet elevation. Not a word being here said of the size, appearance, colours, or affinities of this uncouthly named bird, the reader turns to the index, in order to find it in the catalogue and learn something more about it; but the name is not to be found there. Even if he turn over the 180 pages of the catalogue of birds, and runs his eye down the specific names, very clearly printed in large type, it is still not to be found; and it is only by going through the synonyms, that he at length discovers it under the name of *Grandala leucogaster*, and can get at what the author has to say about it.

Mr. Blandford is evidently a close observer of birds, and thinks for himself as to their affinities. His opinions on points of difficulty are therefore worthy of attention. The sternum of *Indicator*, he tells us, resembles that of the Barbet and Coly, and the bird was observed clinging to the stems of trees, as the Barbets occasionally do. The Colies are placed between the Turacos and the Rollers, but the nest—"a small platform of sticks in a thorny bush"—would remove it widely from both these groups; and Mr. Blandford himself remarks that "the toes are very different from those in other Scansorial Insessores, and even from those of the Plantain-eaters." The Timalidæ are classed with the Crateropidæ, and such genera as *Drymœca*, *Cisticola*, *Prinia*, and *Orthotomus*, are included in the same family. The Larks follow the Warblers, and include the Wagtails in a single family group.

The list of birds reaches the large number of 293 species; and as the author has taken great pains to make himself acquainted with the literature of the subject, it is rather a pity, while devoting so much of his book to a mere catalogue, that he did not include all the species known to inhabit Abyssinia, and thus make it a complete *résumé* of our knowledge at the date of publication.

Good coloured figures are given, of seven new or rare species of birds and of six of the limestone fossils. The author appears to have observed and collected assiduously during his eight months' journey. He has carefully elaborated his materials, and has consulted the writings of previous travellers in Abyssinia; and the result of his labours is an important contribution to the natural history of the country.

Alfred R. Wallace.

Kuno Fischer's Interpretation of Kant. [*Kuno Fischer und sein Kant. Eine Entgegnung*, von Adolph Trendelenburg.] Leipzig: Verlag von S. Hirzel, 1869.

Anti-Trendelenburg. Eine Duplik von Kuno Fischer. Jena: Hermann Dabis, 1870.

Kant's Transcendental Ideality of Space and Time. [*Kant's transcendentale Idealität des Raumes und der Zeit.* Von Dr. Emil Arnoldt.] Königsberg: Albert Rosbach, 1870.

A long controversy which has been going on with alternate replies in the successive works of Professors Fischer and Trendelenburg has come to a final explosion of bitter personalities, and unsparing polemic in the two pamphlets first named at the head of this article. I say final, for the grounds of difference have now been so thoroughly explained, that it is scarcely possible for anything of importance to be added on either side. The substantial gains out of it all are, on the one hand, some new illustration of difficult points, in the philosophy of Kant, and on the other hand a complete and convincing proof that a certain bye-way of philosophy which Trendelenburg had contrived for himself in his *Logical Investigations*, is really a blind way, that leads to nothing.

The question at issue related in the first instance to the validity of Kant's well-known view as to the subjective origin and character of the intuitions of space and time. But in

this question, as it has been discussed, is involved the wider problem of the relation of thought and being, and of the absolute or relative character of our knowledge. According to Kant, the necessary and universal elements of knowledge, can only be conditions imposed upon sensation by the nature of mind. Sensations in themselves give us no knowledge of any object. Only through the unity given by thought expressing itself in the Categories to the manifold of sensation, can we have any experience, that is, any knowledge of objects as such. Further, the manifold of sensation itself which is passively received by the mind can become object of intuition only under conditions of space and time which are the *à priori* forms of sensibility. The Categories, therefore, as well as the intuitions of space and time, are logically prior to experience, as experience is only possible through them. And it is through them that the mere subjective data of sensation are converted into an order of objective existences. Yet this objective order of experience is only objective in a limited sense; it is an objectivity created by the mind, and not given to it. It is therefore the objectivity of phenomena merely, not of things in themselves, which are necessarily withheld from the cognizance of the mind.

Now Trendelenburg in his *Logical Investigations*, and at more length in the 3rd vol. of his *Contributions to Philosophy*, maintains that there is an incompleteness in Kant's logic in regard to time and space. Kant, he says, set before himself only two alternatives, when there are really three possible views. To Kant it seemed necessary that the forms of sensibility should be either objective or subjective, and when he had shown that they could not be *merely* objective, he immediately inferred that they were *merely* subjective. Or what is the same thing, that their objective validity extends only to phenomena. He did not therefore contemplate the possibility that these forms might be both objective and subjective,—a part of the necessary and *à priori* possessions of the mind, and yet at the same time, elements of an objective knowledge, not merely of phenomena, but of what Kant calls "things in themselves." In his *Logical Investigations*, therefore, Trendelenburg would adopt this third view, and thereby fill up what he considers a want in the theory of Kant.

In the end which Trendelenburg has in view of bridging over the great gulf fixed by Kant between the real and the phenomenal object, and so between thought and things, he is not singular. There is a way by which this end may be reached, a way that was followed by German philosophy immediately after Kant, by Fichte, Schelling, and Hegel. And almost the first step in that way is to challenge the conception of "things in themselves," as Kant presents it—for how, it might be asked, is the "thing in itself" different from the objectivity which, according to Kant, thought gives to sensation? And what reason can there be *in thought* to believe in an object not apprehensible by thought? How does Kant prove the existence of "things in themselves"? His reason is ultimately this, that the mind is receptive or passive in sensation, while it is active and spontaneous only in cognition. There must therefore, it is implied, be something that gives or causes the sensation, and this something is prior to and not identical with the something which the mind makes out of sensation. But to this it may be answered that sensation on Kant's own showing, contains in itself no objective reference, and if it be thought alone that determines an object as such, then there is only one object, and not two—that is to say, the phenomenal object coincides with the "thing in itself." Or if not, how are we to distinguish the objective reference that points to the real objectivity of the "thing in itself" from the objective reference that points to the phenomenal object? Now if for such reasons as these it be once admitted that there is no ground for the distinction of the "thing in itself" from the phenomenal object, the contradiction between knowing and being ceases to be insoluble, and we pass necessarily from the Dualism of Kant to an absolute Idealism like that of Hegel. The passivity of Sensation according to which it appears to be given to thought instead of being posited by thought, is seen to be an illusion, in fact, the great illusion which it is the business of philosophy to dissipate. In this way we might accept Trendelenburg's third view, that space and time are both subjective and objective, as the assertion of a thorough-going idealism, which should solve the difficulty presented by the distinction of knowing and being, by showing that it is a distinction in thought, created by thought, and which thought is therefore able to transcend. But this is not Trendelenburg's meaning; to him, as to Kant, the distinction of knowing and being is an absolute one. In his *Logical Investigations* (i. 134) he maintains it to be a last and highest contradiction that cannot be transcended, and in another passage he says that however far we carry our knowledge of objects there is always a remainder, a substratum, a fixed matter, which we cannot explain. In short, that there is always something which with Kant we may call a "thing in itself" outside of knowledge.

But if the idealistic solution of the difficulty be rejected, if between mind and its object there be no ultimate unity, how can our knowledge be objective or real? how can it apprehend more than the phenomenal? Of the "thing in itself," we can know at most only that it is; and in truth as has been shown, there is a self-contradiction in saying that we can know even that. Or if like Trendelenburg we insist on knowing more about it, we seem forced to revive the old notions of pre-established harmony or occasional causes. As we are not able to lift ourselves above and out of our own thoughts in order that we may discern their agreement with the objects they represent to us, we must suppose that θείᾳ τύχῃ it has been provided that thoughts should coincide with things, and things with thoughts. To Kant it seemed certain that a necessity laid upon us by our own mind could not also be a necessity laid upon us by an object given to the mind from without, and, as he rejected the hypothesis of occasional causes as involving the transcendental use or rather abuse of categories valid only in their application to the data of sensation, he was forced to declare our notions of time and space to be subjective in origin and character, and applicable only to phenomena.

This Trendelenburg thinks an oversight: and he has a key of his own to the problem. Knowing and being are not, he thinks, even ultimately identical, but there is something common to both. And just as the geometrician, when he is proving the equality of the squares of the sides of a right-angled triangle to the square of the hypothenuse, seeks a common element or intermediate unity by means of which he may compare them (*Logical Investigations*, i. 137), so here the philosopher seeks something common to thought and being by means of which their agreement may be manifested. This common something he finds in movement, which belongs equally to being and to thought, the constructive movement of thought corresponding to the outward movement through which alone matter manifests its qualities. This movement does not indeed exhaust the nature of the objective, since there is always the insoluble remainder already mentioned, but it is that point of coincidence with being that gives reality to knowledge.

It is easy to prove that this theory is one of those crude attempts at compromise which always create more difficulties than they remove. It is in fact, to use a phrase of Kant's, "a nest of contradictions." Suppose for a moment that this common element in thought and being exists—suppose that

there is a movement, or, as Trendelenburg puts it, "a creative energy common to thought and things, though acting unconsciously in things and consciously in thought, which lays open the unconscious to consciousness" (*Contributions*, vol. iii. p. 218), how can it possibly be known? How can thought without transcending itself, without being more than thought, compare itself with being, so as to discover what is the common element in both? No doubt there is a movement of things and a movement of thought, but the movement of things is given to us only in thought, or exists to us only as it is thought of by us. To identify the supposed subjective and objective movements is therefore, as Fischer remarks, nothing else than to confuse the thought of movement with the movement of thought. It is indeed just conceivable that some one might maintain that the thought of movement is the primary thought, both of the objective and the subjective, and might begin a metaphysical logic with this thought, as Hegel begins his logic with being. This would revive, in a somewhat coarser form, the old doctrine of Heraclitus, who found the principle of all things in "Becoming." But ultimately it would bring us back by another way to that identification of thought and being which Trendelenburg has spent almost his whole philosophical life in attempting to disprove.

With regard to the doctrine of Kant, it is clear that the "third course" of Trendelenburg was not overlooked by Kant, but excluded by the necessity of his logic. In Kant's system the dualism or absolute distinction between the "thing in itself" and the phenomenal object, *i.e.* the object as it appears to the subject, rests upon another dualism between sensibility and understanding, and the only way in which from his point of view the unity of knowing and being can be attained is by proving that these two are ultimately identical. Now Kant distinctly contemplated this possibility when he said in the introduction to the *Critique of Pure Reason* that "there are two great stems in the tree of human knowledge —sensibility and understanding, which perhaps spring from a common, though to us unknown, root" (*Kant's Werke*, vol. ii. p. 28, Rosenkranz's edition)—and this was the only form which the question could take in his philosophy. So long as the dualism of sensibility and understanding was maintained, the supposition that time and space should be both objective and subjective, or, as Kant would have preferred to express it, the supposition that time and space should have both transcendental ideality and transcendental reality, remained an absurdity. To understand Kant, we must always remember the relation in which he stood to previous philosophy, and the stage which the problem had reached in his time. As Dr. Arnoldt has shown very clearly, it is forgetfulness of the historical position of the Kantian philosophy that has occasioned the mistakes of Trendelenburg. Yet Kant leaves us in no doubt as to his estimate of the philosophy of his predecessors. Locke had held that space and time are at once empirically and transcendentally real. Berkeley seemed to have proved that to us "esse" and "percipi" are one—that we cannot get beyond our sensations to any substratum or "thing in itself," that in Kant's language our knowledge of all things, and therefore of space and time, is confined to their empirical reality. Hume, however, had argued from the same premises that we cannot know even their empirical reality, for wherever our ideas go beyond the data of sensation, they must be mental fictions, or arbitrary results of association, and therefore, in Kant's language, "empirically ideal;" or, in other words, they are subjective in two senses, as they do not correspond to the true nature of the object or "thing in itself," and as they are arbitrary or accidental, and do not even correspond to the sensations from which they are derived (cf. Dr. Arnoldt, p. 9). Kant, on the other hand, maintained the transcendental ideality and empiric reality of space and time. He maintained that, although not contained in the data of sensation, they are valid for all that empiric knowledge of objects which Hume supposed to rest upon sensation, and that it is only under these forms that the manifold of sensation receives from thought the unity of an object of intuition. But this restores only the empiric reality of space and time, leaving them still transcendentally ideal. To maintain, as Trendelenburg does, the transcendental reality, together with the transcendental ideality of space and time, would have been to attack Berkeley as well as Hume—it would have been to pass beyond those limits of human knowledge which were to Kant the "flammantia mœnia mundi." And to say that Kant merely omitted or neglected this alternative without duly considering it is to say that he had forgotten that which he was fighting against all his life.

What has been said may serve as an indication of the main points upon which the controversy turns, although I have omitted to notice much that is of great interest in connection with the interpretation of Kant. On every point of any importance the last answer of Kuno Fischer seems to be conclusive, though sometimes, not unprovoked, he presses too far a trifling logical advantage. As against Trendelenburg at least, he is almost completely victorious. At the same time, Dr. Arnoldt's pamphlet is most instructive for those who would penetrate into the essential meaning of Kant. It exhibits the matter in a "dry light," less darkened by the smoke and dust of controversy. Dr. Arnoldt shows, moreover, greater speculative acuteness and a greater power of gathering into a focus the dispersed utterances of the *Critique of Pure Reason*. In conclusion I may say that the result of the controversy, and the complete demolition of the *via media* which Trendelenburg has expended so much acuteness and logical force in constructing, is one proof among many that no philosophy can be self-consistent that stops short of absolute Idealism. Edward Caird.

THE GULF STREAM.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—My attention has been drawn to the fact that in a notice of Petermann's recent work on the Gulf Stream in the last number of the *Academy*, I have followed the author in somewhat misstating Dr. Carpenter's views in respect to the extension of that current to the coast of Europe.

The reading of Dr. Carpenter's opinion there given is drawn from a ecture on the Temperature and Animal Life of the Deep Sea, delivered by him at the Royal Institution in February of this year; but in a letter published in *Nature* of the 25th of August, Dr. Carpenter corrects the erroneous impression caused by certain of his statements, and whilst he recognises a north-easterly movement of the upper stratum of the warm waters of the North Atlantic, he clearly distinguishes between this *subsidiary current* and the *Gulf Stream proper*. The former current Dr. Carpenter believes to be "a part of a *general interchange* of the polar and equatorial waters" [probably less rapid in its motion than the surface current, and at a lower temperature*], "which is quite independent of any such local accidents as those that produce the Gulf Stream proper, and which gives movement to a much larger and deeper body of water than the latter can affect," and he "fails to see the evidence that either the heat or the movement of the Gulf Stream proper is directly concerned in the flow of the upper warm stratum of the north-east extension of the Atlantic towards the Hebrides, the Faroes, and Spitzbergen; for, as the stream of superheated water on its emergence into the open ocean spreads itself out like a fan, it must necessarily become shallower as it extends, instead of deeper."

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* "Many probabilities leading to the suspicion that the bottom-flow may be considerably less rapid than the surface-current, and its temperature considerably less." —*Nature*, ii. p. 334.

The difference of opinion thus seems to lie, not in the question of the extension of a warm current to Europe, but in the identification of this warm flow with the Gulf Stream of Florida. Dr. Carpenter considers the Gulf Stream as only a special and distinct feature of the great interchange of waters; Dr. Petermann looks upon it as the main feature of the circulation in the North Atlantic. But since Petermann's charts show, for the first time with authority, a regular and constant pulsation of the warmer waters extending without a break from the narrows of the Strait of Florida to Spitzbergen, where *on the surface* shall we draw the line of demarcation between the subsidiary current and the Gulf Stream?

Both, if there be two, as the isothermal charts show, become so blended as to be indistinguishable from one great current, which, for more than one-half of its north-eastward course of 5000 miles, is universally known as the Gulf Stream. Is it not more convenient that one name should designate the whole movement?

Keith Johnston, Jun.

Scientific Notes.

Geology and Natural History.

South African Geology.—No fewer than five papers have been communicated to the Geological Society this session on the geology of Southern Africa, a region which has suddenly sprung into importance by reason of its diamond-fields, which—though yielding stones of inferior value to those of Brazil—have been remarkably prolific in the number and even in the size of some of the stones met with. Prof. Morris has started a new theory as to the source whence diamonds are derived. Hitherto they have been looked upon as coming from igneous and metamorphic rocks, like garnets, rubies, and many other precious stones; a better knowledge of the geology of the diamond-district of South Africa leads us to conclude that these stones come from certain stratified beds containing, besides reptilian remains, numerous plants and much fossil wood. These beds are known as the "Karoo" or *Dicynodon* beds. Prof. Morris calls to mind the remarkable fact (well known to botanists and mineralogists) that in the stems of the bamboo small crystals of quartz are found, known by the name of *tabasheer;* he suggests, whether it may not be possible that the diamonds yielded by these old plant-beds similarly owe their origin to vegetable growth. The idea is well worthy the attention alike of the chemist, the mineralogist, and the botanist. By far the most valuable of these South African papers is that by Mr. C. L. Griesbach "On the Geology of Natal;" a carefully prepared survey, which occupied three years in prosecution, and gives us a good geological map and sections, and numerous fossil remains. Mr. Griesbach discourages the idea of gold being found in quantities sufficient to repay the outlay of European labour and capital.

New British Fossil Crustacea.—The last two monthly numbers of the *Geological Magazine* contain descriptions by Mr. Henry Woodward of seven new species of fossil crustacea from the London clay, chalk, and mountain limestone of England, together with corrections of some others already described.

Glacial Origin of the Valley of the Amazon.—So long ago as 1867, the geological world was filled with astonishment at learning that Prof. Agassiz, in his wonderful interpretation of the geological history of the valley of the Amazon, had arrived at the conclusion that, during the glacial period, the whole valley of the Amazon and its tributaries was occupied by an enormous glacier. Its movement was eastward, it ploughed up and ground down the bottom of the valley, and it built up, as its terminal moraine, a collossal sea-wall of gigantic proportions. With a milder climate the valley became an enormous fresh-water lake. Strata more than 800 feet in thickness were then deposited. At the end of this time the sea is supposed to have worn away the terminal moraine so as to release this vast body of water, which consequently rushed violently seaward, denuding the sandstone it had just deposited save here and there. This wonderful theory has lately been reiterated by Mr. C. F. Hartt in his recent volume which we shall review shortly. Fortunately Mr. Hauxwell, a very careful collector, at present in Brazil, has discovered fossils in this old lacustrine mud-deposit which promise a more tranquil explanation, and tell us of a gradual elevation of the country, changing the condition and position of the river and its estuary, and extending the valley seawards to the east from century to century with the rise of the land, and especially the great water-shed line of the Andes. These shells show, by their contorted character, the presence of brackish (estuarine) water, a sure agent in modifying the form of shells brought within its influence either from the river or the sea.

New Fossil Marsupial.—The remarkable marsupial found fossil in the bone-caves of Wellington, New South Wales, and described in 1859 by Professor Owen as the *Thylacoleo carnifex*, "one of the fellest of the carnivora," has been the subject of considerable criticism upon several occasions by Mr. W. Boyd Dawkins, Professor Flower, Dr. Gerard Krefft, and others, who have disputed its carnivorous character. Prof. Owen recently communicated another paper to the Royal Society on *Thylacoleo* and *Plagiaulax*, an extinct and very small mammal from our own Purbeck beds, treated by Owen as a carnivor, and by the late Dr. Falconer as a rodent.

Fossil Meteorite.—A new meteorite has just been discovered in the miocene deposits of Greenland, and brought to England. It has been offered, we understand, to the Trustees of the British Museum for the sum of 240*l.* This is the first instance on record of a truly fossil meteorite having been met with.

Physiology.

Structure of the Internal Ear.—Dr. Rudinger, of Munich, has just published a short pamphlet, in which he gives the results of his recent investigations upon the minute structure of certain parts of the labyrinth of the ear, especially in relation to the mode in which the auditory nerve terminates. The internal ear consists of three parts, the vestibule, the semicircular canals, and the cochlea. The two former contain a membranous bag and tubes, corresponding in form to the cavities of the bone. The tubes present three ampullæ; and it is to these that Rudinger's observations have been chiefly directed. The branches of the auditory nerve distributed to the ampullæ enter by a groove on their external surface, and are here doubly contoured; but on reaching the internal surface they lose their double contour, and appear as though reduced to the cylinder axis. The internal surface of the ampullæ is lined by epithelium, which, of spheroidal or transitional character through the greater part of its extent, presents a remarkable development on the floor of the ampullæ. Here the layer becomes greatly increased in thickness, and appears to be composed essentially of two forms, one cylindrical, of yellowish colour, and with truncated extremities, which may be regarded as supporting cells; the other, fusiform and ciliate, which may be regarded as nerve cells. The relation of the latter to the nerves is the central point of interest of Rudinger's observations. On staining the nerves with perosmic acid, he finds that after penetrating the basal membrane of the ampulla, and entering the deeper part of the epithelial layer, they form a plexus, with delicate nodules at the point of intersection; and from this plexus fibres are given off which enter the base of the fusiform epithelial cells, and may be traced in their interiors to the nucleus as a fine brownish black stria, and from thence to the peripherical extremity of the cell, where it is prolonged in the form of a fine hair or cilium; the latter, therefore, it would appear, are the true terminations of the auditory nerve, and, floating as they do in the endolymph that fills the membranous canals, are placed under conditions singularly favourable for the perception and propagation of the vibrations of sound.

The Pneumatic Forces carrying on the Circulation of the Blood.—Dr. Buchanan, of Glasgow, has published an interesting and thoughtful essay on this subject (Richardson: Glasgow), dealing especially with those that are referable to the act of respiration. He observes that when any of the great veins that enter the chest—the subclavian, the jugular, or the vena cava—are exposed to view in a living animal, they are seen at every inspiration to shrink in size, losing their cylindrical shape, becoming flattened, and as if so far emptied of their blood as to be no longer distended. These phenomena are coincident with inspiration; and Dr. B. infers that it is the pressure of the external air which empties the great veins of their blood and forces it into the chest. At every expiration again the veins swell out, which has hitherto been attributed to a regurgitation of the blood, owing to the compression of the chest that occurs in expiration; but he shows that it is in all probability due not to a reflux of blood from the heart, but to the accumulation of blood from the smaller veins which is temporarily prevented from gaining entrance into the chest. This suction power, he believes, extends over the whole sanguiferous system—veins, capillaries, and arteries; and in proof refers to the difference in character of the pulse in inspiration and expiration, the phenomena presented when the brain is exposed by a wound, the phenomena of asphyxia, and of the fœtal circulation.

The Migration of Cells.—Dr. Caton publishes a paper in the *Journal of Anatomy and Physiology*, Nov. 1870, on the cell migration theory. It is well known that the blood contains two kinds of corpuscles, the red and the white, floating in a colourless fluid. The white corpuscles are capable of spontaneous movements; and when, from any cause, the current of the blood through the smaller or capillary vessels is arrested or retarded, as occurs during inflammation, the white corpuscles, according to Cohnheim, von Recklinghausen, Stricker, and others, escape from the interior of the vessels, either by perforating their continuous but delicate wall, or by squeezing themselves through minute openings which are believed to exist in the walls. The white corpuscles that have thus escaped become altered and form pus cells,

or in common language, "matter." Some observers deny that this migration really occurs, contending that the passage of the white corpuscles through the vascular walls is an optical illusion, and that pus cells are formed *outside* the blood-vessels. Dr. Caton states that, having undertaken many observations on winter frogs, he was unable to satisfy himself of the occurrence of the migration of the white corpuscles; but at length, on examining strong and healthy frogs in spring, he clearly saw the passage of white corpuscles, as described by Cohnheim. Experiments made upon the transparent parts of fishes led to a negative result; but in tadpoles the process could be seen with great ease; indeed he states that he here observed the apparent migration of red as well as white cells, even when there was no local inflammation.

Relation of Tactile Sensibility to the Mobility of Parts.—MM. Kottenkamp and Ullrich have undertaken some investigations to determine the sensitiveness of different parts of the skin (*Zeitschrift für Biologie*, Band vi. p. 37). They fastened pins, at different distances, into pieces of wood, and then applied them to the skin, as a measure of the acuteness of touch, and no answer was deemed correct unless not only two pins were distinctly felt, but the direction of the line uniting these, in regard to the axis of the limb, whether longitudinal or transverse, could be accurately stated. Taking the upper arm, fore-arm, hand, and finger respectively, the acuteness of sensibility could be expressed by the numbers 1 : 3·5 : 29 : 160; and they lay down this proposition, that the delicacy of the sense of touch in a given region of the skin is represented by the sum of two factors, of which one indicates the mobility of the articular axis, whilst the second is proportional to the distance of the part from that axis.

Botany.

Structure and Affinities of the Passifloreæ.—Dr. M. T. Masters read an important paper on this subject before the Linnean Society at their meeting on Nov. 17th. Jussieu and St. Hilaire held that there is no true corolla in the passion-flower, but two calycine whorls, because both organs drop at the same time. But the mode of development and the internal structure clearly demonstrate that the inner whorl is a true corolla. The flower-tube is, according to Bentham, composed of a union of the calyx and corolla; Dr. Masters, on the other hand, believes it to be an expansion of the axis. Its development is comparatively late. The form of the corona was traced from its simplest form in *Turnera* to its most complicated arrangement in some *Modeccas* and *Passifloras;* in all cases it is a mere projection from the flower-tube, and is of late development, and morphologically of little importance, though essential to the individual life of the plant. The inner portion of the tube is a glandular secreting substance. The anthers are invariably two-celled. The pistil is singularly uniform, one-celled, made up of three united carpels, with three parietal placentæ, and three stigmas. The arrangement of the reproductive organs favours cross-fertilisation. The anthers, originally introrse, become, when fully developed, distinctly extrorse, and it is thus rendered difficult for the pollen to fall on the stigma of the same flower: it falls on to the rays of the corona, on which insects alight in search of the honey concealed at the base of the tube, and carry the pollen away to other flowers. Some species are more easily fertilised by pollen belonging to a different species than by their own: hence hybrids abound. Dr. Masters connects the *Passifloreæ* rather with the *Turneraceæ*, *Samydaceæ*, *Violaceæ*, and *Sauvagesieæ* than with the *Cucurbitaceæ*, with which they have usually been associated; his main argument being the truly hypogynous character of the stamens. In geographical distribution the order is essentially tropical, occurring between 30° N. and 30° S. latitude. The true passion-flowers are almost exclusively American, and chiefly Brazilian. The *Passiflora incarnata*, or original passion-flower of the Jesuits, is one of the few North American species, and has probably been introduced there, being closely allied to *P. edulis* of Brazil. Types of the order more or less divergent from *Passiflora* occur in Peru, India, the Indian Archipelago, with a solitary outlier at Hongkong, Australia, the Pacific Islands, New Zealand, and Africa.

Chemistry.

Synthesis of Indigo.—The synthesis of indigo has at last been achieved by MM. Emmerling and Engler. Their results have been communicated by Prof. Baeyer to the Berlin Chemical Society, and are published in the latest number of their *Berichte.* Acetophenon (the methyl keton of benzoic acid) was converted by means of hydric nitrate into mononitroacetophenon. This azotised body was *reduced and dehydrated simultaneously*, which was done by heating the mononitroacetophenon with a mixture of powdered zinc and dry calcic hydrate (quicklime). The indigo sublimed over, and was recognised as such by its characteristic iodine-like vapours, and also by its yielding with strong sulphuric hydrate the "Indigo-Küpe." The authors could not obtain enough of the substance for the purposes of analysis, but they are continuing their experiments with the view of obtaining this artificial indigo in estimable quantities.

The Aerolitic Shower at Hessle.—This meteoric fall, the first recorded to have taken place in Sweden, occurred at 12.20 p.m. on 1st January, 1869, in the neighbourhood of Hessle, three Swedish miles from Upsala. Prof. Nordenskjöld, who announced the shower last year, has now issued (*Poggendorff's Annalen*, No. 10, 1870) a detailed account of the physical and chemical characters of the stones, and the phenomena attending their descent. They were strewn over a line of country lying 30° E. of S. towards 30° W. of N. Some fell within a few yards of peasants leaving church, another fell close to a fisherman on the Mälar bay Lårsta-Viken, dug a hole 3 to 4 inches deep in the ice, and rebounded; when picked up, it was still warm. The noise accompanying the fall, which was heard in Stockholm, is described as resembling some very heavy thunderclaps, followed by a rattle like the passing of waggons at a gallop, and ending with first a note like an organ tone and then a hissing sound, the whole lasting some minutes. The sky was cloudy, and though apparently unseen at Hessle itself, a luminous meteor was noticed by observers at a distance. The stones vary greatly in size, some weighing nearly 2 lbs., the smallest (and the little ones were numerous) only 0·07 gramme. Though of sufficiently loose structure to break in pieces when thrown with the hand against the floor or frozen ground, it is remarkable that nearly all the specimens are intact, and that some of the stones weighing 2 lbs. which struck the ice of the Lårsta-Viken, failed to penetrate it, though its thickness on that day did not exceed a few inches. These facts support the statements of eye-witnesses as to their remarkably small downward velocity. These meteorites present no unusual aspect, and resemble in particular those of Aussun and Clarac, Haute-Garonne, which fell on the 9th December, 1858. Their exterior is black; within they are bright grey, and sufficiently porous to cling to the tongue, whence it is concluded that their mass has not undergone fusion, as would be required by the theory of Laplace. Chemical analysis proved them to be composed of about 20 per cent. of nickeliferous iron (chamoisite, Fe_8Ni); some schreibersite, and rather less than 1 per cent. of what was probably chromite; a variable amount of iron monosulphide (troilite); a trace of carbon, probably in the form of a hydrocarbon; traces of salts soluble in water; about 10 per cent. of labradorite or anorthite; 37 per cent. of olivine; and 23 per cent. of shepardite. These silicates, it should be remarked, were not isolated for examination, but are assumed to be present from calculations based on the results of an analysis of the mass. The researches of Prof. Maskelyne and Dr. Laurence Smith have shown the existence of shepardite as a mineral species to be highly improbable.

The most interesting feature of the Hessle fall is the association with the stones described above of others mainly composed of carbon. The peasants noticed that some of those which fell on the ice near Arnö soon crumbled to a blackish brown powder, which formed with the snow water a mixture resembling coffee-grounds. A similar powder was found on the ice at Hafslaviken in masses as large as the hand, which floated like foam on water, and could not be held between the fingers. A small amount secured for examination was seen under the microscope to be built up of small spherical granules. It contained particles extractible by the magnet, and, when ignited, left a reddish brown ash. Heated in a closed tube, it gave a small amount of a brown liquid distillate. A quantity dried at 110° had the following composition:—

		Equivalent Ratios.
Carbon	51·6	8·600
Hydrogen	3·8	3·800
Oxygen (calculated)	15·7	1·962
Silicic acid	16·7	0·371
Iron protoxide	8·4	0·233
Magnesia	1·5	0·075
Lime	0·8	0·029
Soda and trace of lithia	1·5	0·048
	100·0	

The combustible constituent of this body appears therefore to have the formula—

$$n.\ C_9H_4O_2.$$

It was noticed, moreover, that the stones found in the same district with this carbonaceous substance were, as a rule, quite round, and covered on all sides with a black, dull, and often almost sponge-like crust. The iron particles on the surface of the smaller stones were usually quite bright and unoxidised, as though the stone had been heated in a reducing atmosphere. The author believes that this carbon compound frequently, perhaps always, occurs in association with the meteorites, and attributes its preservation in this case to the fall of the stones on snow-covered ground.

Isotrimorphism of Stannic and Titanic Oxides.—Stannic oxide, resulting from the action of steam on stannic chloride at a red heat, has been shown by Daubrée to take a crystalline form, not identical with

that of tinstone, but of a prism of the rhombic system, in fact to correspond with the brookite form of titanic oxide. Wunder has since found that stannic oxide, under certain conditions, crystallises in the tetragonal forms which rutile and anatase exhibit, and has thereby established the fact of the existence of a complete isotrimorphism between the two metallic oxides. Melted with borax, and allowed to separate by cooling, stannic oxide assumes the forms of rutile and tinstone; replace this flux by phosphorus-salt, and the oxide crystallises in the form found in anatase. The usual blowpipe bead is of sufficient magnitude for the success of the experiment; and in order to produce well-developed crystals, the bead, as soon as it has become clear, should be retained for some time in a region of the flame which, though somewhat cooler, is still sufficiently hot to just prevent its becoming opaque. The crystals are finally separated from the material of the bead with warm hydrogen chloride, and measured under the microscope. In compound beads crystals of both kinds occur, that form of crystal predominating whose flux was present to the largest amount. By the addition of phosphorus-salt to a borax bead filled with crystals of rutile, and subsequent fusion and prolonged gradual cooling, crystals of anatase appear. The mean of some measurements of the angles formed by the two polar edges bounding a face of the prism, on such an artificial crystal of anatase, was 40° 46′, the same angle on a natural crystal being 40° 35′.

The Metallic Peroxides prepared by Electrolysis.—Wernicke has examined these bodies and the conditions favouring their formation, and has obtained the following interesting results. The battery used consisted of two Daniell elements; when the strength of the current was increased, oxygen was evolved from the positive plate, and the yield of peroxide diminished. The so-called peroxides deposited from alkaline or neutral solutions of the metals, are hydrates of the form RO,H_2O or $R_2O_3,2H_2O$, and have the following constitution and specific gravity:—

Hydrate of lead peroxide . . .	PbO_2,H_2O .	6 267
Hydrate of manganese peroxide .	MnO_2,H_2O.	2·564—2·596
Hydrate of bismuth peroxide . .	BiO_2,H_2O .	5·571
Hydrate of cobalt peroxide . . .	$Co_2O_3,2H_2O$.	2·483
Hydrate of nickel peroxide . . .	$Ni_2O_3,2H_2O$.	2·744

In thin films these compounds exhibit very beautiful interference colours, those of cobalt being especially marked by their great brilliance and permanence. In explanation of the diminished yield of metallic peroxide when stronger currents are used, it is assumed that in such cases hydrogen peroxide is simultaneously formed, and these two bodies decompose each other, oxygen being evolved and an hydrated oxide produced. This view is favoured by the fact that in acid as well as alkaline solutions, such as those of manganese and lead nitrate, with increased current intensity, basic oxides are set free at the positive pole.

Metallic Vanadium.—Prof. Roscoe has observed that the amount of hydrogen taken up by metallic vanadium varies with the more finely or coarsely divided condition of the chloride, VCl_2 ($V=51·3$) employed for its preparation. The metal containing hydrogen absorbs oxygen from the air, loses its lustre, and turns dull grey. An analysis of this body gave the numbers: vanadium, 87·8, hydrogen 1·3, oxygen 10·9 per cent. Metal absolutely free from oxygen has not yet been formed. By heating the dichloride, formed from the tetrachloride, in a current of hydrogen, he obtained a product containing 95·8 per cent. of metal, but the method of reducing the vanadium chloride with sodium was less satisfactory. The tetrachloride, in contact with sodium, decomposes with explosion; the reaction with the solid chloride at a red heat takes place more readily.

Henderson's Patent Steel Process.—Mr. James Henderson, of New York, contributes to *Nature*, for Dec. 1st, an account of this new process. The object is the production of steel by the partial decarbonisation of cast-iron by the combined use of fluor-spar, or other fluorides, and titanic acid applied to cast-iron at the melting temperatures, preferably in reverberatory furnaces. Fluorine is given off from the fluor-spar, and is a more powerful agent for the removal of silicon than oxygen, getting rid of it almost entirely from the cast-iron before the reactions with the carbon begin; the phosphorus and sulphur are next acted upon and eliminated in the order they are named by means of the combined action of fluorine and titanic acid, *i. e.* fluorine, titanium, and oxygen. Last of all the carbon is removed. The fluorine is derived from fluor-spar combined with iron ores containing titanic acid in such a way as to ensure simultaneous action of the fluorine, titanium, and oxygen, upon the cast-iron; and by reason of the affinities of these substances for silicon, phosphorus, sulphur, manganese, arsenic, and carbon, they are taken from the iron in the form of vapour and slag; whilst the purified metal is left behind, to be hammered or rolled for the market.

Physics.

Method of Determining the Co-efficient of Reduction for Tangent-Galvanometers.—The co-efficient of reduction for the indications of a tangent-galvanometer, or the factor by which the tangent of the angle of deflection produced by any current must be multiplied, in order to get the strength of the current expressed in absolute units, may be deduced by a well-known formula from the dimensions of the instrument, when the strength of the horizontal component of the earth's magnetic force is known for the time and place of experiment; or it may be ascertained by comparing the amount of chemical decomposition effected by a current in a given time with the deflection it produces. A third method, capable of being carried out more readily and with simpler instrumental appliances than either of these, is recommended by A. Wassmuth, of Prague (*Pogg. Ann.* Supplement, vol. v. p. 167), and is founded on a knowledge of the absolute electromotive force of a Daniell's cell. The experimental part of the process consists in the compensation of a Daniell's cell by one of greater electromotive force, as in Poggendorff's method of comparing electromotive forces, the galvanometer to be examined being introduced into the branch-circuit. Then, putting e for the electromotive force of the Daniell's cell, and r for the resistance of the branch-circuit including the galvanometer, the strength of the current c traversing the galvanometer is given by the equation—

$$e = c\,r;$$

and, combining this with the observation of the deflection produced, we get the factor required. For the value of e, the author adopts the number resulting from Professor von Waltenhofen's measurements, namely, 12·04 "Jacobi-Siemens units"; that is to say, 12·04 times the electromotive force which would produce, in a circuit whose resistance is equal to that of a column of mercury one metre long and one square millimetre in section, a current of the same strength as that which would evolve in a voltameter one cubic centimetre per minute of explosive gas at 0° C. and 760 millimetres pressure.

The Nature of Vowel-Sounds.—A discovery announced in the *Comptes rendus* for the 25th of last April, by Rudolf Koenig, the well-known maker of acoustical apparatus, seems likely to have an important bearing on some points of philology. It is known that Helmholtz has shown that the distinctive character of the vowel-sounds is due to fixed tones characteristic of each, and that he has investigated the pitch of the tones proper to the different vowels, by examining the resonance of the cavity of the mouth, when adjusted for whispering them, by means of vibrating tuning-forks held near the opening of the lips. In this way he arrived at the following results—

Vowel	U	O	A	E	I
Characteristic tone . .	*f*	b^{i}♭	b^{ii}♭	b^{iii}♭	d^{iv}

Koenig, on repeating Helmholtz's experiments with more complete apparatus, has entirely confirmed his general result, but has arrived at slightly different conclusions as to the characteristic tones of the vowels U and I, which he finds are respectively lower and higher octaves of the tones of the intermediate vowels. For the North German pronunciation (to which Helmholtz's results also refer) the vowels are accordingly characterised as follows:—

Vowel	U	O	A	E	I
Characteristic tone . .	b^{i}♭	b^{ii}♭	b^{iii}♭	b^{iiii}♭	b^{iv}♭
Simple vibrations per second (approximate)	450	900	1800	3600	7200

As Koenig points out, it is more than probable that the physiological reason of the occurrence of nearly the same five vowels in different languages, is to be sought for in the simplicity of these ratios, just as the simplicity of the ratios of the musical intervals explains the adoption of the same intervals by most nations.

Ebullition of Non-miscible Liquids.—An experiment which affords a striking illustration of the law that the vapour-tension of a mixture of two mutually insoluble liquids is equal to the sum of the vapour-tensions of the two liquids taken separately, has been described by August Kundt (*Pogg. Ann.* vol. cxl. p. 489; July, 1870). He finds that sulphide of carbon, which boils by itself at 46·6° C., boils in the presence of water at nearly 43°, and that, if sulphide of carbon and water, which have been heated separately to 45°, be mixed together, the mixture boils briskly until the temperature has fallen to 43° or 42°.

New Publications.

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Flower, Prof. W. H. An Introduction to the Osteology of the Mammalia. London: Macmillan and Co.

Leo, Dr. E. Die Steinkohlen Central-Russlands. St. Petersburg: Röttger.

Leroy, G. G. The Intelligibility and Perfectibility of Animals. London: Chapman and Hall. [Translation of a work published about 1780, by M. Leroy, who was then ranger of Versailles, under the name of the Nüremberg Naturalist. Contains many observations on the habits and instincts of animals, of which use has been made by Darwin and others.]

Mädler, D. J. Reden und Abhandlungen über Gegenstände der Himmelskunde. Berlin: Oppenheim.

Müller, Prof. D. Lehrbuch der Anatomie der Haussäugethiere. 2te verb. Aufl. Wien: Braumüller.

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Schell, Dr. W. Theorie der Bewegung u. der Kräfte. Leipzig: Teubner.

Spencer, Herbert. Principles of Psychology. Vol. I. Being the fourth part of the author's System of Philosophy. Williams and Norgate.

Stewart, Prof. Balfour. Lessons on Elementary Physics. London: Macmillan and Co.

Stricker. Handbuch von den Geweben. IV. Das Gehirn. Leipzig: Engelmann.

History and Archæology.

Superstition and Force.—Essays on the Wager of Law; The Wager of Battle; The Ordeal; The Torture. By Henry C. Lea. Second Edition. Philadelphia: Lea.

Mr. Lea's book is not what its title-page would lead us to expect, a contemptuous exposure of the cruelty and superstition of past ages; it is an impartial history of the attempts made by the European nations to shape out of their ancestral beliefs and customs a trustworthy system of judicial evidence. The author undertakes his task in a catholic spirit, rightly observing that these rude judicial institutions claim respect both as improvements upon a past state of society, and as first steps towards future progress. The history of each system is preceded by an examination of the principles on which it was based. Proofs are also furnished of its existence among nations entirely, or almost entirely, unconnected by blood or intercourse with those of mediæval Europe, and a strong presumption is thereby established that all these systems—the judicial employment of torture excepted—were, in like manner, indigenous among the tribes which broke up and parcelled out the Roman Empire. Each institution is traced from its earliest germs to its fullest development in the different communities of Europe, examples of its practical working are furnished, and the causes and slow process of its decay are analyzed. The opening remarks of the Essay on the Wager of Law point out that,—

"The loosely-knit organizations which overthrew the Roman empire were based upon two central principles—the independence of the individual citizen, and the solidarity of the family; and on the mutual interaction of these organic laws was based the jurisprudence of the period. The criminal was not responsible to the State, but to the injured party, and all that the state professed to do was to provide some definite process by which the latter could assert his rights."

The proceedings by which those individual rights were asserted or defended were regulated by the other great central principle—that of family partnership. All the members of a kindred were indissolubly united. For the crime of one member all suffered; the wrong done to one was to be avenged by all. Compensation as an alternative for reprisals was collected from the whole family of the offender at a rate measured by the different degrees of kindred, and similarly distributed among that of the sufferer. One prevailing exception there was to the universal law; a priest neither contributed nor received a share of compensation imposed upon, or claimed by his relatives. In case of his murder, the Church, not his family, received the *wer-gild* (not *wehr-gild*). The solidarity of the Church alone dissolved that of the family. The principle of the unity of families was the natural basis of *compurgation*, a form of procedure whose strong and rapid growth extended in the middle ages from Southern Italy to Scotland. In our own day the last flickerings of its vitality have been evoked in English law courts, and in America it has never been formally abrogated. So early as the laws of Canute we find *compurgation* modified in this country into a close resemblance to its modern offspring, trial by jury. In Welsh law, of which it became the leading characteristic, the custom steadily kept its pristine form, but the number of conjurators rose to a degree which marks the primitive conception of the family widened into that of the clan.

The Wager of Battle, unknown both to the Cymry and the Anglo-Saxons, although practised by the barbarian tribes of Europe, is mentioned by the Senchus Mor in terms which prove its existence among the Irish from the earliest times. Towards the close of the 13th century, when the judicial combat was at its fullest vigour, wager of battle in France lay against judges of all courts, that of the king only excepted. In England, as in Germany, it lay against the sovereign himself; at the coronation of our Norman kings, the champion was by no means a mere lay figure in a state pageant. Mr. Lea has collected many curious facts illustrating the legal duel, particularly as to the measures restricting its use, and the employment of champions. The custom last-named appears to us especially marked by that union of lofty theory and corrupt practice which so strongly characterizes mediæval legislation. In its practical working intolerable abuses were developed which rendered the venal office of champion not less infamous than that of the hangman. But in the original system which was based on the principle of solidarity, that office was set apart as the sacred and self-imposed duty of a kinsman; and the substitution of battle undertaken on behalf a relative for the fine paid by the family reflects the spirit of a chivalrous age, according as it does with the sentiment which gives the key-note to such mediæval legends as the "Childe of Bristowe;" that feeling which counted worldly gear too cheap for vicarious offering, and held that in another's ransom a man must be willing to give nothing less than his own self. Cripples, priests, and women, were allowed to substitute a champion; but in Germany the latter frequently fought in person, under conditions in their favour calculated to satisfy the most uncompromising partisan of woman's rights.

The essay on the Ordeal is interesting and suggestive in the highest degree. The appeal to the Judgment of God under all its various forms is referred to the strong impulse under which "men oppressed by doubt have essayed in all ages to relieve themselves of responsibility by calling in the assistance of Heaven." That the custom was well-nigh as universal as the feeling which gave it birth is proved by a consensus of practice extending from the eastern limits of Asia to the shores of western Europe. To the examples of its use as an extra-legal rite, among the Greeks and Romans may be added the striking and well-attested instance of the Hirpi, at the sacrifice of Apollo, on Mount Soracte. In India the ordeal still flourishes under certain forms, between which and the provisions for its use in Anglo-Saxon dooms Mr. Lea indicates points of similarity not less striking than the close resemblance the Brehon law exhibits between the Irish custom of "fasting upon" a debtor and the modern Hindoo practice of sitting motionless and fasting at his door. From the immobility of eastern usage such coincidences cannot be dismissed as accidental; they not only point to the strong family likeness established by Mr. Lea, between the ancient law-systems of Asia and the codes of mediæval Europe, but add weight to the argument this furnishes for the common origin of the great Aryan family of man. The author's illustrative formula is from Baluze, but he might have chosen a better example first-hand from the prayers and adjurations for the hot-iron and water ordeals in the Durham Ritual where various formulas of the christianized pagan rite stand in fit juxta-position to those for the consecration of

vessels which had in heathen days held offerings to Thor and Woden. The apocryphal version of Godwin's death although valuable as illustrating superstitions connected with the *Corsnaed*, is worthless as an historical fact. A sudden stroke of apoplexy at table coming upon a man who had worked hard and perhaps lived harder still, after the fashion of his time, need neither be referred to miracle as in the Latin Annalists, nor to treachery, as Mr. Lea suggests. The last crime of which Edward the Confessor would be held guilty is that of poisoning his father-in-law at his own table. Like the Wager of Battle, the Ordeal was entirely rejected by Maritime law, and the following causes gradually brought both customs into disuse—the growth of the commercial and municipal spirit, the revival of Roman law, and the vigorous opposition of the Church.

It is not surprising that the Judgment of God, appealing as it does to a sentiment common in all times to all the human race, should still in our own day keep its last stronghold in ignorance and superstition; but the fact is startling that a system so utterly repugnant to humanity and civilization as that of torture should even now be vital both in Europe and America. Under Roman law and the codes of the barbarian tribes slaves only were tortured, with this difference, the former tortured the slave both as criminal and witness, the latter only as a criminal. The adoption of the practice by the Church in the thirteenth century gave it currency throughout Europe, where the system in full operation became more intolerable than it had been among the ancients. In the essay on torture, as in the preceding sections, great stress is deservedly laid upon the policy followed by the Church in her adoption or rejection, as circumstances dictated, of forms of procedure which were all in themselves alien to her primitive spirit and constitution. In this respect Mr. Lea has made a larger contribution to ecclesiastical history than any modern English writer who has gone over the same ground. His book has been written with a thorough knowledge of the subject; it is distinguished by admirable clearness of expression, and a judicious selection and arrangement of elucidatory facts from the copious materials which the author's learning and research have placed at his command. Also its value to the historical student will be greatly enhanced by the skilful blending of philosophical reflection with the exposition of events.

George Waring.

Sources of German History. [*F. C. Dahlmann's Quellenkunde der deutschen Geschichte.* Dritte Auflage.—*Quellen und Bearbeitungen der deutschen Geschichte*, neu zusammengestellt von G. Waitz.] Göttingen: Verlag der Dieterichschen Univ.-Buchhandlung, 1869. 8vo.: xviii. and 224.

Criticism, so peculiar a characteristic of our age, has (for the first time in historical science) laid special stress on the value of contemporary sources of information. And continental Universities now possess teachers of history who have extended the range of their enquiries beyond what is implied in the mere knowledge of facts; whilst in their writings they have produced models of research, which, by influencing their numerous scholars, have led to further progress. In Germany the whole of this development is linked with two names, those of Ranke and Pertz. Pertz's collection of the original authorities has no rival, while Ranke has worked up the materials into masterly creations of historical science. And yet it is only within these last years that works have been produced which could serve as direct clues to guide us in studying the history of Germany in the middle ages: I mean Wattenbach's *Handbook of the Sources of German History* (now in its second edition), and Potthast's *Bibliotheca Medii Aevi.* It requires a long search, however, in these two books before one can get together a list of the original sources for any given period; while nothing whatever had hitherto been done for the later literature on these subjects, which could only be collected by working through extensive libraries. Hearers of University lectures who wished to pursue the enquiry further, have sorely felt the want of such a Handbook. Dahlmann had made a special Synopsis of the original authorities and later writers of history for the purposes of his Lectures, the enlarged edition of which shewed what a reception it had met with in a much wider circle. After the author's death, Waitz made a completely new work out of his predecessor's materials. Dividing all German history down to our own days into periods, he has given us a systematically chronological arrangement of our original authorities and later historians for each period.

In such an undertaking our first question must be whether we should take German history as a whole, or only the history of the Empire, or whether a combination of the two may not be preferable. A mere history of the Empire is defective, since the Empire only came into existence centuries after the rise of the German people. On the other hand, to describe all the historical forms which the life of the German people has assumed, is too extensive a task; and anything like an accurate account of the literature connected with the subject would be simply impossible. We must therefore choose out a narrower province, and such may be found if we confine ourselves to considering the main periods of development in German history.

To the literature of the subject, whether original or secondary, we can add little beyond a few remarks. A comprehensive general history, corresponding to the requirements of the present day, does not yet exist. Notwithstanding the number of Prize Essays published within these last few years, such a history yet remains to be written. The reason lies partly in the great extent of the subject, but partly also in the want of sufficient monographs. We must not, however, conceal our view that the method of all German historical enquiry at present is unsatisfactory, chiefly because it is still too much under the influence of the Juristic school. We learn from it hardly anything of the real family and social life during the middle ages and the later time. Considering the perfect picture of Classical Antiquity which philologists have given us from all points of view, we must feel ashamed when we reflect on the far richer material available for German history. There is no exhaustive history of German culture in any one of its branches. It is to be hoped that the example Gustav Freytag has set in his *Pictures from the Life of the German People* may bear fruit by influencing the professed historian. We should like to make one more protest against the polemical style of writing lately come into fashion in Germany. Scientific questions are treated from opposite points of view with a bitter hostility that cannot help research, and exhibits painfully the littleness of party-spirit.

As to Waitz's list of original authorities prefixed to each section, we may let it pass here. Wattenbach's book and the various "Collections of Documents" present a clearer and richer view as far as regards the middle ages. A medieval work is written usually by monks, and has a sharply-defined local or intellectual range. For German history the original authorities of France and Italy also come under consideration, indeed the editors of the *Monumenta Germaniae* have been obliged to include all central Europe in their range as the work went on. For the Frankish ages, Gregory of Tours, Fredegar, the *Gesta Regum Francorum*, and the *Lives of the Saints* are sufficient—for they are all we have; but for the times of the Frank Emperors, for instance, the list, pp. 95 and 96, is not many-

sided enough to supply a complete picture. From the end of the 13th century our leading source of information is one which before this time only ranks on a par with the Chronicles; viz. the original documents and state papers. The publications of the Munich historical commission will throw new light on these times and we already see their importance from the additions to the Town Chronicles and the first volume of the *Proceedings of the Diets of the Empire.* As the history goes on, these sources increase in importance and ultimately become almost our only trustworthy authorities—the complete recognition of this fact for the first time being again a service we owe to Ranke. It is a cheering circumstance that most of the governments have liberally thrown open their secret archives, but enough has not yet been effected in this direction. The treasures of the French archives are public property, and open to every one's use without further formalities. In Prussia, on the other hand, special leave from the minister is necessary, and even with this there are other disagreeables which make working very difficult.

Such are the considerations to which a perusal of Waitz's book give rise. And we conclude by expressing the hope that when another edition of Dr. Waitz's book becomes necessary, the author may be able to double his lists.

W. Arndt.

The Letters and the Life of Francis Bacon . . . newly collected and set forth . . . by James Spedding. Vol. v.: pp. xvi. and 422. 8vo. London: Longmans, 1869.

This volume, the twelfth of the latest edition of Bacon's *Works*, covers the two years and a half which precede the last day of June, 1616—the day of Coke's disgrace, and that from which Mr. Goldwin Smith would date the English Revolution. It deals with events of great interest to the historian of law and of society, and it is composed in a manner which clearly displays Mr. Spedding's merits as well as his defects.

These defects are now well known. He is prolix and inelegant. He follows his chronological order often to small purpose, and often so as to destroy the unity of important episodes. Naturally prejudiced in favour of those whom he has known so long and so well as James and Bacon, he has a tendency to assign to the latter much that is simply Baconian (or rather Elizabethan or Jacobean), and though he does not look at facts from a modern point of view, he is above that commonplace weakness, but he loses sight of principles which prevail in most civilized societies. He describes without apparent indignation the treatment of Peacham: it does not strike him that a great lawyer stoops in continually soliciting promotion and continually carping at a great rival; he contends, if not against evidence at least without conclusive evidence, that Bacon had for the king the regard which law-officers now have for their parties; and he falters in the resolution stated in his preface (p. v.) of shewing only what Bacon thought about the occasions of his time, and often tries to shew that he was wise and virtuous.

Mr. Spedding's merits are learning of the right kind, industry, acuteness, and zeal, and these he has in so great a measure that it is almost as futile as it is unpleasant to speak of his defects.

The letter to the king advising him to call a parliament (Petyt m.ss. Inner Temple, No. 538, vol. 37) is an instance, and the memorial of some points which may be touched in his Majesty's speech to both houses (p. 24) and the king's decree (p. 385) are better instances of papers which ordinary people might say were not necessarily Bacon's—of the authenticity of which at least we need some formal proof, something more than an "evidently," something for which Mr. Spedding, who is so lavish of his space, might have found room.

The book may be said to open with the proceedings against Talbot, a member of the Irish parliament, who had evaded a formal repudiation of the doctrines of Suarez as to the duty of Romanist subjects towards heretical kings. Suarez, Bacon sketches (p. 9), almost in the style of *Lothair*, as "a professor in the University of Coimbra, a confident and daring writer, . . . one that fears nothing but this, lest he should seem to doubt of anything, a fellow that thinks with his magistrality and goose-quill to give laws and manages to crowns and sceptres." Talbot, like many others in his position, was sentenced, but probably not punished.

Next come arguments in favour of holding a session of parliament addressed to James by Bacon, whose political ideal, the same in this respect as Strafford's, was "a parliament absolutely submissive to the Crown rather than naked despotism," and with these arguments proposals for legislating, often in the best way, on many questions of public economy, criminal law, tenure of land. One of them, a "bill of grace," made "the estates of attainted persons liable for the payment of their just and true debts" (pp. 15, 41).

The unhappy dissolution of the parliament, that of 1614, necessitated new devices for raising money, and among these a "voluntary oblation." To set such a thing on foot was to appeal from the House of Commons to the country: the project was attacked by one Oliver St. John (neither the Lord Deputy of Ireland nor the defender of Hampden), and, though a practical failure, it did not fail till in spite of Bacon it had been branded as a "Benevolence" (pp. 81, 111, 130, 168). Another device was the enfranchisement for money of copyholds (p. 114). Many more were contained in a m.s. now lost (p. 129).

Meanwhile, to make up for calling no parliament, a reform of the law, including a scheme for official reporting, was advised by Bacon (pp. 84-6).

We are now in 1615, and Peacham, a Puritan clergyman, is brought before us. He had been charged with libelling his diocesan, and in his house m.ss. had been found criticising the king and foretelling the end of his measures, but not, at least not directly, inciting to rebellion, and, if intended for publication, unpublished. Though an old man, he is tortured, tried for treason at the assizes, convicted and sentenced, but allowed to die in prison. Has Bacon to answer for the torture, and for having urged that the judges should be sounded before the trial? Mr. Spedding says that torture, though not warranted by law, was in this case used by a body, which, like the House of Commons now, was not answerable to the law courts (p. 92, n. 2), and that Bacon's part was subordinate and ministerial only. He says also that it was advisable to sound the judges, and that Coke, as his behaviour in Owen's case (pp. 114, 118), and in Weston's (p. 211), and even in this case, showed, was not sincere in objecting to be sounded (pp. 105, 114 foll.). To the second part of this reply it need only be answered that Bacon's notion of a judge, illustrated by his promise in p. 243, and by his suggestion in pp. 252-3, excludes the notion of judicial independence. To the first one might rejoin that a patriot and even a partisan is most valuable when he best preserves his honour and satisfies his conscience, and that a conscientious and honourable man who was (as Bacon was) above his age would not have assisted at Peacham's torture.

There follow the prosecution of Owen for an attack on the king, and of St. John for his attack on the "oblation," proceedings rather menacing than serious. A whisper of a new parliament is a confession that the subscription has failed.

The topic most interesting to the general reader is the murder of Overbury. Mr. Spedding's conclusion as to the connection of James with the affair (a conclusion resting on a good deal which is not imaginary, but arrived at

with some needless abuse of Prof. A. Amos), may be said to be this. When James first heard the evidence on which Somerset was suspected of complicity in the murder, he treated him as usual because he would not prejudge him, and he said that he should never see him again because he feared that on the trial for which he thought it right to send him he would be convicted. On hearing the *prima facie* case made against him before the commissioners, he pressed him to plead guilty that it might be the more easy for him to pardon him. When Somerset threatened to accuse him of —— we do not *know* what, he was frightened, because, though innocent of everything, any accusation would have injured him, or because Somerset *might* have known something of (say) his intrigues with Spain, the disclosure of which would have been painful. The king let the trial go on out of love of justice; he did not allow the execution of the sentence, partly from fear that it might be unjust, partly because the earl's fall was punishment enough if he were guilty, partly from pity. The reader must say whether this theory is so satisfactory as to justify Mr. Spedding in passing *sicco pede* over the received one. As to Bacon's share in the matter, the insinuation that he was employed to get Somerset convicted, though unjustly, needs no answer: but would Sir Roundell Palmer, had he been attorney, have consented to draw the pardon for the confessedly guilty Lady Somerset?

The case of Commendams, the *Rege inconsulto* case, the conflict between the Chancery and the King's Bench, and the state of the Irish parliament, are the chief subjects which remain.

The first two both raised, though in different ways, the question whether the judges might try causes in which the royal prerogative was concerned without first hearing what the king's counsel had to say. In each the king was (to use his own phrase) "wounded through the sides of a private person:" in the first he had granted to Neile, Bishop of Lincoln, in respect, perhaps, of the "exility" of his bishopric, a living *in commendam*, to be held together with the revenue of the see; but certain people claimed a right to present to the benefice and went to law with the prelate, and so two points arose, one whether James could grant this living, one whether he could grant *any* livings *in commendam* and so (practically) redistribute the property of the Church; in the second case James had granted to a favourite a patent office, the holder of which was paid by fees to which another person was entitled, and, when the latter was for asserting his right, Bacon submitted that the point could not be argued *Rege inconsulto*. Of course the difficulty sprang from the confusion, not yet ended but then at its worst, of the king and the sovereign.

As to the conflict of the courts, the question was whether, the King's Bench having decided something and the Chancery having set aside the decision, the former could punish (if not the equity judge) at least the appellant and his legal advisers. The king, on the ground that he was especially present in his Court of Chancery, held the negative. We should say that each and neither of the two tribunals was to blame, that the conflict of jurisdiction, though no doubt caused by greed and jealousy, was necessary and expedient, and that the law-courts stood in need of co-ordination.

But these are antiquated topics, though unhappily not entirely antiquated. One of more practical importance is that of the Irish parliament. The reform of that assembly, praised by Mr. Spedding (vol. iv. pp. 382-7), with its notable device of fictitious boroughs to make up for the want of real ones, is now bearing its fruit (vol. v. pp. 2, 376). Strange, and yet not strange for a nation so fond of giving birth to parliaments as to have presented Jamaica with one, that the expedient of a sham representation, more profligate than that of Union, carried out again in 1654, in 1656, in 1658, and not the expedient of "an honest, able, and humane Lord Deputy, with full powers," should have seemed *una salus* of Ireland. Bacon wishes to play off the Irish and the English parliaments against one another (vol. v. p. 2). As the former grows malleable, he goes on to advise that recusancy should be connived at, that, by moving the army about, the veterans who had become all but settlers should be shaken off, and that, while *they* remained in reserve, tiros should have their places and pay, that, the privy council being kept apparently intact, a committee of council on finance should be appointed (p. 376). Even then, though Chichester still was deputy and Davis attorney, and though Bacon, sagacious and naturally mild, was a privy councillor, "the full measure of Free Trade" given by St. 1654 c. 32, but withdrawn at the Restoration for a century and a half, was not suggested,* and the tolerant views of Bacon and Chichester were successfully opposed by religious bigotry.

It is presumptuous to doubt whether Mr. Spedding, in the defence of Bacon which he has without intending it undertaken, has chosen the best line. We may fairly say of the attorney's schemes that they were not absolutely bad (if the word "absolutely" has a place in the political dictionary) and that to many junctures they were well suited: we *must* say of them that a people, who though intelligent, could, as he puts it (p. 243) "better skill of *concretum* than *abstractum*," and "the traces" of whose affections flowed "rather after persons than things," on the whole disapproved of them, and that, therefore, they should have been abandoned.

It may be worth asking if the sentence in p. 251, "*Ignoramus* was wiser than those who know too much" can refer to the comedy, and if "*Tyrones*" (p. 376) is meant for a joke.

R. Robinson.

Intelligence.

The Eleventh Meeting of the German Historical Commission took place from the 1st to the 5th of October last, von Ranke in the chair.

The following works are now ready or nearly so:—*Geschichte der Germanischen Philologie*, von R. v. Raumer (out); *Die Recesse u. andere Akten der Hansetage von* 1256–1430, Bd. 1; *Briefe u. Akten zur Geschichte des dreissigjährigen Krieges in den Zeiten des vorwaltenden Einflusses der Wittelsbacher*, Bd. 1: *Die Gründung der Union*, 1598–1608, bearbeitet von M. Ritter.

The great biography of the celebrities of Germany, edited by Liliencron, is to contain 40,000 articles in 20 volumes. The *History of Zoology* by Victor Carus is already in great part printed; the *Histories of Classical Philology*, *Historiography* and *Medicine*, have been undertaken by Bursian, Wegele, and Hirsch respectively. The *History of Botany* has to be arranged for afresh; but it is estimated that the whole series of the *Histories of German Sciences* will be completed by 1876.

The 2nd volume of the Chronicle of Strassburg is nearly printed: those of Nürnberg (4th volume), Cologne, and Lübeck are progressing. The *Reichstagsakten*, on the contrary, have been delayed by untoward circumstances. A new part of the *Yearbooks of the German Empire*, the History of King Pippin (Oelsner) is already in print: that of Ludwig the Pious (Simson) is partially written: that of Otto the Great, formerly in the hands of the late R. Köpke, will probably be undertaken by Dümmler. The History of Heinrich II. is committed to Breslau, of Heinrich III. to Steindorff, of Philip of Swabia and Otto IV. to Winkelmann. The researches into the Wittelsbach correspondence have brought to light a large quantity of material, not merely of German but of European importance. Other works were also progressing. It was observed that in the election of new members an inclination was shown to strengthen the relations of the Commission with German Austria.

PROFESSOR MAINE'S FIRST COURSE OF LECTURES.

In his new capacity of Professor of Jurisprudence at Oxford, Mr. Maine has this term given a course of lectures of more than ordinary interest. His main object was to call attention to the vast and in great measure unexplored field which India offers to the student of the history of law. Recent researches, especially those of von Maurer and Nasse, had led to important results for the early history of Teutonic and Slavonic

* Comp. Lord Mountnorris's book on the Irish Parliament (vol. ii. p. 244) with "The restrictions laid upon the trade of Ireland," printed in "Debates relative to the affairs of Ireland" (1763-4).

institutions: and these, Mr. Maine shows, may be confirmed and extended in the most remarkable way by the parallel phenomena of India.

The village group, with its threefold division of the land which it holds in joint ownership—the township, the arable mark, and the waste—with its council of elders, the authorised depositary and exponent of the customary law by which the relations of the cultivators of the common property are regulated, forms the basis of primitive society in India as in Europe. The various causes which tend to dissolve this unit, and to reduce its members to the condition of independent owners, were next traced. These are the absorption of village communities into cities; the predominance given to the family or officer which represents the group in its dealings with a central government; the growth of the commercial spirit, with the rules and practices which it implies; the adoption of new methods of tillage made necessary by the removal of the society to countries under different physical conditions; in India itself, the disintegrating influence of the written English law, accepted by the natives with surprising readiness.

Recent inquiries of the Indian Government have thrown great light upon the nature of these societies; and in many parts of England, rules still in force respecting the cultivation of land show traces of similar institutions among the English settlers.

Mrs. Bray's The Revolt in the Cevennes.—This description of the struggle of the Protestants against Louis XIV., after he had revoked the Edict of Nantes, is vivid and clear, and forms a companion picture to the history of the Covenanters in Scotland under Charles II. It rests, perhaps, too much on Cavalier's description of his own exploits (he escaped to England, and took service under Queen Anne); but this gives us a series of leading events to which the rest can be referred; and it is well that the enthusiasm of the persecuted mountaineers should make its voice sometimes heard in history against such wanton tyranny as that of the Great King.

IN MEMORIAM.

Mr. Richard Robinson, Fellow and Tutor of Queen's College, and Student of the Inner Temple, died at Oxford on the 13th ult., aged 26. Others have borne witness to those qualities which specially endeared him to friends and pupils, and to those which led good judges to predict for him extraordinary professional success: we ourselves are more immediately concerned with the loss which his early death inflicts on the cause of knowledge. His powers were immensely varied, and he could direct them at will with equal effect to matters of practice, of imagination, and of science. After a brilliant University career, however, he gave himself up almost wholly to historical and legal study, going by preference, it appeared, into obscure and outlying regions where access was difficult. During the five years which elapsed between his bachelor's degree and his death he had amassed a probably unrivalled store of learning in two subjects—the history of the English Universities, and the political and legal history of the Commonwealth. He died before he had had time to do more than acquire. His extraordinary knowledge of the pamphlet-literature of the last two centuries is, for us, almost resultless. A number of MS. notes, a few articles and short papers, themselves so compressed in form as to be for the most part little more than notes, contain all that is left to us of a first-rate mind. Such as they are, however, they are of great value, whether as aids to future historians, or as indications of what he might have done if he had lived longer. During 1867 he published in the *Oxford Undergraduates' Journal* a series of elaborate papers on "The University of Oxford from 1650-1750;" and from time to time sent notes on curious points of University history. In *Macmillan's Magazine* he published "Commemoration during the Last Century" (Jan. 1868), a condensed treatise rather than an article; a paper, "The Nonconformist at Oxford, by a Junior Fellow," in the *Theological Review* (Oct. 1868); and, the result of personal observation, "Anecdotes of the London Poor," in *Macmillan* (Sept. 1869). He read before the Juridical Society in 1869 a paper on "Anticipations under the Commonwealth of Changes in the Law" (see *Academy*, vol. i. p. 135); another on "The Law Relating to Suicides;" and had collected materials for more. At Clifton, in 1868, he gave a course of lectures on the English Revolution, and published one, of local as well as general interest, on "The Two Sieges of Bristol." Lastly, in our own columns, he wrote reviews of Wellington's *Historical Notices of Events chiefly in the Reign of Charles I.* (vol. i. p. 186); of Baker's *History of St. John's College, Cambridge* (ib. p. 219); of Markham's *The Great Lord Fairfax* (vol. ii. p. 18), Spedding's *Life and Letters of Bacon* in the present number, &c. His MSS. have not yet been put in order: we shall hope to notice them at a future time.

Contents of the Journals.

Von Sybel's historische Zeitschrift, viertes Heft, 1870.—Weil describes some recent additions to the literature of the history of the Crusades, especially the Armenian documents in the *Recueil des Historiens des Croisades*, published by the French Académie des Inscriptions et Belles-Lettres. The Armenian documents unfortunately are of rather slender authority, popular lays, religious discourses, general panegyrics forming part of them. Even the chronicle of Matthew of Edessa is full of myths, *e. g.* as to the complete conquest of Palestine by the Emperor John Tzimisces. It is needless to say that the numbers in the battles are hopelessly large in hundreds of thousands, or that the Armenians and the Franks charge each other with the most faithless conduct. But some of the authorities are of considerable value for the interior history of Armenia. There is also a notice of Riezler's and Fischer's excellent monographs on the Crusade of Frederic Barbarossa.—Scheffer-Boichorst goes fully into the question of the forged Malespini history of Florence, which is merely an inadequate abridgment of Villani. This is shown by a comparison of the original sources and the differing modes of expression. The additions show the object of the work; they are all meant to glorify certain of the great families of Florence. What Livy says of some Roman chroniclers is true as a general canon of historical inquiry (viii. 40): "Familiae ad se quaeque famam rerum gestarum honorumque fallenti mendacio trahunt, inde certe et singulorum gesta et publica monumenta rerum confusa."—Schaefer describes the origin of the Seven Years' War on the authority of the Austrian archives, in a review of von Arneth's *Maria Theresia*. Many fresh details are given, but the general impression left by the usual account is not materially altered.

Götting. gelehrte Anz.—Nov. 9: Waitz discusses the view of Scheffer-Boichorst, that a lost book, the Annals of Paderborn, formed the basis of later annuals of North Germany, and points out that the theory is pushed much too far, though a certain amount of connection is established.—Nov. 16: Wachsmuth reviews Oncken's book on the Politics of Aristotle (part 1) and argues against his view of Plato's Laws (that only the latter part is genuine), and against the theory (reference should be made to Grote) that the account of Lycurgus having divided the lands of Sparta equally is a romance only, dating from the times of the reforming kings Agis and Cleomenes.—Nov. 23: Contains a notice of Peter's War of the Great Elector with France, 1672–5. He fought for the independence of the Netherlands against Louis XIV.: and the war in Alsace affords some curious parallels with later events. Austria, as usual, played North Germany false.—Nov. 30: A review, by Geiger, of Krabbe's David Chytraeus, points out that the eminent Lutheran theologian of Rostock, a pupil of Melanchthon's (his History of the Augsburg Confession is well known), rendered considerable service to the history of North Germany. The evidences of this are well put together.

Centralblatt. — Nov. 19: A review of Freytag's Tiberius and Tacitus, discusses the question as to the sources whence Tacitus may have derived his information, *e. g.* from letters or memoirs of Sallustius Crispus, the confident of Tiberius, or Vitellius, the confident of Claudius. The idea that Tacitus is writing "dramatically," or "following some malicious romance," must be rejected. An appreciative notice follows of Brentano's History and Development of Guilds and Origin of Trades' Unions (already reviewed in the *Academy*).—Nov. 26: An analysis is given of the 4th volume of the Scriptores rerum Prussicarum.—Dec. 3: Contains an account of the Codice Diplomatico delle colonie Tauro-liguri durante la Signoria dell' Ufficio di S. Giorgio (1453–1475), fasc. 3, Genova.

New Publications.

Böhmer, J. F. Acta Imperii selecta. II. 3. Innsbruck: Wagner.

Bryce, J. Holy Roman Empire. Ed. 3. Macmillan.

Büdinger, Max. Untersuchungen zur römischen Kaisergeschichte. 3 Bd. Leipzig: Trübner.

Burn, Rob. Rome and the Campagna. Bell and Daldy.

Castelli, Castello. I Guelfi e i Ghibellini in Bergamo. Bergamo.

Cuningham, Alex. Geog. of India. Trübner.

Deane, J. B. Life of Major-General Deane. Longmans.

Foss. Biographical Dictionary. Murray.

Kennan, G. Tent Life in Siberia and Adventures, and Adventures among the Voraks and other tribes in Kamtchatka and North Asia.

Richy, Alex. G. Lectures on the History of Ireland (second series), from 1534 to the date of the Plantation of Ulster. Longmans.

Sallet, Alfr. Die Daten der alexandrinischen Kaisermünzen. Berlin: Weidmann.

Scheffer-Boichorst. Annales Patherbrunnenses. Eine verlorene Quellenschrift d. 12. Jahrh. Innsbruck: Wagner.

Ward, A. Translation of Curtius' History of Greece. Vol. 3. Bentley.

Wilson and Warren. Jerusalem Recovered. Bentley.

Oriental and Comparative Philology.

Travels in Arabia, by A. von Wrede. [*Adolf von Wrede's Reise in Hadhramaut, Beled Beny 'Yssà und Beled el Hadschar.* Herausgegeben, mit einer Einleitung, Anmerkungen und Erklärung der Inschrift von 'Obne versehen, von Heinrich Freiherr von Maltzan. Nebst Karte und Facsimile der Inschrift von 'Obne.] Braunschweig, 1870.

The publication of Wrede's travels by Herr von Maltzan deserves more than ordinary thanks. The narrative was within an ace of being lost altogether. In spite of the good opinion of Fresnel and Ritter, Wrede was unable to find a publisher for his work in Germany. He hoped to be more successful in England, and placed his papers in the hands of a translator, in whose house all his drawings and maps were lost. Thereupon he seems to have given up his last hopes of publication. He himself went to Texas, where he probably died; the manuscript seems to have been left behind in Europe. Not long since it came by a happy chance into the possession of the editor.

Whether that simplicity and that love of truth, which we value so highly in Wrede's book, deserted him in his conversation, I cannot undertake to say, but it is certain that many of his countrymen regarded him as an impostor, and spoke of his "story-telling" (*Aufschneidereien*). So far as we can make his acquaintance from his narrative, this judgment was in the highest degree unfair, and Wrede deserved a better reception. His journey to Hadhramaut was full of hazard, and though he only half succeeded in executing his intention, he has considerably extended our knowledge of this part of Arabia. His statements are unadorned; his one aim is to relate what he has seen, not what may amuse the reader, and his topographical notices are so accurate, that von Maltzan has been able by their means to reproduce the missing map.

Herr von Maltzan has thought it necessary to subjoin notes, consisting for the most part of etymological explanations of the proper names. He probably did this in order to show (comp. p. 5 of the introduction) that the meaning of the names agrees in general with the topographical character of the places. And since Wrede was no learned etymologist, it would follow that the names cannot possibly have been forged, unless we endow him with a supernatural "gift of divination." Still I venture to think that the editor might have spared himself this trouble. The explanation of proper names, even if the reading is certain, is always a hazardous thing. But the form in which the names are given by Wrede is frequently inexact, and von Maltzan has not sufficiently attended to this. Hence by following Wrede too closely he has invented a new word, غبابة (*rhobâba*), "eine Art Altviole" (note 93, p. 283). The reading should be رباب (*rebâb*), pronounced also by Wallin in the *Journal of the Royal Geographical Society*, vol. xxiv. p. 147, *rubâba*. The two angels of death are named by him (note 165, p. 291) منقر (*monqir*) and نقر (*naqr*). The true reading is منكر (*monkar*), and نكير (*nakîr*), &c. These are not the only notes which bear marks of haste on the part of the editor. On page 283, note 92, he says he has nowhere read of the red hair of Qodâr; yet this was not difficult to find. And in the version of a passage in Jacut (p. 288, note 132) we read "that at that very time an enormous number of unbelievers had died." The Arabic is عظيم من عظماء الكفار, "one of the chiefs of the unbelievers." Here is another specimen: "according to Abbas (the third Chalyf) the souls of the faithful are in a clear water-tower (*in einer reinen Wasserburg*, literally Aquarium) in the land of Syria." The Arabic is وعن ابن عباس ان ارواح المومنين با لبحابية من ارض الشام, "according to Ibn Abbâs the souls of the faithful are in Djâbia in Syria." Djâbia is the well-known headquarters of Omar (see my *Mémoire sur la conquête de la Syrie*, p. 111). How Herr von Maltzan comes to make Ibn Abbâs (or Abbâs), a khalif, I cannot think. Lastly, the rendering, "Then I thought of that man of the people of the books (Christian or Jew), who declares," should rather be, "Thereupon I turned to a Christian (or a Jew), who said to me." A worse error occurs on page 289, note 141, where another passage of Jacut is altogether mistranslated. We are told, "Ibn Hâyik says, Schabwe was a city of the Himyarites, and when these made war on the Madshidsch, the people emigrated, and after them men of Hadhramaut dwelt there, and from them the city was first named Schibâm." The correct rendering is, ". . . . and established themselves in Hadhramaut, and Shibâm was so called after them." The editor draws the mistaken inference that Shabwa and Shibâm are identical, whereas the former lies much to the west of the latter on the high road from Hadhramaut to Mekka. See Sprenger's *Post- und Reiserouten*, p. 140, where by a mistake the name is given as شنوة (*Shanwa*). (Another place there mentioned by Sprenger is الجريمة; probably the same as the Choraybe (الخريبة) of Wrede, who describes it as the most beautiful place in the whole country, p. 207). According to Jacut, Shabwa is much older than Shibâm, which was founded by colonists from the former place. Whether the identification of Shibâm with the Sabota of the ancients can be defended any longer is very questionable.

The discussion of the Himyaritic inscriptions I would rather resign to more competent critics. But I cannot help adding a few remarks on a book which is involuntarily suggested by the perusal of a new work on Arabia. I mean the well-known narrative of Mr. Palgrave, which is still wrapped in a veil detrimental to scientific progress.

When we see how constantly Mr. Palgrave falls foul of Lamartine's travels (Herr von Maltzan does the same to the *Mystères du Désert par Hadj Abd el Hamid Bey*), we naturally expect that he will abstain from all romance or exaggeration and from arranging his facts with a view to effect. And yet his book contains a history of the Wahhābites which completely disagrees in the main points (see my own essay in *De Gids*, 1866, pp. 249-277) with what we know from other sources, and is seen, when carefully examined, to be a mere historical romance. He asserts first of all that he gives the narrative in its simplicity, as he heard it from the natives, and yet he tells us further on that he made use of a manuscript history of the Wahhābite rule in the house of the minister Maḥboob. Now it is almost incredible that such a distorted

notion of facts should have been current in Nedjd in 1862, and that not only among the lower classes, but even among the principal men, some of whom had been eyewitnesses of the tragic events of 1818. If Mr. Palgrave maintains that, in spite of its internal improbability, his account is in the main correct, he surely ought to have pointed out where and by what means Corancé, Burckhardt, Jomard, and Mengin were led astray. Instead of this, he ignores them. Neither in the seven years, during which he prepared himself for his journey, nor yet after his return has he made himself at all acquainted with what had been written on Central Arabia forty years before. This, I think, proves a want of earnestness in Mr. Palgrave. It was the great merit of men like Niebuhr and Burckhardt that they went through preliminary studies, so as to find out which points were most deserving of attention, that they possessed a strict love of truth, and communicated their results with sobriety. How can Mr. Palgrave expect us to credit his superficial assurances as to the traces of ancient Arabian religion, not only among the Bedouins, but even in the heart of Arabia, unless he informs us of those points of detail which he ought to be acquainted with in order to make such assertions? He seems scarcely to have remarked that this is a point, on which even the smallest fact deserves to be mentioned. If it be unfair to Mr. Palgrave to place him at most on a level with M. Du Chaillu, it is his own fault. It is not a bad thing to write an amusing book, but one need not imperil one's life in Central Arabia for that purpose. If Mr. Palgrave has set before himself a higher aim than to win popularity, he must give better proof of his competence. To incite him to do this, is the principal object with which I have taken this opportunity of recurring to his narrative. M. J. de Goeje.

The Divans of the six Ancient Arabic Poets Ennābiga, 'Antara, Tharafa, Zuhair, 'Alqama, and Imruulqais; chiefly according to the MSS. of Paris, Gotha, and Leyden; and the Collection of their Fragments, with a List of the various Readings of the Text. Edited by W. Ahlwardt, Prof. of Oriental Languages at the University of Greifswald. London: Trübner and Co., 1870.

No branch of Arabic literature has received more attention from the Arabs themselves than the remains of their ancient poetry; and to us Europeans an intimate acquaintance with these remains, both linguistically and historically, is absolutely essential, if we would thoroughly understand the writings of this people in almost any department of study and inquiry. The native historian finds a large portion of his materials for the earlier history of his race in the songs of the bards; the geographer turns to the same source of information when he treats of Arabia and Syria; the philosopher draws most of his scanty information regarding the religious views of "the time of ignorance" from the scattered verses of pre-Islamic poets; and the lexicographer and commentator on the Ḳor'ān often cite them to prove the meaning of a word or to illustrate a rare form or construction.

The older grammarians in particular devoted themselves with earnest zeal to the collection and exposition of the works of the ancient poets. Some brought together the poems of a single individual, such as Laḳiṭ ibn Zurārah, Ḥātim al-Ṭā'ī, or 'Orwah ibn al-Ward; others those of a particular tribe, as the Banū Hudhail. Some published collections of entire ḳaṣidas, such as the *Mu'allaḳāt*, the *Mufaḍḍalīyāt*, and the *Jamharat Ash'ār al-'Arab*; others compiled anthologies, like the rival *Ḥamāsas* of Al-Buḥturī and Abū Tammām. Six of the ancient poets, however, by general consent, bore away the palm from all competitors, viz. Imru'u 'l-Ḳais, Al-Nābighah al-Dhubyānī, 'Antarah, Ṭarafah, Zuhair, and 'Alḳamah. Their ballads were collected at an early period into one corpus, and are generally known by the title of *Ash'ār al-Sittah*, or "The Poems of the Six."

Of this important work there was as yet no complete edition to be had. De Sacy and others had given selections from it; de Slane had edited the poems of Imru'u 'l-Ḳais, Derenbourg those of Al-Nābighah, and Socin of 'Alḳamah; but still every scholar who took an interest in Arabian poetry, or wished to dive deeply into the writings of the grammarians, was obliged to copy this and similar collections from whatever MSS. he could most easily obtain access to. The undersigned knows his own labours of this kind at Leyden, Oxford, and London, and is consequently in a position to appreciate those of other students.

We are therefore deeply indebted to Dr. Ahlwardt for his compact edition of "The Six Poets." He has given us a text, fully and carefully vocalised, according to ten good MSS.; a collection of various readings, gathered from about twenty other works in manuscript, as well as from various printed books; and some other helps towards the criticism and appreciation of the poems. What we sorely miss, however, is an index of the names of persons and places which occur in them. This would have added but little to the editor's labour, or to the cost of the volume, whilst it would have been of great use to the reader.

Into the criticism of particular passages we cannot here enter; but we may remark that Dr. Ahlwardt seems to us to have followed the MSS. too slavishly in some respects, especially in regard to the insertion or omission of *hamzah*. It can hardly be right to print أُمِيمَةَ in the first half of a verse, and أُقَاسِيهِ in the second; بَايِبِ in one line, and كَتَايِبِ in another; here كَأَنِّي, but in the preceding verse أُووبِ; in one line وَالْقَى, and soon after وَأَعْجَبَنِي. Hence, too, the mistake of writing الْقَاتِلِينَ (page ١٤٣) instead of الْقَاتِلِينَ.

For Dr. Ahlwardt's successors in the study of these poems there still remains much to do. The difficulties which the interpretation of them presents can scarcely be surmounted without the publication of at least one of the commentaries extant in manuscript; and a glossary, or even a concordance, exhibiting all the words that occur in them, and all the passages in which each word is found, would be a great boon to lexicographers.

We regret that Dr. Ahlwardt did not print his preface in German instead of English, as it has not been very well rendered into our language. The translation abounds in Germanisms, and there are some positive errors in it. "A deaf nut" (p. ix), for example, is not the English equivalent of "eine taube Nuss" ("an empty nut," or "a blind nut"); and no one who is unacquainted with German could guess what was meant by "a diffuse and mainly real commentary" (p. xxvi). W. Wright.

Intelligence.

Recent Additions to the India Office Library.—From the government of the Khedive upwards of a hundred volumes of *Arabic* works printed at Búláḳ have been received. Of these, the following may be specially noticed: the Ḳorán commentaries of Abu Sa'úd, al-Zamakhsharí, al-Jalálain; the collection of traditions about Muhammad by al-Bukhárí, also al-Ḳastalání's commentary upon it, and al-Zarḳání's commentary on the latter;—Ghazzálí's Iḥyá 'ulúm id-dín, Ḳushairí's Risálah on Súfism;—al-Damírí's Zoological Dictionary, the Ḥayát ul ḥaiwán;—Ibn Khaldún's great historical work, the Kitáb ul 'abar,—al-Soyúṭí's

Muzhir,—Jauharí's Arabic lexicon, the Ṣiḥáḥ,—al-Kutubí's supplement to Ibn Khallikan's biographical dictionary, and the celebrated Kitáb ul aghání.

The India Office Library annually receives from India a copy of each of the publications registered under Act XXV. of 1867. The following recent arrivals may be of interest to Oriental scholars. In *Arabic:* Shaháb-ud-dín's Táríkh-i-Taimúrí (Lahore), Shaikh Jalál-ud-dín's Táríkh-i-Khulafá (Lahore), the Ṣaḥiḥ of al-Bukhárí w. comm. (Míraṭh), the Ṣaḥiḥ of Muslim w. comm. (Lahore), Tirmizí (Lahore), the Ḳorán commentary of the Jalálain (Míraṭh); in *Persian*: Tohfat-ul-'irákain (Lahore), Muntakhab-ut-tewáríkh, by Badáoní (Lucknow), Akbarnámah (Lucknow), Aín-i-Akbarí (Lucknow). In *Sanskrit* (Telugu and Grantha character): Ten Upanishads with the commentaries of S'ankara and Râmânuja, the Brahmasûtras with do., the Mahâbhârata with commentary, the Râmâyana with the commentaries of Mahes'atîrtha and Govindarâja, another edition of Books I.–VI. with a short gloss by Vîrarâghava s'ûrin, also several editions of the text only, the Vishnupurâna with the commentaries S'rivishnuchittî and S'rîdharîya, the Bhâgavata-purâna with commentary; the philosophical works Nyâyabhâskara, Tarkasangraha, Vedântadîpa, Âtmabodhaprakâs'ika, and Yatîndramatadîpikâ; the Chandrâloka, Kuvalayânanda, and Pratâparudrîya; the Vrittaratnâkara, the Sangîta sarvârtha sâra sangraha; the Siddhântakaumudî; Vâsavadattâ, Kâdambarî, S'ankaravijaya, Vikramârkacharitra, Murârinâṭaka. In Nagari and Bengali character: the Chhandomanjarî and Vrittaratnâkara; the Vais'eshikadars'ana with the Bhâradvâjavrittibhâshya; Charaka, Sus'ruta, and Vâgbhaṭṭa; Târanâtha's new edition of the Siddhântakaumudî; new editions of the dramas Mrichchhakaṭî, S'akuntalâ, Vikramorvas'î, Mâlavîkâgnimitra, Uttararâmacharita, Mâlatîmâdhava, Venîsamhâra, Mudrârâkshasa, all with commentaries; also the Ritusanhâra, with a commentary by Pandit Manirâma S'arman. Further instalments of new editions of the Râmâyana, Mahâbhârata, Vishnupurâna, Matsyapurâna, Dâyabhâya, Raghuvans'a, Kumârasambhava, S'is'upâlabadha, Kirâtârjunîya, and Das'akumâracharita, now in course of publication. As a curiosity may be mentioned a new edition of the Vajrasûchi, in Sanskrit and Malayâlma. Lastly, the Muktikopanishad has been brought out by Bâbu Bhuvanachandra Vasâka, as a first instalment of a collective edition of the 108 Upanishads of which the Muktikâ is the last. Brief notes accompany the text in those pages (4–10), in which the list of Upanishads is given.

The Batavian Society for Arts and Sciences has distributed printed copies of some inscriptions on brass plates in the so-called Kawi language. Professor Kern, in his report to the Royal Academy at Amsterdam, states that they are written in the same language as the old Javanese poems, and that the name of Kawi (abbreviated from Tembung-Kawi, *i.e.* poetical language) is inaccurate, the correct designation being "old Javanese." It seems, however, that the Javanese of the present day has not sprung from this language. It is rather the Soerakarta dialect, whilst the old Javanese is probably the dialect of Madjapahit. The inscriptions consist of decrees of various ages. In the oldest of them, bearing the date 840 A.D., we find enumerated the privileges granted to the district of Waharu Kuṭi, with the usual anathemas against offenders. Some extremely corrupt Sanskrit verses are quoted in the same document. Professor Kern remarked on the importance of such a collection of dated inscriptions for the historical study of the language, and concluded with the proposition that the Academy should issue an edition of them with translation and glossary. The Academy of Amsterdam has agreed to this, unless it should appear that the Batavian Society itself wishes to undertake the task.

A pamphlet on the Moabite Stone by Prof. Kaempf, of Prague, has just reached us; but as the author's critical apparatus is imperfect, and many of his conjectures have been anticipated by other scholars, a brief notice will be sufficient. Korḥah is supposed to be a northern quarter of Dibhon, and derived from קרח, "frost;" the southern being called Dibhon from דוב or דיב, "to melt." The lacuna in lines 4 and 5 is supplied thus: עמר or עמר בן ישז׳ מלך ישראל. This is ingenious; but the interval between Solomon and Omri in l. 7 is too great. L. 6 is read [בימי אמרתי], "in the days of my dominion," which is entirely inadmissible. L. 8 is rendered, "And he dwelt in it [till his death, and after him] his son 40 years," a round number for the 22 years of Ahab's reign. In l. 25 Prof. K. reads [באובדי את] ישראל, and translates "after having expelled the Israelites;" but אבד does not mean "to expel," and there is no room for את. L. 27 is read thus: סי עזרני אש דיבן "for armed men from Dibon supported me." But, as we have remarked before, the three כי require three separate phrases. The historical introduction prefixed is interesting, though we cannot admit that any conclusion as to the word שלכן can be drawn from a passage in a Midrash, cited by Prof. K. on p. 17. The interpretations of the Aggadist are free, and are not based on any historical fact. An appendix of 6 pages is given on the inscription of Eshmunazar.

Dr. Wright has accepted the Professorship of Arabic at Cambridge.

Contents of the Journals.

Zeitschrift für vergleichende Sprachforschung, von Dr. Ad. Kuhn, xix. 5. H. Gradl: Der ostfrankische Dialect in Böhmen. [Careful and minute.]—E. Förstemann: Altnordisch und litauisch. [A peculiar relation between these languages is due to a time when they were spoken in the later Lithuania by conquering Lettish and conquered Germanic races. Three different streams of migration passed through Lithuanian countries to Scandinavia: one by Jutland (Danish); one by the island of Bornholm, formed the Goths of Sweden; a third, starting from the country between the gulfs of Riga and of Finland, became the Swedes. The second division left many traces of their presence in local names, and in the phonetic peculiarities of Lithuanian. Some great historical movements affecting the Roman empire were caused by the pressure of these new races on the earlier emigrants.]—J. Schmidt: Ein übersehenes Comparativsuffix. [-τιων, -tius, in βελτίων, sectius, diutius.]—Reviews: Dietz's Wörterbuch zu Dr. Martin Luther's deutschen Schriften, by E. Kuhn. Kühner's Ausführliche Grammatik der griechischen Sprache, by R. Rödiger. [Recast in accordance with the demands of the science of language].—Miscellaneous: On Spange, by Leo Meyer. On nap, napāt, nāfō, nābhi, by Fr. Spiegel. [Original meaning, "to be moist."]—On ar, arja ārja, and dvār dvāra dur, by Lefmann. [Ingenious, but evidence scanty.]

Journal of the Royal Asiatic Society, vol. v. pt. 1.—V. Fausböll: Two Jâtakas. [The original Pâli text, with an English translation.]—A. Wylie: On an Ancient Buddhist Inscription at Keu-yung-kwan, in North China.—Dr. H. Kern: The Brihat-Sanhitâ, or Complete System of Natural Astrology of Varâha-Mihira: Translated into English. Part 3.—C. E. Gover: The Pongol Festival in Southern India.—Lord Stanley of Alderley: The Poetry of Mohamed Rabadan, of Arragon. Part 3.—C. P. Brown: Essay on the Creed and Customs of the Jangams; with a Note on the words Coromandel, Quilon, &c.—Prof. J. Dowson and General A. Cunningham: On Pâli Inscriptions at Mathura; with Plates.

Verhandelingen van het Bataviaasch Genootschap van Kunsten en Wetenschappen (published by the Batavian Society). Deel xxxiii. among other articles, contains: *a.* Bijdragen tot de Kennis van het Hindoeïsme op Java, door J. 'F. G. Brumund.—*b.* Bijdrage tot de Kennis der Talen en Dialekten voorkomende op de eilanden Luzon of Lesoeng, Panai of Flong-Flong, Balangingi, Solog, Sangi, alsmede op Noord-en Midden-Celebes; door J. G. F. Riedel.

Tijdschrift voor Indische Taal-, Land- en Volkenkunde. Fifth Series, vol. iii. parts 1-6; vol. iv. part 1. Also by same society: Bantiksche Legende in het oorspronkelijke met Nederlandsche verslag, door J. G. F. Riedel.—De Bekentenis van eenen Holontaloschen Ponggoh. By the same.—De Sesamboh of Sangische Volksliederen. By the same.—To oe Oenseasche fabelen met Nederlandsche vertaling en aantekeningen. By the same.—Vergelijkende Woordenlijst van Lampongsche tongvallen, door H. N. van der Tuuk.

Selected Articles.

The Tartar Languages compared with the Chinese, by J. Edkins, in the Phœnix, Nos. 1 and 2. Mongol and Chinese, by the same, in the Phœnix, No. 3.

The Literature and Religion of the Buddhists, by B. H. Hodgson, in the Phœnix, No. 4. [No. 1. On the Languages of Nepaul: reprinted from the Bengal Asiatic Society's Journal, 1828.]

Studies on Rabbinic Etymology, continued by J. Perles, in Grätz's Monatsschrift, Nov. [Discusses a number of religious and official names, chiefly of Greek or Latin origin, in the Talmud.]

Muir's Sanskrit Texts, vol. v., notice in Athenæum, Nov. 12. [Commends the book to the general reader, as well as to the Sanskrit scholar.]

New Publications.

'Attâr, Ferîd-eddîn. Pendnâmeh, das ist das Buch d. guten Rathes, aus d. Pers. übers. von G. H. F. Nesselmann. Königsberg: Braun u. Weber.

Ephraemi Syri sermones duo. Ex codd. Syriacis Romanis editi à P. Pio Zingerle. Brixen: Weger.

Kaempf, S. J. Die Inschrift auf dem Denkmal Mesa's, Königs von Moab; mit einem Anhang über die Inschrift Eshmunazars. Prag: Tempsky.

Daňko, J. Joannes Sylvester Pannonius (Erdösi), Prof. der hebr. Sprache an der Wiener Universität, Leben, Schriften und Bekenntniss. Wien: Braumüller.

Classical and Modern Philology.

Pronunciation, Vocalism, and Accentuation of Latin. [*Ueber Aussprache, Vokalismus und Betonung der lateinischen Sprache.*] Von der königlichen Academie der Wissenschaften zu Berlin gekrönte Preisschrift von W. Corssen. Zweite umgearbeitete Ausgabe. Erster Band. Leipzig: Teubner, 1868.

The subject of the present work is the thesis given for the prize essay of the philosophical class by the Royal Prussian Academy of Sciences at Berlin in 1854. The wording of the thesis itself, somewhat lengthy and vague,* was reduced to clearness and method by Corssen's treatment, which follows the order marked out in the title above quoted. His first edition, in two vols. (1857), was the successful prize essay; an important work, which at once attracted the attention of scholars who were working in the field of Latin philology. The facts were patiently gathered, and the conclusions, generally distinguished by tact and sense, were carefully worked out, clearly stated, and not easily impugnable on important points. Neither the author, nor perhaps any one else, could at that time have anticipated such an enormous addition to the materials for his work, as the second edition reveals to be the result of his own and other scholars' researches during the following eleven years. In the present book the former one is rather rewritten than newly edited. The new edition is in fact the summary of the contributions of an unusually active decennium of general and special philological research to the criticism of Latin. Between 1857 and 1868 Latin philology has been enriched from many sides. The study of the Italian dialects has been illustrated by the discovery of a number of documents: an Oscan inscription on a sun-dial at Pompeii, a lead plate found at Capua, a shrine of Herakles at Mersa, a tablet found at Pietrabbondante on the site of the ancient Bovianum, and some other Oscan relics; as well as the Sabellian inscriptions of Sulmo and Navelli between Peltunium and Aufinum in the territory of the Vestini. The existence of a separate Faliscan dialect, considered to stand to old Latin in much the same relation as Anglo-Saxon stood to old Saxon, has been proved by an inscription found at Falerii, and treated by Garrucci and Mommsen. The first volume of the new *Corpus Inscriptionum* embodies in a more trustworthy form than any preceding collection the contemporary monuments of Latin writing down to the death of Cæsar. Mommsen's edition of the *Monumentum Ancyranum*, Brambach's *Corpus Inscriptionum Rhenanarum*, and some treatises of less compass, have contributed to a more exact knowledge of the writing of the Augustan age. The later popular Latin dialect has been newly illustrated by de Rossi's *Inscriptiones Christianae Urbis Romanae*, Renier's *Inscriptions Romaines de l'Algérie*, and Le Blant's *Inscriptions Chrétiennes de la Gaule*. Corssen also acknowledges the merits of Schuchardt's important work *Der Vokalismus des Vulgärlateins*, though not always admitting the author's accuracy or agreeing with his results. In the domain of comparative philology there have appeared the second edition of Pott's *Etymologische Forschungen*, with the first instalment of a *Wurzel-Lexicon der indogermanischen Sprachen*, the second edition of G. Curtius' *Grundzüge der griechischen Etymologie*, Schleicher's *Compendium der vergleichenden Grammatik der indogermanischen Sprachen*, and Corssen's own *Kritische Beiträge* and *Kritische Nachträge zur lateinischen Formenlehre*, the results of which have been worked up in the present book. Finally, the investigations of physical observers into the laws which govern the formation of vocal sounds, have been to a certain extent made use of. Here Corssen is chiefly indebted to Brücke's *Physiologie und Systematik der Sprachlehre*, Helmholtz's *Lehre von den Tonempfindungen*, and Max Müller's second series of *Lectures on the Science of Language*: he might, perhaps, have noticed the remarkable work of Mr. Melville Bell on *Visible Speech*, of which a high authority, Mr. A. J. Ellis, declared that it did more than any work with which he was acquainted towards laying the foundations of alphabetic science (*Reader*, August 5, 1865).

The history and general treatment of the "pronunciation, vocalism, and accentuation" of a language might seem at first sight to concern merely the form of the language in its more limited sense, not necessarily its structural development. Empirical and superficial as such a view of the subject would have been, it would not, it must be owned, have been altogether inadmissible on the loose terms of the thesis as given out by the Berlin Academy. It is fortunate for Latin scholarship that Corssen preferred never to leave out of sight the whole history and etymological affinities of the letter or syllable which he was treating. By widening and deepening his range in the manner indicated, he has given his book an interest and scope much exceeding the apparent limits of his subject, and has projected a work, the compass of which must cover the whole range of Latin etymology, grammar, and orthography. The bearings of the treatise on etymology and grammar constitute, in fact, by far the largest element in its importance and interest. It might, perhaps, have been wished that the material collected could have been presented in a form different from that imposed by the exigencies of a prize essay; and we cannot refrain from expressing a hope that, for the purposes of general convenience, the author will one day reduce the etymological results of his labours into a lexicon-form resembling that adopted by Curtius in his *Grundzüge der griechischen Etymologie*.

The first volume (792 pp.) covers the section upon pronunciation, and rather more than a third of that upon vocalism, or, as it may perhaps be paraphrased, the pathology of vowels. A short article cannot do justice in any but general terms to the patience and general thoroughness of the author's labours. As we have said, the present edition has in the first section, as everywhere else, completely transformed the first. The account of each letter is prefaced by a statement of the physical conditions under which the sound represented is produced, and where possible this analysis is brought into harmony with the *dicta* of the Roman grammarians on the letter. The discussion, clear, patient, and well supported by reference to authorities, is invariably well summed up. The chief change of view exhibited by the author in this section lies in his present comparative disbelief in the disappearance of mutes as a cause of change in form; a result for which he had prepared his readers in the *Kritische Nachträge*. Among the best and newest things to be found here are the discussion on *af*, *ab*, and *au* (p. 152 foll.), in which *ab* is shewn to be distinct from forms previously supposed to be akin to it; the section on the affinities of *f* (p. 140 foll.) and the account of the transition from the third to the fifth declension in the case of the *es* stems (p. 281 foll.). There are, however, some points in this division which seem obviously open to criticism.

The statement (p. 175) that *annis* in *quotannis* is an old nominative, though retracted as unnecessary in the corrections added at the end of vol. ii., should not have been

* A sample may be quoted in illustration: "Hierbei sollen die Etymologie, die Zeugnisse der Alten selbst, die verschiedenen Schreibweisen in Inschriften und Handschriften, die Formen, welche die lateinischen Wörter in der Uebertragung ins Griechische erhalten haben, die altitalischen Dialekte, und die aus dem Lateinischen stammenden neueren Sprachen benutzt werden, endlich besonders die altrömischen Dichtungen, vorzüglich die Komödien;" hardly a model of arrangement.

made without an acknowledgment of the existence of the expressions "quot Kalendis," "quot mensibus," which entirely refutes it. This is an instance of the tendency to forget or ignore the living usages of a language which is so often induced by the exclusive study of its formation. It seems again very unnatural to say with the author (p. 213) that *iani-tor* stands for *iani-tuus*. If so, why have we not a form *aedi-tor* by the side of *aedi-tuus?* Corssen argues on the form *aedi-tos*, said to be the original one by Varro *L. L.* 7, 27. This form may have been due to the analogy of words like *honos*, *labos*, &c., which weakened their *s* to *r* in the nominative, as well as in the oblique cases. *Tos* may have been, as Corssen says, short for a consonantal stem *tu-os;* but it should have been first proved that such a contraction was possible or likely in a suffix. In the controversy with Pott on *nocturnus* and *diurnus* (p. 232 *note*), the author seems to strain a point for the sake of uniformity. He maintains that *diurnus* stands for *dius-nus*, as *veternus* stands for *vetusnus*, and insists in finding the same stem *dius*, shorn of its *s* in the adverbs *interdiu* and *diu*, which he maintains to be accusatives. *Hodiernus* must surely be from *hodie*, an unmistakeable ablative; the case of *nocturnus* and *diurnus* is not beyond dispute. But, in spite of Corssen's arguments, Pott seems to us to take the most natural view in supposing them to be formed, like *hodiernus*, from ablatives, and to be therefore distinct from formations like *veternus* and *infernus*. *Noctu* points back to an old stem *noctu*, of which a relic is left in *noctu-a*. If *diu* be an ablative, then *inter* in *interdiu* must once have governed the ablative; and it is easier to believe that it did so in this word and in *interea* (see Ritschl, *Neue Plautinische Excurse*, p. 82 foll.) than to suppose with Corssen that *diu* (in face of its final syllable) is an accusative with the *s* lost, and that the *eā* of *interea* is a neuter accusative plural with the original length of its final syllable preserved. To account, as Corssen does, for the length of the last syllable of *diu* by assuming an original stem *divas*, whose final syllable could be either short or long, is somewhat arbitrary.

The second section, on vocalism, is in this edition as in the last the most important part of the work. Here the most important alteration in the author's views lies in the enlargement of the sphere which he is now disposed to allow to the action of "Vokalsteigerung," or the strengthening of vowels in Latin by the processes known in Sanskrit grammar as *Guna* and *Vriddhi*. This process Corssen believes to have been active in the formation and modification not only of stems but of suffixes; a theory most suggestive and important as tending to simplify many of the more puzzling phenomena of Latin grammar. The pages in which the action of vowel-strengthening on suffixes is treated (pp. 566-627) are especially worth study, and not least the discussion of the Latin perfect (pp. 607-20), which may be favourably contrasted with Schleicher's treatment of the same tense. Corssen gives up, in face of the number of facts, any attempt to give a precise theory of the origin of the multitudinous process to which he ascribes such extensive working. Bopp's theory of a law of compensating gravity in syllables, according to which a light suffix was supposed to be balanced by a heavy stem, and a heavy suffix by a light stem, was as broad and clear as theories started by great minds generally are; but it is now found to be inadequate to the facts.

The second division of this part, on the disfigurement or spoiling ("Trübung") of the diphthongs, contains much important discussion on grammatical points. The treatment of the Latin dative and ablative (p. 726 foll.) is extremely good; but the weightiest result to which we are brought in this section is the giving up of the supposed archaic genitive of the first declension in *aes* or *ais*. Corssen thinks it can be proved that these genitives are no genuine Latin forms, but that they arose under Greek influence; being in fact imitations of the Greek genitive in ης. The ending *aes* is found mostly in proper names; many of these names are Greek; in many cases the person who wrote the inscription was a Greek; several are the names of slaves or freedwomen, presumably Greek. The form *Prosepnais*, usually relied upon as the best, because the oldest, evidence of this genitive, Corssen now follows Mommsen in pronouncing to be a bastard compound of the Greek genitive in ης and the Latin genitive in *ai*. If the genitive in *aes* be given up as a true Latin form, it follows that the older genitive in *as* (familia*as*) can no longer be identified with that in *ai*, the only proveable link between them having disappeared. It is not, therefore, surprising that Corssen (p. 769) should return to the view that the genitive in *ai* is properly a locative. Equally important is Corssen's theory that the old plurals of the second declension in *eis* and *is* are due to a confusion of declension; that forms like *vireis* for *viri* are in fact cases of a transference of an *ŏ* stem into the *i* declension. This theory, if made good, would deprive the Latin declension system of the symmetry which has hitherto been supposed to characterize it.

H. Nettleship.

Greek Syntax, with a *Rationale* of the Constructions, by James Clyde, M.A., LL.D. Fourth edition, re-written. Edinburgh: Oliver and Boyd.

From a brilliant sketch of Greek syntax, Mr. Clyde's work has grown into a complete and systematic treatise, and that without degenerating into mere bulkiness. Its chief merits are, logical subtlety, and a wide range of illustration from other languages. Like most of his countrymen, Mr. Clyde shows a strong leaning to the psychological or deductive method. He starts from the pregnant axioms that the rules of syntax are ultimately based on the principles of logic; that "there are more forms of the mental act than" corresponding forms in syntax, so that "language cannot always render fully or keep pace with thought;" and that the expression of thought in language is determined by a series of influences —emotion, the desire of euphony, national temper, and the like—which vary in each several case. His manner of applying these principles is always full of thoughtful research: and he is often strikingly successful in carrying the light of reason into the intricate windings of grammatical usage. Nor is this attained by sacrificing facts. Mr. Clyde has a thorough critical acquaintance with the Greek of every period, not excepting the living dialects; and he gives abundant parallels from Latin and modern languages. Indeed, his book is almost a comparative syntax based upon Greek. His weak point is etymology, or rather the quotations on that subject, which he has admitted, sparingly and with evident misgiving, from other writers. The theories of Dr. Donaldson (p. 8), and Mr. Crosby (pp. 26, 50, &c.), are as obsolete as judicial astrology.

D. B. Monro.

Fragmenta Aristotelis. Collegit disposuit illustravit Aemilius Heitz in gymnasio Argentoratensi litt. ant. professor. Paris: Fermin Didot, 1869. (Vol. IV. of Didot's Aristotle.)

When we reflect on the mass of extant writings bearing Aristotle's name, fragments testifying to the existence of a body of Aristotelian literature, now lost to us, may well excite surprise and mistrust. It is natural to ask, How could so much have been produced in the sixty-three years of one man's lifetime? A probable solution of the difficulty is to suppose that a large portion of that which in antiquity passed as Aristotle's was due to the school of Aristotle rather

than to the master himself, just as in our time some nameless imitator may be credited with a picture which the art-critics of the last century assigned without hesitation to Rafael or Lionardo. This view substantially coincides with that maintained by Val. Rose in his essay *De Aristotelis librorum ordine et auctoritate* (Berl. 1854), but we cannot help thinking that negative criticism may be carried too far, and that Rose errs in this direction in prefixing the title of *Aristoteles pseudepigraphus* to his well-known collection of the Aristotelian fragments. The *Verlorene Schriften des Aristoteles* (Leipz. 1865) of M. Heitz, of Strassburg, was a seasonable protest against this somewhat indiscriminate spirit of condemnation; and it was reassuring to find that so much might be said on behalf of the more conservative side of the controversy.

The present volume, though apparently based on the great work of Rose, presents traces in every page of the sound and independent judgment of one who has a right to speak with authority. Besides introducing much valuable material of his own, the editor makes good use of the more recent contributions to Aristotelian philology: in the case of the Dialogues, for instance, the importance of Bernays' admirable essay on the subject is duly recognised, although the plan of the edition precludes the mention of anything more than the results attained. M. Heitz would be the last person in the world to regard his own work as final, or to ignore the fact that something still remains to be done (more especially in the way of identifying anonymous fragments); also that we may expect a gradual improvement in the text, as the late and often obscure writers, to whom we are indebted for the preservation of fragments, come to be better known and more critically edited. We believe we are right in stating that the concluding volume of Didot's Aristotle will have the benefit of M. Heitz's editorship.

I. Bywater.

Aeschyli Persae. Ad libros MSS. de integro aut primum collatos, edidit et praefatus est R. Merkel. Leipzig: Teubner, 1869.

Italian MSS. of Aeschylus. [*Aeschylus in Italienischen Handschriften*, von R. Merkel.] Leipzig: Teubner, 1868.

These two works, by the well-known editor of Apollonius Rhodius, are different parts of one design, the restitution of the text of Aeschylus in constant subordination to the MS. tradition. They contain the results of a year's minute, almost daily, examination of the great Laurentian codex, 32.9 to which M. Merkel came with the experience gained by his previous collation of the *Argonautica*, which forms the last, as *Aeschylus* the middle, and *Sophocles* the first, part of the MS., besides a collation, less minute but evidently careful, of two at Venice, *A* and *V*, three at Milan, *x y z*, nine, with excerpts from twenty, at Rome; besides five other Laurentian, less known than the great 32.9. Many of these have hitherto remained unused; when supplemented, as M. Merkel in the preface to the *Persae* promises, by a transcript of 32.9, shortly to be issued by the Clarendon Press, they will form a *matériel* such as can scarcely fail to throw fresh life into the always interesting study of Aeschylus.

Of the two works at present under notice, the latter is at present incomplete. It is in German. After 31 pages of general description of the Laurentian and other codices, it proceeds to the text of the *Persae*, according to the pages of Laur. 32.9, giving the minutest facts of that MS., a collation of the others, and a discussion of such points of accentuation, orthography, and exegesis, as arise. Of its minuteness some idea may be formed by the fact that eight octavo pages are devoted to the 32 lines which form the first page of Laur. The edition of the *Persae* is in Latin, and follows a similar plan, but less elaborately and so as to suit the requirements of more ordinary students. It is not to be supposed from this that it includes a commentary; M. Merkel's work is that of a critic, only entering on the more practical task of interpretation when it becomes necessary as explaining an emendation, or contributing a new, generally a more recondite, view of the most obscure passages. It has the great merit of extreme conciseness; a preface of 8 pages is followed by the text in 34, and this by the critical notes in 33.

Among the more important restorations of the original text are, in 28, ἐντλήμονι; 372, ὑπ' εὐθύμου φρενὸς, for ὑπ' ἐκθύμου φρενὸς, which is only found in one of M. Merkel's MSS.; 415, αὐτοί θ' ὑπ' αὐτῶν ἐμβολαῖς χαλκοστόμοις, for αὐτῶν ἐμβόλοις, both unnecessary; 422, φυγῇ δ' ἀκόσμως, for ἀκόσμῳ; 551, τοτοῖ, for the repeated ποποῖ; 851, εὐδοκίμως στρατιὰς ἀπεφαινόμεθ', for εὐδοκίμου στρατιᾶς; 860, ἐπεύθυνον, for ἐπεύθυνεν, where M. Merkel makes νομίσματα nominative, connects πάντ' closely with πυργινὰ, like τὴν ἐναντίαν πᾶσαν ὁδὸν, and explains ἐπεύθυνον of the direction under which the army marched; 926, πάνταρφύς τις, for πάνυ γὰρ φύστις, as read by Dind.; 1006, οἵᾳ δι' αἰῶνος τύχᾳ, for οἷαι τύχαι, where M. Merkel explains, perhaps questionably, *quali umquam post hominum memoriam re adversa;* at any rate the usual sense of "everlastingly" suits sufficiently well, οἵᾳ being exclamatory, "with how deep a disaster." Of the emendations proposed, ναῦς καὶ κρατῆσαι, in 338, for ναυσὶ κρατῆσαι, seems likely; βροτήσι' for βροτοῖσιν, 599, is very plausible; 281, 286, Δάοις as a proper name for δᾴοις is not unlikely, though the same cannot be said of οὐδέ τις ταβῶν for οὐδέ τις γέρων, 732; 761, ἐξεκίνυσσεν for ἐξεκείνωσεν is not improved by the addition of πέσος for πεσόν; in 550, ὑπαντιᾶν εὐωπαδὶς is more Alexandrian than Aeschylean, and M. Merkel confesses to have borrowed it from Apollonius Rhodius; ἁλιδινεῖς for ἁλὶ δεινᾷ, in 576, though not admitted into the text, is ingenious, and at least not feeble.

Those who are interested in tracing the signs by which the various divisions of an ancient drama were marked off from each other, will find various notices in these two books. Thus the *paragraph* still exists in the Laur. to mark the beginning of the antistrophe; in one case, out of its place, at 890.

R. Ellis.

Intelligence.

The collected works of Poggio are to appear shortly in 4 vols. under the editorship of Aug. Wilmanns, already known through his labours on the fragments of Varro.

Latin scholars will welcome the news that a fifth volume of Hand's Tursellinus is said to be in course of "preparation." A new edition of Tacitus by Nipperdey is in the press. (Berlin, Weidmann.)

Messrs. Teubner announce (1) a critical edition of Cornelius Nepos by Halm; (2) the orations of Antipho, together with the declamations of Gorgias, Antisthenes, and Alcidamas by Fr. Blass; (3) Cebetis tabula, with critical apparatus, &c., by Fr. Drosihn. All these, however, seem trifling by comparison with another announcement, that of an entirely new and complete edition of the Greek writers on Music, in 4 volumes. The editors will be von Jan, Deiters, and Marquard, with Prof. W. Studemund as collaborateur, who supplies a collation of the Italian MSS. The series is to begin with Aristides Quintilianus by Deiters. A German translation and (in the case of the more difficult writings) an explanatory commentary are to accompany the text, and an elaborate Lexicon terminorum will enhance the value of the work. The book certainly promises to be one of the most important philological productions of our times.

The new *Tidskrift for Philogi og Paidagogik* (Copenhagen), is not a very valuable journal: the current number, however, contains some valuable emendations by Herr Bugge.

Contents of the Journals.

Rheinisches Museum, vol. xxiv. part iv.—A. W. Zumpt: On the Lustra of the Romans. [Maintains not very satisfactorily the old view of Censorinus that there had been seventy-five lustra before Vespasian, against Borghesi's that there had been only seventy-two.]—L. Urlichs: Certain Pictures by Aristides. [Fixes his date, and gives a history of some of his works: concludes with a discussion an Pliny, N. H. xxxv. 99.]—O. Richter: Delia; a contribution to the biography of Tibullus. [Accepting Lachmann's view as to the data and order of the poems of Tibullus, maintains that Delia was a *libertina*, and a married woman even at the beginning of her liaison with the poet.]—F. Nietzsche: The Florentine Tractate on Homer and Hesiod, their family, and the contest between them.—A. Eussner: Frontonis et M. Caesaris epistularum emendationes. [Some of them are demonstrably superfluous.] E. Rohde: Inedited Scholia to Lucian, relating to the Attic Thesmophoria and Haloa. [Interesting, as illustrating the history of Greek religion.]—L. Müller: On Horace.—H. Usener: Lectiones Graecae. [Most of the suggestions seem to deserve careful attention.]—H. A. Koch: Archaic Forms in Plautus. [On *sequo*, *fariolus*, *tame*, *Herculeus*, *auxilla*, *aeriternus*, *senet*, &c.]—F. Bücheler: Sophocles in Philodemus. [On a passage in the recently published portion of the Herculanensia volumina.]—L. M.: A New Fragment of Ennius. [Ap. Isidor. Or. i. 36, 3.] —W. Schmitz: *Retiaculum*.—L. M.: *Cena*. [Orthography of the word.]—L. M.: *Dilaxat*. [For this we must read διαλλάσσων in Lucil. fr. v. 25.]—W. Clemm: Ad Scholia in Homeri Odysseam observationes criticae duae.—J. Klein: On Galen.—L. M.: On Lucilius.—G. Krüger: On Horace.—L. M.: On Acro and Porphyrio.—J. Maehly: On Ovid. —L. M.: On Ausonius.—J. Steup: On Sallust's Catiline.—A. Schöne: On the Fragments of the Histories of Sallust.—The same: On the Dialogus de Oratore.

Hermes, vol. v. part 2.—Th. Mommsen: The Two Battles of Betriacum, in A.D. 69. [Discusses Tacitus' account of them.]—M. Haupt: Varia. L. von Sybel: On the Callinicus of Archilochus and the Scholia to Pindar. [Deals with the fragment ap. Bergk, L. G. p. 716: the formula τήνελλα καλλίνικε is shown to have been fathered on Archilochus through a conjecture of Eratosthenes as to its origin.]—V. Rose: On Ion's Pictures of Travel and Joannes Alexandrinus the Physician. [On the ἐπιδημίαι of Ion of Chios and the Allusions to the Book in the Commentators on Hippocrates.]—Th. Gomperz: On Soranus of Ephesus. [Conjectures on the text.]—U. Köhler: Lycurgus' Administration of the Finances. [A discussion on the inscription relating to it.] —Th. Mommsen: On the Legends of Sp. Cassius, M. Manlius, Sp. Maelius. [Regards that of Maelius as least historical: points out some interpolations in the fasti which Livy has followed.]—R. Hercher: On certain Greek Prose Authors. [Critical suggestions on the text, with collation of MSS. of Choricius and Porphyry's Quaest. Homer.]—O. Hirschfeld: On Cicero's Letters.—The same: On Cic. de Rep. v.—J. Bernays: Aristotle and Simonides. [Corrects Pol. ii. 5 by a masterly emendation (ἔθνεσιν for ἔτεσιν), showing that the place contains a quotation from Simonides (fr. 193, Bergk) which has hitherto appeared in our collections in a curtailed form: another allusion to Simonides is pointed out in Phys. iv. 13.]—Th. Mommsen: Actors' Inscriptions. [A sort of ancient play-bill on stone.]—R. Schöne: On Greek Artists' Inscriptions.—H. Schiller: On Nero's Salutationes Imperatoriae.

Zeitschrift für die österreichischen Gymnasien, xxi. 7.—J. Ptaschnik: The leges centuriatae of 305 and 415 a. u. c. [An ingenious attempt to carry further the conclusions of Mommsen in his Römische Forschungen. Too much stress is laid upon Livy's representation of "pragmatical" details. A preliminary question might be asked, viz. have we any trustworthy evidence for the terms of laws not in force in historical times?]—L. Vielhaber: Rev. of Kraner's Caesar, 7th ed. [Laudatory.]—J. Schmidt: Rev. of the new edition of Bentley's Horace. [Interesting attempt to determine what proportion of Bentley's emendations have been universally accepted.]—R. Heinzel: Rev. of Wackernagel, Voces variae, animantium, 2nd ed. [Curious and interesting; depending too exclusively upon philologrial materials rather than those of the science of language.]—The same: Rev. of Zupitza's edition of Dietrich's Abenteuer by Albrecht von Kemenaten. [This, the 5th volume of the new Berlin Heldenbuch, contains the works of a poet of the 13th century whose importance has been only lately recognised.]

Zeitschrift für die österreichischen Gymnasien, xxi. 8.—J. Kvicala: Zur Beurtheilung der drei Thebanischen Tragoedien des Sophokles. [Disproves in detail the view of A. Schöll, who regards those tragedies as a Trilogy. Sophocles wrote the Antigone first; and Antig. 49 foll. (cf. Hygin. Fab. 242) and 900 foll. show that the poet here followed a version of the legend differing from the story of his own Œd. Tyr. and Œd. Col.] K. Schenkl: Rev. of Otto Jahn's Orator of Cicero. [Detailed review—laudatory.] W. Scherer: Rev. of Rumpelt's Das natürlische System der Sprachlaute and sein Verhältnis zu den wichtigsten Cultursprachen. [With especial reference to German grammar and orthography.]

Philologischer Anzeiger, by E. von Leutsch, II. 8, Aug. 1870.—G. Curtius: Erläuterungen. [Notes some changes in this edition. We are glad to see an English translation announced.]—E. Löfstedt: Grekisk Grammatik.—R. Westphal: Methodische Grammatik der Griech. Sprache.—B. L. Gildersleeve: Latin Grammar.—O. Ribbech: Beiträge zu der Lehre von den lateinischen Partikeln.—F. Ch. Kirchoff: Beiträge zu den Elementen der antiken Rhythmik und Grammatik. [Chiefly criticism of Westphal's account of the dactyl in logoœdic verse, with a refutation of his use of the δάκτυλοι κυκλικοί of Dionys. Hal.]—J. La Roche: Homerische Untersuchungen. [A book that shows how unexhausted the subject is.]—H. W. van der Mey: Studia Theognidea.—H. van Herwerden: Animadversiones philologicae ad Theognidem. [Supply new collations of the Codex Mutinensis.]—H. Hennig: De Iphigeniae Aulidensis forma ac condicione. [Supposes two main interpolators, besides a Byzantine and certain MS. correctors. The reviewer accepts the leading results.] C. Badham: Adhortatio ad juventutem academicam Sydneiensem. [Emendations of Thucydes—condemned, with few exceptions.]—Herculanensium voluminum quae supersunt collectio altera, t. vi. fasc. i.–iv. [Sadly fragmentary remains, chiefly of Epicurus περὶ φύσεως.]—H. Almers: Römische Schlendertage. [Travels.]

New Publications.

Aeneae commentarius poliorceticus: R. Hercher rec. Berlin: Weidmann.

Anthologia Latina: rec. A. Riese. P. I. fasc. 2. Leipzig: Teubner.

Aristotelis Opera, ex rec. Bekkeri. Tom. V. Berlin.

Aristoteles über Kunst, besonders Tragödie: Exegetische u. kritische Untersuchungen von J. H. Reinkens. Wien: Braumüller.

Bursian, C. Erophile. Vulgaer-griechische Tragoedie von Georgios Chortatzes aus Kreta. Ein Beitrag zur Geschichte der neugriech. und der italiän. Litteratur. Leipzig: Hirzel.

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ERRATA IN No. 14.

Page 34 (a)	34	lines from bottom,	for "Schärsburg"	read "Schässburg."
,, 35	26	,,	for "Gregun"	read "Gregus."
,, 56 (a)	32	,,	for "π." 3 times	read "II." 3 times.
,, ib.	29	,,	for "*sidens esse* deos *dies*"	read "*sideris esse deos dies*."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, February 1st, and advertisements should be sent in by January 26th.

NOTICE.

The Academy *will in future appear regularly on the 1st and 15th of every month.*
The space devoted to Theology, Science *and* Philosophy, History, *and the various branches of* Philology, *in each month will be the same as before: whilst the department of* General Literature *has been increased to more than twice its original size, and is in course of complete reorganization.*

General Literature.

ALEXANDRE DUMAS.

In an early volume of the *Mémoires* of Alexandre Dumas we find a remark to the effect that, out of the six hundred volumes which called him author, there were only four which the most scrupulous mother need hesitate to put into the hands of her daughter. Of course, as the smaller number cannot be taken quite literally, the larger one might be only intended as approximative; but considering that eighteen or twenty volumes of memoirs alone have appeared since this announcement, the figure would be now rather an understatement than an exaggeration. In literature, as elsewhere, power is considerable in proportion to its volume as well as to its direction, and the power exercised by the author of *Monte Cristo* is of a kind which serious criticism is less likely to overrate than to undervalue. The author of any six hundred popular volumes is, *ipso facto*, a considerable man, but, unfortunately for Dumas, the question has been raised whether he is that author; whether all, or only the best, whether scarcely any, and those the worst of the whole six hundred, are by their professed author. The novelist himself owned to one assistant; his friends admit that he lent his name rather too freely in the interests of his publishers; and in the most elaborate and circumstantial attack upon his literary probity, the number of authors ancient and modern whom he is accused of defrauding reaches the respectable figure of sixty-four.

Those who are curious in such controversies will find in Quérard's *Supercheries littéraires* a full discussion of Auguste Maquet's share in *Les Trois Mousquetaires*, and of Émile Souvestre's contributions to *Anthony*, as well as of the general question how far a writer may plunder his predecessors without acknowledgment. But under the cover of his bibliographical zeal, Quérard shows, if possible, more private animosity than Eugène de Mirecourt, author of the pamphlet *Fabrique de Romans, Maison A. Dumas et Compagnie;* and if it were worth while to scrutinise all the evidence accessible, it would be easy to show that his conclusions admit of modification. But this would require a separate controversy for every one of some fifty or sixty second-rate novels and third-rate plays, and a general result reached by simpler means will be quite as trustworthy. That Dumas borrowed characters from Scott, and plots from Cooper, scenes from Goethe, and sentences from Schiller, is quite certain, and he sometimes took very little trouble to conceal his obligation. Compare the two lines:—

> "Ah! c'est un beau spectacle à ravir la pensée!"
> "Oh! que c'est un spectacle à faire envie au cœur!"

As one critic has happily remarked, "Charles Quint dit, *Ah!* et Christine dit, *Oh!*" and the speech proceeds with about the same degree of originality. But, after all, these obvious and unmistakable plagiarisms would scarcely fill one volume, to say nothing of five hundred, and they are a sign of haste and indolence on the part of the writer, much more than of absolute want of invention. M. de Mirecourt attempted to prove by calculation that it was a physical impossibility for the most practised penman to do more than copy out the number of pages which Dumas was supposed to compose in a week. This was allowing sixty pages a day to the copyist, but as Dumas published his first volume of tales in 1826, and continued to write for more than forty years, the supposed copyist, working three hundred days in the year, would produce just four times as many volumes as those claimed by the novelist. Such productiveness is therefore possible, though strange; it is scarcely even strange if we make allowance for a translation of *Jacopo Ortis* touched up and published as original, for Méry's *Chasse au Chastre* inserted without acknowledgment in the *Impressions de Voyage*, and reprinted as an independent work, for new names given to old stories, for old stories cut up into new *feuilletons*, and then served up for the third time as fresh compositions, and for all the other devices by which a practised bookmaker can turn one volume into three. The *fabrique de romans* was carried on in the face of day, and Dumas could not complain of Thackeray's ironical congratulations addressed to him in the *Revue britannique* as the inventor of the twenty-one-volume novel. But the associates in the trade were not so numerous, or their co-operation so extensive, as the author's enemies have endeavoured to make out. M. Auguste Maquet, the only *collaborateur* whom Dumas consented to acknowledge, and who served under him for some twenty years, had achieved several failures on his own account, before entering on this one-sided partnership, and only attained very moderate successes after its dissolution. He helped, no doubt, to select and arrange the historical myths which were to save his master the trouble of inventing subordinate characters for himself; he may even have been the first to discover the names of Athos, Porthos, and Aramis in Anquetil; but it by no means follows from thence that it was he who wrote Artegnan's duel with the three musketeers, and made the story of the diamonds so absorbing as to imperil the soul of one of Miss Yonge's juvenile heroes. No doubt, Dumas was well content to let those of his readers who knew no literature but their own, remain ignorant of the assistance he derived from his more varied studies, but he was personally honest, as his behaviour towards Victor Hugo proves. *Anthony*, a very worthless melodrama, had had a great success, while *Marion Delorme* was still delayed by the censorship of the press. The resemblances of character and situation were too strong to be accidental, and the critics began to talk of plagiarism; whereupon Dumas announced publicly that the plagiarism, if any, was on his side, as he had been admitted to the first reading of *Marion Delorme*, before *Anthony* was begun. Literary honesty, on the other hand, as it is now understood, only dates from the first law of copyright, and Dumas' sins against it would have been mere matters of course at an earlier period. A living literature, that is, one orally transmitted, is common property, and a thousand unknown poets may have had a hand in correcting and enlarging the barest outlines of our present nursery legends. Mediæval

romance grew up in the same manner, and it was as natural for a poet to have a school of followers as for a painter to touch up the work of his pupils; the Homeridæ are only the Auguste Maquets of an heroic age. And though it may not be altogether to the credit of the 19th century, there is something to be said for the view that the French novel is to modern Europe what Homer was to the Greeks, the *Nibelungenlied* to our ancestors, and the songs of the Troubadours to southern chivalry. From Paris to Constantinople, from St. Petersburg to Rome, Dumas and his contemporaries have extended their sway; their power is real, however earned, and however exercised. Instead of disputing the fact, it would be as well to analyze its causes, for it is scarcely conceivable that a school should owe so wide a popularity to its vices alone.

We must distinguish, to begin with, the younger generation, Feuillet, Flaubert, Droz, Dumas fils, and the rest from the generation which is now dying out, Méry, Gautier, Karr, Eugène Sue, the elder Dumas, Hugo, and Sand. The two last, who possess (and abuse) an unquestionable portion of real genius, may be considered to stand apart. Of the others, Sue is the connecting link between Dumas père and Dumas fils, between the invention which aims at nothing but to make an amusing story, and the realism which is satisfied with the narrowest view of a fraction of humanity. The tradition which forbade the novelist to be dull is perhaps losing its force, but there is a good deal of conscientious workmanship even in the new school; its members endeavour either to write immediately from experience or to follow out certain given principles or assumptions to the remotest refinements possible. It is true that their range of subject is deplorably narrow, and their real facility is somewhat mechanical, as belongs to a decadence; so that there is something to be said for the indignant ejaculation of Alexandre Dumas the first, when he couldn't find any boots to go out in, and reflected that his son had twelve pairs in an orderly row: "Décidément ce garçon-là n'aura jamais de génie." Without attributing genius to the author of *Monte Cristo*, it may readily be admitted that he had a more spontaneous, a much more varied, and a much less disagreeable talent than his successor.

His writings fall naturally into four divisions: the plays, the historical novels, other novels, and the *Mémoires*, *Impressions*, and miscellaneous *feuilletons*. From the last of these we can gather quite as much as is necessary of the author's history, while avoiding all controverted points; in the discussion of which, however, some fifty or sixty volumes might easily be spent. But if we were to attempt to correct all Dumas' own statements, in common fairness we ought as well to examine the grounds of the thousand and one apocryphal stories which circulated about him in the French press. M. de Mirecourt's scandals may be explained away quite as easily as the Homeric account of the capture of the magazines at Soissons in the *Mémoires*. The truth is generally midway between the rival versions, as in the case of Dumas' claim to the rank of marquis. His enemies denied, what was true, that he was the legitimate son of the republican general Dumas; he himself asserted, what was doubtful, that his father was the legitimate son of the Marquis Davy de la Pailleterie and the West Indian mother from whom he took the name of Dumas. The fact probably is that there had been a Scotch marriage, which might have passed muster in revolutionary times if the father and son had not quarrelled, the latter enlisting as a private soldier in the armies of the Republic, which was scarcely the way to secure an old title, nor, as his opinions remained unchanged, to earn a new one under the Empire. General Dumas died young, and as Napoleon refused a pension to his widow, their son Alexandre found himself at one-and-twenty started in life without other fortune than a particularly good handwriting. This procured him a clerk's place, and the first two or three years of his residence in Paris were spent in filling up the deficiencies in his education. In 1826 he published a volume of Tales, and soon afterwards composed his first play, *Christine*, according to the received classical models. In 1833 he wrote a paper in the *Revue des Deux Mondes*, entitled "Comment je devins auteur dramatique," to describe the revolution effected in his being by the first play of Shakespeare he saw represented; but the narrative is more eloquent than accurate. It is true that about this time he joined the so-called Romantic movement of which Victor Hugo was the head; and while *Christine* was still seeking a friendly manager, *Henri III.* was vaunted to the skies by the revolutionary clique which was nearly supreme on the French stage from 1830 to 1840. *Christine* was romanticised, and became "Stockholm, Fontainebleau et Rome, une Trilogie dramatique," still in the rhymed couplets which so easily acquire the sound of mock-heroics. *Anthony* was almost the *reductio ad absurdum* of the movement, and went a good way towards justifying Granier de Cassagnac's attack, which the paper in the *Revue des Deux Mondes* was meant to answer. "He has no ideas, no passions, no style,"—"quant aux idées, il les emprunte; quant aux passions, il les suppose; quant au style, il le copie." *Anthony* is in the worst style of the worst German imitations of what was thought to be Shakespeare; the characters are insignificant, there is no plot, and the action advances at haphazard; but the work was taken for a triumphant protest against vulgar morality because it ended with the hero stabbing his mistress at the approach of her husband, exclaiming, "Je l'ai tuée parce-qu'elle m'a resisté." In comedy, Dumas could have succeeded better; *Mademoiselle de Belle-Isle* might perhaps be described as Beaumarchais without the sparkling dialogue, but some of the situations are really comic, and a little more care in developing the intrigue would have made it a good acting play. The hackneyed episode of a duel with dice is quite *de trop*, and neither helps nor hinders the natural catastrophe.

But it is not as a dramatist that Dumas earned his reputation: he is most known as the author of *Le Comte de Monte Cristo;* he is best known as author of *Les Trois Mousquetaires*. The latter work does not want much to make it a perfect historical romance. It is more amusing than *Quentin Durward*, or *The Fortunes of Nigel;* it is not more unhistorical, and the first half of it is not less moral. In fact, Dumas, at his best, rivals Scott in everything but the creation of his great humorous characters; he is always more readable than Scott at his worst because he gives less disproportionate space to matters of costume. *Les Trois Mousquetaires* is excellent while it keeps to its subject, but there is a great deal too much of "Miladi"; as an accessory she was very well, but the unity of the story is broken by the gradual substitution of her enmity and machinations for those of the great cardinal. The scene of her execution, a servile copy of the judgment on Adelheid in *Götz von Berlichingen*, is perhaps the most unfortunate of all the author's thefts. The principal purpose served by this episode is to provide a new evil genius, in the form of Miladi's son, for the heroes when they reappear in *Vingt Ans après*. This continuation is better than the worst, and not so good as the best, parts of *Les Trois Mousquetaires*, but poetical license is carried rather far when Charles II., of all people in the world, is chosen to repair the neglect of ungrateful sovereigns. The third part, *Le Vicomte de Bragelonne*, is simply interminable; it grew, like the riband a conjuror pulls out of his

mouth, till the spectators were tired of watching it, and then made way for a fresh trick.

It is chiefly in the name of *Monte Cristo*, that delight of schoolboys, that we ventured to claim for Dumas the high (relative) place hinted at above. The readers of this 19th century fairy tale lay in a stock of provisional credulity exactly similar to that which reconciles an Oriental to the djinns and marvels of the *Arabian Nights;* the phenomena are strange, but the student's science is happily just too scanty to warrant him in scepticism. As a work of art, *Le Comte de Monte Cristo* has been spoilt by the writer's indolent diffuseness. The magnificently luxurious count is quite a different person from the Edmond Dantes, whose slow revenge is the ostensible theme of the book; the two characters are constantly changing places and interfering with each other's development, and the consequence is that the main story lags wearisomely, while the ingenuity spent in inventing miracles of wealth is wasted; better placed they would be less like the day-dreams of a valet and *Lothair*. *La Reine Margot* is perhaps the next best known of Dumas' romances, but it is far inferior to *Les Trois Mousquetaires*, and as bloody as the most "Romantic" play. In his other works we have G. P. R. James, dashed more or less strongly with *La Dame aux Camélias*, and more or less enlivened with his own narrative art.

The *Impressions de Voyage* are half bookmaking about William Tell and the dukes of Burgundy, half amusing gossip, and guides' tales freely improved upon. The *Mémoires*, which for some time formed the staple of a journal entirely conducted by Dumas, also contain a good deal of padding, and half a volume at a time was devoted to any eminent contemporary who would consent to furnish materials for it. The only portion that has much independent interest is the account of the days in June, 1830. Dumas sailed with the stream; he did not, like the editor of the *Temps*, invent a whole provisional government with proclamations to match, nor, like Étienne Arago, prove to the Parisians that Paris was in revolution by closing the theatres; but he walked about the streets with a gun, and accompanied his friends when they had a fancy for charging any particular barricade. After the patriots had been dispersed by a discharge of cannon, he was asked if he had been under fire, and answered, Yes: "seulement je n'y suis pas resté longtemps." He was born in 1802; married, it is said in obedience to a hint from his patron, the Duke of Orléans, in 1842; his death last year was preceded by long illness and incapacity. If he deserves no higher praise than that of an intelligent maker of tales, it is partly the fault of the public which was easily satisfied with less than his best. H. Lawrenny.

Songs before Sunrise. By Algernon Charles Swinburne. London: Ellis, 1871.

If the *Songs before Sunrise* had been published anonymously, it would not have required a great amount of penetration in the reader to discover their author. There is indeed but one man in England who could and perhaps would have written them. They will probably meet with the same admiration from the one side and certainly with the same indiscriminate abhorrence from the other as their predecessors, the *Poems and Ballads*. These *Songs before Sunrise* are, in fact, nothing else than the continuation of those eruptions of hot and unfettered passion with which they share the same fundamental idea, applied in this case to the great political and religious questions of our age, and modified only so far as this more serious and elevated subject required. This idea is, in one word, that of Liberty, not so much the liberty which developes and constructs as that which lays low all conceivable limits which may surround the human spirit. All of us know how this Titanic volition led in the *Poems and Ballads* to exaggerations which ought to have been judged from an æsthetical rather than from a moral point of view, and the same might in many cases be said of this new production, although we gladly acknowledge that the *Songs* show a remarkable advance in the way of self-criticism and, in a certain sense, of moderation.

This abstract idea of freedom blossoms under the hand of the poet into a variety of forms, often of extreme beauty. About the morality or immorality of this idea in itself we shall have nothing to say. It seems to us that a poet has to be judged according to moral principles only so far as these are identical with the lines of beauty, and Swinburne before all men may rightly claim this privilege, because in him the purely artistic quality predominates over every other.

Unlimited freedom of human thought and action is Swinburne's first principle of philosophy, and he therefore attacks with the utmost ferocity every belief or institution which seems to restrain this supreme *droit de l'homme*. The Christian revelation, its Divine Author, and its human interpreters, the priests of all confessions, excite his intensest indignation. The Christian God with all His anthropomorphic qualities is, according to our poet, only an impure imagination, which the frightened and servile human mind created for its own thraldom, and which the same human mind purified must abolish:

> "Thought made Him, and breaks Him."

This phantom itself is stained with the vices of its creators, and has become their most cruel enemy and bane. In a poem called "Hymn of Man," which perhaps has never been reached, certainly not surpassed, in its sublime lyrical pathos, the Judge Himself, in whose name generations were slaughtered, is arraigned before the bar of man and condemned to death and utter oblivion. A deity in whose name so many crimes have been committed, cannot be the help of man—

> "What for us hath done
> Man beneath the sun?
> What for us hath God?"

ask the miserable outcasts of society in "Outside Church," while their happier brethren sing in pious contentedness their "Christmas Antiphones." For the priests have degraded the pure original socialism of Christian doctrine into a religion of the rich; they have made the cross

> "Shadowing the sheltered heads of kings."

These are in brief, and so far as it is possible to quote them, the reasons for which Swinburne breaks, and breaks fiercely, with the idea of a personal God. The true and sufficing object, on the other hand, of the religious emotions of man is his own ideal being, the

> "Pure spirit of man that men call God."

His idea of this *Être Suprême* our poet has defined in two poems, which for beauty of poetical expression may fairly be called masterpieces of the highest order: "The Litany of Nations" and "Hertha." The former is a prayer of all the children of the earth, however parted by diversity of customs and nationalities, to their common mother Hertha, "the earth-soul Freedom," the power of progress and liberty in Nature, as it is manifested by the everlasting struggle of light against darkness, of form against chaos. This power is eternal and universal. Hertha says:—

> "Before God was, I am."
>
> * * * * * *
>
> "The deed and the doer, the seed and the sower, the dust which is God;"

her head is crowned by the terrors and hopes of generations; her ong . "hoarse and hollow and shrill with strife,"

till at last she attains her perfect stature in liberated mankind. The pantheism of these poems, and indeed of every line of this volume, is of a sort quite unrestrained and uncompromising; in this quality markedly distinguished from that of Tennyson.

The following sublime passage, in which Hertha answers the prayers of her children, is in its grandeur like the oracle of some unknown goddess:—

> "I am that which began;
> Out of me the years roll;
> Out of me God and man;
> I am equal and whole.
> God changes, and man, and the form of them bodily: I am the soul.
>
> Before ever land was,
> Before ever the sea,
> Or soft hair of the grass,
> Or fair limbs of the tree,
> Or the flesh-coloured fruit of my branches—I was; and thy soul was in me."

Swinburne's political radicalism is of the same order as his religious. To define his position in relation to this great question, it may be sufficient to say that the book is dedicated to Joseph Mazzini, in a little poem which, by the bye, is the simplest and therefore perhaps the most charming of all. His chief aim throughout is to introduce into this country the principles of the European revolution which this name represents. Since the Restoration, England has stood aloof from the main stream of continental life, but now the poet implores her, "by the star that Milton's soul for Shelley lighted," to arise and join the cry, and struggle for the universal republic,—the sunrise meant to be heralded, as with larks' voices, in these songs. But not to his own country alone does the poet limit his sympathies for the democratic movement. Wherever a sign of this new life is visible, be it in Poland or Greece, in France or Italy, he watches it with loving solicitude, while he sends his song over the ocean to "Walt-Whitman in America," his fellow-sufferer and fellow-singer. But foremost in this struggle he regards France and Italy, and for these two countries his lyre resounds in the most enthusiastic strain. France, "liberty's sign and standard bearer," and "Italia, the world's wonder, the world's care," must be united with England and Spain by the link of universal freedom. This ideal and purely humanitarian conception is all the more remarkable and precious for Englishmen, whose most advanced notions of political emancipation have been till quite lately almost, if not entirely, historical and insular. The unsympathetic exclusion of Germany, "by whose forest-hidden fountains freedom slept armed" (whatever that means), from partaking in the emancipation of man is a proof that our poet knows but little of the country of Heine and Schopenhauer, and but little of the infinite depth in the conception of human freedom which has been sounded by its greatest thinkers. The freedom of Swinburne is the flaming sword "to destroy the sins of the earth with divine devastation"; it is the principle of "fiat justitia pereat mundus"—

> "It is better that war spare but one or two
> Than that many live and liberty be slain;"

it is the *fraternité ou la mort* of the men of 1793, which in the person of Robespierre erected the guillotine whilst voting for the abolition of capital punishment.

Nearly the same might be said about Swinburne's veneration for the republic, the mere sound of whose name seems to possess for him a magic charm. This is objectionable from an æsthetical point of view. For a republic, like a monarchy, is even, if the best, only a certain form of government, which is in itself no poetical object.

Swinburne's great qualities appear in a much better light where he abstains from all these accidental forms, and symbolizes the pure idea of liberty, as he has done under the beautiful image of the Mater dolorosa, who—

> "Sits by the way, by the wild wayside,
> In a rent stained raiment, the robe of a cast-off bride,
> In the dust, in the rainfall sitting with soiled feet bare,
> With the night for a garment upon her torn wet hair."

In fact it seems that the grander the idea is he has to deal with, the higher grows Swinburne's power and felicity, while on the other hand, as soon as he introduces any distinct system or person, the violence of his attacks exceeds by far the limits of artistic propriety. The abuse of Pius IX. in the "Halt before Rome," or of the Emperor Napoleon, the "son of a harlot," in "Quia multum amavit," scarcely stops short of the *banale*. At the same time these energetic diatribes are something quite alien in character from the *Weltschmerz*, that hopeless and helpless apathy which paralyzes the highest aspiration of the modern spirit. Swinburne's active nature happily preserves him from that malady; his desire is never to leave off struggling and toiling, even without the faintest ray of hope, as his "Pilgrims" beautifully express it—

> "Nay, though our life were blind, our death were fruitless,
> Not therefore were the whole world's high hope rootless."

This is, in the main, what under various forms Swinburne has to say in the *Songs before Sunrise*. It now remains to make a few remarks on his manner of saying it. In the artistic form lies decidedly one of the greatest charms of his poetry. The flow of his rhythm, the composition of his stanzas, the correctness and music of his rhymes are inimitable. At the same time, he has the finest feeling for all the *nuances* of poetical expression; the richness and variety of his epithets is astonishing, and he succeeds even in presenting the most abstract ideas under symbols the most lifelike and picturesque. But in this boundless power over all the treasures of formal beauty lies our poet's greatest danger. Sometimes this grace of form engrosses his mind so entirely that the meaning of the words dwindles away as it were under his hands. We almost venture to say that not a few of his beautiful tirades convey no distinct meaning at all. In other places this meaning is extremely difficult to make out, owing to the great number of the different symbolic personifications, which makes it almost impossible to bring home to each the personal pronoun belonging to it.

The same may to some extent be said of several stanzas of the "Prelude," a fault, however, which is not incompatible with much charming "præ-Raphaelite" *chiaro oscuro* in the image of youth sitting on the hollow stream of Time, and rising to cast away the shallow joys of Pleasure and Passion which might prevent him on his long and toilsome journey to his own ideal self. Swinburne has also certain formulated expressions whose effect depends mainly upon their unexpectedness, and therefore loses much by their constant repetition. The chief of these is a sort of antithesis (by the way, neither peculiar nor original), as found in sentences like "we mad *blind* men that *see*," "these honours without honour," &c. The alliteration, too, appears sometimes overdone, and even tiresome, in these songs. Everyone who knows with how much moderation this was used in old Teutonic poetry, in which the other great modern principle of sound, rhyme, was wanting, must be shocked by a line like the following, "Hiding her high as her head," for which it is difficult to discover any onomatopoetic reason. But the greatest fault in Swinburne's poems is the immoderate length of almost all of them, which distracts the attention from the delights which lie concealed in single passages. This is the more inappropriate in poetry the pathos of which is chiefly lyrical, intense, and therefore transitory, in the production

as much as in the enjoyment of it. This drawback is again traceable to an overmastering richness of gift and idea, but also to a certain want of plastic power which should model the forms of a poem with a necessity akin to nature. Many of these poems might be several stanzas longer or shorter without any great difference in their general impression, and only a very few, like the "Watch in the Night," have an organic and inevitable conclusion. This fault, once more, might have found its correction in a greater familiarity on the part of our poet with German literature. Had he recalled the range and variety of poetic feeling which is included within the narrow limits of one of Goethe's, Heine's, or Möricke's *Lieder*, he would scarcely have written a marching song of forty and some stanzas. This lengthy exuberance characterises in different degrees all the modern English poets whose work shows the influence of Shelley (and whose does not?), and may be traced back to the great master himself. The lyric of Shelley, it must be remembered, is not, like the German, a development of the popular song, but is the poetical expression of the prolonged and passionate contemplation of a speculative idea. Besides Shelley, and perhaps Victor Hugo, it is scarcely fair to Swinburne to mention any modern poet as excercising great influence on his style. All his so-called models, Baudelaire, Walt-Whitman, or Landor, breathe the same air, the air of the modern social revolution; and this "elective affinity," of course, effects a certain likeness in their mode of expression: still here is no imitation of any of them. More discernible, as we think, is the influence of the masterpieces of Greek and Hebrew literature. If the pathetic strophes and antistrophes of the "Ode on the Insurrection in Candia" remind us of the grandeur of Æschylus, the "Eve of Revolution," with the "trumpets of the four winds of the world," has quite as decidedly the weird, strange character of Ezekiel or the Apocalypse. Some of Swinburne's stanzas, in which he shows a greater variety and beauty than any other English poet, bear evidence of a thorough study of Dante. The sonnets, for instance, those on Barbès, the French republican, whose life was saved by Victor Hugo's lines, and the paraphrase of Michel Angelo's celebrated inscription on the "Night," in that entitled "In San Lorenzo," are models of symmetry. The stanzas of the "Eve of Revolution" might (except the two last verses) be divided exactly according to Dante's theory into "pedes and versus" (*De Vulg. Eloq.*), and lastly, in the "Christmas Antiphones," with their artificial middle rhyme, Italian influence seems undeniable.

To conclude; we regard Swinburne as of all English poets the most highly endowed with the purely poetic gift; and there is little doubt of his rank amid the poets of all time but for his fatal wantonness and exuberance of power, the restraint of which, as Goethe says, is the note of the true master:

> "So ist's mit aller Bildung auch beschaffen:
> Vergebens werden ungebund'ne Geister
> Nach der Vollendung reiner Höhe streben;
> Wer Grosses will, muss sich zusammenraffen,
> In der *Beschränkung* zeigt sich erst der *Meister*,
> Und das Gesetz nur kann uns Freiheit geben."

Franz Hüffer.

LITERARY NOTES.

Number 50 of the *Grenzboten* begins a valuable collection of hitherto unprinted letters, by German poets, of the so-called "Sturm- und Drang-Periode," a name originating with the title of a tragedy of Klinger, one of these poets. The letters are taken from the collection of the late chancellor von Müller, and are all addressed to the composer and poet Kayser, whose connection with the literary celebrities of his time is well known. They give a fair specimen of the wild and affected originality of those young Titans, which in some cases, as in that of Lenz, Goethe's friend and rival, led to actual madness. The first letter of this series is written by Klinger and Miller together, in alternate sentences, forming a curious *potpourri* of the most heterogeneous ideas. Other letters are from Stolberg and Miller, all more or less in the same style, the prose being occasionally interspersed with poetical passages. Of the greatest interest are the remarks about the chief poets of the epoch, Voss, Claudius, Herder, and Goethe, all of whom Miller knew more or less intimately, and admired. The second series (No. 51, *Grenzboten*) includes letters from Agnes Klinger, Lenz, Stolberg, and several of Schubart. In his letters the musical side of the "Sturm und Drang" movement appears, in the form of unlimited admiration for Gluck, who, as Schubart writes to Kayser, deserves to be worshipped. In striking contrast to the whole tone of these letters stands a note of Wieland, written in his usual style of reserved *bonhomie*. For him also "Gluck is an Apollo." The most valuable documents of the third series (*Grenzboten*, No. 52) are another letter of Wieland about Gluck, and a letter from Miller in which an account is given of the perfidious kidnapping of Schubart by the tyrannical Karl Eugen, Duke of Würtemberg, for writing epigrams against him.

We have received the first number of Gustav Freytag's new periodical *Im neuen Reich*, whose appearance we announced in our last. It would, perhaps, be unfair to take this as a sample of what Herr Freytag can, and no doubt will, do.

In the current number of the *Westminster Review* is an elaborate and comprehensive article on the poetical work of D. G. Rossetti. By far the best and newest thing in it is the short comparison of some of Rossetti's Sonnets with those of Shakespeare. There are however a few inaccuracies in the first part of the article which may probably be explained by too close a following of Fauriel. It is, for instance, perhaps a little difficult to prove that the Troubadours generally wandered so far as the feudal halls of Suabia: on the other hand, they exercised an undoubted influence upon the Minnesingers Friedrich von Husen and Rudolf von Neuenburg, as is shown by the imitations and translations of the latter. Apart from these slight defects, the article shows that faithful study which the works of this poet and his masters require and repay.

In an article, "De las artes magicas y de adivinacia en el suelo Iberico," contained in the *Revista de España* for Dec. 10, the writer shows how important a place the art of divination, and the study of judicial astrology held in the schools of Cordova, and enumerates the leading writers upon the subject among the Spanish Moors. In Christian Spain its professors were persecuted from early times by the Church, though the belief in magic, in its grossest forms, was very prevalent among the people. The review of the history of the black art is brought down to the days of the wise king Alfonso, who in his *Partidas* distinguished between black and white magic, and thus acknowledged that the art had its uses as well as its abuses. We are promised, in a future number, a sketch of the history of magic in Spain during the centuries succeeding the age of Alfonso.

The Paris letter of the *Athenæum*, Dec. 17, announces the death of M. Pierre Jannet, the well-known founder and publisher of the Bibliothèque Elzévirienne. He edited himself, among other works, *Les Quinze Joies de Mariage*, and the works of Rabelais. He was also remarkable for his great bibliographical and linguistic knowledge. The languages which he had mastered included Chinese, for which he tried to introduce an improved mode of printing.

The banks of the Guadiana were famous as the cradle of several mighty conquerors in the New World; of Cortes, Pizarro, Garcilasso de la Vega, and Belalcazar. But they are equally renowned for the number of zealous friends of the Indians who went forth from Estremadura to ameliorate the condition of the

conquered people in East and West. One of these was Froy Juan de Plasencia, whose labours in the Philippine Islands are given in detail, by Señor Barrantes, in the last number of the *Revista de España*. This fervent and warm hearted friar takes his place in the front rank of that band whose leader was Las Casas, and of whom Spaniards have more reason to be proud than of their boasted Conquistadores. Señor Barrantes promises further interesting sketches of worthies of the 16th century connected with Philippine history; a subject which has recently been so ably handled by Lord Stanley of Alderley in his translation of Antonio de Morga.

Art and Archæology.

EXHIBITION OF OLD MASTERS AND DECEASED BRITISH ARTISTS.

Preliminary Notice.

Last year, when the Academy took up the office of the defunct British Institution, as far as the old masters were concerned, by opening an exhibition of their works by loans from English collectors, combined with the pictures of deceased painters of our native school, the collection comprised in all 235 examples. This small number was reduced by about a third, pictures by Stanfield and Leslie in rooms by themselves numbering 74. Even then it was said that once in two years or three would be as much as could be looked for without exhausting the resources of the country, and here in the exhibition just opened we have no fewer than 426 pictures, the great majority of high intrinsic interest, and many of them of unspeakable value and importance.

So large is the collection, and so extraordinary, we feel unable to cope with it in the hurry and variety of the ordinary London art season, and wish it had been only half the extent, so that we would not come away after spending an hour or two in Burlington House with the feeling that a proper measure of study and enjoyment is out of our power. The arrangement, besides, is apparently fortuitous; English pictures of yesterday, wretched French things like those by Greuze, Dutch genre, and Italians of the great time, are all side by side. Added to this, the Academy is too polite to refuse a great collector's offered picture because it is not genuine, or to insinuate a doubt into the catalogue, so that the difficulty of determining whether the work we stand before is what it pretends to be, checks the spectator's enthusiasm. They say that it is impossible to do other than accept the names attributed by the proprietors, and such in a politic point of view is very likely the case, but the subject might be properly described, and the portrait of a standard-bearer need not be entered as a burgomaster, as in the case of Rembrandt's splendid picture, No. 77. The small picture called "Reconciliation," No. 49, an admirable finished sketch by Rubens, is the Sabine women rushing between the swords of their brothers and husbands, and is companion to another of the "Rape of the Sabines," which has an extraordinary interest as the sketch for the large picture in our National Gallery.

Out of this great collection let us try to select a few of the most notable, and here the earlier men of the Italian school are by far the most important. Botticelli, for example, Bellini, Filippo and Filippino Lippi, are rarely seen to such advantage. The two long pictures of the history of Virginia, No. 271-2, indeed, are early Filippinos; but the piece of a tempera on wood, by Filippo, No. 281, sent by Mr. Wynn Ellis, is beyond praise. By Botticelli, we have three pictures, more important in size and excellence. All three are Nativities. One of them, No. 299, is possibly known to many of our readers, having been before the public with Lord Dudley's collection in the Egyptian Hall, which collection, we may say parenthetically, is again before the public in this exhibition, no fewer than 129 being lent by that nobleman. The other two are still finer works. In the picture No. 294, five young saints in gorgeous attire, kneel round the Virgin and Child, the whole group having that certain mystical and poetic character which distinguish this master of the Florentine school, whose light paled before the great development of the early years of the 1500. He, like his contemporary Mantegna, who is represented by three uncertain pictures, the best by far being the "Wise Men's Offerings," No. 287, lent by the Dowager Lady Ashburton, has a strong individuality apparent in all he did, while he is also representative, expressing the innocence of the earlier conceptions of Christian story and mythology, and the mediæval manner of rendering them. The third Botticelli, lent by W. Fuller Maitland, and numbered 278, is not only one of the most notable works in this gathering, but, we are inclined to think, one of the most delightful and valuable of the school to which it belongs, whether it really be from the hand of the master or not. It is small, 32 in. by 30 in., the figures being of the size to which the artists were accustomed in painting the long scenic decorations on marriage chests. In the centre is the Holy Family, under a kind of baldaquin of thatch, on which three angels sit, giving them music, like the pipes and tabors of the little gallery in the barons' hall. Above them, and above the trees, is a glory of angels, four red, four white, and four of a dark bronze colour, dancing in a circle, the space between being like the entrance to heaven, all of gold. All these figures are exceedingly lovely, and one or two perfectly free from the quaintness we attribute to imperfect training. All of them carry great branches of myrtle, but the words on the banderols that fly about are now nearly lost. To descend to the green earth beside the Holy Family; on one side are the Shepherds, on the other the Magi, two lovely groups, each group being under the charge of an angel with bright-coloured wings, and in the foreground, which is strewn with the bodies of monstrous little devils, living, but skewered through with darts, are three similar angels embracing three saints or prophets. This meagre description will partly enable the reader to see what a superb poetic creation we have in this small picture.

Lord Dudley's pictures we shall not enter upon, as they have been seen before. Nos. 268 and 270 are two crayon studies for the heads of Christ and St. Peter by Da Vinci for the "Last Supper," admirable works, certainly, we think, from the hand of the master, and apparently cut from a cartoon of the entire subject, hands of a neighbouring figure appearing in the drawing of St. Peter. There must be some history attached to such noble fragments, and, whether or not, the Baroness North may congratulate herself on their possession. No. 88 is a Holy Family, by Fra Bartolomeo, of equal interest. It is no more than the beginning of a picture, the most part of it being only freely drawn out by the reed pen on the gesso ground, now changed from white to yellow. One of the finest pictures in the whole collection is Bellini, No. 92, "The Virgin: the Child seated before her, surrounded by four Saints and the Donator:" a little doctored, but very carefully. By Giorgione, whose works are so seldom seen, we have three, all of great beauty. Lord Ashburton's "La Richiesta" is celebrated, but No. 227, "An Italian Villa, with groups of figures," is also very charming and perfect in colour. In this particular, time has befriended the Venetians. Of the earlier northern schools we have no less than three elaborate Van Eycks, and one by Mabuse, with a wonderful renaissance background.

Second only to these early works, and to the examples of the Venetian school as seen in the pictures of Titian, of which there are many, Tintorette, Bonifazio, and others, are the portraits in this exhibition. These are very numerous, and nearly all of the highest order; Vandyck is especially well represented. In the nineteen works under his name we find specimens of all his periods, from the early imitations of Rubens, through his Italian middle time, to his latest English. Sir Joshua Reynolds and Gainsborough seem endless, and every time one sees them, these painters rise in our admiration. Having named these English artists, we may mention others appearing here in great force, especially Constable and old Crome, both of them noble landscape painters, who died before passing into the egotism and fatuity of success in which Turner's later years were passed. By the latter painter we have four; the wonder being we have no more. Of these, No. 235, "Landscape with Cattle," is an imitation of Gainsborough's manner, but very fine; No. 140, "The Fifth Plague of Egypt," is one of his great productions; and No. 40, "Italy," is an imitation of his later manner, by Webb, who, it seems, imitated Turner and Constable to the advantage of the dealers, and made better pictures than his originals. In this instance we think he really has done so.

William B. Scott.

Archæological Topography of the Taman Peninsula [*Arkheologicheskaya Topografiya Tamanskago Poluostrova*]. By Carl Görtz. Moscow: 1870.

IN the year 1859 the Russian "Imperial Archæological Commission" sent an exploring party to the Peninsula of Taman, between the Black Sea and the Sea of Azof. What a treasure-house of antiquities that part of the country is, all archæologists know well, the subject having been exhaustively treated by M. Dubois de Montpereux in his *Voyage autour du Caucase*, and the galleries of the Hermitage at St. Petersburg bearing testimony to the richness of the hoards of gold ornaments of which the tombs near Kertch could once boast. Such a discovery as that made in 1831, when 120 lbs. of gold jewellery are *said* to have been taken out of one mound, may never again reward an explorer's patience, but yet there can be no doubt that much that is valuable still remains to be found.

In the volume now before us, Mr. Görtz, the well known Russian archæologist, gives a topographical description of the country in which the excavations of 1859 were made, and a brief sketch of the results to which they led. A work on which he is at present engaged will contain the full details of the successive explorations. In the meantime he has mentioned a few of the principal objects discovered. One of the most interesting was the sarcophagus of carved wood inlaid with ivory, in which were found the remains of a woman, apparently a priestess of Demeter. A number of gold ornaments, all belonging to the best period of Greek art, had been buried with the corpse, and by its side were four beautifully chased bits, the relics, perhaps, of the horses which may have drawn the chariot of the priestess. Another was a sarcophagus, discovered in 1868, attached to the sides of which were several heads of griffins in gold, while inside it were a number of female ornaments, necklaces, bracelets, and rings, also all of gold. Together with it were found some thirty terracotta statuettes, most of which were "very original male and female caricatures of a Baccho-Erotic character," and which retained traces of the motley colouring with which they had originally been covered.

Tombs which had not previously been rifled generally rewarded the explorers with similar results, but in many cases, after ingress had been obtained, it was found that other treasure-seekers had been there beforehand. Various stories are told about them by the natives. Many of the mounds are supposed to be guarded by evil spirits, and he who disturbs them is in danger of being carried off by a sudden storm. Everywhere tales are rife of great treasures hidden away somewhere in the neighbourhood. In one place, for instance, it was said that towards the beginning of the present century a boy and girl, the children of a Cossack herdsman, were out watching their cattle one day, when their dog, while chasing some animal, suddenly disappeared in a hole which led into the interior of a *kurgan*, or mound. The children made their way into it, and came to a subterranean chamber, in which was a great white coffer, surrounded by numbers of *bolvans* and "dolls." *Bolvan* is the name given to the great shapeless stone figures found in South Russia and elsewhere, about which so little is known; the "dolls" were no doubt the terracotta statuettes which occur in such abundance in the tumuli. The children carried off some of the "dolls," but they agreed to say nothing as to where they had found them, intending to renew their researches at some future period. But time passed, the girl married and went away; the boy became a soldier and disappeared. Meanwhile their secret had leaked out, so the neighbours from time to time made exploring parties and tried to find the great stone coffer, which they thought might be full of gold. But all in vain; the entrance into the *kurgan* was never found again. Sometimes, however, the unauthorised treasure-seekers have been more successful. One Russian archæologist worked for six weeks at a mound without being able to penetrate it. He was followed by another, who spent three weeks more over his task. At last he made his way into its central tomb. This was a great stone vault, with an arched roof, and in it were portions of a wooden sarcophagus, fragments of a human skeleton, a white marble table, and pieces of vases. But whatever treasures might once have been there had been carried off by some previous explorers who had made their way in by the roof. So such treasure-seekers, who work with an eye to gain only, and know nothing about art, must sometimes be rewarded. In some districts along the coast it is the custom for the Cossack women and children to go down to the shore after a heavy gale from seawards, and there to search in the sand for the bronzes and coins which are then to be found there, together with quantities of terracotta statuettes and fragments of Greek vases.

Mr. Görtz's book is written in Russian only, but it is to be hoped that both it and the detailed account of the excavations to which it is intended to serve as an introduction may appear some day in the form of a translation. The careful manner in which he has treated his subject—one on which he is entitled to speak with authority—would render his work valuable to the antiquarians of many lands, were they not deterred from using it by linguistic difficulties.

W. R. S. RALSTON.

ARCHÆOLOGICAL WORK IN ROME UNDER THE NEW REGIME.

Rome, January 3rd, 1871.

NOT many days had passed after the ever memorable 20th September, 1870, when the newly established journals of Rome announced that the government of the Royal Lieutenant had assigned 300,000 francs per annum to the works of excavation and repair in the sphere of monumental antiquity, and to the maintenance of the public museums, especially the Capitoline, in this city. On the 11th Nov. appeared in the *Gazzetta ufficiale di Roma* an edict of General Lamarmora, to the effect that the former "Commissariat of Antiquities," presided over by the Baron Pietro Visconti, is abolished, and a "superintendence for the excavating of antiquities and the guardianship and preservation of monuments in the province of Rome" created in lieu thereof; this board to be composed of a superintendent and six counsellors, the former and two of the latter to be appointed by government, the other four counsellors by the Provincial Deputation and Municipal Junta of Rome. Another clause of the same edict nominates to the post of superintendent the Commendatore Pietro Rosa, who has so long and ably directed the works on the Palatine in the Farnese gardens, purchased by the Emperor Napoleon; and two artists—Prof. Bonopiani for paintings, and the Cav. Tadalini for sculptures—are nominated as assessors to superintend the discovery and destination of objects found. Through other sources I learn that the application of the endowment, 300,000 fr. per annum, is confided to a triumvirate alike responsible; namely, the Signor Rosa, Signor Gori—a well known Roman archæologist—and Signor Tocca, an artist. The first projects adopted by the newly constituted body, and recommended by authorities, was the prosecution of the works on the Palatine, and purchase of another estate (pertaining to the nuns of a convent there situated), contiguous to the Farnese on that "Imperial Mount," in order that the area of excavations may be extended over the entire hill; also the reducing of the Forum, at least of the Via Sacra, to its original level, and alike laying open the ancient level (long covered) between the Forum and the Colosseum; also the undertaking of similar works in the Forum of Augustus, and purchasing of ground therein comprised from the nuns of the Nunziatella convent. Rosa's project is to restore to the extent possible the Julian Basilica (first discovered, but in vaguely discernible ruins, about 12 years ago), with the ancient

material found on the site. The new government has purchased from the ex-Emperor the Farnese estate on the Palatine for 360,000 fr., Napoleon III. having purchased it from the ex-King of Naples, in 1861, for 10,000*l.* sterling; and not long afterwards another well-advised purchase by the Royal Lieutenancy was announced, that of the Braschi estate, near Tivoli, containing the vast and long-neglected ruins of the Villa of Hadrian, another site for archæologic undertakings to commence before long, as expected.

Walking on the Forum about a fortnight ago, I saw for the first time some 30 or 40 men at work on the newly ordered *scavi* around the Julian Basilica and the column of Phocas. Returning, I have noticed an increase in the number of labourers, affording proof of the intent to carry out the promise officially given that 200 workmen are to be at the service of the archæologic superintendence. The ruins of the Basilica are laid open to somewhat greater extent, but without any important results hitherto. Under the majestic arcades of the other Basilica, that of Constantine (long miscalled the "Temple of Peace"), have been found an ancient conduit and some fragments of sculpture, among which a bust and a mutilated female statue are noticeable.

Not without regret did I see for the first time the change recently wrought within the Colosseum by stripping those ruins of all the graceful draperies provided by nature, the overshadowing forest trees, the luxuriant plants and hanging tapestries of wild growth, that concealed yet beautified. Byron's lines—

> "The garland forest, which the grey walls wear,
> Like laurels on the bald first Cæsar's head"—

will henceforth be no longer applicable to the gigantic skeleton of the wondrous amphitheatre. Yet I cannot altogether agree with the sentimental reprobation called forth by this proceeding. The few spreading roots of large trees and of the utterly unchecked vegetation, which added so much to the picturesque aspect, were undoubtedly accelerating the progress of decay. The artist may condemn, but the archæologist must rejoice in this case.

On the 16th December, the German Archæologic Institute commenced its weekly sessions for the winter in its well-stocked library in the Capitol; and on this occasion very interesting papers were read by Prof. Henzen, the Cav. di Rossi, and another gentleman; some remarkable terracotta busts, serving as antefixes in Etruscan tombs lately opened at Cerveteri (the antique Cære), and several photographs, were exhibited; the attendance was unusually numerous. In reference to the above-named gentlemen, I may mention the present literary undertakings on which Dr. Henzen and the Cav. di Rossi are engaged: the former on the completion of his *Corpus Inscriptionum;* the latter on the 3rd volume of his *Roma sotteranea*, already so celebrated a work, and another, the 2nd volume of his *Inscriptiones Christianae*—the first having been published a few years ago. His *Bolletino* of Sacred Archæology continues to be issued, and in a new series of improved form and typography.

On the 30th, the British Archæological Society commenced its sessions—also weekly, and held on the Friday evenings at half past eight in the Palazzo Poli. For this inaugural meeting Mr. Parker was ready with a very interesting report on the excavations and antiquarian discoveries in Rome during the year; dwelling also on the present prospects both of that society and of archæologic undertakings in or near this city generally. No discoveries of *primary* importance entered into this review, except, indeed, one, and that so interesting that I cannot attempt here to do justice to it—the Mithraic Temple found, a few months ago, under the church of S. Clemente in the researches intelligently carried on by Father Mullooly, prior of the Irish Dominicans, who have their convent beside that ancient basilica. This temple may be supposed to represent the sacred cavern of Mithras, with its vaulted roof pierced by eleven large skylight windows, its altar and platform for sacrifice *in situ*, and other highly interesting details. A statuette of the god, at the moment of his birth from the rock, was found about the same time, though not within the temple, by the learned prior, who has caused photographs to be made of these as well as all other objects brought to light through his means. This representation of the Oriental god, issuing out of the parent-rock, is unique; the hands are alone wanting: but from the attitude of the arms, it is evident that they both held certain symbols, perhaps torches. A paper on this Mithraic Temple is promised by the British archæologists, to be written by the Cav. Visconti.

C. J. Hemans.

THE OGHAM INSCRIPTIONS.

The study of that interesting class of lapidary inscriptions known as *Ogham* Inscriptions, which are found in many localities in the South of Ireland, has latterly received a great impetus through the labours of Dr. Samuel Ferguson, Deputy Keeper of the Records of Ireland.

Hitherto the great obstacle to the promotion of the study of *Ogham Inscriptions* has been the want of anything like a collection of reliable copies of the inscriptions. The field of enquiry was invaded by some enthusiasts who contented themselves with obviously erroneous *drawings* of the inscriptions, and sacrificed the interests of exact truth and science to the indulgence of whimsical theories about pig-worship, cow-worship, and Priapian notions.

Dr. Ferguson has already secured most accurate paper moulds of about forty of these inscribed stones, from which metal casts can be taken. The moulds are at present arranged in the Royal Irish Academy, where Dr. Ferguson also intends to deposit a series of casts, which will, in fact, serve as the foundation of an Ogham Museum, and place the study of this heretofore obscure class of inscriptions for the first time on a sound basis.

Miscellaneous Notes.

The *Pall Mall Gazette*, for Dec. 31, 1870, quotes the following from a Texas paper.—Advices from Santa Fé state that Governor Arny, the special Indian agent for that territory, has found the Cañon de Chelly, which was explored for twenty miles. The party found cañons, whose walls tower perpendicularly to an altitude of from 1000 to 2000 feet, the rock strata being as perfect as if laid by the skilled hands of masons, and entirely symmetrical. Among these ruins of ancient Aztec cities many of them bear the evidence of having been populous to the extent of many thousands of inhabitants. In one of the cañons, the rocky walls of which rose not less than 2000 feet from the base, and whose summits on either hand inclined to each other, forming part of an arch, there were found high up, hewn out of the rocks, the ruins of Aztec towns of great extent, now tenantless, desolate. In one of these rocky eyries there remained in a state of good preservation a house of stone about twenty feet square, containing one bare and gloomy room, and a single human skeleton. In the centre of the room were the evidences that fire at some time had been used. The only solution of this enigma thus far ventured is that these solitary rooms were the altar places of the Aztec fires; that from some cause the people at a remote period were constrained to abandon their homes, but left one faithful sentinel in each instance to keep alive the flame that, according to the Indian traditions of these regions, was to light the way of Montezuma again to his people—their hoped-for Messiah and their eternal King. A close examination of many of the ruins proved that the builders must have been skilled in the manufacture and use of edged tools, masonry, and other mechanical arts. But who these people were, whence they came, and whither they are gone, is now probably one of the mysteries to remain eternally unsolved. Some of the ruins are reported to be stone buildings seven and eight stories in height, being reached by the ladders planted against the walls. Round houses 20 feet in diameter, built in the most substantial manner of cut stone, and plastered inside, were also found in excellent preservation. Astonishing discoveries have been made of gold and silver regions richer than any yet known on this continent. They are supposed by well-informed persons to be the East mines, of which tradition has handed down the most marvellous tales, and the mines themselves discover unmistakable evidences of having been successfully worked ages ago.

The well-known archæologist Helbig has lately called attention in the *Grenzboten* (No. 50) to the mode of representing the

action of breathing in antique sculpture. In the first state of earlier Greek art the only means of representing the act of breathing seems to have been a heaving breast with the lips closed, as in the Apollo of Tenea. A further advance was marked by the opening of the mouth, which, however, was done in an imperfect manner, chiefly by protruding the underlip. This theory, if true, may serve to explain appellations like that of the "yawning" Dionysos of Samos used by later Greeks. Phidias and his followers continued both these modes of expression with characteristic finish and grandeur. Those works, in which the influence of Praxiteles is visible on the other hand, show only a very slight expansion of the breast, while the protruded underlip entirely disappears. This agrees perfectly with that graceful *laissé-aller* which forms a chief characteristic of the works of this school. In the next state of development, as introduced by Lysippos, the action of breathing leaves no impression on the lower part of the body, while its surface, showing the veins, skin, muscles, is rendered with exquisite life-like accuracy. In the time after Alexander the closed lips occur again, but seemingly only in portrait-busts, while the statues of gods and heroes preserved their classical traditions.

New Process of Photography.—The liability of photographic prints produced by the ordinary silver process to fade under the action of strong lights is a defect which photographers have long attempted to overcome. A new photographic process, entirely independent of the use of nitrate of silver, and producing prints absolutely imperishable, and yet of the delicacy of the most beautiful silver-prints, has recently been brought to perfection under the name of Heliotypy. The process depends on the well-known action of light in rendering gelatine and similar substances, under certain circumstances, insoluble. A plate of glass is coated with a warm solution of gelatine, to which a suitable proportion of bichromate of potash has been added, the coat, when dry, being about the thickness of an ordinary visiting-card, the operation having been carried on in a dark room from which all actinic light is excluded. When dry, the film is exposed to light under the photographic negative taken in the ordinary way. The plate is then placed in cold water to dissolve out all the unchanged bichromate of potash, when the image produced by the action of light on the film is seen in relief. The portions protected from the light by the opaque parts of the negative, representing the whites in the picture, readily absorb water and swell; the portions to which light has had full access through the most transparent parts of the negative, representing the blacks, have been hardened by the light, and rendered insoluble and non-absorbent; whilst all the portions partially acted on by the light through the graduated degrees of transparency in the negative, representing the gradations from light to dark in the image, have been rendered insoluble and non-absorbent just in the degree to which they have been subject to the action of light. The plate, after being thoroughly washed, is now ready for printing, which is effected by a process exactly analogous to that of lithography. After being sponged with water, and the superfluous moisture removed by an india-rubber scraper, an india-rubber roller charged with lithographic ink is applied to the surface. The ink readily adheres to the deep shadows, which, being hard, insoluble, and non-absorbent, have repelled the water altogether; to the parts representing the various gradations of tone the ink adheres in such degree as they have rejected water, producing a perfect transcript of the original negative in the proportion of ink remaining on the different parts of the image. The impression is then pulled in the ordinary way on a sheet of fine plate-paper. Several steps of this beautiful process have long been known; their concatenation and perfection are due to Mr. Ernest Edwards. In the number of *Art, Pictorial and Industrial*, for October, is a detailed account of it, together with some extremely fine illustrations. From the absolute indestructibility of the prints by light, the rapidity of their production, as compared with ordinary silver-printing, entirely independent of the weather, and the beauty of the tone, heliotypy bids fair rapidly to supplant the old process, at least for all purposes of book-illustration.

Music.

In treating of the vexed questions of Musical Criticism, we shall follow the same rule as we have hitherto pursued in Theology: i. e. *we shall give free expression to the most divergent points of view, of the Classical School of the Past, as well as of the "Music of the Future," the latter of which has not hitherto been represented by a critical organ in this country.* Ed.

UNPUBLISHED LETTERS OF ROBERT SCHUMANN.

I.

We give, as the best introduction to our new musical department, the first set of a series of letters written by Robert Schumann, between 1835 and 1844. These letters cover almost the entire period during which he was the presiding genius, as editor or otherwise, of the *Neue Zeitschrift für Musik*, which he had recently started.

The state of music in Germany was at the commencement of this period not encouraging. Rossini ruled the stage, Herz and Hünten the pianoforte, the last two mere *virtuosi*, entirely innocent of the spiritual import in musical art. Musical criticism in the hands of the almighty Rochlitz and his tribe, as in England at the present day, contented itself with disquisitions on the technical "how," with little heed or appreciation of the spiritual "what" of the performance. And yet the great masters, Beethoven, Weber, and Schubert, had but just passed away. The stars of Mendelssohn and Chopin, on the other hand, had scarcely risen. At this point, Schumann and a few brave friends started their journal, to fight for the vital principle of "die Poesie der Kunst," the deep underlying meaning, as opposed to the merely external enjoyment, of musical sound. "Können Sie mir vielleicht," writes Schumann to Zuccalmaglio, in December, 1835, "einige *poetische* Menschen Ihrer Bekanntschaft als Mitarbeiter der Zeitung nennen?" Not that Schumann was the inventor of this principle, which is the informing, though as yet unconscious, soul of the great music of all time: in Gluck, it had attained to a few articulate utterances in the introductions to some of his operas; in the great nature of Beethoven, it had awakened to meditation, but not to speech, and remains to us embodied in the immense musical effort of his later life, which culminates in the Ninth Symphony. Schumann broke down once for all the wall of partition between the writer on music and the musical composer. We may almost say that his writings and criticisms form a kind of enlarged programme and commentary to his musical works. This then is the new thought which struggles toward expression in the brain of Schumann, as founder of the more or less imaginary society of Davidsbündler; and to which, as exemplified and carried out to its legitimate consequences in the writings and music of Wagner, we shall have frequently to recur.

The letters, nineteen in all, are written to Anton von Zuccalmaglio, one of the most devoted contributors to Schumann's journal, and living at that time in the house of Prince Gortschakoff at Warsaw. From Zuccalmaglio they came into the family of Mr. Franz Hüffer, in whose possession they now are.

(1)

[*Apparently dictated.*]

"Dear Sir, "*Leipzig, 11th Aug.* 1835.

"It was not till some weeks ago that we received your MSS., and are delighted to find that our young institution [the *Neue Zeitschrift*] has found an echo in the far North. The letter you contributed is a capital parody of certain epistles in German newspapers. Your Wedel,* the

* Probably one of the imaginary impersonations, like Florestan, Eusebius, Raro, &c., under which Schumann and other actual or aspiring "Davidsbündler" were accustomed to represent phases of their own characters or opinions.

village sexton, is an excellent idea, and admirably adapted for our journal. Both the papers will shortly be printed. As to the printing of your poems, I hope you will have a little patience, as we have arrears which will take half a year to clear off.

"Won't it be possible for you to send your communications by a shorter route? "R. Schumann."

Schumann adds a note in his own handwriting:—

"Your second letter of Aug. 5 has this moment arrived. This goes by post in order to set your mind at rest about your excellent papers; the answer to your second will follow in the bookseller's parcel in a few days. One or the other will, I hope, reach you. In any case, favour us soon with something new. If you like our musical paper, you will greatly oblige me by mentioning it occasionally.

"R. Schumann."

(2)

"Dear Sir,—First of all my best thanks for your new contribution. There is something in your articles which pleases me, but for which I cannot yet find the right name, unless it be the quiet way in which you dive down to the deepest places of the soul, and the clear exposition you give of what you have seen when you reappear on the surface. Continue to delight us by going on. Your capital proposal to supply a new text to Mozart's operas I quite agree with; but I have my doubts whether you will be able to carry it through. We know what publishers are, not to speak of managers, and especially the public, when they have once taken an idea into their heads: however, try it. So far as I am concerned, I am quite at your service, so long as I have nothing to do with the commercial side of the question, of which I am supremely ignorant. Have the kindness to let me know more of your plan, whether it includes any structural alteration in the plot, or only a text better adapted to the score, and so forth, in order that I may consult a publisher here about it. There is another thing which is rather on my mind. You know how difficult every undertaking is at the beginning. Our new journal meets with an unusual amount of sympathy: but yet I am working almost entirely without pay. If you are not compelled to live by your pen, clever, excellent as it is, I hope you won't mind waiting a little while longer for the usual *honoraire*. But if this is to be a bar to your sending us further contributions, consider the previous sentence cancelled. I accept all your conditions. On this point please send me your decision at once. "Yours truly,

"*Leipzig*, 28/9, '35. "R. Schumann."

(3) "*Dec.* 17, '35.

"Dear Sir,—Two things very different from one another have prevented my answering your letter before, I have been travelling, and I have been ill. First of all, about the publication of your manuscripts, a matter in which I take the warmest interest. I have knocked once and again at the publishers' doors for you. It is hard enough for principals to get any tolerable terms out of booksellers, let alone third parties. At last I found that the trees had prevented me from seeing the wood. My brothers are booksellers, and a firm, I think I may say, of good standing (Gebrüder Schumann, at Zwickau), and they will be happy to take your metamorphosis of the text to Mozart, but only on condition that you share the loss as well as the profit. This, although I represented to them the inconvenience of such an arrangement. Now, you must decide, please. You can depend upon everything being above board, and upon their punctuality, whether you have a yearly or a shorter account with them. It will be better for you to apply direct to the house at Zwickau, and arrive at something definite. Your essays and letter I have. All excellent. Wedel has been declared member of the Davidsbund, whether you like it or not. Waldbrühl seems to me too obvious a pseudonym, so I have changed it to W. Brühl; you will forgive me. If you read our journal regularly (I hope you do, but should be glad to know for certain), you will stand some chance of improving your acquaintance with the Davidsbündler.

"We shall be glad of any number of pages out of W.'s diary. If I can be of use in any other way, I am at your service. Do you know anything of the editor of the *Volkslieder* (along with Baumstark, of Heidelberg)? Can you give me the names of some people *with a turn for poetry*, who could contribute to the journal? "Yours very truly,

"R. Schumann."

These letters bring us to the end of the year 1835, and show the difficulties with which, even in Germany, the "higher criticism" in music had to contend. Franz Hüffer.

(*To be continued.*)

THE LAST ENGLISH MUSICAL SEASON.

The commemoration, by pipe and string, of Beethoven's centenary, which was to have occupied all musical Europe during a considerable portion of the past year, has, through the enforcement of sterner occupation and the exclusive handling of rougher instruments, been made to fall for the most part on England, whose musical tastes and powers "musical Europe" is wont to hold cheap. All things considered, English musicians, artist or amateur, have a right to look back on what they have done and tried to do in honour of the great master with a good deal of satisfaction. Beethoven's genius is as varied as it is exalted: not only has he done better than others, but more—better and more too in an art the forms and resources of which have increased and multiplied in this century—greatly, no doubt, through his own agency—at a rate without precedent. It would be hard to name an aspect in which his many-sided genius has not of late been presented to English audiences—largely by English artists—in the most efficient as well as the most agreeable manner, by means of performances, not merely of pieces in every form of musical art which he has essayed, but of almost every individual specimen of those forms. To take London and its dependencies alone. At the Crystal Palace, at the Philharmonic, at the Monday Popular, and at the Oratorio Concerts opportunities have been offered, and eagerly and largely accepted, of hearing all Beethoven's orchestral symphonies, the ninth not excepted, his concertos, the majority, if not all, of his instrumental chamber-music, his single opera, his single oratorio, the second as well as the first of his Masses, and a number of shorter, though not always slighter, productions, even down to certain "arrangements" of our own national melodies. Of these performances the greatest number and the most important have been given at the Crystal Palace. The execution of the septet by Mr. Manns' entire orchestra was, as execution, deserving of high praise. The propriety of presenting a piece of chamber-music at all in such a way is surely more than questionable. For the rest, the performances at one and the same concert of the Choral Fantasia and the Choral Symphony, and at another of the three Overtures to *Leonora* in immediate succession, might alone entitle the musical direction of the Crystal Palace to the gratitude of all students and admirers of a genius the development of which they served in so striking a manner to illustrate.

The provincial towns, their means considered, have not lagged behind the metropolis. At Manchester, Liverpool, Leeds—the first especially—at Dublin, at Glasgow, even at Edinburgh—still in its musical infancy—recognition, more or less hearty and intelligent, has been shown of the first musical composer of whom it could be said that he had even tried to express the yearnings and the aspirations of his own age, and had succeeded in his attempt without falsification of the material in which he worked, or without putting a greater strain upon it than it would bear.

Our thoughts of late have been so often turned exclusively on Beethoven that we have been perhaps not mindful enough of what else has been going on beside as well as along with the *cultus* of the great master.

The past year will also be memorable in another way. There are many indications of the deepening as well as of the widening of musical culture in England. In the production and performance of church-music very considerable improvement of late has been noticeable. There are persons—the wish perhaps is father to the thought—who believe that the lives of the cathedral establishments may be, if not eventually saved, at least indefinitely protracted. Be this as it may, the quantity of new music—to say nothing of old—for church use published during the past year has been enormous, and the quality of much of it not unworthy of commendation. In regard to the practice of church-music, a respectable contemporary, the *Choir*, calls attention to the fact that during the past year "not only has the number of churches where there is a full choral service risen from 128 to 146 in London alone, but the return of churches with a partly choral service shows a still greater, indeed, an enormous, increase—from 115 to 170."

Another indication in the same direction will be found in the increasing study and practice of the works of Johann Sebastian Bach. True, our esteemed Sacred Harmonic Society of London continues pertinaciously to ignore his existence; but meanwhile the excellent and cheap editions of his greater choral works, whose very names were unknown to the last generation of

English musical students, are already sold in large numbers. Better still, the past year has been marked by a loving and meritorious performance of the difficult *Passionsmusik* at the Oratorio Concerts, and a "public rehearsal" (under my own direction) by the students of the Royal Academy of Music of the two first parts of the *Weihnachts-Oratorium* never before heard in this country.

Lastly, the production of our adopted countryman's, Mr. Benedict's, oratorio "St. Peter," at the Birmingham Festival, and subsequently at St. James's Hall, is an event not to be passed over. Opinions differ, and are likely for a long time to differ, as to the place this work will take among works of its class; but it is impossible to resist its claim to the possession of much beauty, uniform refinement, rare sustaining power, and unsurpassed mastering of orchestral and other effect.

JOHN HULLAH.

New Publications.

GENELLI, Bonaventura, Sature, Compositionen von. In Umrissen gestochen von J. Mery, J. Schütz u. H. Spier. Mit erläuterndem Texte herausg. von Max Jordan. Leipzig: Dürr.

GERVINUS, G. G. Geschichte der deutschen Dichtung. 1ster Bd. 5te gänzl. ungearb. Aufl. Leipzig: Engelmann.

GROTH, Klaus. Quickborn. 11ter Theil. Leipzig: Engelmann.

OSSIAN, The Poems of: in the original Gaelic, with literal translation, and dissertation; by Rev. Archibald Clerk. 2 vols. Blackwood.

WAGNER, R. Beethoven. Leipzig: Fritzsch.

Physical Science.

Scientific Results of a Journey in Brazil. By Louis Agassiz and his Travelling Companions. Geology and Physical Geography of Brazil. By Ch. Fred. Hartt, Professor of Geology in Cornell University. With Illustrations and Maps. Trübner and Co.

THIS book is open to the same objection as applies to most American reports of exploring expeditions: it is too full of matter. It would have added greatly to the clearness of the narrative had the interesting but irrelevant information regarding plants, animals, ethnology, and economic science been omitted, or at any rate relegated to an appendix. But the plan of the work of itself subjects the geological student to much needless labour: the districts are described separately, and, as an almost inevitable consequence, points of very unequal importance receive equal attention, while phenomena of minor interest are described more than once. This want of perspective is scarcely atoned for by the *résumé* given in the concluding chapter.

When Agassiz announced his opinion that the surface coverings of Brazil were due to extensive glaciation, Prof. Hartt was not alone in declining to give his assent to the startling doctrine. But though he now avows his former error, and has accumulated proof which seems well nigh irresistible in support of the theory of glaciation, he gives satisfactory evidence in disproof of the Amazonian glacier, and concludes his statement thus (p. 493): "It is with much hesitation that I express an opinion at variance with so distinguished an authority as Professor Agassiz: but the facts have seemed to need a different interpretation from that which he has given them. My conclusions, after all, do not affect his theory of the former existence of glaciers under the tropics, down to the present level of the sea—a theory which I hold as firmly as he." Agassiz' position as regards the surface geology of Brazil is in fact the counterpart of that which he held many years ago as regards that of Scotland. There he was the first to recognise the true glacial character of the boulder clay, and to solve satisfactorily a problem so oppressive as to have disturbed the slumbers of a leading Scottish theologian and geologist. No doubt his judgments as to one or two localities were afterwards reversed, just as a few species of fish have been otherwise placed since his great work appeared. But the correction of details does not affect his fame as the discoverer of the right method of investigation, and Professor Hartt shows that he rightly appreciates the value of detailed corrections.

The coast districts of Brazil are covered by a layer of variable thickness, consisting of a reddish unstratified clay, the materials of which are manifestly derived from the strata in the vicinity. This deposit is absent from the coast plains whose elevation does not exceed twenty feet, but, with this exception, it covers hill and valley alike. Nearly coextensive with this deposit is a layer of *cascalho*, the pebbles being chiefly quartz, more or less rounded. This sheet, of varying thickness, follows the inequalities of the surface, and occasionally presents accumulations of remarkable thickness; a combination of phenomena which precludes the notion of its deposit from water. The clay and *cascalho* were formerly confounded with what Agassiz asserted to be the surface of the subjacent rock decomposed in place, the heat and moisture of tropical regions affecting the strata to a considerable depth. Hartt figures at p. 508 a cutting where the surface deposits lie on decomposed gneiss, the partition line being distinct: he found that quartz veins in the gneiss, which had resisted the decomposition of the matrix, nevertheless did not pass up into the overlying deposits: further the clay and gravel sometimes rest directly on the bare rock in those drier regions in which decomposition has made small progress, or from which its results have been removed: again, while the clay frequently contains pebbles and blocks, more or less rounded, of various sizes, the decomposed mass wants such ingredients: lastly, while the former is thoroughly unassorted, the latter frequently shows clearly the stratification, the softening process having left undisturbed the relations of the parts. These are the main points of the argument, which goes to prove that in Brazil the atmosphere has power as an agent of waste to which our northern temperate regions offer no parallel. That the clay and gravel are not of aqueous origin, Hartt proves very satisfactorily, founding strongly on the absence of interstratification such as characterises the tertiary deposits over which also the clay and gravel occur. Exception may fairly be taken to Hartt's use of the term "drift" for this superficial deposit; he has himself proved that it is inapplicable, yet continues, as do many other writers, to use a word suggestive of erroneous theory: why not call it boulder clay? On one or two points the author is not sufficiently explicit, and I draw attention to them in the belief that his time and opportunities did not suffice for their thorough investigation, and in the hope that he may yet be able to inform European geologists on subjects on which their experience does not qualify them to decide. Part of the difficulty arises from the unfortunate circumstances that Professor Hartt has given little information as to the heights of the more important localities visited, and that no maps supply the details necessary for following him satisfactorily on his routes, those given in the volume having no pretensions to rank as general maps. Hence there is some difficulty in understanding the relation of the *cascalho* to the subjacent rock. The *canga* seems to be the representative of the *cascalho*, the former being, as in Minas Geraes, derived from and resting on clay slates, the latter characteristic of the gneissose districts. We have thus seemingly a local character of the surface deposits comparable to that recognised in the boulder clay of this country. But if so, how is it that both varieties of gravel seem to rest alike on rock decomposed in place? Professor Hartt speaks of the meteoric decomposition as having preceded the ice-period; of regions which, at the present day, being destitute of the vegetation which determines copious moisture,

present undecomposed rock at the surface, and specially notes that, as on the São Francisco, the clay diminishes towards the dry zone, the gravel layer increasing till it passes into a sheet of boulders. Possibly more detailed survey, such as Professor Hartt may yet undertake, will show that the locally characterised deposit passes eastwards beyond the area of the rocks whence it was derived, just as in the north of England and in Scotland; indeed something of the kind has been already recorded. Meanwhile the fact (if I have rightly collated the scattered passages) that the *canga* consists of solid pieces of ferruginous rock seems to suggest that the decomposition must have been in places subsequent to the date of the ice-sheet: that, as is suggested in the concluding chapter, pre-glacial decomposition may have occurred in the now dry regions and the converse, the travelling ice grinding away the soft, and carrying off fragments from the solid rock, to be left over surfaces afterwards softened; yet, if so, why are not the fragments also softened? But these are difficulties of detail which are only alluded to because their solution involves the thorough investigation of atmospheric waste as illustrated in Brazil. If the advocate of marine denudation can prove his case from Brazil, he will easily succeed in Britain. Meanwhile this volume shows that, speaking generally, the erosion of the water-courses follows the order suggested by Jukes, and illustrated by Geikie and others, the lowering of the watersheds whereby the great river-valleys of South America are well nigh opened into each other telling clearly of the backcutting power of streams. Le Neve Foster describes *moco de hierro* in Venezuela as a ferruginous alluvial deposit, beneath which lies a layer of blocks of vein quartz, with which is associated an auriferous clay: these deposits rest on *cascajo*, or rock decomposed in place. The superficial deposits Foster calls alluvial, yet their resemblance to the strata described by Hartt renders their origin a question of great interest.

One statement at p. 548 must be noticed, namely, that the equivalents of the Laurentian series are to be found in the coast gneiss, while further to the west the Silurians come on. Sir R. Murchison has already spoken of the possibility of Laurentian rocks occurring in South America; but Professor Hartt's observations and mode of reasoning do not instil much confidence in his conclusions. He relies altogether on lithological and mineralogical resemblance, and Dr. Sterry Hunt seems equally satisfied therewith. If anyone takes the trouble to compare the observations made in different districts, he will find that the recorded dips and strikes vary extremely, but the physical relations of the masses are not alluded to. It is said that the gneiss "becomes finer westward, and finally gives way to heavy beds of mica-slate, or mica-schistose gneiss with bands of quartz" (p. 549). Literally this would suggest a passage of less metamorphosed strata in the west into more altered beds eastward. If succession, especially if unconformable succession, is intended, the phrase is at least unhappy. Nor is the argument strengthened by the statement that gneiss is seen under the Brazilian table-land. The district is a very difficult one to explore, and hasty generalisations may be formed from the evidence of a few imperfect exposures. Hartt refers to Wall's paper on Venezuela, as evidence that a similar gneiss to that of Brazil occurs there: but Wall expressly says that the gneiss is a variation in a series which from its leading characters he calls one of micaceous and silicious schists, and which presents, in fact, a curious resemblance to the kind of transition suggested by Hartt's words just quoted. This series, the Caribbean, be it remarked, has been subjected to disturbance exactly parallel to that which has affected the older Parian or cretaceous rocks of Venezuela. Yet, founding on lithological character and parallelism of disturbance, Hartt classes the gneiss of Brazil and of Venezuela with the Laurentians of Canada. Whatever the probabilities may be, this book has done nothing to prove the existence of South American Laurentians.

The difficulties attending exploratory journeys in tropical regions explain and largely excuse the want of precision in many parts of Professor Hartt's book. I hope that he may have opportunity of revisiting the country, and filling in the details of the sketch outlined in this volume.

John Young.

SCHWEINFURTH'S JOURNEYS IN CENTRAL AFRICA.

Perhaps the most important advance which has been made in geographical discovery during the past year has been the exploration of a large portion of Central Africa, lying to northwestward of the great equatorial lakes, by Dr. Schweinfurth, already known through his botanical studies in the lower Nile valley, the first practised traveller who has penetrated far into this region. The reports of the ivory traders, Piaggia and the brothers Poncet, had already indicated the great interest of this part of Africa, but it has been left to the German traveller, in reaching a position nearer the equator in the centre of the continent than any European has before attained, to determine the limit of the Nile valley in this direction, and to cross the water-parting into a westward basin, presumably that of Lake Chad. As yet only the outline of Dr. Schweinfurth's discoveries have reached Europe.* The newly explored country lies to the south and west of the perplexing and variable entanglement of rivers and swamps which feed the White Nile from the west in its course between Gondokoro and the Bahr-el-Ghazal; through which Brun-Rollet, Petherick, Madame Tinné, and von Heuglin have wandered, without entirely unravelling its plan. Beyond this swamp region to the water-parting south-westward, the land traversed by Dr. Schweinfurth forms part of a great sandstone formation. Its surface has two sharply distinguished characters of vegetation; that of the deeply cut channels of its numerous rivers and streams, whose banks are thickly overgrown with tall trees; and that of the grassy, park-like steppes between these, with dwarf trees or clumps of bush. On the water-parting itself the aspect of the country changes and presents a system of bare and swampy flats, with a white sandy soil.

The ruling tribe of the inhabitants of the Nile watershed here is that of the Niam-Niams, who are described by the Marquis Antinori as men of powerful form and stately carriage, bronze-coloured skin, and long sleek hair. On crossing the water-parting into a fertile country, where the oil-palm gives a new character to the landscape, Dr. Schweinfurth came upon a race differing from these in every respect. The Abānga and Monbuttu of the inner watershed are distinguished by the lighter colour of their skin, and their blonde and frizzled hair is worn by both sexes in a high chignon. Though inhabiting a richer land than the Niam-Niams, and in advance of them in agriculture, and the arts, cultivating the banana and other fruits, trading in copper, and forging weapons in iron, the Monbuttu rank far beneath them in the scale of humanity, since they indulge in cannibalism to an extent which appears to be unparalleled on the globe, a practice in no way explicable here by necessity, since the land abounds in game of all kinds. To the south of the Monbuttu is a dwarf race named Ackā or Ticki-Ticki; the average height of the men of this tribe is five feet, but many do not reach this measure. The most southerly point reached by Dr. Schweinfurth is in lat. 3° 35′ N., long. 27° 5′ E. of Greenwich, 2500 feet above the sea, and three days' journey to S.S.E. of the Niam-Niam chief Kifa's (now his son Kanna's) residence, the extremity of Piaggia's route. Here is the palace of Munsa, the chief of the Monbuttu, compared by the traveller to a middle-sized railway station in bulk and form. This capital is south of a great river, named Uēlle both by the Niam-Niams and the Monbuttu, which is as large as the Blue Nile in summer at Chartum. It is formed near 28° E. long. by the confluence of the Gādda

* In letters received at Gotha (20th Nov. 1870), and published in Petermann's *Mittheilungen*, and in a communication to the *Cologne Gazette*.

and Kibali, the latter apparently springing in the neighbourhood of the sources of the Tonj, on the inner side of the mountains which enclose the Albert N'yanza. Farther on in its westward course the Uëlle is said to receive two large tributaries from the south, and an affluent on the right bank, which Dr. Schweinfurth believes to be the river of Senā reported by von Heuglin. The Uëlle, which is navigated by native canoes of 30 feet in length and 6 feet broad, is the Bari or Babura river of the brothers Poncet, and since it maintains a north-westerly direction into the land of the Mohammedans, the "clothed people who pray on the ground," it is scarcely to be doubted that it is the upper course of the Shari river, the main supplying stream of Lake Chad. Piaggia and the Poncets report this river as flowing out of a great lake. Brun-Rollet and von Heuglin each heard of a great lake in this region, and from these reports, especially from the apparently exact information of Piaggia, a fourth great equatorial sheet of water, of an extent rivalling the Victoria Lake, has been represented on recent maps to north-westward of the Albert N'yanza; but for the reasons, that the confluence of so many large streams to form the Uëlle, show that it is rather a mountain-born river than the outlet of a lake; and that though he came within a day's journey of the position given by Piaggia to its northern shore, he could nowhere find any one who had seen or heard of the lake at all, Dr. Schweinfurth throws strong doubts on its existence. Still some weight must be given to the independently received information of the four travellers above named, and the question of the existence of this lake is still to be solved.

Thus the opening up of the African Continent is at last proceeding with rapid strides. The details of this journey, and of those which Dr. Schweinfurth was on the point of undertaking when his letters were despatched, will give the accurate geography of a large portion of the western side of the Nile valley; the corresponding eastern half in these latitudes is now being penetrated by the great discoverer, Sir Samuel Baker, with his Egyptian forces, and if, above all, there shall be added to this the long pent-up store of African knowledge which Dr. Livingstone now jealously guards, Inner Africa will no longer be counted among the unknown parts of the globe, and the time of great discoveries will be nearly at an end.

Keith Johnston, Jun.

Scientific Notes.

Natural History and Physiology.

The Wing of Bats.—In Max Schultze's *Archiv*, Band vii., 1tes Heft, is a most exhaustive and interesting paper on the structure of the bat's wing, by Dr. Jos. Schöbl, of Prague. Long ago Spallanzani discovered that bats which had had their eyes put out were able, nevertheless, when allowed to fly about in a room, to avoid threads stretched across it. This faculty he attributed to some highly developed sense of touch possessed by the wing. Dr. Schöbl has repeated these experiments; but for the putting out of the eyes he has substituted the less painful method of covering them with sticking plaster. He has kept bats thus treated for a year alive in his room, and has entirely confirmed Spallanzani's results. To account for these phenomena, the wings of bats have been examined for peculiar nerve-endings by Cuvier, Leydig, and Krause, but without any success. The author's discoveries are therefore quite new to science. The following is a short abstract of his results. The bat's wing membrane consists of two sheets of skin, the upper derived from that of the back, the lower from that of the belly. The epidermic and Malpighian layers in each sheet remain separate, whilst the true skins are inseparably fused. In this fused median layer are imbedded the muscles, nerves, vessels, &c., of the wing. A complicated arrangement of delicate muscles is described, which have their tendons formed of elastic tissue instead of the usual white fibrous tissue. There are also present numerous long elastic bundles stretched in different directions in different regions of the wing. The arteries are each accompanied by a single vein and a nerve, the three keeping company as far as the commencement of the capillary system. With regard to the pulsation in the wing, Dr. Schöbl has nothing new to add to the observations of Wharton Jones and Leydig. The whole wing is covered, both on the upper and under surface, with extremely fine, sparsely scattered hairs. These hairs are most numerous on the inner third of the hinder part of the wing, and they gradually decrease in number towards the tip. The two wings taken together contain from 8000 to 10,000 of them. They have a general resemblance to those on the body, but are simpler in form. Their length is about 0·2500 mm. in *Vesperugo serotinus*, the species principally made use of in these investigations. Each hair sac has from two to seven sebaceous glands, according to the species; and one sweat gland opening into its sac. The two outer fibrous layers of the hair sac have no sharp line of demarcation to separate them from the surrounding connective tissue, but the inner or hyaline coat is highly developed, and, after being constructed beneath the hair bulb, widens out and encloses the Tastkörperchen, one of which organs is connected with each hair.

The nerves of the wing may be considered to consist of five layers, *i. e.* there is one occupying the centre of a transverse section of the wing, which gives off on each side of it four others, and these are successively finer and finer as they approach the opposite surfaces. The inner layer and the one immediately on each side of it consist of nerve fibres with dark borders, the other layers of pale fibres only. The Tastkörperchen are connected with the second layer. The fifth layer of finest fibres ends as a network between the innermost layer of cells of the Malpighian layer of the epidermis. The Tastkörperchen are shaped like a fir-cone, with a rounded apex turned inwards. They lie immediately below the root of the hair; and their core or central substance is formed of a prolongation of the cells forming the two root-sheaths of the hair. Their length is 0·0259 and their breadth 0·0175 mm. A nerve containing about six dark-edged fibres is distributed to each Körperchen. Just before the nerve reaches this organ, it splits into two, and three fibres pass to one side of it, three to the other. The fibres are then wound round the body so as to sheath its cellular core. Dr. Schöbl thinks it probable that the fibres on one side are continuous with those on the opposite side, and that there is thus a bipolar arrangement here. He attributes to the fine network of pale nerve fibres belonging to the fifth layer the appreciation of temperature, pain, &c.; to the Tastkörperchen the highly exalted sense of touch. It is curious that both kinds of nerve endings are connected with the Malpighian layer of the skin. In conclusion, the author states that he believes he has found similar bodies in peculiarly sensitive places in other mammals, and promises an early account of them.

Habits of the Fur-Seals.—Mr. J. A. Allen gives in the *Bulletin of the Museum of Comparative Zoology at Harvard College*, vol. ii. No. 1, an interesting account of these little-known animals, the *Otariidæ*, or Eared Seals, from which the seal-skins of commerce are obtained. The fur-seals resort in large numbers to the Pribyloff Islands, off the northern part of the Alaska Territory, in the summer months for the purpose of breeding. It is estimated that not less than 1,152,000 male and female seals take up their abode in these "breeding rookeries," as they are termed. Each male has about ten or fifteen wives, the older males always driving off the younger ones, who retaliate by stealing the wives of the patriarchs while they are asleep, carrying them off in their mouths. Constant struggles are the result, in which the females often get severely lacerated. All the males have assembled at these breeding-places by the 15th of June: the females only then begin to arrive, and are not all collected till the middle of July. By the middle of August the young are born; the old males, who have remained at their station the whole of this time without food, now go off-shore in company with the younger ones to feed; and at the end of October the whole body of seals leave the island and journey southwards. The only seals killed for the sake of their fur are the younger males, great care being taken by the hunters not to disturb the remainder in any way.

Mode of Life of the Sucking-Fish and Pilot-Fish.—Professor Van Beneden has ascertained the nature of the food of these two forms of fishes. The sucking-fish has sometimes been supposed to derive its nourishment from the sharks, to which it attaches itself by the curious apparatus on the crown of its head. M. Van Beneden finds that the common sucking-fish (*Echeneis remora*) feeds upon small fishes. From an examination of the contents of the stomach in several examples of the pilot-fish (*Naucrates*)—it would appear that this fish is omnivorous—the food consisted of portions of fishes, crustacea, fucoid plants, and, in one instance, parings of potatoes. These observations have been communicated to the Royal Academy of Belgium.

The Physiological Laws of Human Increase.—An interesting pamphlet has just been published in Philadelphia from the pen of Dr. N. Allen, of Lowell, Mass., on the Physiological Laws of Human Increase, especially bearing on the American population. He states that his attention was directed several years ago to the change taking place in the native population of Massachusetts and other New England States, showing that, whilst the immigrant Irish, English, and Scotch women had large families, the American women had so few children that it was becoming more and more a doubtful question whether in point of numbers the stock was kept good. In a review of Dr. Allen's work in the *Amer. Med. Journal* the fact is put in a still stronger manner. "By a census of the people of Massachusetts taken in the year 1765, it appears that of the entire population nearly fifty per cent. were under sixteen years of age, while at the present time not more than twenty-five per cent., if so many, are under that age; while at the former period the average number of offspring to each couple amounted to from eight to ten, at the present time it scarcely exceeds three." In the foreign part of the population, again, the number of children to each family outnumbers nearly threefold what it is among the native stock.

Dr. Allen discusses the various causes that have led to this remarkable result, and considers that the real cause is to be looked for in a modification of the vital powers of the American women, and the cause of this deterioration he finds in the important changes that have taken place in the education, domestic habits, occupations, dress, and amusements of the female sex especially.

Geographical Distribution of Diseases.—A series of essays of more than ordinary general interest are now in course of publication in the *British Medical Journal*, by Alfred Haviland, and are entitled "Lectures on the Geographical Distribution of Diseases in England and Wales." The one before us on phthisis is strikingly illustrated by a coloured map, and we append some of the conclusions which have been arrived at. 1. More than a quarter of a million of females died from phthisis during the decade 1851–1860. 2. The divisional distribution of heart-disease and phthisis is shown to be the reverse of one another. 3. The most exposed divisions have the highest mortality in phthisis, and the lowest in heart-disease. 4. The most sheltered divisions have the lowest mortality in phthisis, and the highest in heart-disease. 5. London and the West Midland division have the lowest female mortality, being only 24·9 to every 10,000 living. 6. The division having the highest mortality is the North-Western Counties. This fact is coincident socially with the engagement of the population in cotton and other factories, and climatically with exposure to the direct and powerful influence of the north-westerly winds. The maps of heart-disease and cancer show an exceedingly low mortality from these causes in this division. 7. In heart-disease and cancer Wales has a remarkably low mortality, whereas in that of phthisis a high mortality is depicted. It ranks next to that of the north-western division, its female death-rate from phthisis being 32·0 or 4·3 to every 10,000 living *above* the average.

Structure of the Glands of the Stomach.—A valuable paper has been written by Prof. Heidenhain, on the structure of the gastric or peptic glands, and is contained in the 6th vol. of Schultze's *Archiv für microscop. Anatomie.* Heidenhain's investigations were carried on in dogs, the mucous membrane of whose stomach was hardened in alcohol, stained with carmine or aniline-blue, and examined with moderate microscopic powers. The glands are arranged singly like palisades or in groups like the fingers of a glove, in close proximity to one another, and he distinguishes the orifice, the neck, and the body in each. The orifice in the grouped glands resembles the hand part of the glove, several glands opening into it, just as the fingers of the glove open into the wider hand part. This is lined by columnar epithelium. The neck, or narrower portion of each tube, is lined by roundish coloured cells. The body is lined by two kinds of cells, one external or marginal, round, and coloured, the other small, internal, and uncoloured, though their nuclei sometimes become tinted; the former he calls investing cells (Belegzellen), the smaller uncoloured ones he names chief cells (Hauptzellen). The former probably represent the peptic cells of previous writers. The lumen of the glands is occupied by granular dark material. He describes with full details the action of various reagents upon the two above-mentioned forms of cells. He then furnishes the results of his researches on the glands during digestion. The glands are found to become increased in size. The chief cells are much swollen, and their contents finely granular, showing that they have absorbed more than they have secreted; the investing cells are less altered. No division or multiplication of cells was observed.

Glycerine Extracts of Pepsin and other Ferments.—Dr. M. Foster calls attention in *Nature*, Dec. 29, to the value of glycerine as a new means of working out the intricate problems of so-called ferments. Dr. Foster has confirmed the statement of von Wittich, published a short time since in *Pflüger's Archiv*, that, if the mucous membrane of a pig's stomach, washed and freed as much as possible from water, then finely minced and bruised, and covered with pure glycerine, is allowed to stand for twenty-four hours, a few drops of the glycerine, diluted with acidulated water, will digest fibrin with remarkable rapidity. On heating this glycerine extract, after filtration, with a large excess of alcohol, a slight precipitate is obtained, which, separated by filtration and re-dissolved in acidulated water, though giving only the faintest proteid reaction, is strongly peptic. The glycerine extracts appear to remain unchanged for a very long period, so that a stock of ferments can always be kept in store.

Physics.

On the Tension of Saturated Vapours.—Ever since the publication of Regnault's classical researches into the laws of the elasticity and expansion of gases, it has been recognised that the so-called laws of Boyle and of Gay-Lussac express properties which do not correspond exactly to those of any known substance, but to which the properties of the uncondensible gases make a near approximation, especially at high temperatures and low pressures. It has also been long known, from the experiments of Regnault, Cahours, and others, that the more easily condensed gases, and the vapours of substances which are solid or liquid at common temperatures and pressures, approximate more and more closely to the state of perfect gases, or conform more and more nearly to the above laws, as they are farther removed from the condition of saturation. Beyond this very little has been known, until recently, of the behaviour of vapours in relation to pressure and temperature. An important step has, however, been made within the last year or two by Dr. Hermann Herwig (*Poggendorff's Annalen*, 1870, No. 9; also vol. cxxxvii. [1869]), who has shown that, at least in the case of several vapours—namely those of alcohol, ether, chloroform, water, ethylic bromide, and carbonic sulphide—a remarkable law holds good, which may be thus stated. If a quantity of vapour, not in contact with liquid, be subjected to continually smaller and smaller pressures while the temperature is kept constant, a point is reached sooner or later beyond which the product obtained by multiplying the pressure by the volume occupied by the vapour no longer varies appreciably—that is to say, a point beyond which the vapour sensibly obeys Boyle's law. But if now the pressure be increased up to the greatest pressure which the vapour can support at the temperature of the experiment, so that the vapour becomes saturated, the product of this pressure into the corresponding volume bears to the constant product previously mentioned a ratio which is inversely proportional to the square-root of the temperature of the vapour measured from the absolute zero, and which does not depend upon the nature of the vapour. To express the matter mathematically, let v be the volume occupied by a given mass of vapour at the constant temperature t, and under the pressure p so small that the vapour behaves as a sensibly perfect gas; and let v' be the volume occupied by the same mass of vapour at the same temperature, but under a pressure p', the greatest it can support without undergoing partial condensation, then Herwig's law is represented by the equation—

$$\frac{pv}{p'v'} = 0{\cdot}0595\ (a + t),$$

where a is the reciprocal of the coefficient of expansion of a perfect gas.

On the Discharge of Statical Electricity.—The effect of coiling a conducting wire carrying an electric current round a core of soft iron has been very happily described as conferring the property of *inertia* upon the current. Some remarkable facts have been discovered by von Bezold (*Poggendorff's Annalen*, 1870, No. 8) in relation to the discharge of statical electricity, which tend to show that the charge of a Leyden jar, or condenser, or any equivalent arrangement, may be conceived of as having both inertia and *elasticity*. The details of von Bezold's experiments could not well be made intelligible without the aid of figures and a long description: the following is his own epitome of the general results:—1. If an electric discharge which has traversed a space of air, so producing a spark, has open to it two conducting paths to the earth, a shorter one and a longer one, the latter being interrupted by a non-conducting plate, the farther side of which has a metallic coating connected with the ground, a division of the discharge takes place if the striking distance is small. But if the length of the spark is increased, the electricity follows, on the other hand, only the shorter path, and even carries electricity with it from the other branch. 2. If a series of electrical waves are sent into a conducting wire whose farther end is insulated, they undergo reflexion at the end, and phenomena, which accompany the process when alternating discharges are used, seem to owe their origin to the interference of the direct and reflected waves. 3. In wires of the same length, an electric discharge is transmitted in the same time, without regard to the material of which the wires are made.

New Publications.

Airy, G. B. A Treatise on Magnetism. London: Macmillan.

Baltzer, Dr. R. Die Elemente der Mathematik. 2ter Band: Planimetrie, Stereometrie, Trigonometrie. 3te verbesserte Auflage. Leipzig: Hirzel. 6*s.*

Baumhauer, Dr. H. Die Beziehungen zwischen dem Atomgewichte u. der Natur der chemischen Elemente. Braunschweig: Vieweg. 1*s.*

Brauer, F., u. Gerstaecker, Dr. A. Bericht über die wissenschaftlichen Leistungen im Gebiete der Entomologie während der Jahre 1867 u. 1868. Berlin: Nicolai. 4*s.*

Brefeld, Dr. O. Untersuchungen über die Entwicklung der *Empusa muscae* u. *Empusa radicans*. 4 Kupfertaf. Halle: Schmidt. 5*s.* 6*d.*

Brunner, Dr. G. Beiträge zur Anatomie u. Histologie des mittleren Ohres. 4 Kupfertaf. Leipzig: Engelmann. 3*s.*

Fritsch, Dr. G., u. Müller, O. Die Sculptur u. die feineren Structurverhältnisse der Diatomaceen. Berlin: Müller. 16*s.*

Godman, F. Du Cane. Natural History of the Azores. London: Van Voorst.

Gorup-Besanez, Dr. E. F. Lehrbuch der Chemie. 1er Band. 4te verb. Auflage. Braunschweig: Vieweg. 3*s.*

Helmholtz, H. Populäre wissenschaftliche Vorträge. 2tes Heft. Braunschweig: Vieweg. 3*s.* 6*d.*

Huber, Dr. J. Die Lehre Darwins kritisch betrachtet. München: Leutner. 3*s.* 2*d.*

Landgrebe, Dr. G. Mineralogie der Vulcane. Cassel: Luckhardt. 7*s.*

Lyell, Sir Chas. Student's Elements of Geology. London: Murray.
Maudsley, Dr. H. Body and Mind. London: Macmillan.
Mivart, St. George. The Genesis of Species. London: Macmillan. [An exhaustive criticism on the Darwinian theory of the origin of species, in which the author contends that the principle of natural selection is insufficient to account for the production of species and genera. The theories of homologies and of pangenesis are also reviewed, as well as the connection between the doctrine of evolution and theology.]
Naumann, Dr. C. F. Elemente der Mineralogie. 8te verm. u. verb. Auflage. Leipzig: Engelmann. 10s.
Prior, Dr. R. C. A. Popular Names of British Plants. London: Williams and Norgate.
Rüdinger, Dr. Die Anatomie des peripherischen Nervensystems des menschlichen Körpers. 2te Abtheil.: Die Anatomie der menschlichen Rückenmarksnerven. Mit 23 Taf. Stuttgart: Cotta. 16s.
Stilling, Dr. B. Untersuchungen über den Bau des kleinen Gehirns der Menschen. 15 lith. Taf. Cassel: Kay. 48s.

History.

The History of Scotland, from Agricola's Invasion to the Revolution of 1688. By John Hill Burton. Vols. V. VI. VII. Blackwood.

English History owes more, perhaps, to the historians of the sister nation than has been acknowledged. It is the fashion now to abuse Hume, but the summaries which he gives at the end of each reign are still very valuable for their social and economical views, and not a few passages of the history itself have much of the merits of his political essays. The claim of England to the vassalage of Scotland forced Scotch enquirers to scrutinise the sources of our early history very closely, and the result was that a considerable amount of forgeries was detected, which had imposed on English statesmen even down to Elizabeth's days. Mr. Burton repeatedly points out how the queen and her statesmen were influenced by their belief in the English supremacy. Rymer, the editor of the *Fœdera*, began his great work most unfortunately by engraving a document purporting to be Letters Patent, in which Malcolm Canmore acknowledged that he held Scotland and the adjacent islands of Edward the Confessor by liege homage, an ancient forgery which the Scotch at once detected and exposed. Mr. Burton, who has written an excellent *Life of Hume*, and a *History of Scotland since the Revolution*, has followed Hume's example in taking the earlier portions of the history last, a plan which in some respects may be serviceable. He has had the advantage of having the ground cleared for him by the late Mr. Robertson's *Scotland under the Early Kings;* the portion of which the merit belongs more largely to himself, and which is particularly valuable for its impartiality, is that relating to the Stuart dynasty. It is of course hopeless to please those who make Mary Stuart an object of romantic and idolatrous worship, but they should be content with the ideal Mary Stuart whom Scott and Schiller have made immortal as a creation of the heart, and not be angry when the historian refuses to acknowledge romance as history and rejects the view of those who look on Mary as a saint, as he rejects the other extreme view, which regards her as the foul witch Duessa, who, in the *Faëry Queen*, is alternately the false woman and the false church. In one point Mr. Burton seems to us to make more allowance for Mary than Mr. Froude. If history must condemn her, yet let not even in this extreme case the extenuating circumstances be forgotten. She was less than twenty-six years of age when the English prison doors closed on her, and she had lived as Queen of France and Scotland when social life in those countries was at its worst; her husband was utterly worthless, and had assassinated Rizzio in her presence, and she must have been almost more than human if she had escaped her terrible fall. As a passionate woman and as a Catholic devotee, who did in a sense die for her faith, she will still carry with her a sympathy which the historian himself cannot and does not wish to entirely suppress. On the other side, Mr. Burton seems to us eminently fair as regards Elizabeth. Mary's friends see in her nothing but a subtle foe. Mary herself knew better. Elizabeth thought that nothing could justify subjects in rising against their sovereign, and she honestly endeavoured to keep Mary on the throne till it became impossible. If any one had a right to complain of the English queen's conduct, it was Murray and the leaders of the Scotch Kirk. She meant, too, that Mary should succeed her, and would have befriended her all along; but she found that Mary regarded her as illegitimate, and herself as already rightful Queen of England, and that to declare Mary her successor would be to sign her own death warrant. Let us make the allowance for Elizabeth that we make for Mary; far less allowance is needed, far less is usually given. Elizabeth too suffers in another way. Spenser could represent the *Queen of Faëry* sending out her knights to relieve fair Belgé, or help Sir Burbon, or execute strict justice through the realms of Irena; but history finds that the queen was with difficulty brought to carry out any great measures, and that the credit is largely due to Cecil and Walsingham and the famous English sea captains of the age. But though the monarchical fashion of writing history has almost disappeared, yet Elizabeth cannot lose her fame, for she carried England safely through the great crisis of religious change without a religious war. We have but to think on the condition of the continent at the time, we have but to contrast Elizabeth with her predecessor and her successor, with Mary Tudor and James VI., to see why England, why even the most violent of the Puritans, clung loyally to her rule. Nor is Mr. Burton less fair to a much reviled class of men, the Scotch Covenanters. The Solemn League and Covenant sealed the cause of freedom in Scotland (we may trust the feeling of Burns rather than that of Sir Walter Scott on this subject), and should have been not less celebrated than the oath of Grütli for Switzerland, or the vow of Joan of Arc for France. But history, "so warm on meaner themes, is cold on this. She execrates indeed the tyranny that doomed them to the fire, but gives the glorious sufferers little praise." These words represent the impression made on Cowper's mind by reading Hume's account of the persecutions in Scotland under the Stuarts. But the Puritans lived in the agony of too great a crisis to have been able to be friends with the literary class, and they have suffered accordingly in literature. Mr. Burton has given us a chapter on "Social Progress from the Reformation to the Restoration," which will well repay perusal. It is sometimes said that the history of a country is imperfectly written if it do not in the narrative reveal the social condition of the people brought forward to act upon its stage. This may be so, but most narrators are apt to feel that there are characteristics of a people too placid and leisurely in their growth to be easily put into companionship with others born of violence, fanaticism, or craft. This is Mr. Burton's apology for the chapter, but its merits need no apology. He has rightly taken the literature as reflecting the character of the people. It was a Scotchman who first said that if a man were permitted to make all the ballads, he need not care who should make the laws, of a nation, and in ballad literature Scotland is peculiarly rich. To criticise their origin is as difficult as to criticise that of the Homeric songs: they grew and fell into shape as they passed from generation to generation by tradition, and Burns and Scott did but complete the work of many unknown poets. For the manners of the country, Robert Chambers has collected much

material in his well known book, the *Domestic Annals of Scotland;* our author can but give a summary. The darkest stain on the age is the superstition of witchcraft, an evil heritage from the Middle Ages. King James's *Daemonologie* is a true Scotch work; Scotch lawyers treated sorcery as a crime long after English commentators regarded it as an obsolete belief, and many religious men were vehemently opposed to the repeal of the disgraceful penal laws against witchcraft in 1736.

After all, the true history of the nation is its history as a people, and Mr. Burton has done justice to John Knox as having to a great extent created modern Scotland. The Kirk system of national education gave Scotchmen a great advantage for a long time over other nations, and the Presbyterian scheme of church government requires careful consideration if the real nature of Scotch history is to be understood. For the causes which led to the downfall of the old church system, we may refer to Mr. Froude's late article in *Fraser.* Both sides contended that their view rested on express divine authorisation; the historian accepts various forms of government as lawful in the church, just as he recognises monarchy, aristocracy, and democracy in the state, and sees that they are equally human and divine.

Mr. Burton passes lightly over the consideration of the morality of Scotland, but the question is surely important to an enquirer into its history, and we should have liked some comparison with the Scandinavian kingdoms on the one side, with England and Ireland on the other. In constitutional matters, too, we are not quite satisfied with his account of the Scotch Parliament; the passages about it are very scattered, and we have nowhere the advantage of reading Mr. Burton's views in a connected form. But the work as a history of Scotland is far the best we have, the critical power is conspicuous, and the literary merit of a clear style gives it a by no means inconsiderable advantage over some of its rivals. The author has avoided as much as possible the temptation to trench on the ground already occupied by English historians. When Mary crosses the frontier, he quits her company, and shuns entering the enchanted ground. The tangled web of plots and counterplots, the final struggle, the great death scene at Fotheringay, all these he leaves to the English writer who has already made them his own. In this way, however, his work appears somewhat at a disadvantage. When once the crowns are united, the histories can no longer be kept entirely separate; the contest of the Stuart kings with the two nations forms a drama which falls into separate acts, but the acts are but parts of the whole, and can hardly be treated apart. In one sense the Scotch are still a nation, but their later national history and our own, though they may be distinguished, yet hardly admit of separation.

C. W. Boase.

THE FASTI OF THE LATIN FESTIVAL.

Through the kindness of Professor Mommsen we are able to give by anticipation the following account of some newly discovered fragments, and of the criticism of them which he has written for the next number of *Hermes.*

The most interesting fragment is one which contains the years 304–306 U.C., and is therefore much older than any yet found. The others belong to the years 537–542, 552–554 U.C., and 40–43 A.D. The most important entry, as restored by Mommsen, is as follows: it is that of 305 U.C., the year after the fall of the Decemvirate:

M. Horatio M. f. L. n. Barbato L. Valerio P.F.P.N.PUTITO COS.
L(atinae) f(uerunt) IIII. EID. IAN.
*ite*R(*um*) L(*atinae*) F(*uerunt*) III. NON. FE*b*R
tertium L(*atinae*) F(*uerunt*) K. MAI

The festival was therefore celebrated three times in that remarkable year, viz. Jan. 10, Feb. 3, and May 1. The first of these days is much earlier than was the rule in later times; but it fits very well with the day on which, according to tradition, the magistrates entered upon office after the fall of the Decemvirate, namely, Dec. 10 for plebeian tribunes, and Dec. 13 for *magistratus populi.* It was a sacred rule that the consuls must hold this festival before taking the field.

The intimate connection thus made out between the festival and the commencement of the official year further explains why the institution was ascribed to Tarquinius Superbus. The Fasti could only be reconstructed as far back as the annual magistracy supplied a ground for fixing the time of celebration. Afterwards, probably in 532 U.C., the day for entering office was fixed for March 15: and according the festival about the time is usually held in May. But when the official year in 601 B.C. was made to begin on Jan. 1, the time of the festival was not again altered.

The occasional repetition of the festival is now ascertained; and Prof. Mommsen is thus able to fix the reading of a passage in Livy, xlv. 3, 2, in which a second celebration is mentioned as having taken place in consequence of the victories in Macedonia. Another took place in 731 U.C., probably on the occasion of the assumption of the tribunicia potestas by Augustus. If the repetition in 305 U.C. were in honour of the restored liberties of the *plebs,* as seems likely, it is curious that, as Mommsen says, the same festival should have been held "at the second birth and over the grave of the Roman republic."

Other inscriptions have been found on the same place, among them one containing the terms *Cabenses sacerdotes feriarum Latinarum montis Albani.* The modern name Monte Cavi is thus traced back probably to the time of the Emperor Tacitus.

These results confirm and supplement the views which Professor Mommsen expounded in his recent essay on Sp. Cassius, M. Manlius, and Sp. Maelius. The chronology, the dry bones of history, extends much further back in the case of Rome than anything which can be called historical record: and it supplied the framework which legend and fabrication filled out with the existing narrative.

New Books.

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Köhler, Ulrich. Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes. Berlin: Dümmler.

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Pertz, G. H. Das Leben des Feldmarschalls Grafen Neithardt von Gneisenau. Dritter Band: 8. Juni—31. December 1813. Berlin: G. Reimer.

Philippi, Adolph. Beiträge zu einer Geschichte des attischen Bürgerrechtes. Berlin: Weidmann.

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Philology.

Syntaxe Nouvelle de la Langue Chinoise, fondée sur la Position des Mots, suivie de deux Traités sur les Particules, et les principaux Termes de Grammaire, d'une Table des Idiotismes, de Fables, de Légendes et d'Apologues traduits mot à mot. Par M. Stanislas Julien. Paris: Librairie de Maisonneuve; London: Trübner and Co., 1869.

Dictionnaire Français-Latin-Chinois de la Langue Mandarine Parlée. Par Paul Perny, M.A. Paris: Librairie de Firmin Didot Frères, Fils et Cie, 1869.

No living sinologue has done so much to familiarise the people of Europe with the language of China as M. Julien. During the last forty-seven years he has entirely devoted himself to the study of Chinese, and beginning with a Latin translation of the works of Mencius, he has from the year 1826 down to the present time continually furnished students of that tongue with text-books which for correctness and utility are quite unsurpassed. His present work is perhaps of all his publications the greatest boon to would-be sinologues. The difficulties which surround the acquirement of even a moderate knowledge of the *koo wen,* or

"antique style" are very considerable. The construction of its sentences and the characters used are entirely unlike those employed in the modern colloquial, the official, and the epistolary languages; and although an acquaintance with the latter styles is at first of greater moment to the official and missionary students in China itself, the fact that all works which can claim for themselves any importance are written in the *koo wen* makes a knowledge of it the one thing necessary for European sinologues. To the study of this branch of the language M. Julien has directed his entire energies, and the work before us, discarding any pretensions to being a complete grammar of Chinese, professes only to deal with that particular style of composition. Chinese has never attracted in England the notice to which its richness and great antiquity entitle it, and this may be attributed in a great measure to the want of sure guides in the shape of dictionaries, grammars, and text-books which has hitherto been felt. Now, however, this deficiency has been to some extent supplied.

To the early works of M. Julien, and the recent translation of the classics by Dr. Legge, has been added the valuable grammar and text-book before us. A thoroughly good dictionary is still much to be desired, and we trust that we may look, at no distant date, to the appearance of such a one from the same hand which has now supplied us with the *Syntaxe nouvelle*. In making these remarks we would not have it supposed that we in the least undervalue the dictionaries of Messrs. Morrison and Medhurst, to both of which every student of Chinese must be deeply indebted; but it must be patent to every one possessing any knowledge of the subject, that a fuller and more complete dictionary than any yet published is much wanted.

Chinese characters are, as M. Julien informs us in his introduction, monosyllabic, indeclinable, and "inconjugable." Neither are they susceptible of inflections such as those by which the numbers, genders, and cases of nouns, and the tenses, modes, and persons of verbs, are in European languages recognised. Further, the language is destitute of what in the ordinary sense is known as grammar. At first sight the difficulty of acquiring a knowledge of a language suffering under such disadvantages would appear insurmountable. But a little reflection will show that a nation which has possessed a wide and ever increasing literature for upwards of 2000 years must be guided by fixed rules in the manner of its composition. Although up to this time these rules have never been clearly laid down, they have still existed, and are to be found in the amplification of the discovery first made by Dr. Marshman, and adopted as a motto by M. Julien, that "the whole of Chinese grammar depends on position." This axiom is the key to the written language, for by their position alone is it possible to determine the value of the characters in a sentence. This being so, we have only to add that a large proportion of Chinese words are interchangeable as either substantives, adjectives, or verbs, according to the relative positions they occupy, to show how all-important a careful adhesion to this principle becomes to enable students rightly to understand the works of Chinese authors. To illustrate practically the rules by which to distinguish the grammatical significance of Chinese words, M. Julien gives us a number of examples of the changes which take place in the value and meaning of the same characters as the result of their different position, or of the connection in which they occur. For instance, he tells us that the character 治 *tch'i*, "to govern," if placed before a substantive remains a verb, as 治 國 *tch'i koŭc*, "to govern a kingdom;" if the order of these two characters is reversed, they signify, "the kingdom is governed;" and if the character *tch'i* be placed after 史 *chi*, "a magistrate," it becomes a substantive, and the two words are then to be translated, "the administration of the magistrates." We will further quote one example of the changes that some words undergo in the same sentence. For instance, we find the expression 以 鑽 鑽 之 *i tsouan tsouan tchi*. The primary meaning of the character *tsouan* is "an awl," or anything with which a hole is bored; and in this sentence we recognise that, since the first *tsouan* is preceded by *i*, the sign of the instrumental case, it stands in the place of a substantive; *i tsouan*, therefore, means "with an awl;" but the character *tchi* being plainly the object of a verb, the second *tsouan* must, by virtue of its position, be considered as a verb, and the sentence will then read thus, "with an awl to bore it" (*tchi*).

From what we have already said, it will be obvious that any work on Chinese grammar must resolve itself rather into a list of examples than a compilation of rules. M. Julien does, however, deal separately with substantives, adjectives, verbs, and adverbs, and by the addition of certain affixes and prefixes declines the substantives, and to some extent conjugates the verbs. By far the most important chapter in this part of the work is that which treats of the signs of the accusative case. To M. Julien, without doubt, belongs the credit of having discovered the value of the characters 以 *i*, 於 *yu*, 于 *yu*, and 乎 *hou*, as marks of the accusative. In a supplementary treatise to his translation of Mencius, he announced this grammatical discovery, and in his present work he brings forward such a number of thoroughly well-selected examples to prove his case, that even those least willing to accept his dictum must be convinced of its accuracy. M. Julien has the great advantage of possessing a knowledge of Manchoo. This being a Tartar language differs widely from Chinese in construction as well as in every other respect, and the power of comparing therefore the two versions of the same works—for all the classical works of China have been translated into Manchoo—furnishes him with obvious facilities for disentangling with certainty many points which must remain doubtful to those learned in Chinese alone. Thus to all the examples he gives us of the above characters as marks of the accusative case, he is able to point in the parallel passages in the Manchoo versions to the fact that they are invariably translated by *be*, the sign in Manchoo of the accusative.

The pages devoted to the *syntaxe* of the language form but a very small portion of the work before us, and are followed immediately by two chapters on "Monographs," or, as M. Julien further describes them, those "caractères qu'on rencontre à chaque pas avec des significations infiniment variées." These characters form one of the chief stumbling blocks in the way of translating Chinese. They cannot, strictly speaking, be said to belong to any one part of speech, but due regard being had to the rules of position, they are capable of changing their grammatical value to an almost indefinite extent at the will of the writer. One or more of them occur in every sentence, and not only are their meanings "infinitely varied," but are often so directly contradictory that the utmost care and considerable experience are required to enable the student to fix with certainty their significance in each case. As an illustration of this difficulty we may quote the character 以 *i*, which is perhaps the most common and most puzzling of these monographs, and for which M. Julien gives us thirty-four dif-

ferent meanings, besides the use which we have shown above to attach to it as the mark of the accusative case. In the first chapter on monographs, M. Julien reaps for us the benefits of his own experience in the course of his varied reading, but the second chapter is a translation of part of a Chinese work which we believe to be unique of its kind, entitled *King chuen shih tsze*, by Wang Yin-che. This work was first brought to the notice of M. Julien by Dr. Legge, through whose instrumentality also a copy has been recently added to the Chinese Library at the British Museum. It is impossible to overestimate the importance to the student of Chinese of a thorough comprehension of the "monographs." Former writers on the language have treated of them but very superficially, not that their importance has been overlooked, but for the simple reason that the great variety and depth of reading necessary to the thorough elucidation of their ever changing values, and possessed by the author of the *Syntaxe nouvelle*, has been wanting in the case of his predecessors. Of equal importance with the chapters on monographs is the table of idioms which follows them. To these parts of M. Julien's grammar we commend the earnest attention of the student. In them, as well as in the rest of the work, we have the result of the life-long study of a scholar who, after but three years' acquaintance with Chinese, published an excellent translation of one of the most difficult works in the language. The translations also which supplement the *Syntaxe nouvelle* give every opportunity to the student to put into practice that which he will have learnt in the earlier parts of the work. Every line in M. Julien's book contains valuable information. He places before the beginner in a fair and by no means exaggerated light the difficulties which will surround his onward path, and at the same time supplies him with a sure method of overcoming them. From first to last it is an excellent work, and one with which every student of the language should make himself thoroughly acquainted.

A very different kind of work from that referred to above is M. Perny's *Dictionnaire français-latin-chinois*. No more difficult linguistic task exists than the compilation of a thoroughly useful dictionary of Chinese. The knowledge required for its accomplishment must of necessity be encyclopædic, and the scholarship of the author should be beyond question. But in the work before us we can find little trace of either of these qualities. M. Perny appears from the tone of his preface to have set about compiling his dictionary with but a very slight appreciation of the responsibility he was thereby incurring, and the result has been the production of a very faulty book. The knowledge he displays of Chinese is comparatively slight, and his ignorance of Latin is astonishing. On one point we can, however, heartily congratulate him. The Chinese type employed in printing his dictionary, which he tells was the work of his own hands, does infinite credit to his patience and ingenuity. It is very clear, the characters are well proportioned, and the general execution is excellent. M. Perny informs us in his introduction that this dictionary is to be followed by the appearance of a Chinese grammar, and a book of Chinese proverbs. The last-named we have not yet seen, and the grammar is, we believe, not yet published. We can only hope that the experience M. Perny must have gained in making his dictionary will have led him to bestow greater care upon the composition of his other works.

Robert K. Douglas.

Studies on Plato. [*Platonische Studien.* Von M. Vermehren.] Leipzig, 1870. 164 pp.

Professor Vermehren's contributions to the criticism and explanation of Plato, contained in the present volume, will be welcomed by all those who are aware that I. Bekker's edition only inaugurated, but by no means concluded, the critical study of that author. It would be unnecessary to put the statement in such guarded terms but for the large number of *English* scholars who seem to be actually of opinion that criticism has no longer anything to do with Plato, his text having (as they think) been brought into a satisfactory shape by the German editor. But the truth is that Bekker's edition, far from exhibiting a satisfactory text, only furnishes the means of forming it; the most important MS. of the greater half of Plato's works (the Bodleian) not having fallen under the editor's notice until his text was printed off. This defect, it should be added, was remedied in the Zürich edition and in C. F. Hermann's text in the Teubner series, in which the Bodleian MS. was duly followed as the most important guide in the criticism of those works which it contains; but still much was left to be done in the way of critical accuracy, as neither the Zürich editors nor Hermann took the trouble of recollating it. This remains to be done now, and we are glad to hear that the work has lately been taken in hand by a gentleman already known for some contributions to Platonic criticism; though there is probably no person living better acquainted with the peculiarities of this MS. than Mr. I. Bywater, of Exeter College, Oxford, to whose kindness I owe several important collations, besides which I have also some made by myself.

But a second kind of criticism has of late become very prominent in the field of Platonic study, and its necessity seems to be pretty generally acknowledged, in spite of the vehement war waged against it by many English scholars, and especially by Stallbaum; I mean *conjectural* criticism. Heindorf's ingenious conjectures, though published before Bekker's edition, still deserve careful consideration; occasionally we may learn something from Hirschig, though in most instances we regret the absence of critical σωφροσύνη from his pages; very rarely Cobet will furnish us a good observation or emendation, owing to the sovereign and arbitrary manner in which he corrects Plato, just if he were a mere schoolboy whose knowledge of Greek style was far inferior to Cobet's;—how very different from the late J. Riddell, whose *Digest of Platonic Idioms* shows such conscientious study of the language and style of his author—but it is *Dr. Badham*, who, more than any one else, has shown the necessity of employing conjectural criticism in Plato. Prof. Vermehren fully acknowledges the importance of Badham's "numerous, partly highly felicitous and ingenious emendations," but regrets their being put forth with such "laconic brevity." It is true, he frequently disagrees with Badham, but that is only natural; if we might venture to say a word on the point, we think that in his last two publications on Plato—ingenious and important as they are—Dr. Badham has scarcely done himself justice, a certain hurry appearing almost everywhere, and many hints and thoughts being only just thrown out which would have been capable of further elaboration, and which it was, moreover, the editor's duty to work out completely. Prof. Vermehren gives, on p. 8, a remarkable instance of this, by himself explaining and arguing for an emendation of Badham's.

Among Prof. Vermehren's observations there are some with which we agree, some with which we disagree, and some which we think scarcely justifiable.

We agree, above all, with his tendency rather to emend a passage than throw out a number of words as an interpolation, *e.g.* Sympos. 181 C, 182 D (though here we confess not to be quite convinced), and 186 E, while *ib.* 186 A we believe to be interpolated notwithstanding our writer. We are, moreover, inclined to accept ἐπόθουν ἕκαστοι, *ib.* 191 A, and consider the conjectures on 202 E and 205 D very

ingenious, though scarcely convincing; but protest against such violent changes as 179 B, where τούτου is changed to δοκεῖ! or 180 E, where πάντας θεούς is turned into πάντα γ' ὁμοίως. In the passage from the Sympos. p. 178 E, treated p. 46, we would add οὐκ after ὅπως, taking ἄμεινον in the sense of "excellently" without any comparative meaning, and translating ἤ by "or" (not "than"), but agree with Vermehren in considering the stop after ἀλλήλους absurd, as the three participles ἀπεχόμενοι . . καὶ φιλοτιμούμενοι . . καὶ μαχόμενοι conjointly describe the causes of the victory obtained by the πόλις ἐραστῶν τε καὶ παιδικῶν. In another passage, 175 B, we think that Vermehren's conj. τίσις μὴ ἐφεστήκοι is altogether foreign to Plato's mode of expression; the passage is, however, very difficult, and perhaps ἐπειδάν τις may be ἐπεὶ δεσπότης, or also ἐπειδὴ αὐτὸς (= "master").

In some passages the reading seems to be perfectly sound in spite of Vermehren's doubts. Laches, 186 E, *e.g.*, is either right as it stands, or the simple addition of ἤ before καὶ πότερα would obviate all difficulties. In Symp. 176 A the words ἃ—ἐποίει form an integral part of Apollodorus' speech, and according to Greek idiom must be in the imperfect tense; in 178 C the position of ἤ goes against Vermehren's explanation. In another passage (Sympos. 172 A) I am surprised to find so much sagacity and learning wasted, if but for the consideration that it is nowhere proved that ἀπολλόδωρος can have the sense of ἔρμαιον; the joke simply consists in the pompous appellation Παληρεὺς οὗτος Ἀπολλόδωρε, where the mere mention of the name would have been sufficient: comp. the drunken Philip's pompous and ironical Δημοσθένης Δημοσθένους Παιανιεὺς τάδ' εἶπεν.

But even these cursory observations will suffice to show that a perusal of this volume will amply reward the attentive reader of Plato. It should not be neglected by any future editor. W. WAGNER.

SANSKRIT MANUSCRIPTS IN BENGAL.

IT will be in the recollection of our readers that, at the instance of Mr. Whitley Stokes, the Indian Government has sanctioned an annual outlay of 24,000 rs. (including a grant of 3000 rs. to the Asiatic Society of Bengal) for the printing of lists of MSS. in the Indian libraries, and the purchase of unique or unusually valuable ones. The task of collecting and examining lists of MSS. in Bengal was entrusted to Bâbû Râjendralâla Mitra, who has just issued a catalogue of Sanskrit MSS. with an account of the method employed by him in his operations.* This work contains descriptions of rather more than 200 MSS., in the order in which they were brought under the editor's notice. As, however, similar lists will be published from time to time, "it is intended to supply a classified index on the completion of a volume." A different method has been employed in the *Classified Alphabetical Catalogue of Sanskrit MS. in the Southern Division of the Bombay Presidency* published at Bombay. In this catalogue we are furnished with a scientific arrangement, which does not, however, give any information beyond the title of the work, the name of the author, the number of leaves in the MS., and the average number of lines in a page, the place where it is deposited, and whatever dates may be found in it regarding its transcription. Bâbû Râjendra, on the other hand, in the work referred to above, accompanies the title of each work with a short abstract of its contents in English, with occasional references to books in which further details may be found; then he gives the title in Devanâgarî, the name of the author, and the necessary information on the nature of the MS., and in conclusion the opening and concluding sentence or couplet. The chief advantage of this method is that it enables us to identify the work noticed in the catalogue, whenever we may happen to light on another copy of the same work, even should it be deficient in either the beginning or the end, or, as often happens, in the colophon containing the title and the author's name. By far the greater part of the MSS. in the catalogue now under notice are copies of modern dramas and poems and Upanishads, many of which, though hitherto unknown, are apparently of quite recent origin and hardly deserving that denomination. Still there are copies of Upanishads among them, and not a few, which will be useful, the more so as several of them are accompanied by commentaries.

In grammatical, phonetical, and Prâtiçâkhya-literature, I may notice a "complete and remarkably correct" copy of the *Mahâbhâshya*, a "remarkly correct and beautifully written" copy of the *Tribhâshyaratna*, or commentary on the *Taittirîya-Prâtiçâkhya*, the *Nâradîyaçikshâ* with a commentary by *Çobhâkara*, the *Lomaçîçikshâ* by Gargâchârya, the *Amoghânandinî-*, *Kauçikî-* and *Maṇḍûka-çikshâs*. Of Kalpa-works there is Çankha's *Grihyasmriti* with a commentary, the *Çânkhâyana Grihyasûtra*, the *Drâhyâyaṇasûtra-Ṭîkâ* ("pariçuddham") by Dhanvisvâmin, two copies of the *Subodhinî*, a commentary on the *Baudhâyanasûtras* and a few others. In medicine: Bhâva Miçra's *Bhâvaprakâça* and several others.

In a compilation of this kind we must be prepared to meet with errors, and particularly with misreadings, in excerpts from manuscripts. The remarks in English also do not seem to have had the benefit of a careful corrector whilst passing through the press, as they bristle with misprints. With several of the works noticed some doubt may be entertained as to the nature of contents assigned to them by the compiler. The *Saptaçatî* by *Govardhana Achârya*, for instance, noticed under No. lxxvii., is stated to be a work "on moral maxims," consisting of 700 çlokas. The work is, however, in the first place a vocabulary (and as such it is mentioned by Medinîkara), from which Wilson supposed the plan of the Hindi vocabulary *Sat Sai* by Bahârilâl to have been conceived. I may add that among Colebrooke's MSS. at the India Office Library there is a copy of Govardhana's *Kosha* (with a commentary by Ananta Pandita, MS. 959), the first and last çlokas of which, with some variations, agree with those given in Bâbû Râjendralâl's catalogue. The text was also published at Calcutta in 1864. Notwithstanding these shortcomings, the method adopted in this catalogue is very useful, and will, it is to be hoped, be followed in other parts of India. The second number of Bâbû Râjendrâl's catalogue will, I understand, reach Europe shortly. J. EGGELING.

* *Notices of Sanskrit MSS.*, by Râjendralâla Mitra. Published under orders of the Government of Bengal. No. I. Calcutta, 1870. 8vo. pp. v. 109.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—In his review of the new edition of Corssen's *Aussprache, Vokalismus und Betonung der lateinischen Sprache* (*Academy*, vol. ii. p. 82), Mr. Nettleship calls attention to the fact that Corssen has proved the genitives in *ais* and *aes* not to be genuine Latin forms, and that therefore the derivation of genitives in *âî* and *ae* from those in *ais* and *aes* is no longer tenable. "It is not, therefore, surprising," he adds, "that Corssen should return to the view that the genitive in *ai* is properly a locative."

It so happens, however, that in his second volume, p. 721, Corssen retracts this admission, and claims genitives in *âî* again as corruptions of older genitives ending in *s*. He supposes that, corresponding to the Sanskrit genitive in *âyâs*, there was a Latin genitive in *â-ias*, changed to *â-ia*, *â-ie*, and *â-î*. His reasons for changing his opinion are that no decided locative in *âî* occurs in literary monuments, and that the genitive of the fifth declension in *êî* never has the power of the locative. The first reason has little weight, considering the comparative scantiness of genitives in *âî*; the second is invalidated by Corssen's own remark, that nearly all nouns of the fifth declension are abstract nouns, and therefore not likely to occur in the locative. But there is even a stronger reason why genitives in *âî* and *ae* should be taken as original locatives, and not as corruptions of genitives, real or imaginary, ending in *s*; viz. *that* (if we except a few doubtful cases, like *diu*, &c.) *no final* s *is dropt in Latin after an organically long vowel.* In the course of a sentence, no doubt, any final *s* may become evanescent, but the loss of a final *s* after a long vowel in a grammatical termination is, I believe, without a precedent. The nom. plur. of *o*-stems in *oe*, *ei*, *î* cannot be derived, as has been supposed, from the nom. plur. in *os*, *eis*, *îs* by dropping the *s*, first, because the former are really the older forms; secondly, because there would be no excuse for dropping the *s*. Corssen explains nom. plur. such as *magistris* for *magistrî* by admitting a secondary base *magistrĭ*, like *acro* and *acrĭ* (p. 756). This is better than taking *is* as a contraction of an original *a* and *as* (cf. *pûrvâs pûrve*), which in Latin would be phonetically objectionable. MAX MÜLLER.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—I regret to find that there is very little literary work going on in India just now.

Major W. M. Carr has just taken up the study of the Dakhnī, or southern dialect of Hindustānī, and proposes to edit, with notes, some of the chief works. He has also in the press an edition of Nannaya Bhaṭṭa's Āndhra-çabda-cintāmaṇi. This is supposed to be the oldest Telugu grammar in existence, and consists of 278 Sūtras in Sanskrit. The author has made use of the technical terms of Pānini and the Çiva-sūtras, but has added a few new ones, e. g., *drûta* for n used to obviate hiatus. He is also the author of the classification of words used in Telugu, according to the fancied derivation (P. I. 46), namely, *tatsama*, or words taken unaltered from Sanskrit; *tadbhava*, or modified Sanskrit words; *deçya*, or pure Telugu words; and *grāmya*, vulgar or foreign words. It may have been a step in advance when Nannaya wrote, but

this classification has long hindered true progress in Dravidian Comparative Philology. The age of Nannaya is not certain; he probably lived under the later Cālukyas, and about the 10th cent. A.D. His work has been repeatedly commented on; but Major Carr will give an English translation.

In Tibetan Dr. Jaeschke has printed a version of the Epistles of John. At the end are 44 pages in German containing critical remarks, which add much to our knowledge of Tibetan grammar and lexicography.

I am myself at work at an essay on Strīdhana, in which I attempt to illustrate a very obscure question of Hindu Law by the historical method, which is as yet entirely neglected by writers on this subject. I am also to examine for the Government the Sanskrit MSS. in the Mysore Rājā's Library. A. Burnell.

Cuddapah, Madras Presidency, Dec. 12, 1870.

Contents of the Journals.

Philologus, vol. xxx. pt. 5.—Beiträge zur Erklärung Homers. I. Die Spuren der Bronzezeit. II. Das Haus des Odysseus. (Mit zwei Tafeln.) By L. Gerlach. [Two most interesting antiquarian essays. The first takes for text the line (Iliad, xviii. 401, πόρπας τε γναμπτάς θ' ἕλικας κάλυκάς τε καὶ ὅρμους) enumerating the ornaments which Hephaestus wrought in his sea-cave. Homer belongs to the beginning of the Iron Age, but shows a fresh recollection of the earlier time: and this line, occurring in a very primitive piece of mythology, gives us the names of several ornaments not elsewhere mentioned. Dr. Gerlach shows that these names answer very well to articles of the Bronze Age, which have been found in Northern Europe, especially in Schwerin and Strelitz, and that this coincidence is part of a general agreement between the remains of the same period in Greece, Italy, and Germany. The funeral customs, in particular, correspond in the most striking way, even down to the use of oak in the pyre. The prevailing character of the ornaments in question is the fondness for spiral lines. Thus the ἕλιξ is a ringlet-shaped elastic (γναμπάς) ornament, of which specimens are found both of bronze and of gold. The ὅρμος is a plaited collar. The κάλυξ is like the "cup" of a flower. Another design is the ἀνθέμιον, a combination of the figure of a flower, with a flat spiral like an Ionic volute. The second essay relates to the history of architecture, showing how the house or palace of the Heroic Age grew out of the primitive wooden hut, and again how it was transformed, without any essential change in construction, internal disposition, or ornament, into the Greek temple of historical times. For the interpretation of the Odyssey—in particular for the solution of the various difficulties surrounding the words μεσόδμη, ὀρσοθύρη, ὀπαῖα, &c.—this part of Dr. Gerlach's paper is of the greatest importance.]—Ueber die Amazonen in den Sagen der kleinasiatischen Städte, by O. Klügmann. [It appears, from the careful account given, that the Amazons are not closely connected with any of the great religious worships of Asia Minor. At Ephesus, for instance, they were only said to have fled as suppliants to the protection of the "great goddess" of that place. Many places are said to have been called from them; and they were especially associated, as in so many similar cases, with supposed funeral mounds, but they were nowhere venerated as the founders of cities. Most of the geographical names popularly derived from Amazons—Μύρινα, Μύρρα, Σμύρνα, &c.—show the desire of connecting local traditions with the well-known lines in which Homer (Il. ii. 811) speaks of the hill "which men call Batieia but immortals the tomb of far-bounding Myrine." H. Klügmann thinks that the invasions of northern tribes, such as the Kimmerians, with the masculine character of their women, left this impression on the imagination of the people of Asia Minor. The prominence of the Amazons in the adventures of Theseus, Hêraklês, &c., seems to point rather to a more purely mythical origin. The passage of Homer deserves further consideration. It means, as Lobeck showed, that the hill Batieia was in fact so called by men, but in reality was the tomb of Myrine. The myth, therefore, was only half localised. This gives the more value to H. Klügmann's proof of the dependence of other local Amazon legends on this passage. The Homeric text seems to have exercised a determining influence on the whole class of legends.]—G. Roeper: On Diogenes Laertius I. [Corrects sundry places in Bk. I.: the result, in the case of the proper names at least, is hardly more satisfactory than that of many similar attempts.]—A. O. F. Lorenz: Contributions to the Criticism and Exegesis of the Miles Gloriosus of Plautus. [An appendix to his well-known edition: gives some valuable particulars about the MSS. B and D, and in the discussion of isolated passages introduces a variety of matter of general interest, *e.g.* remarks on *unus* as an article, on the meaning of *facetus*, &c.]—H. F. Zeyss: Explanations of Passages in Latin Authors [Cic. de Orat., Sallust, Livy].—E. von Leutsch: On Verg. Ecl. x. 1, and x. 9-22.

Philol. Anz. vol. ii. part 2.—Homers Ilias, für den Schulgebrauch erklärt von J. La Roche. Th. I. II. Gesang i.-viii. Rev. by L. G. [Generally laudatory: finds fault chiefly in reference to antiquarian points.]—H. Lehmann: Zur Lehre vom Locativ bei Homer.—W. Jungclaussen: Ueber das Greisenalter bei Homer. [Suggested by Ameis on Od. xv. 246.]—Codicis Scholiorum Sophocl. Dobkowiciani coll. a L. Lange confectae specimen V.—Ueber Umarbeitung einiger Aristophanischen Komoedien, von Joseph Stanger. Rev. by E. von Leutsch. [Unsuccessful attempt of a young student.]—M. Haupt: De Helladiis Besantinos et Alexandrino. Rev. by G. Roefer.—W. Hahn: Zur Entstehungsgeschichte der Scholien des Donat zum Terenz. [Useful.]—Lehrbuch der griechischen Privatalterthümer, von K. F. Hermann. 2. Aufl. bearbeitet von Karl Bernhard Stark. Rev. by G. Wolff. [Makes some additional notes.]—Besitz und Erwerb im griechischen Alterthume, von B. Büchsenschütz. Rev. by H. Frohberger. [Important and comprehensive work.]—Wörterbuch zu Dr. Martin Luther's deutschen Schriften, von. Ph. Dietz. 1. Bd. (A–F) [Laudatory.]

Selected Articles.

On the Significance of the Stone of Mesha, by Dr. Himpel, in Merx. Archiv., vol. ii. part 1. [A good summary of linguistic and palæographical results.]

The Rise of Islam, by Michele Amari, in the Nuova Antologia, Dec. [Defends the comparative credibility of the oral tradition, and gently corrects Springer for his excessive scepticism. An interesting account is given of the vicissitudes of the story of Mohammed in Europe, and an acute criticism of the lives of the prophet by Sprenger, Muir, and Syed Ahmed, the first of whom is biassed by his partiality for medical studies, the second by "too much Christian logic," the third by his uncritical Oriental education. In conclusion, Sig. Amari announces his intention, alas! unexecuted, to publish a recast Italian version of his essay on the chronology of the Koran, which was crowned by the French Academy.]

Studies in Rabbinic Etymology, by J. Perles, conclusion, in Grätz's Monatsschrift, Dec.

Benfey on the Sanskrit *r*-suffixes, noticed in Lit. Centralblatt, Dec. 10, and Radloff's Specimens of the Kirgis dialects, in the same, Dec. 17.

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Budenz, Dr. Jos. Ugrische Sprachstudien. 2. Heft. Determination des Nomens durch affigirten Artikel im Mordwinischen und in einigen andern Ugrischen Sprachen. Pest: Aigner.

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Salusti Crispi Gai. Catilina Jugurtha orationes et epistolae excerptae de historiis. Revised text, with introductions, &c. By Fr. Dor. Gerlach. Stuttgart: Hoffmann.

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ERRATA IN No. 15.

Page 60 (b), 15 lines from bottom, omit "Where is the evidence of this?"
,, 62 (a), line 27 from top, for "prayer" read "fugue."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, February 15th, and advertisements should be sent in by February 9th.

NOTICE.

THE ACADEMY *will in future appear regularly on the 1st and 15th of every month.*
The space devoted to THEOLOGY, SCIENCE *and* PHILOSOPHY, HISTORY, *and the various branches of* PHILOLOGY, *in each month will be the same as before: whilst the department of* GENERAL LITERATURE *has been increased to more than twice its original size, and is in course of complete re-organization.*

General Literature.

Madeline, with other Poems and Parables. By Thomas Gordon Hake, M.D. London: Chapman and Hall, 1871.

ABOVE all ideal personalities with which the poet must learn to identify himself, there is one supremely real which is the most imperative of all; namely, that of his reader. And the practical watchfulness needed for such assimilation is as much a gift and instinct as is the creative grasp of alien character. It is a spiritual contact hardly conscious yet ever renewed, and which must be a part of the very act of production. Among the greatest English singers of the past, perhaps four only have possessed this assimilative power in pure perfection. These are Chaucer, Shakespeare, Byron, and Burns; and to their names the world may probably add in the future that of William Morris.

We have no thought of saying that not to belong to this circle, widest in range and narrowest in numbers, is to be but half a poet. It is with the poetic glory as with the planetary ones; this too has satellites called into being by the law of its own creation. Not every soul specially attuned to song is itself a singer; but the productive and the receptive poetic mind are members of one constellation; and it may be safely asserted that to take rank in the exceptional order of those born with perfect though passive song-perception is to be even further removed from the "general reader" on the one hand than from the producer of poetry on the other.

But some degree, entire or restricted, of relation to the outer audience, must be the test of every poet's vocation, and has to be considered first of all in criticising his work. The book under notice has perhaps as limited a reach of appeal as can well be imagined, and the writer's faculty of *rapport* seems on the whole imperfect; yet there are qualities in what he has written which no true poetic reader can regard with indifference.

The best and most sympathetic part of Dr. Hake's volume is decidedly its central division — the one headed "Parables." Had one poem of this section, quaintly called "Old Souls," come first in the book, the favourable impression on opening it must have been immediate and conclusive. The poem is a symbolic expression of the humility of Christ in his personal ministering to man's needs and renewal of fallen humanity; and the subject is carried out with great completeness as regards the contrast between Christ himself and his earthly representatives, his relation to all classes of men, and the deliberate simplicity of his beneficent labour in the soul. The form of expression adopted in this poem is of the highest order of homely pathos, to which no common word comes amiss, and yet in which the sense of reverence and appropriateness is everywhere perfect. The piece is so high in theme, and so utterly good of its class, that we shall not attempt to extract from it, as its unity of purpose and execution throughout is the leading quality without which no idea of its merit can be conveyed.

Two others among the four "Parables"—"The Lily of the Valley" and "The Deadly Nightshade"—though somewhat less perfect successes than this, rival it in essential value. They are contrasted pictures; the first, of poverty surrounded by natural influences and the compensations of universal endowment; the other, of poverty surrounded in the life of cities by social rejection only, and endlessly instigated to snatch some share of good by the reiterated scoff, "This is not for thee." In the first poem a young forest-bred girl, in the second a boy reared in the fetid life of courts and alleys, is the medium through which the lesson is developed. Here, again, we are at some loss to express the poems by extract; but with this proviso we may take from the "Lily of the Valley" a few sweet stanzas of simple description:—

"The wood is what it was of old,
  A timber-farm where wild flowers grow:
There woodman's axe is never cold,
  And lays the oaks and beeches low:
But though the hand of man deface,
The lily ever grows in grace.

"Of their sweet loving natures proud,
  The stock-doves sojourn in the tree:
With breasts of feathered sky and cloud,
  And notes of soft though tuneless glee,
Hid in the leaves they take a spring,
And crush the stillness with their wing.

"The wood to her was the old wood,
  The same as in her father's time;
Nor with their sooths and sayings good
  The dead told of its youth or prime.
The hollow trunks were hollow then,
And honoured like the bones of men."

This simple story or parable has great beauties, especially at the point where the first acquaintance with death among those she loved causes the child to wander forth bewildered, and at last, weary and asleep in the wood, to find the images of terror and decay hitherto overlooked in nature assume prominence for the first time in her dreams. This is very subtle and lovely; but it must be added that even this poem, which is among the least difficult in the book, needs some re-reading before it is mastered, and leaves an impression—if not of artificiality, to which the author's mind is evidently superior—yet of a singular native tendency to embody all conceptions through a remote and reticent medium. This, however, is much less apparent in the "Deadly Nightshade," which approaches "Old Souls" in clearness and mastery, though not essentially finer than its companion poem, the "Lily." The description here of the poor beggar-boy's drunken mother is in a vein of true realistic tragedy; and the dire directness of treatment is carried on throughout:—

"Then did he long for once to taste
  The reeking viands, as their smell
From cellar-gratings ran to waste
  In gusts that sicken and repel.
Like Beauty with a rose regaled,
The grateful vapours he inhaled.

"So oft a-hungered has he stood
  And yarn of fasting fancy spun,
As wistfully he watched the food
  With one foot out away to run,
Lest questioned be his only right
To revel in the goodly sight.

"Lest justice should detect within
A blot no human eye could see,
He dragged his rags about his skin
To hide from view his pedigree:
He deemed himself a thief by law,
Who stole ere yet the light he saw.

"His theft, the infancy of crime,
Was but a sombre glance to steal,
While outside shops he spent his time
In vain imaginings to deal,
With looks of awe to speculate
On all things good, while others ate.

"No better school his eyes to guide,
He lingers by some savoury mass,
And watches mouths that open wide
And sees them eating through the glass:
Oft his own lips he opes and shuts,—
With sympathy his fancy gluts.

"Yet he begs not, but in a trance
Admires the scene where numbers throng;
And if on him descends a glance,
He is abashed and slinks along;
Nor cares he more, the spell once broke,
Scenes of false plenty to invoke."

The fourth "Parable," called "Immortality," deals with the course of an elevated soul in which thwarted ambition is tempered by resignation, and which looks into the future of eternity for free scope and for a reversed relation between itself and antagonistic natures. This, however, is somewhat obscurely rendered, and must be pronounced inferior to the other three. Of these three, we may say that, if they are read first in the book, the fit reader cannot but be deeply moved by their genuine human and spiritual sympathy, and by their many beauties of expression; and will be prepared to look thenceforward past his author's difficulties to the spirit which shines through them, with a feeling of enthusiastic confidence.

We may turn next to the last section of the volume—the series of sixty-five short poems entitled in the aggregate "The World's Epitaph." Many of these reveal the same tender thought for human suffering which is the great charm of the "Parables," and it is sometimes expressed with equal force and beauty. Such pre-eminently are those "On the Outcast" and "On the Saint;" the last conveying a picture which has something startlingly imaginative, of a member of the communion of saints presenting before the supreme Tribunal, as an appeal for pity, some poignant personation of the anguish endured on earth. However, here again the order of the poems seems unfortunate, the series opening with some of the weakest. Many of the "epitaphs" have appended to them an "epode" which appears to be, generally or always, the rejoinder of the world to the poet's reflection; but perhaps these do not often add much to the force of the thing said. Such a scheme as this series presents is obviously not to be fairly discussed in a brief notice like the present; but we may note as interesting examples, in various degrees, of its plan, the epitaphs "On the Sanctuary," "On Time," "On the Soul," "On the Valley of the Shadow," "On Life," "On the Seasons of Life," "On the Widow," "On Early Death," "On the Deserted," "On Dissipated Youth," "On the Statesman," "On Old Age," "On Penitence," and "On the Struggle for Immortality." As a specimen of this section of the book we extract the following brief poem "On the Soul:"—

"Free as the soul, the spire ascends;
Heaven lets it in her presence sit;
Yet ever back to earth it tends,—
The tranquil waters echo it.
So falls the future to the past;
So the high soul to earth is cast.

"But though the soul thus nobly fails,
Not long it borders on despair;
It still the fallen glory hails,
Though lost its conquests in the air.
While truth is yet above, its good
Is measured in the spirits' flood.

"Though not at first, its holy light
Is figured in that mirror's face,
It scarce returns a form less bright
Than fills above a higher place.
The one was loved though little known,
The other is the spirit's own."

This little piece, in spite of some uncertainty in the arrangement of its last stanza, has the dignity and ordered compass of a mind naturally empowered to deal with high things; and this is often equally evident throughout the series. Still we have to regret that even complete obscurity is a not uncommon blemish, while imperfect expression seems too often to be attributable to a neglect of means; and this despite the fact that a sense of style is certainly one of the first impressions derived from Dr. Hake's writings. But we fear that a too great and probably organic abstraction of mind interferes continually with the projection of his thoughts; and we are frequently surprised to meet, amid the excellence and fluent melody of his rhythm, with some sudden deviation from the structure of the metre employed, which can be attributable only to carelessness and want of watchful revision. It needs such practical and patent proofs as this to convince one of neglect where the instinct of structure exists so unmistakably; and it is then that we begin to perceive the cause of much that is imperfect in the author's intellectual self-expression. This is no doubt the absence of that self-examination and self-confronting with the reader which are in an absolutely unwearied degree necessary in art; and the question only remains whether the poet's nature will or will not for the future admit of his applying at all times a rigorous remedy to this mental shortcoming.

The same difficulty meets us in excess when we come to the poem which stands first on Dr. Hake's title-page—"Madeline." With this our remaining space is far from permitting us to deal at such length as could alone give any true idea of its involved and somewhat bewildering elements. Its unexplained form is a puzzle at the outset. It is delivered in a kind of alternating recitative between "Valclusa," the name of the personified district in which the action is laid, and a "Chorus of Nymphs." The argument may be summed up somewhat to this effect. Hermes, a beneficent magician and poet, has been enamoured of Daphne, who has since died and become to him a ministering spirit and his coadjutress in the hallowed exercise of his art. He has been made aware of the seduction of a young girl, Madeline, by the lord of the land, and has in vain laboured to prevent it, but now calls Daphne to his aid in consoling the outcast. This angelic spirit conveys her to the magician's home, where a sort of heavenly encampment is formed, in the midst of which Madeline lies in magic slumbers watched by her protectress. Glad and sad visions succeed each other in her sleep, varied but not broken by conference with Daphne, who urges her to forgiveness of her betrayer. But she has been chosen by a resistless power as the avenger of her own wrong; and as this ever-recurring phantom of vengeance gains gradual possession of her whole being, the angelic comforter, who has taken on herself some expiatory communion in Madeline's agony, is so wrung by the human anguish that she undergoes the last pain of humanity in a simulated death. Madeline then fulfils her destiny, and makes her way, still in a trance of sleep, by stormy mountain passes to the castle of him who had wrought her ruin; passes through his guards, finds him among his friends, and slays him. She then returns to the magic encampment, and lying down by the now unconscious Daphne, is in her turn

released by death. The poem closes with the joint apotheosis of the consoler and the consoled, together with a child, the unborn fruit of Madeline's wrong.

This conception, singular enough, but neither devoid of sublimity nor of real relation to human passion and pity, is carried out with great structural labour, and forms no doubt the portion of the volume on which Dr. Hake has bestowed his most conscientious care. But our rough argument can give no idea of the baffling involutions of its treatment and diction, rendering it, we fear, quite inaccessible to most readers. The scheme of this strange poem is as literal and deliberate in a certain sense as though the story were the simplest in the world; and so far it might be supposed to fulfil one of the truest laws of the supernatural in art—that of homely externals developing by silent contrast the inner soul of the subject. But here, in fact, the outer world does not once affect us in tangible form. The effect produced is operatic or even ballet-like as regards mechanical environment and course of action. This is still capable of defence on very peculiar ideal grounds; but we fear the reader will find the sequence of the whole work much more difficult to pursue than our summary may promise.

The structure of the verse is even exceptionally grand and well combined; but the use of language, though often extremely happy, is also too frequently vague to excess; and the employment of one elaborate lyrical metre throughout a long dramatic action, only varied by occasional passages in the heroic couplet, conveys a certain sense of oppression, in spite of the often felicitous workmanship. Moreover a rigid exactness in the rhymes—without the variation of assonance so valuable or even invaluable in poetry—is apt here to be preserved at the expense of meaning and spontaneity. Nevertheless, when all is said, there can be no doubt that the same reader who at one moment lays down a poem like this in hopeless bewilderment might at another, when his mind is lighter and clearer, and he is at a happier juncture of *rapport* with its author, take it up to much more luminous and pleasurable results, and find it really impressive. One point which should not be overlooked in reading it is, that there is an evident intention on Dr. Hake's part to make hysterical and even mesmeric phenomena in some degree the groundwork of his conception. The fitness of these for poetry, particularly when thus minutely dealt with, may indeed afford matter for argument, but the intention must not be lost sight of. Lastly, to deny to "Madeline" a decided element of ideal beauty, however unusually presented, would be to demonstrate entire unfitness for judgment on the work.

We have left ourselves no room to extract from "Madeline" in any representative way; but the following two stanzas (the second of them extremely fine) may serve to give an idea of the metre in which it is written, and afford some glimpse of its uniquely fantastic elaboration. The passage is from the very heart of the poem; where Madeline is overshadowed in sleep by the vision of her seducer's castle, rousing half-formed horror and resolve; till all things, even to the drapery which clothes her body, seem to take part in the direful overmastering hour.

"The robe that round her flows
Is stirred like drifted snows;
Its restless waves her marble figure drape
And all its charms express,
In ever-changing shape,
To zephyrs that caress
Her limbs, and lay them bare,
And all their grace and loveliness declare.
Nor modesty itself could chide
The soft enchanters as they past her breathe
And beauty wreathe
In rippling forms that ever onward glide.

"Breezes from yonder tower,
Loosed by the avenging power,
Her senses hurry and a dread impart.
In terror she beholds
Her fluttering raiment start
In ribbed and bristled folds.
Its texture close and fine
With broidery sweeps the bosom's heaving line,
Then trickles down as from a wound,
Curdling across the heart as past it steals,
Where it congeals
In horrid clots her quivering waist around."

We have purposely avoided hitherto any detailed allusion to what appear to us grave verbal defects of style in these poems; nor shall we cite such instances at all, as things of this kind, detached from their context, produce often an exaggeratedly objectionable impression. Suffice it to say that, for a writer who displays an undoubted command over true dignity of language, Dr. Hake permits himself at times the most extraordinarily conventional (or once conventional) use of Della-Cruscan phrases, that could be found in any poet since the wonderful days when Hayley wrote the "Triumphs of Temper." And this leads us to a few final words on his position as a living writer.

It appears to us then that Dr. Hake is, in relation to his own time, as original a poet as one can well conceive possible. He is uninfluenced by any styles or mannerisms of the day to so absolute a degree as to tempt one to believe that the latest English singer he may have even heard of is Wordsworth; while in some respects his ideas and points of view are newer than the newest in vogue; and the external affinity frequently traceable to elder poets only throws this essential independence into startling and at times almost whimsical relief. His style, at its most characteristic pitch, is a combination of extreme homeliness, as of Quarles or Bunyan, with a formality and even occasional courtliness of diction which recall Pope himself in his most artificial flights; while one is frequently reminded of Gray by sustained vigour of declamation. This is leaving out of the question the direct reference to classical models which is perhaps in reality the chief source of what this poet has in common with the 18th century writers. The resemblance sometimes apparent to Wordsworth may be more on the surface than the influences named above; while one might often suppose that the spiritual tenderness of Blake had found in our author a worthy disciple, did not one think it most probable that Blake lay out of his path of study. With all his peculiarities, and all the obstacles which really stand between him and the reading public, he will not fail to be welcomed by certain readers for his manly human heart, and genuine if not fully subjugated powers of hand. D. G. Rossetti.

The Mutineers of the Bounty, and their Descendants in Pitcairn and Norfolk Islands. By Lady Belcher. With Illustrations. London: John Murray, 1870.

The appearance of a new history of the mutineers of the *Bounty* is justified by the fact that Lady Belcher has obtained much additional information from original sources, which to a great extent supplies the deficiencies of preceding narratives as to the causes which led to the mutiny, and also brings down the history of the Pitcairn Islanders to the middle of the year 1869. The most valuable portion of the new matter consists of the journal of one of the petty-officers, James Morrison, who, though not a mutineer, was kept on board the ship, and was subsequently taken home prisoner in the *Pandora*. This journal bears internal evidence of being a truthful narrative, and of being written by a person by no means prejudiced against the captain; yet it reveals such an amount of spite and petty tyranny on the part of

Bligh against the officers and crew, but more especially against the chief officer, Christian, a gentleman by birth and education, that not only is the mutiny itself fully accounted for, but it is also, from an unofficial point of view, almost justified. The account of the sufferings of the prisoners, who after waiting two years at Tahiti, voluntarily delivered themselves up to the captain of the *Pandora*, is now for the first time fully given from the same source; and when we remember that these prisoners were all untried, and most of them quite innocent men, the reckless barbarity with which they were treated is almost incredible. That it appears so to us now, although it passed almost unnoticed at the time, may be taken as a gratifying proof of how much, within the memory of persons now living, society has advanced in that true civilisation which is indicated by a horror of all injustice, tyranny, and needless cruelty.

But it is to the subsequent career of the mutineers and their descendants—the well-known Pitcairn Islanders—that we are most attracted, presenting as it does features of the highest social and political interest. It is so rarely that social problems can be subjected to anything like a critical experiment, owing to the impossibility of eliminating the disturbing influence of adjacent populations, that we should have thought our rulers would have carefully secured this one from interruption. In Pitcairn Island we had an instance of people almost completely isolated from the rest of the world, who, owing to such exceptional circumstances as can hardly be expected to occur a second time, were morally and physically healthy, with most of the capacities and virtues, and but few of the vices of civilisation; and who were both able and willing to keep themselves free from intermixture or social contamination. Many curious problems were here in process of solution. The little community consisted almost entirely of half-breeds; would any signs of sterility appear, or could they permanently continue the race? They necessarily soon came to marry almost wholly with blood-relations; would this cause disease or deterioration? In the mixed race would the characteristics of the white or of the brown progenitors ultimately prevail, and which special features of each would maintain themselves longest? As population increased, would zymotic diseases arise? Was infant mortality above or below the average of civilised communities? Would the services of a regular medical man increase or diminish the mortality? The political and social problems were of equal interest. The islanders began with a simple republican form of government; would they maintain this? They began dividing the land equally among each man's descendants of both sexes, a certain portion falling due on their marriage; how long would this practice continue? When population so increased as to render the means of subsistence difficult, would they put a stop to early marriages, and with what result? Would they establish a poor law or trust to private benevolence? In an intelligent, industrious, and healthy population, what numbers could be supported by each acre of cultivable ground? Would the prohibition of alcoholic drinks in the island be permanently maintained? These are a few of the questions we might have had answered had Pitcairn Island been let alone, or had the people been removed to some larger island equally remote from civilisation and equally difficult of access. Unfortunately, however, before there was any pressing necessity for removal at all, and strongly against the inclinations of the majority of the inhabitants, they were persuaded to allow themselves to be removed in a body to Norfolk Island, which they understood was to be wholly given up to them in order that they might have ample room for their rapidly increasing numbers. Yet hardly have they settled there when a thousand acres of land is taken to found a missionary college for Melanesian converts, notwithstanding the protests of the Pitcairners. They soon find that the island is not their own as Pitcairn was. They are now under the New South Wales government, and though they have been as yet left under their own freely elected magistrate, there is nothing to prevent a governor with different views from dictating to them and putting strange officers over them. This unexpected change from their former freedom disgusted several families, who, as soon as they could obtain the means, returned to their old home. At Norfolk Island they are far less isolated than before. Trading vessels and whalers often visit them. Strangers settle among them or marry and carry away their girls. They have no longer the accustomed resources of bread-fruit, cocoa-nuts, and bananas for food, or *tappa* for clothing, and many have turned whalers or get their living by trade. The rural self-supporting simplicity of their former state is gone; yet by the latest accounts they still retain that kindliness of disposition and purity of life, which so charmed every visitor to Pitcairn Island.

Their numbers are now somewhat more than 300 in Norfolk Island; and allowing for those who have left, we find that since 1800 their little population has about doubled itself every twenty years. Though they had only an amateur doctor in their schoolmaster, Mr. Nobbs, the mortality among them was very slight. In the ten years from 1841 to 1850, for example, there were 62 births and only 13 deaths, at which time the population was 156. The numbers of the sexes were always nearly equal, sometimes the male and sometimes the female element preponderating; and when they had reached a population of 300, there were exactly 150 of each sex. These figures would indicate that both the death and birth rates were low, the former extraordinarily so; and as all marry very young, and almost every form of vice and immorality is unknown, they should be one of the happiest, as they are one of the most interesting, of English-speaking communities.

In the Pitcairn code of laws (as given in the Rev. T. B. Murray's volume on "Pitcairn") we find several excellent regulations which might advantageously be copied by other communities. The laws were to be made known by being read in public; all parents were obliged to send their children to school, having previously taught them the alphabet; no intoxicating liquors were to be made or introduced, except for medicine; no law was made in anticipation of crimes; all punishments were by fines, unless otherwise determined by the jury; and women had votes for the election of the magistrate.

The families who returned to Pitcairn Island were visited in 1860 by the *Calypso*, and in conversation with the officers they explained that they had left Norfolk Island because it was not their own. They said that no one could be kinder than the Governor of New South Wales, but that a schoolmaster and a miller had been placed among them who were not of their own people, and some sappers and miners had also been quartered on the island; that their own magistrate was now responsible to government, and altogether they found it so different from the life of freedom and irresponsibility to all but themselves and their elected magistrates they had led at Pitcairn, that they had a longing to be back to the island where nobody could interfere with them, however good and kind the intention. They also loved the wild, rocky, luxuriant islet, with its cocoa-nuts and bread-fruits; with every foot of whose soil they were familiar, and in which they had all been born; and they compared it disadvantageously with the much colder, tamer, and less productive Norfolk Island, with no trees but gloomy pines, and nothing eatable but what was cultivated.

We have now, therefore, two distinct colonies of Pitcairn Islanders; and we trust, that the officious though well-meaning persons who so rudely broke up the happy and united community in its original home, will for the future leave these interesting people to manage their own affairs (for which they are quite competent), and to work out after their own fashion the many problems in physical, social, and political science which increasing population will soon force upon them. ALFRED R. WALLACE.

THE SEASONS.

SPRING.

Spring am I, too soft of heart
Much to speak ere I depart;
Ask the summer-tide to prove
The abundance of my love.

SUMMER.

Summer looked for long am I,
Much shall change, or ere I die;
Prithee, take it not amiss,
Though I weary thee with bliss.

AUTUMN.

Laden Autumn, here I stand,
Worn of heart, and weak of hand;
Say the word that sets me free;
Nought but rest seems good to me.

WINTER.

Ah! shall Winter mend your case?
Set your teeth the wind to face;
Beat the snow, tread down the frost!
All is gained when all is lost.

WILLIAM MORRIS.

LITERARY NOTES.

The country of the "*Manimes*," from which Dr. Livingstone had not returned at the date of Sheik Said's letter to Dr. Kirk, recently forwarded to Sir Roderick Murchison, appears to be the "*Manyema*" country round Lake Ulenge, west of Tanganyika, which Dr. Livingstone announced his intention of visiting in the latest letter received from him in Europe, dated 30th May, 1869.

Two posthumous tales by Miss Austen will shortly be published. *Lady Susan* is a short one-volume story, and is regarded by the family as one of the earliest, if not the earliest, of her works. *The Watsons*, on the other hand, which will accompany *Lady Susan*, is written in her happiest manner. It is unfortunately unfinished.

The *Athenæum* of January 21 says:—

"Mr. Swinburne's new poem is ready for the press. It is said he has written a novel also."

This is incorrect. The two poems on which Mr. Swinburne is engaged, the epic "Tristan and Iseult" and the "Chastelard Trilogy," are neither of them nearly finished. As to the novel: he wrote one about seven years ago—indeed he has from time to time written several, both in English and French, though there is no reason to suppose that he is about to publish any of them. He is also engaged upon another story at present: but it is not "written."

M. Ivan Turguenief, who is still in London, has just published a new tale in the current number of the *Vyestnik Evropui*. It is a masterly study of a type of character not uncommon in Russia. Tyeglef is a military man, who, although possessing few or none of the qualifications for success in life, is morbidly bent upon applause, or at least notoriety. He is a fatalist, and he eventually takes refuge from the failure of his career in suicide. It has been a fashion with novelists in Russia to cast a halo over heroes of this order, or at least over their final catastrophe. M. Turguenief, on the contrary, has exhibited Tyeglef, and his exit from the world, in the most unromantic light possible. The name of the piece, *Stuk Stuk Stuk* (Rat tat-tat), is suggested by an incident in the story. A friend of Tyeglef's happens to tap three times on a piece of wood one night, and the fatalist, who is sleeping in the same room with him, imagines that it is a case of spirit-rapping. The friend, by way of a joke, keeps the sound going from time to time, and Tyeglef looks upon himself as the recipient of a most important message from the invisible world. He becomes very grave, and his gravity is intensified by a mysterious summons he soon after receives, when he hears his name called by an unearthly voice faintly heard through a dense fog, which seems to blur all sights and sounds. This fog, by the way, the Russian *tumàn*, is most poetically decribed, and throughout the whole story the reader is affected by a kind of sense of uncertainty and insecurity, as if he were feeling his way about in a thick mist, through which all things seemed to be what they were not. At the end the mist lifts, and everything appears in harsh distinctness of outline. But before then Tyeglef has put an end, by his own hand, to his most unsatisfactory life—leaving behind him a name which, thanks to Mr. Turguenief, has served to point a very salutary moral, and to adorn a most artistically executed tale.

In the last number of the *Edinburgh Review* is an article on Mr. Morris's poems, the first part of which is confined to illustrations of the sad "Carpe diem" keynote sounding all through these beautiful stories. In the second part the reviewer, contrary to his own promise, ventures into the region of criticism. The grand passions of the old heroes and deities, for which he seems to hold the poet responsible, are inexpressibly shocking to his feelings. In the pages which treat of the "Lovers of Gudrun," occurs a passage which is too characteristic of Philistine review-writing not to be quoted. When Kjartan cannot forget the lost Gudrun, the Scotch reviewer breaks out:—

"This is intolerable. What we would have is the plain duty of a Christian man, which in such a case would be, either that he should remain as he was, or that, as he could not marry the woman whom he had first wooed, he should betake himself to her whom he preferred to love, with a strange love great and sore."

In continuing his review of the history of witchcraft and magic in Spain, Señor de los Rios, in the last number of the *Revista de España*, shows how much the conquests of James of Aragon and St. Ferdinand of Castille, by placing a Mohammedan population in habitual and immediate contact with the Christians of northern Spain, tended to spread the belief in fatalism and the practices which accompany it. Several enlightened churchmen seem to have striven to stem the torrent of superstition. Among them a certain Friar Pascual, Bishop of Jaen, became best known as a denouncer of fortune-telling and charm-curing, and as a firm upholder of the doctrine of free-will. But for a long time the popular beliefs were too strong even for the Church of Rome to eradicate them; and the cavallaresque literature, afterwards ridiculed by Cervantes, appears to have come into Spain with the hosts of the Black Prince and Du Guesclin, and to have given fresh vigour to the old Moorish superstitions. The enchantments of Merlin, Freston, and Bracamonte were added to the fortune-telling and charm-curing of the Spanish Jews and Moors. The laws of the *Partidas* tolerated those who practised magic arts *with good intentions*, and astrologers were patronised and encouraged at the courts of John II. and Henry IV. But the great Queen Isabella set her face firmly against the toleration of all forms of the black art, and the measure of success which attended her efforts to extirpate them will form the subject of the next and last of these interesting articles on witchcraft in Spain.

The writer in the *Revista de España* who zealously defends the claims of Columbus against all comers, as the first discoverer of the New World, fails to see that, even if the Zeni or the Normans did not reach some portion of the Labrador coast a century or two earlier, these facts cannot detract one jot from the glory of the great navigator. This glory consists in the originality of his ideas, and in the single-minded heroism with

which he persevered until success was achieved. The bells of Gordar, now in the Copenhagen Museum, afford absolute proof that the Normans actually were in Greenland, and the story of their discovery of Vinland scarcely admits of doubt. But even if a Runic inscription were found on Watling Island itself, the discovery would not injure the fame of Columbus in the slightest degree.

Señor Barrantes has done very good service to the literature of Spanish discovery, in rescuing from oblivion the benificent life of Father Palencia, the apostle of the Philippines. In the last number of the *Revista de España*, the interesting notices of Palencia's labours are concluded, with some account of his literary work; including his Tagala grammar and dictionary, and his description of the habits and character of the Philippine Indians. It is remarkable that, three hundred years ago, Palencia should have introduced the system of mutual instruction among these people; but he looked upon Indians as children, and his rule closely resembled that of the Jesuits in Paraguay. In Palencia's lifetime there was no printing-press in the Philippines; but Antonio de Morga made free use of the good friar's manuscripts.

The Germans have just been celebrating the eightieth birthday of Grillparzer, "the Austrian Schiller." Probably few English readers have ever heard of this worthy old man: and yet the author of *Sappho* and *King Ottokar* is reckoned by his Austrian admirers, along with Goethe and Schiller, as one of the only three "complete poets" ("ganze Dichter") which the Fatherland has produced. *Sappho*, the best known of Grillparzer's tragedies, was performed at the Vienna Burgtheater, preceded by a prologue, and followed by the coronation of a colossal bust of the poet. The Emperor Francis Joseph signalised the occasion by decorating the poet, and presenting him with a salary of 3000 gulden. A further sum of 20,000 gulden was also collected for him, to found a prize for rising artists, and other objects. Poor old Grillparzer, amid all his honours, is said to have whispered to a friend, "Innocence has much to suffer. I cannot surely help being eighty years old." He has at present two more dramas completed, *Libussa* and *Ein Bruderzwist in Habsburg*, but does not wish them to be published till after his death.

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Nagler's Künstler-Lexikon, 2te gänzl. neubearb. Aufl. v. Julius Meyer. 1. Bd. 6. Heft. Leipzig: Engelmann.

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Art and Archæology.

EXHIBITION OF WORKS OF THE OLD MASTERS, BURLINGTON HOUSE.

II.

THE VENETIAN SCHOOL.

The visitor for the first time passing through these rooms suffers an overpowering feeling of admiration to take possession of him. Every picture appears to be fine and masterly. The second time he selects and finds selection agreeable, and at the third visit he goes direct to the great works, and wishes the rest away. Even painters who stand firmly on their own original qualities become offensive when we can only admire their technical abilities without sympathy for their views or intentions as artists. Nay, a virulent hatred arises, and a tendency to break the third command of the decalogue. There are no less than nineteen Murillos in this collection. From these canvasses the *canaille* of Madrid grin impudently at you; or "idealess girls" look upwards with stupid black eyes and long light-blue drapery, partially supported by an alarming number of real naked children, and backed by streams of yellow, an arrangement supposed to represent without impropriety the "Immaculate Conception;" or half a dozen frames (410-419) show you, with a vulgar and obvious force, the story of the Prodigal Son. Greuze, too, is represented by seven, in which girls of tender years, children almost, show their conscious charms, or the "Pedler" (393) struggles away from the dreadful old woman and the lewd young one, who would buy his wares without coin. Such is really the subject of this meagre picture, though now called simply "The Pedler," and originally "Le Geste napolitain." These, alas! are the things that brought the fabulous sums last year at the Demidoff sale—"Le Geste napolitain" bringing 2120, the "Young Girl with a Dog" (398) 3560 guineas. We should have liked to have seen the assembly of bidders that day at the Hôtel Drouot; no doubt it had a fine resemblance to Gerome's red-mantled circle in his "Phryne before the Court of Areopagus."

Let us turn to the extreme opposite of these, to the manly and patrician art of Venice, and the men whose names are in the Libro Doro of that school of colour. The first of these in the order of the rooms are two portraits by Moroni. The first, called "A Spanish Warrior" (10), has the date and the painter's name, "Jo. Bap. Moronus p. 1540," inscribed upon it, a rare thing after the beginning of the 1500. The complete absence of making up a picture here is refreshing, and also in the other, called "Titian's Schoolmaster" (14), where the hands are splendidly drawn, and express the character and the age of the man almost as much as his face.

Passing into the second room, we immediately come upon the Gio. Bellini, the "Virgin and Child, with Four Saints and the Donator" (92), a picture perfectly preserved, the only touching on it being a little opaque colour visibly rubbed into the high lights. The two early pictures on either side (91-93), SS. Mark and Sebastian, by Battista Cima, are in the same extraordinary state of preservation. In the Bellini, the Virgin places her hand encouragingly on the shoulder of the donor, who appears in the usual position from below, as if he knelt on the steps of the Virgin's seat, and the Infant blesses him with a sweet childish, yet curiously conscious, face. The S. John Baptist is a wild man of the mildest gentle nature, and the S. George, on the other side, is most probably a portrait, so very young he is. The sky behind these half-figures is quite pure; it is very blue, but of a peculiar character, graduated into the yellowish light below without any intermediate green; against this blue the white linen over the Virgin's head, enclosing, as it does, the warm flesh-colour that preceded Giorgione, and was only intensified by him and by Titian, is very bright and lovely. Other Venetian works there are in this neighbourhood: the Titian (63), "Woman taken in Adultery," in which we are led to believe only by the beauty of the woman's head, and the character of some of the male faces, and the Portrait by the same (84). This is a young Paduan doctor or student, not a very wise individual, but having a character of head seemingly much to Titian's liking, as the same forehead and mouth appears in many of his pictures. Here is also the Giorgione (94), "A Young Lady Professor of Bologna" (!), of which we may speak along with his others.

Entering the third room, we find (120) "Portrait of a Senator," by Bassano, a convenient name, a Senator or a Warrior being always satisfactory, or, if a Dutchman, a Burgomaster. This Senator is especially interesting to us, a noble example of the third generation, as we may say, of the greater Venetian painters. There is a lurid, and in some sort unintelligent, strength and violence in the colour and chiaroscuro of Bassano's compositions which does not here injure his excellent result. On the other side of the room is another of the same period (121), the Esther of Tintorette, a large picture, which it was surely unnecessary to bring in from Hampton Court; might indeed have been safely left for the delight of holiday makers.

The fainting Esther, and the group of women supporting her, has the superb and inexhaustible character of Tintorette; but the flesh, and particularly the shadows, which are as dark on the bosom of a woman as on red marble, give a diseased and hot sense, which prevents the gorgeous colour from giving any pleasure, without one knowing why. The Tintorette in the previous room (95), a small copy by the master, not the sketch, of the wonderful and overpowering picture in the Academia of Venice, has the same infernal atmosphere, but happily, as in many of his greater works, the subject warrants the unearthly effect. However this may be, we must recognise this lurid light and shadow as the passage into the region of "black masters," which resulted in the wholly artificial scheme of picture-making from which modern art has but lately emerged. Intellectual gladiators like Tintorette, or even Bassano in his baser way, are curses to their contemporaries and successors.

To return to the earlier men; earlier, we may say, because twenty years or thirty made a wide difference at that time in the development of the technique of art, as well as in its spirit; how candid and clear, and how lovely, is the colour and light in the Bonifazio (357), the sober brightness in the Virgin's eyes, and on the face of the lovely and innocent S. Catherine stooping forward. He has been called a pupil of Palma, but he was really a disciple of Titian, following him, a biographer, Boschini, affirms, "as the shadow follows the body," and this all his female faces show. Even in Venice, where Bonifazio is seen to greatest advantage, there are few finer examples than this. And not far from it hangs a Titian (365), nearly as fine relatively. It is called "Susanna," but is really a lovely and innocent woman, whose limbs are lucid and luminous as gold and pearl, who sees no harm in being aided in her toilet by two "senators," as they might be called, were they only portraits. This picture reminds one of the Giorgione in the Louvre, where a nymph in nakedness sits on the grass by a fountain, with two happy musicians, and a shepherd in the distance drives his sheep without thought of anything strange: a golden age, or at least a blessed age; and here we arrive at another Giorgione, "The Golden Age" truly, delightful beyond expression (334), another of Lord Dudley's pictures. "The Golden Age:" in a land of twilight, never changing—"a land in which it seemeth always afternoon"—warm as the south should be, but with a fresh coolness in the grey sky, a brown shepherd lies on the dark green, and a little less brown shepherdess, leaning on his naked limbs without fault, looks frankly at his dreaming but strong face. She holds the double flute in her hands, and he also has a flute; the music has ceased thousands of years ago, and here it still sounds from Giorgione's canvass. At the other side of the picture is a bunch of naked children, "Cupids immortal;" two have gone to sleep together, but with the third the day is not yet done—he climbs on the bodies of the others without hurting or waking them. But even Giorgione could not stop here without his *moral* or pretence of one. In the middle distance is a hermit or a philosopher—let us suppose him both—with a skull in his hand, which he intently examines, an incident suggesting the Hamlet morality, "to this complexion we must come," sadly spoiling the poetry of the picture. This morality we find in other pictures here (with the Germans of this date it was universal), and especially in the Portrait by the same painter (94), which has no doubt caused it to be called in the Catalogue "A Lady Professor." Another Giorgione is (227) "An Italian Villa, with groups of figures," a large picture that nearly embodies the ideal of a "pleasance" in the romantic poetry of a certain period. A marble colonnade forms a pergola, but how the vine grows it is difficult to say. Rose trellis surrounds the enclosure, trees are cut into tiers and roundels, and animals abound, deer, and rabbits, and a goat, and the joys of the chase are introduced in the shape of a hound extemporizing a hunt on its own responsibility: gentlemen stand idly talking, and, above all, fair and dark Venetian damsels look at you in a row behind a marble barrier, with flowers in their hands. A picture full of mundane pleasure—not a Golden Age—but neither has it any *moral;* a most interesting illustration of Giorgione's sensuous character. He was the first rebel, the first who threw off the service of the Church and the sentiment of religious mythology. Beauty and luxury were his only objects, and that wholly without the sensual bias of inferior natures. Moreover, his was beauty of colour, beauty as a painter sees it; he let the sculptor look after form, and the poet after ideas. Had he been asked what he meant here or there, he would have answered that he meant nothing, yet was he a born poet with his brush in his hand. The fourth Giorgione—for there are four in the collection—(185) is called "La Richiesta." What the request is, it is difficult to say, and yet how much there is in both the faces; confidences doubted and not to be trusted, solicitude and uncertainty, and a little merciless residuum at the bottom of the man's thought. They are well understood by each other, too, and the present request is not of deadly import. But Giorgione cared less for all that than for the rich full pleasure of the colour, the unity of the impasto. How completely Titian and Giorgione went together in this respect may be seen by comparing the green sleeve of Herodia (189), which we believe is a well known undoubted Titian, with the sleeve in "The Request:" not only is the colour the same, but the method of execution, as shown in the rough impasto of light yellowish white filled with glazing colour.

Let us point out one more picture, which might be Venetian, by Gentile Bellini possibly (306), "Israelites gathering the Manna—painter unknown." Here is a man in a turban gathering the food into an oriental silver vessel, which suggests Gentile, but the action of some other figures, particularly one seen from behind wearing a black doublet and yellow hose, are more like quite another school and master, Luca Signorelli. At all events, this is an early work of the highest beauty. It has a purism like Fra Angelico, and a naturalism as strong. It is small, painted on copper, possibly by a miniaturist who laboured all his life on the vellum page of Psalters and Books of Hours, but so purely felt and so primitively simple and natural in its near approach to the beautiful that we think it worthy of notice in the same page with Giorgione. WILLIAM B. SCOTT.

NOTE.—In our recent notice of the three Botticelli pictures, the words "whether or not it is really from the hand of the master," were an interpolation intended to relate to Lord Dudley's picture (299). Mr. Maitland's glorious Nativity is unquestionably a notable work of the artist. Indeed, the long Greek inscription over the subject, which is no doubt contemporary with the execution of the painting, expresses that the work was done by Alessandro in 1500. W. B. S.

HENRI REGNAULT.

IN the German Gallery, 168 New Bond Street, there was opened, just at the end of the year—and there is now remaining open, with additions from time to time—a small but remarkable collection of pictures by living and deceased French artists. This is the third Gallery in London where our neighbours may be seen in their school of Painting at the present moment. Here, among other very great and notable works—Louis David's "Dead Marat," for instance, and two small works of excellence by Ingres—are two immense canvasses, painted with tremendous power and daring. One of these is a portrait of General Prim on horseback, with a background of a wild crowd of Spanish military. The horse is magnificently drawn, and the General sits with perfect ease, an equestrian portrait of the most complete mastery of both man and horse.

The other is one of the most terrific subjects painted with the most unflinching truth. The scene is on a flight of steps in the Alhambra, all the walls shining with gold and colour. The only living figure is a gigantic Moor wiping his sword on his crimson robe, and looking down on his work: he is an executioner, and below him lies the trunk rolling over in the last struggle, and the separated head struck away from the body turns its dying eyes up (as it would seem) to the face of the executioner, while the blood flashes and spurts against the marble steps. The figures are gigantic, the style is decisive and something more than masterly—gladiatorial, and demonstrative to the last degree. The face of the Moor is without pity, that of the head shorn from its body without mercy; there is neither regret, pain, nor any human expression but that of unconquered mercilessness even at the moment of death.

These pictures—and this last described, really takes one's breath away—are by a young Parisian, Henri Regnault, who took the "Grand Prix de Rome" a year or two ago, and who has returned to Paris to die with a musket in his hand, fighting in the last sortie against the resistless Germans. On first seeing these pictures we asked ourselves whether such a power used in such a manner was a gift from God or the devil. It had a hot

taste that no other place than Paris could delight in: the painter seemed to rejoice in the Moor and in the act depicted. We could not decide for ourselves whether or not genius such as there exhibited itself should be praised or not; there did not seem to be the heroic element which enobles tragedy, and makes blood sacred. Fate in the shape of a rifle bullet has, alas, decided the question as to the further exercise of the great but doubtful talent. Regnault, it would appear, had a presentiment of death as he marched out, and affixed a card on his breast with his name and the address of a young lady to whom he was to be married; and when he fell he was carried thither, and died without the power of speech.

NOTES ON ART AND ARCHÆOLOGY.

A few words are due to the memory of Alexander Munro, the sculptor, well known in London for a considerable number of years, and much respected by many lovers of art. A Scotchman, and from the far north, he came from Sutherlandshire to London about twenty years ago, and immediately became popular, at least within a certain circle of artists and wealthy patrons, who kept him fully occupied. His busts had the extraordinary power of impressing the spectator at the first moment with the truthfulness of the portrait, and yet were not, on more thorough examination, found to express fully the character, years, &c., of the original. His medallions were nearly always very admirable, and in many cases highly beautiful. Indeed these will be the most enduring record of his professional abilities. His groups of children also were of extraordinary beauty. In statue sculpture he was rather pictorial than sculpturesque. On his health failing, he left London for Cannes, and here he modelled Victor Cousin, who had also fled thither in failing health; and Munro, after the death of the metaphysician, executed a marble bust for the government of France, to be placed in the Institut. He died on the 10th (January) at a little villa he had built for himself in the neighbourhood.

The *Panaro* of Modena of December 30 reports the discovery in a barn of two precious pictures; one of them a Correggio. This picture is above one metre in height, and represents a Presepe, with many figures, in very good preservation, of extraordinary strength of colour, with wonderfully painted accessories. The other is the upper part of a Christ, life size, and bearing the cross, painted on a panel by Gaudenzio Ferrario. The stupendous anatomy of the hand supporting the cross is very remarkable. These two masterpieces are now being exhibited in the Museum of Dr. Rusconi, in the Gallery of Vittorio Emanuele.

The Count de Gobineau is at present offering for sale a valuable set of Persian manuscripts and of engraved stones; the latter containing over five hundred specimens, and illustrating the whole history of the art in Asia, from its very earliest beginnings down to modern times. Of the manuscripts there are about a hundred, all of exceptional value, either from their rarity or from the elegance of their workmanship and the splendour of their decoration. There is a full descriptive catalogue of them in existence; which is once more accessible now that the gates of Paris have again been opened.

The designs for the new Opera House at Dresden have at last, in deference to a good deal of pressure from public opinion, been committed to Professor Semper, the distinguished architect of the old house, which was burned down last September year. From the elaborate description of the plans given in the *Augsburg Gazette* (Jan. 15), we gather that the glory of the new house is not only to surpass the glory of the old, but the structure is to be something quite original in character. The stage and its dependencies tower like a separate building over the large auditorium: thus revealing at a glance the uses for which the whole structure is intended. The impression of unity is lost by the consistent following out of this idea; but without any or much sacrifice of beauty. The ornamentation is in the grand style of the later Renaissance.

The cast is now completed for the statue of the late Dr. Whewell, which Mr. Woolner has in hand for the chapel of Trinity College, Cambridge. The figure is seated back in an arm-chair, with one leg thrown over the other, the left shoulder advanced, and left hand resting on the top of a book, which it supports against the thigh. The right arm is drawn back, and right hand slightly lifted—the attitude suggesting the sudden occurrence to the mind of a thought, presently to be carried out. We believe that what the artist has in this meant to suggest is Dr. Whewell's first idea of his endowment for the study of international law. The figure has in it much life, as well as gravity; and in the matter of likeness, Mr. Woolner has been particularly happy in seizing the singular half-smile which used to add a grimness of his own to the massive features of his model.

The same artist has also almost finished an important imaginative piece long since commenced—the relief, in nearly life-size, of Virgilia, the wife of Coriolanus. Taking the Shakespearian conception of her—as a wife too tender-hearted, and too much lost in the love of her husband to do anything but dread the event of war and pine for his return, and in his return too much overwhelmed to do anything but weep—the sculptor has thrown into this work a great intensity and modernism of sentiment. The figure is in high relief—of the fullest elaboration in the modelling of those parts which are as yet finished—in a seated attitude, with the head flung forward, and one arm resting along a parapet. Above the parapet, on a different scale, and in low relief, the actual triumph of Coriolanus is suggested by a group of Volsces huddling together behind their shields from his assault. The work will probably be exhibited at the Royal Academy this year.

The fourth (December) number of Zahn's *Jahrbücher für Kunstwissenschaft* is in great part taken up with a long synopsis of M. Labarte's *Histoire des Arts industriels au moyen âge et à l'époque de la Renaissance.* In the same number Dr. Lübke has an essay on the respective shares of Masolino and Masaccio in the various frescoes commonly ascribed to their joint workmanship; in which, following a hint of Dr. Zahn, he differs from the opinion of Mr. Cavalcaselle. The three main subjects of comparison are the frescoes of the Brancacci chapel at Florence, of the church of S. Clemente in Rome, and of the Collegiata and Baptistery of Castiglione di Olona; and concerning these Dr. Lübke's conclusions, made "aus frischer Autopsie," and from a comparison of internal evidence with dates, are—

(1) That the Brancacci frescoes one and all are the work of Masaccio by himself.
(2) That upon the S. Clemente frescoes Masaccio worked, if at all, only in a quite subordinate character, as pupil of Masolino.
(3) That, at Castiglione, the frescoes on the *roof* of the choir of the Collegiata were executed by Masolino before the year 1427, when we know him to have been in Hungary with his patron, Cardinal Branda; that the frescoes on the *walls* of the same choir were executed during his absence by his pupil Masaccio; those of the roof and walls of the Baptistery, again, by Masolino himself, after his return, and after the death of Masaccio—sc. between 1428 and 1435.

In the *Zeitschrift für bildende Kunst* for January the same prolific writer concludes a set of "Contributions to Italian Art and History," with an account of the Cathedral at Como.

The *Portfolio* for February 1st contains a photograph after one of the heads in Mr. Millais's unfinished picture of Moses, Aaron, and Hur.

Music.

Musica Divina sive Thesaurus Concentuum Selectissimorum omni cultui divino totius anni juxta ritum S. Ecclesiæ catholicæ inservientium; ab excellentissimis superioris ævi musicis numeris harmonicis compositorum. Quos e codicibus originalibus tam editis quam ineditis accuratissime in partitionem redactos ad instaurandam polyphoniam vere ecclesiasticam publice offert Carolus Proske, Ratisbonæ, sumptibus, chartis et typis Friderici Pustet.

The reappearance of this periodical, the publication of which had been suspended for nearly ten years, is matter of con-

gratulation for the students and lovers of ancient ecclesiastical music. Designed by the original editor, Dr. Carl Proske, in a thoroughly practical spirit—literally, for church use—this work, had it been brought to an end with the completion of the first series, might well have been regarded, from its contents, its typographical beauty, and moderate price, as in its kind the most important that has appeared in our time. The table printed inside the wrapper of one of the numbers just issued is a veritable epitome of the history of church music; presenting, as it does, the name of almost every master who has made himself a part of it, from the Fleming, Josquin Deprès, to Pitoni, "ultimus Romanorum." The new series starts with seven first numbers to four different volumes; one volume to consist of masses, another of motets, another of litanies, and another of vesper-music. It is gratifying to trace in the selection of their contents the influence of that same catholic spirit which gave such interest and such charm to the work while under the editorship of Dr. Proske; a catholic spirit kept in check, however, by a thoroughly cultivated taste—indispensable to the conduct of a work the materials for which, if they are not actually inexhaustible, there is no likelihood of any number of editors or publishers ever exhausting.

Whether a liking, unaffected and hearty, for the productions of the composers of the 14th and beginning of the 15th centuries—those of Dufay and our countryman Dunstable, for instance—is possible to a 19th century musician of however retrospective tastes, is a question. But from the end of the 15th century—the age of Josquin—down to the middle of the last, an unbroken succession of composers has been maintained whose productions, while of the highest interest to the student of musical history, are not wanting in charm even to those who have not familiarised themselves with the *idiom* in which all but the latest of them have expressed themselves. For, into whatever number or variety of "epochs" or "periods" the history of modern—*i.e.* of polyphonic—music may be divided, one great boundary line can never be obliterated or ignored—that which separates modern from ancient *tonality*. Everything wherein the music which attained perfection in the 16th century differs *essentially* from that of our own time grows out of the different scale systems accepted by the composers of those different epochs; or—if we may, without arrogance, so speak of our equals in invention and our superiors in certain branches of musical science—may be referred to the imperfect appreciation of the nature of a scale or key to which those composers had yet attained.

Of Vol. I. of the *Musica Divina*, four numbers have already been printed, each of which is entirely occupied by a mass; that in No. 1 by G. M. Asola, a Veronese of the latter part of the 16th century; that in No. 2 by the Roman, Francesco Anerio; that in No. 3 by J. L. Hasler, a Nuremberger of a little later date; and that in No. 4 by Palestrina, the type and glory of the Roman school. Asola's mass is for equal voices—a form, from the narrow limits within which the parts must of necessity move, which at once taxes and reveals the skill of the composer who works in it to the uttermost. As an example of how a few notes may do duty as the motive of a considerably prolonged work, this is of great interest. Anerio's is a "requiem" mass, in which several clauses are set in more ways than one—all of them presenting contrasts not less instructive than remarkable with the more dramatic but not more impressive settings of modern composers. The hymn "Dies Iræ," which forms so large a portion of the requiem mass, would doubtless in performance produce an imposing effect: the stanzas being in every instance begun by a single voice and concluded by a choir of four voices. Hasler's mass, over and above its intrinsic merit, has an historical interest as containing indications of that musical "renaissance" which was destined only a few years later to act so largely and so thoroughly even on the music—that of the Church—which would have seemed least likely to become subject to its influence. The mass by Palestrina, the "Tu es Petrus," though occasionally referred to in musical history, and occasionally met with in manuscript, appears now in print for the first time. Like many others of his best works, it is for six voices, two of which—always the lowest two—are dispensed with in several movements. Next to the serene majesty which cannot fail to strike the cultivated eye or ear during the perusal or performance of this work, will be the absence both of those vain repetitions of words and of that exaggerated emphasising of them, which disfigure most even of the finest modern works of the same class. In the setting of the "Credo," for example—that section of the mass which from its variety as well as its extent presents the most opportunities for, or temptations to, musical painting—we look in vain for that startling contrast between the first and second clauses of the "Crucifixus," to present which has been the obvious aim of every recent composer. With expression, no doubt, the movement abounds from end to end; but it is the expression, not of this or that article of belief, but of belief itself, and of the joy in believing. The notes and combinations of notes present themselves to our ears as did the Sages of Antiquity to the eyes of Dante:—

"Sembianza avevan nè trista nè lieta."

No. 1 of Vol. II. contains six motets, two by Orlando de Lasso, the Flemish contemporary and even rival of Palestrina; one by the later Felice Anerio, better known to us by his secular compositions; one by the Spaniard, Vittoria, and two others severally by Casciolini and Giovanelli—masters both, about whom musical historians are mostly silent. Of the two motets by Orlando de Lasso, No. V., an "Ave Maria" for six voices, is the more extended and interesting, characterized by much of the energy and all the grace of the composer. Anerio's motet, a "Laudemus Dominum" for two choirs, is singularly modern in its tonality and even construction; beginning and ending unequivocally in the same key, with a close to the first period in that of the dominant. Casciolini's "Angelus Domini" again is for two choirs; the composer belonging evidently to that later Roman school whose disciples had learned to turn *place* as well as tune and time to account in musical performance. The mere repetition of the same passages by a second and somewhat distant choir is, as we all know, one of the finest "effects" to which we have even yet attained in musical performance.

Of the four litanies in the first number of Vol. III., one is the production of that rare personage, in music, "auctor ignotus." We should assign it rather to a modern hand trained in an ancient school than to that of a veritable "old master." The three other litanies are severally by Orlando, the indefatigable and masterly, by his countryman Rinaldo de Mel, and Felice Cornazzaro, an Italian who died, in the service of the Bavarian court, in 1628. One and all have an especial interest for the student, as presenting such numerous examples of the same phrase harmonized in a variety of different ways.

Five psalms for "Even-song" occupy No. 1 of Vol. IV. They are most of them arranged in the most striking of all antiphonal forms, that in which a single voice is answered by a perfect choir of five or six voices. The first, "Dixit Dominus," is the work of Giovanni Gabrieli (the elder), and the four following of "unknown authors." The number is worthily closed by a clear and effective "Magnificat" for two

choirs, also by Gabrieli, famed for his masterly and effective employment of many voices.

I very heartily commend this work to musical students and—though with less hope of immediate practical result—to directors of choirs and choral societies. The latter, having first learned to understand, and therefore to like, the music of which it is made up, will have before them the more difficult task of teaching those under their direction to do likewise. The latter will at first dislike it, because they will inevitably at first perform it badly; and they will afterwards, perhaps, perform it badly, because they dislike it. But there is a stage or condition beyond this, for those who have perseverance to attain to it—one in which they will find themselves in the enjoyment of a pleasure at once true and new. To recover or discover the traditional mode of performance of this music—properly printed in the *Musica Divina* as it was written, without "marks of expression" of any kind—will demand time and thought. Indications of and helps towards it abound however in the music itself, and will reveal themselves sooner or later to those who study it earnestly. One hint may be thrown out in conclusion: that neither extravagant loudness nor extravagant softness were ever heard in the Sistine Chapel in its palmy days. Both are heresies which could only have sprung up among a people who, whatever their achievements in musical composition and in instrumental performance, have not yet become, and are still far from being, singers in the proper sense of the word. John Hullah.

We are compelled by the press upon our columns to postpone the next series of Schumann Letters until the second February number.—Ed.

MUSIC IN JANUARY.

With the new year has come in a variety in our London music which, it is to be hoped, will prove as lasting as it has already been found pleasant. The opening of the Lyceum for Italian Comic Opera was in itself a bold experiment, if only because it had already been made unsuccessfully; the manner of making it was still bolder. To the average English amateur comic opera—of necessity foreign, for we have none native—is too much of a puzzle to be altogether an entertainment; and an operatic performance, of whatever kind, without a "star," has hitherto shown little attraction for him. In the list of artists forming the Lyceum *troupe*, there was not a single name with which he could have had any association; that he has shown any desire to make their acquaintance may be regarded as a hopeful sign. The new company has been among us but three weeks, and has already performed five operas, *Il Barbiere*, *L' Italiana in Algeri*, *L' Elissire d' Amore*, Ricci's *Crispino e la Comare*, and *Ali Baba*, composed expressly for them by Signor Bottesini, better known to us as an executant than as an inventor. The favourable reception of the last—confirmed by repeated presentations before increasing audiences—is due less to its intrinsic merit, which is really considerable, and has been thoroughly considered, than to its freedom from affectation. It is neither Gallo-Italian, nor Tedesco-Italian, but Italian—Italian in its fluency, fitness for the voice, and, more than all, pervading buoyancy; just the opera which an Italian company of the present time would take in, and in their turns give out, with quite as much pleasure to themselves as to their hearers. The "business" of the opera chiefly rests on Sig. Borella, the only member of the company previously known to us by name, and whose performances, in almost every work as yet put on the stage, justify his reputation as the greatest living artist of his class. Of the *prime donne* of the company, Madlle. Colombo, who has no part in *Ali Baba* seems so far to have found the greatest amount of favour. She is young and well-favoured, both as to feature and voice; the latter having been formed with an amount of care of which recent Italian singing has presented few indications; and, though not yet quite an actress, there is a certain drollery—graceful withal—about her carriage which, supposing even it to be teachable—which is at least doubtful—Madlle. Colombo cannot have had time to learn. The new tenor, Signor Piccioli, has excellent intentions, but his physical gifts, which are considerable, have not yet been sufficiently trained. He produces his upper notes with difficulty, uncomfortably apparent to his hearers. The barytone, Sig. Torelli, is a clever singer and a cleverer actor. I have not seen him in what is said to be his best part, that of Dulcamara, but his Figaro is admirable, irresistibly comic, and yet thoroughly refined. Some of our very best resident artists, foreign and native, are in the orchestra, which nevertheless goes very badly. They play without either delicacy or force, maintaining almost throughout an evening that indolent *mezzo-forte* which is the invariable result and unequivocal index of want of discipline.

Two of our best public instructors in classical music, the Crystal Palace Band and the St. James's Hall Quartet, have begun work again. By the former, the two completed movements of Schubert's unfinished symphony in B minor were finely performed last Saturday week. The first of these is to me the most satisfactory movement of its class by the same composer with which I am acquainted: not because it contains more beauties than any other, but, on the contrary, because it contains fewer, presented, however, in a more orderly and intelligible manner than was the composer's wont. The Monday Popular Concerts have of late been additionally graced by the presence of Madme. Szarvady, better known here as Madlle. Wilhelmina Clauss. If we have made progress since Madme. Szarvady was last among us, so has she. Her conception and execution of classical music exhibit all their wonted fervour and finish, with the addition of something that time only can give even to the most gifted and carefully trained.

Mr. Henry Holmes, a native artist of whom we may be proud, renewed his "Musical Evenings for the Performance of Chamber Music," at St. George's Hall, on the evening of Thursday the 26th. His collaborators, as heretofore, are Messrs. Folkes and Burnett, and Sig. Pezze, individually excellent musicians and finished executants, and, in conjunction with Mr. Holmes, accustomed to work together. The Sextet in B♭ (Op. 18) of Brahms would have been the most interesting work performed, from its novelty alone. It has, however, stronger claims to attention. Brahms is generally regarded as an alumnus of the modern German school; though in the sextet performed on Thursday, there is not a trace of its influence beyond an occasional evasion of an imminent but time-worn form of its influence. It might have been the work of any master of the last half-century, who could have felt as deeply, and expressed himself as clearly. The first movement is based on a fresh and graceful thought, conscientiously followed out to its utmost consequences—generally on the self-same plan to which a Haydn, a Mozart, and even a Beethoven, have been content, in all essential points, to conform. The andante consists of a series of ingenious variations on what is either a "national melody" or a very happy imitation of one, and which has been suggestive of some ingenious and effective harmony. The scherzo, as scherzos are apt to be, was encored; and the conclusion of the rondo was followed by such applause as would hardly have been evoked by execution, quite as spirited and refined, of a less interesting movement.

Our chief foreign musical news is transalpine. The *Nuova Antologia* (of Florence) tells us that the performance of a new opera *Aida* composed by Verdi expressly for Cairo, and already paid for by the Pacha, has been postponed indefinitely through the detention of the scenery, dresses, and decorations in Paris, where they had been prepared! For the rest, the Italian journals have of late chiefly occupied themselves with lamentations over the dearth of new operas, and the incompetency of new singers, and with eulogiums on the composer Mercadante, who died at the age of seventy-four, on the 18th of December last. Mercadante's career is the most remarkable from its uninterrupted labour and all but uninterrupted unsuccess recorded in musical history. He was the composer of a prodigious number of—nearly a hundred—operas, the very names of the majority of which are already forgotten, and no one of which has kept the stage. For many years also he was the principal of the Conservatorio of Naples, once the first musical school in Europe, now, from whatever cause, all but extinct. Deficient in invention, he was unquestionably a skilful and learned practitioner of his art—a veritable *maestro*—who, despite his century of failures, leaves a great reputation behind him. John Hullah.

Theology.

THE DOGMA OF PAPAL INFALLIBILITY.

I.

Voices from Maria-Laach. [*Stimmen aus Maria-Laach. Die Encyclica Papst Pius' IX. vom* 8. *Dezember* 1864. *Neue Folge. Das Oecumenische Concil.*] Herausgegeben von Florian Riess und Karl von Weber, Priestern der Gesellschaft Jesu. Freiburg im Breisgau: Herder, 1868, 1869, 1870.

The title of this collection of pamphlets, *Voices from Maria-Laach*, probably conveys no idea to most Englishmen. Yet many of us have been much nearer to St. Mary of the Lake than we suppose. Up in the mountains which form the gorge of the Rhine, a few miles from Andernach, the traveller suddenly comes on a lake round and blue as the Lago Albano, and, like it, even to the unscientific eye, evidently lying in the crater of an old volcano. Across it, at the entrance of a wooded valley which opens on the lake, are seen the numerous towers of one of the oldest and most beautiful Romanesque churches in all Germany. Close to it lie the buildings of what was once a Benedictine abbey, and is now the house of studies for the Jesuit scholastics of a large part of the Teutonic race. From this house, sufficiently solitary for the purposes of study, near enough to Bonn to be a thorn in the side of the liberal party in that university, issues the series of pamphlets under the above title. The Jesuits of Maria-Laach, living as they do in the very midst of the conflict, understand its bearings and its vicissitudes even better than their brethren of the *Civiltà*. Before and during the Council they have issued a number of popular treatises on subjects connected with the famous Syllabus, such, for instance, as "The Council and the Modern State," "The Council and the Freedom of Science," and "The Modern State and the Christian School." They are now occupied with an explanation of the decrees which have been passed. In order to give the reader an idea of the series, I will chiefly give an account of two, that on "The Power of the Church, as a Teacher of Truth," and that on "The Dogmatic Constitution of the 24th of April, 1870."

It will be necessary for me to fill up the outline of the writers, in order to make these pamphlets intelligible in this country. In the latter, the decrees of the Council are printed and translated at length. Then comes a brief history of provincial councils since the Council of Trent. After this, under the head of "Fruits of the Vatican Council," follows a lucid commentary on the decrees. This contains a special reference to the motives of the convocation of the Council, which will be interesting to our readers. One reason of the unpopularity of the definition of the Pope's infallibility among men of the world is the circumstance that, as far as they know, it is utterly uncalled for. What possible reason is there why at this particular moment, when all was going on well, at a time of profound peace, the Catholic Church should be disturbed by a definition, uncalled for by any heresy? As everything must have a cause, the opponents of the Council have recourse to the old superstitions of the ambition of Popes and the intrigues of Jesuits to account for the portent, just as the Romans referred to Jupiter the appearance of a sudden flash of lightning in a sky perfectly serene. I think, however, that even the world dimly sees that its theory is inadequate to furnish a reason for the fact that more than six hundred men have fixed on their own necks a yoke which seems to it an intolerable burden, and which no doubt is an important restraint. The fact is, the reason for the definition lies in the history of Catholic Germany for the last fifty years. The Council itself has referred to the past in words which, according to the fathers of Maria-Laach, are "the answer to the objection of those in the present times who say that there is no heretical division in the Church touching points of the faith." In the preamble it is said that in consequence of the prevalence of errors, which it calls rationalism or naturalism, "in many sons of the Catholic Church, there has been a gradual loss of hold on truth, so that their Catholic instinct is enfeebled." "Every heresy," the pamphlet continues, "as a rule presupposes a preparation, that is, a gradual, more or less extended, more or less conscious, aberration from the instinctive faith of Christendom." I am convinced that with respect to Germany this guarded statement is under the mark. That has been going on in Germany which rendered the definition inevitable. Opinions have been held and expressed by professors of Catholic universities the tendency of which has been the destruction not only of Catholicism but of Revelation.

Three several times during the last fifty years, fundamental truths of Catholic Christianity have been imperilled and at least implicitly denied by German Catholic professors and priests. First came Hermes, professor of theology, at Münster, and subsequently at Bonn, who taught for twenty years the theory that all Christians are bound to put themselves, when they arrive at the full use of reason, into a state not of hypothetical but of real doubt. This he carried to its fullest legitimate conclusion; every man has at some period of his life to force himself to be an Atheist in order to believe in God. This strange error continued after the death of its author, and formed a party called Hermesians, who were condemned in 1835 by Gregory XVI., and whose principles are anathematized in the 5th and 6th canon of the present Council. The fundamental error of Hermes was plainly that the dogmas of Christianity are strictly demonstrable and discoverable by reason. Twice has the same error been repeated, though not in such a crude form, by men who strove to reconcile the independence of theological science with the infallibility of the Church and with revelation. In 1857 the present Pope condemned the opinions of Günther, an Austrian professor and a good priest, who afterwards retracted them. His view was that the theologian is to start with a total hypothetical and scientific doubt, and that the whole Christian scheme is capable of being strictly proved, while the office of the Church is confined to stating as an historical fact that that has actually happened which the human intellect could prove to be absolutely necessary. When I add that in his view the whole of the dogmas of Christianity, the Holy Trinity, and the Incarnation, can be necessarily deduced from the simple principle "*Cogito ergo sum*," the reader will not be surprised when I say that the dogmas which resulted from this chain of reasoning were not the Christian Trinity nor the Christian Incarnation. There must have been deep-seated heretical tendencies in Germany when a Catholic priest could teach such a system. Proofs are not wanted of the hold which the idea of "free theological science" had taken on the German mind. Voices arose from every part of Germany, which, while they corrected Günther's Cartesianism, exclaimed that the Holy Trinity could be metaphysically demonstrated, and that the contents of the Christian revelation were not simply above but immanent in natural reason. I must say that, as far as I am aware, the Catholic Tübingen school have not been guilty of such extravagancies, but the teaching made itself heard in almost every quarter of Germany. Posen was represented by Wohlmuth, Freiburg by Sengler, even Catholic Tyrol, and later Vienna, by Schenach. Munich, however, produced Froschammer, the man who has carried out what in others was a tendency boldly to its legitimate result. The patent

weakness of Günther's theory is in the open rationalism of the principle that Christianity is to be deduced by a strict reasoning process. Froschammer has corrected this by the substitution of a sort of mystical intuition which comes under the head of what the Council calls naturalism, and which reminds us strongly of the school of Mr. Maurice in England. In his system reason is a natural faculty of God-consciousness, and this reason is the sole principle of knowledge for Christian truths. Faith supplies stuff for this knowledge, but does not apprehend it. As this God-consciousness is a natural faculty, of course the theory breaks down the distinction between natural and revealed religion. Accordingly Froschammer distinctly holds that there is no difference between such a natural truth as the existence of God and a supernatural truth like the Holy Trinity. If, however, it be asked what is the use of revelation and of an infallible church, Froschammer answers that they are necessary to state historically truths like the Incarnation which depend on God's free-will, and also for the education of the human race, whose faculty of God-consciousness needs to be brought out by the historical evolution and continual progress of truth. Philosophy, then, that is, this historically educated universal reason, is the ultimate standard of Christianity, and is absolutely independent of Church authority. Froschammer was condemned by Pius IX., in a brief to the Archbishop of Munich in 1862, and has since given up all belief in objective religious truth and revelation. This sketch, brief as it is, sufficiently points out what our pamphlet means by heretical tendencies. It shows what is meant by "the freedom of theological science" in Germany.

It would take us too far to examine adequately the sense in which the "rights of reason and of philosophic science," as they are called in the brief condemning Froschammer, are reserved and guaranteed by the Church. The question immediately before us is the connection between the state of opinion in the Catholic universities of Germany and the definition of the infallibility of the Sovereign Pontiff. That connection is two-fold. First, in all these cases the expulsion of these errors from the Church has been effected solely and absolutely by the authority of Rome. The chiefs of Hermesianism among the professors of Treves submitted themselves to Rome in 1838, declaring that the decisions of the Holy See must be received without conditions. Günther, who, as appears by a passage quoted in the *Stimmen*, was himself an infallibilist, submitted to Rome. By Rome Froschammer was extruded from the Church. In point of fact, since the Council of Trent all heresies have been condemned solely by Rome; and the reason lies in the nature of things. Since the invention of printing, such is the breathless rapidity of modern thought that an Œcumenical Council is far too cumbrous a means for the destruction of error. It is simply ludicrous to suppose that a professor of a Catholic university is to be allowed to teach error while the Church is rendered mute by the impossibility of assembling what on this hypothesis is the only effectual organ of its infallibility. Half Germany would be infected before it could be called. If, secondly, it be asked what was the necessity of defining the Pope's infallibility when the submission of the disputants proves that the dogma was already acknowledged, I answer that it was not acknowledged. I can only point to the significant fact that at this moment, after the definition, an open opposition still exists, not among the bishops of the minority, but among a certain number of the class which cried out loudest for free science —Catholic professors. Among the causes of the definition is to be reckoned the Congress of Munich. There, in the glorious Basilica of St. Boniface, were gathered together the foremost men among the representatives of the science of the great German Church. Who can forget that among them voices were raised for the unqualified independence of science? Not for a moment do I impute to Dr. Döllinger the errors of Froschammer. Yet, I cannot forget that on that occasion he put history into the position which by a legitimate deduction would raise it to the authority which Froschammer assigned to philosophy. He refused the name of theological science to the analysis of existing dogma, and affirmed that he alone was a theologian who could trace the history of Christian doctrine to its source from the first ages. As if the ever-living Church of to-day did not present a definite body of Truth, susceptible of being reduced to a science! In the name of the freedom of science, he affirmed that error, even theological error, by which he meant real acknowledged doctrinal error, only short of actual heresy, was to be left to itself, because authority had no right to interfere with it. In this he meant to affirm the theory that the condemnation of error as distinguished from heresy cannot be infallible, and to denounce the practice of the Holy See in condemning books and opinions by means of its Congregations. We all know that not all the acts of these Congregations are infallible, but, even when not infallible, they are the warning of the Holy See conveyed to an author that his book contains error. In all this there is such an unmistakable tendency to substitute the professor for the authority of Rome that it calls for and explains the definition of the infallibility of the Pope. That the magnificent Church of Germany, with all its unrivalled wealth of learning and thought, is sound at the heart's core, I have no doubt. Nevertheless, I can only agree with Maria-Laach in seeing in the history of the last fifty years an explanation and a justification of the Council. The Church had to make its choice between the infallibility of the Holy See and the infallibity of the professors. It preferred the former.

J. B. Dalgairns.

(*To be continued.*)

Intelligence.

The Recovery of Jerusalem, by Capt. Wilson and Capt. Warren. —As a record of gallant self-devotion to a good cause, this work will be read with deep interest. It is true that biblical archæology is not materially advanced by the researches described. "The results of the excavations down to the foundation of the Haram wall . . . . . do not lead to any more definite conclusions as regards the architectural style of the Jewish nation than can be learnt by those portions hitherto exposed to view" (p. 389). But if the Society's operations are continued, the problems connected with the topography of Jerusalem may in time be expected to receive a decisive solution (see Dean Stanley's remarks, pp. xvi–xviii). The palæographical results of the expedition are also not inconsiderable, though but little information respecting them is communicated in this volume. A large share in the rescue of the Moabite stone belongs to Capt. Warren, and though Mr. Holland (p. 546) ignores the fact that German orientalists had already ascertained the linguistic character and value of the Sinaitic inscriptions, still such a large number of accurate copies as Mr. Palmer may be expected to furnish, together with an independent translation, will be of great importance for Semitic philology. Nearly two-thirds of the volume is occupied by the very interesting narratives of Capt. Wilson on the Ordnance Survey of Jerusalem, and of Capt. Warren on the excavations. Part II. consists of seven papers of a wider range, the most important of which is Mr. Holland's on Sinai. Jebel Mûsa is stated to be the true Mount Sinai, while Rephidim is identified with Feiran, and the Wilderness of Sin with the plain of El Murkhah. The description of the causes which may have led to a diminution in the fertility of Sinai should be consulted by the student of Exodus. A paper on the Hauran, contributed by the Count de Vogüe, is chiefly important from an architectural point of view.

We have reason to believe that Dr. Ginsburg's visit to the land of Moab is postponed till next year. Meantime it is pleasant to record the foundation of a new society, independent of the Palestine Fund Association, for the promotion of historical and archæological researches connected with the principal Biblical lands.

Dr. Muir has placed at the disposal of each of the Scotch Universities the sum of 100*l.* as a prize for Hebrew scholarship and the criticism of the O. T. Scriptures.

Contents of the Journals.

The Theological Review, January.—The most important article is that on the Revision of the Authorised Version of the Old Testament, by Mr. R. Martineau. Its object is to show that nothing short of a new translation will meet the exigencies of the case, principally on the ground of the ignorance of Hebrew syntax, displayed in the current version. The facts are true in the main, but exaggerated, and the translations of select passages leave much to be desired on the score of taste. Dr. Davidson discusses the sense in which the quotations from the Old Testament in the New were intended by the New Testament writers. Mr. Wicksteed devotes a thoughtful and appreciative paper to Roskoff's History of the Devil. He points out, however, the one-sidedness of the picture of the middle ages, and the inaccuracy of an important quotation from S. Eligius, and desiderates a better explanation of the phenomenon, that the most terrible persecutions for witchcraft occurred in the 16th and 17th centuries. The other articles, though interesting, scarcely require a particular description.

Continental Reviews of English Books.—Three articles deserve special mention under this head. 1. On Prof. Max Müller's Lectures on the Science of Religion, by C. P. Tiele, in De Gids for January. [The judgment expressed is nearly identical with that of Prof. Whitney, the American Sanskritist, in The Nation, Oct. 13, 1870, from whom Mr. Tiele disagrees only in admitting that the materials are already collected, and the foundation laid, for a genuine Science of Religion. Both insist on the fact that Prof. Max Müller's theory of the growth of polytheism does violence to sound psychology, and that the men who first offered sacrifices to Dyaus, were in reality fetish-worshippers, that is, they adored the visible heaven as a living divine being.]—2. On Dean Hook's Life of Cardinal Pole, by Alfred von Reumont, concluded in the Bonn Theologisches Literaturblatt, Dec. 19. [The article is extremely severe, but the final verdict not unappreciative.]—3. On Cheyne's Book of Isaiah, by Prof. Schrader of Giessen, in the Darmstadt Allgemeine Kirchenzeitung, No. 46, 1870. [The criticism is courteous and favourable; on points connected with Assyrian history the reviewer holds an opposite opinion to the author.]—4. On the same, by Dr. Kuenen in Theologisch Tijdschrift, Jan. [Favourable, with an answer to the objections of a "liberal" critic in the Spectator.]

Jahrbücher für deutsche Theologie, vol. xv. No. 4. The reviews in this number are, as usual, more important than the essays. The best are two by C. Sigwart of Tübengen, on E. Schürer's Schleiermacher's Religionsbegriff, and P. Schmidt's Spinoza und Schleiermacher, which contain many acute remarks on the fundamental assumptions of Schleiermacher's system. Prof. Wieseler writes on the Epistle of Barnabas, which he believes to have been written under Domitian, the "little horn" of the Epistle. Dr. Herrlinger concludes his studies on the theology of Melanchthon. Professor von der Gottz writes on the true view of dogmatics, as neither a historical nor a speculative science, but the normal development of Christian truth, derived, 1, from religious experience; 2, tradition; 3, the Scriptures.

Archiv für wissenschaftliche Erforschung des Alten Testamentes, vol. ii. No. 1. The Arabic translation of the minor prophets in Cod. Hunt. 206, edited and translated with notes by Dr. R. Schröter, II. Joel.—Rashi's influence on Lira and Luther, by Dr. Siegfried.—On the language of the Targum on Proverbs, and its relation to the Syriac version, by S. Maybaum. [An attempt, based on a critical revision of the text, to shew (against Dathe) that the mixture of Syriac and "Chaldee" in this Targum belongs to the original language of the author, and that the Peshito is largely dependent on the Targum.]—On Amos v. 26, by Dr. K. H. Graf. [Regards the perfect tense in v. 26 as prophetic:—"Ye shall take up your idols, and carry them to your place of exile."]—On the stone of Mesha, by Dr. Himpel. [See under Oriental Philology.]—The natural history of the Phœnix; on Job xxix. 18, by Dr. Merx. [Shows from the Syriac version, as corrected from S. Ephrem and Barhebræus, that קִנָּי is a corruption from קָנֶה "sweet cane," which was proverbial for durability.—On the two books of Zechariah, and on Cant. III. 9, 10, by J. G. Vaihinger. [Renders אהבה in the latter passage "a gift of love."

British Quarterly, Jan.—The explorations in Palestine.—The Greek New Testament of Dr. Tregelles. [Descriptive, rather than critical.]

New Publications.

Cyprianus, Opera omnia. Rec. et comm. crit. instrux. G. Hartel, Pars II. et III. Vienna: Gerold's Sohn.

Ewald, H. Sieben Sendschreiben des Neuen Bundes. Göttingen: Dieterich.

Fürst, J. Geschichte der biblischen Literatur u. d. jüdisch-hellenistischen Schriftthums. Bd. 2. Leipzig: Tauchnitz.

Hupfeld, H. Die Psalmen. Aufl. 2, herausgeg. v. Prof. E. Riehm. Gotha: Perthes.

Jerusalem, the Recovery of. Edited by W. Morrison, M.P. London: Bentley.

Kay, W. The Psalms translated from the Hebrew, with notes chiefly exegetical. Murray.

Keim, Th. Geschichte Jesu von Nazara. Bd. 2. Abth. 1. Zürich: Orelli u. Füssli.

Kuenen, A. De Godsdienst van Israel. Vol. ii. Haarlem: Kruseman.

Monumenta sacra inedita. Vol. IX. Codex Laudianus, &c. Ed. C. de Tischendorf. Leipzig: Hinrichs.

Nitzsch, C. J. Gesammelte Abhandlungen. Bd. 2. Gotha: Perthes.

Reusch, T. H. Libellus Tobit e cod. Sinait. editus et recensitus. Freiberg: Herder.

Rothe, R. Dogmatik. Thl. 2. Abth. 2. Heidelberg: Mohr.

Schmid, C. F. Biblical Theology of the New Testament. Transl. by G. H. Venables. Edinburgh: Clark. [An important work in its day, but now antiquated: need not have been translated.]

Tuch, F. Commentar über die Genesis. 2te Auflage, besorgt v. Prof. Arnold, nebst e. Nachwort von A. Merx. Halle: Waisenhaus.

Physical Science.

THE ENGLISH AND AMERICAN ECLIPSE EXPEDITIONS.

In the absence of detailed reports from the various detachments of the Eclipse Expedition, it is impossible to form any definite idea as to the additions to our knowledge of the constitution of the sun which may result from this expedition. But from the notices which have been published in *Nature* (vol. iii. pp. 221, 228, and 249) and in several newspapers, it would appear that, though the observations were in nearly every case made under most unfavourable circumstances, there is reason to hope that some results have been obtained which will at least prove most useful in directing future observations.

The notices already mentioned, giving as they do a more or less popular account of the observations, are in some respects exceedingly obscure, but some points of interest are to be gathered from them. The sketches which have been made of the corona appear to differ greatly from one another even in the case of observers at the same place, a circumstance which seems to indicate that some of the details are subjective, as the differences are not of such a character as to be accounted for on the hypothesis of different degrees of sensitiveness of different observers to faint light. But as in the case of many parties, the individual members of each produced sketches having a general resemblance to one another, and these sketches were likewise in general agreement with photographs of the phenomenon which were obtained; it is clear that some portion of the phenomenon is objective, though the differences between the sketches made by different parties seem to point to our atmosphere as being to some and indeed to a great extent instrumental in its production. Some excellent photographs were also obtained by Mr. Brothers, at Syracuse, but it does not appear from the notices yet published whether they show the peculiar dark intervals observed in the corona in Spain, and indicated in photographs taken in the latter country. Such agreement or non-agreement between the photographs taken in the two countries will doubtless give material assistance in deciding how much of the whole phenomenon is to be referred to a real existence, and how much to the action of our atmosphere on the light passing through it.

On the other hand, there seems to be a general agreement as to the existence of a shell round the sun having an angular depth of from 5′ to 7′, including what has hitherto been known as the chromosphere.

The spectroscopic observations lead to the conclusion that this shell consists not only of incandescent vapours of

several elements, and especially of incandescent hydrogen, as has long been known, but also, in the part remote from the sun, of hydrogen at a much lower temperature, and some gas or vapour, which must be inferred to be of small density, perhaps even of a density less than hydrogen, and which shows itself by the production of one or more green lines in the spectrum. The observations of Mr. Abbay on the general light received during totality appear to give very definite evidence of the existence of this gas or vapour; but his method of observation will not permit any inference as to the existence of this substance alone without hydrogen in the higher regions of the chromosphere.

The agreement between one of these green lines and a line which has been observed as occurring in the light of the Aurora leads to a most interesting speculation as to the existence of this gas or vapour in the higher regions of our own atmosphere.

With respect to the polariscope observations, from which it was hoped that some evidence might be obtained, not only as to the objective existence of the corona, but also as to whether it be an appendage of the sun, and whether it be self-luminous—or merely shining by light reflected from the main body of the sun—so far as these observations have yet been published, they fail altogether to give any definite information, and leave this question practically as it stood before the recent eclipse.

The unfavourable state of the weather during the eclipse, and the presence in the neighbourhood of the sun of masses of cloud, will, it is feared, prevent any use being safely made of these observations. The results, so far as they have come to hand, are most conflicting, and can only be accounted for by supposing the existence of disturbing causes to such an extent as almost to preclude the hope of our arriving at definite conclusions. The details of the polarisation observations made at Syracuse will be looked for with much interest, as they appear to have been made under circumstances more favourable than were experienced at other stations.

R. B. Clifton.

FATHER SECCHI ON THE ECLIPSE.

The following letter from Father Secchi is communicated to the *Gazzetta ufficiale di Roma*, by Father Rosa, of the Observatory of the Roman College :—

Augusta, Dec. 22, 1870.

This was the day for which we had made so many careful preparations. It began amiss. A rapid fall of the barometer warned us that a squall was imminent, and in the night we had rain, and a furious wind, which gave us great cause for anxiety. The tents set up for the observations, however, stood it bravely, and everything remained in order. The temporary observatories, placed on the summit of the height occupied by the citadel, and on the highest buildings of the castle, could not have been more completely exposed to the wind, and if it had not been for a place of shelter extemporised on the windward side, it would have been impossible to do anything with the photographs. A more inconvenient station in such an uncertain season could not have been chosen. However, every precaution was taken, and hitherto there has been no disaster to record.

The observers were divided into four groups. I was to undertake the photographs, and with me was Father Denza, who was to study the spectrum of the corona. My occupations only allowed me to take a superficial view of the protuberances, but this was most important, in order to compare the forms seen in the spectroscope with those which were to be seen during the totality. During the morning it was to be my duty to examine with the spectroscope the whole of the solar periphery. P. Denza, my colleague, was to observe the spectrum of the corona, and for this I had added our Dolland's finder to his excellent telescope, furnishing it with a small spectroscope, which, for the sake of having more light, was a direct-vision one. Sig. Delisa, the assistant at the Observatory of Palermo, was to assist him in this investigation. I was to superintend all the photographic operations.

The second group consisted of Sig. Cacciatore and Agnello, who undertook to record the time of the phases, which we, who were engaged in physical researches, could not observe during the totality, and they also undertook to measure the various phases. With them was Sig. Blaserna, who gave his attention to the polarisation of the corona.

The third group was formed of Sig. Donati, director of the Observatory of Florence, assisted by Sig. Cantoni Paolo, professor at Messina, and was to be employed on the spectrum of the protuberances, and was provided with a spectroscope of great dispersive power.

The fourth group consisted of the meteorological and magnetic observers, who were to examine their instruments every five minutes, and of assistants who were to note down any accidental phenomena that might take place.

This was our programme. Each group had made its arrangements in accordance with what had been agreed on at Florence, and acted independently. The meteorological department was under the direction of P. Denza, to whom I had also entrusted the magnetic observations which were to be made at the same time as the meteorological, and which were continued for ten successive days, with the assistance of two officers of the navy, and some other persons.

During the days of preparation, Professor Donati and I, assisted by Father Denza, employed ourselves in taking observations of the time, and of the latitude and longitude, and also in determining the local magnetic elements. These observations were so complete and accurate that they would be sufficient alone to constitute a considerable scientific harvest, and to justify our expedition even if no other results had been obtained.

Everything being thus arranged, the morning of the looked-for day dawned bright and fair, but with the barometer extremely low, and a west wind. These circumstances augured ill; however, I hastened to analyze spectroscopically the solar limb, and I found it richly furnished with protuberances of every kind, of which I made a careful drawing.

Towards midday, the cirrus-clouds began to disturb us; but the sky was still clear in places, and we succeeded in taking fourteen very good photographs of the partial phases of the eclipse. But a quarter of an hour before it became total, the clouds began to thicken, favoured by the chill following the occultation of the luminary, and, unfortunately, at the very moment of totality, a cloud thicker than the others passed by, robbing us of about half the precious time.

Happily it vanished speedily, and in the few remaining seconds we were able to secure a result which prevented our labours from being in vain. We obtained at the direct focus a photograph of the protuberances, which form a beautiful small semicircular corona. I was able to see the protuberances, and to compare them with those which I had seen in the morning. I found that I was not mistaken, and that it was really full of the well known rosy jets, of admirable shape and beauty, which confirm the received view that they extend all round the sun, differing in height in different places. Those which we see with the spectrometer are only the most colossal and gigantic, so that, in spite of this valuable invention, eclipses are not useless. The rose-colour was in many cases tipped with a bright yellow, a thing I had already seen in Spain. The shortness of the time, the interruptions from clouds, and the other things I had to do, prevented my seeing everything. But I noticed here, too, what has been observed in Spain, that on removing the coloured glass after the sun had disappeared, the naked eye applied to the telescope could still discover it as a slender brilliant thread, which vanished immediately afterwards.

The corona was almost lost to us by the unlucky cloud, but it was seen a little way off, and Sig. Blaserna found it strongly polarised. In the town it had been sketched with success, as the effects of the cloud were less disastrous there. P. Denza executed the part assigned to him to admiration. As soon as the cloud had passed, he saw the protuberances clearly, and, choosing the clearest and most brilliant part of the corona, he directed the spectroscope towards it, and whilst the assistant kept it fixed, he was able to distinguish plainly the spectrum of the protuberances from that of the corona. This last was continuous, and had two very brilliant bands, one in the green near Fraunhofer's E, and another in the yellow-green. Thus a great problem is solved, and we see that it is possible to pursue this study with different instruments, taking care not to weaken the light for the spectroscope with the analyzing glass. The shortness of the time and the difficulty of calculating the scale would not allow us to fix the lines in question with more precision.

It is not for me to report the results obtained by my other colleagues, but I may say without indiscretion that Sig. Donati succeeded admirably

in analyzing the protuberances with his instrument, and that this, too, marks a step in science. All the meteorological observers brought us a magnificent harvest of data, which it would take too long to enumerate in detail. I will only say that Sig. Cav. Pistoia gave us an excellent description of the flight of the lunar shadow over the wide landscape and over the heaven itself, which being covered here and there with clouds lent itself readily to such a study; the extent of the shadow being less than in Spain, this was the more easy to do.

The instant after totality I applied the spectroscope to ascertain the forms of the protuberances and to identify them, and found that the most beautiful of them, which appeared to me to have the form of a fine *cauliflower* tipped with yellow, retained its shape when seen in the spectroscope, but appeared lower down in the red zone. Sig. Donati assured me that he had seen the yellow line above the red. This fact proves that the element which produces the yellow line is something different from hydrogen, and gives us an additional impression of the complicated form of the protuberances. It may be that this opens a new horizon, and that our spectroscopic studies will have henceforward to include a comparison of the forms which the protuberances present in the different colours of the spectral bands.

I also examined the spectrum of the horns in the phases when they were sharpest, but found nothing except what I think I have seen in full sunlight, that is, a slight broadening of all the lines, discontinued at their summit, which I could not at the time explain to myself.

We then took a few other photographs of the phases, and ended the day's work by taking the sun's altitude with the altitude and azimuth instrument lent to the Commission by the Army Staff.

The results we obtained were certainly not all that could have been desired, but they are still highly interesting, and may be of use to science in various ways, as will appear better when the full reports of the separate observers are collected together. At least as much was done as we could reasonably expect after the meteorological warnings of the day before, and the same was the case more or less at other stations, where the operations were impeded by clouds. Let us hope that, when all these observations have been collected, this solar eclipse may prove to have been not less fruitful in scientific results than its predecessors.

P. A. Secchi.

P.S.—We have received a few communications by telegraph from distant stations. At Villasmundo, Sig. Ragnard observed the corona under very favourable conditions, and found its light strongly polarised, with the plane of polarisation in the direction of the ray of the solar disk. This confirms the results of Sig. Blaserna's observations, which might be disputed on account of the clouds through which the corona was seen. Thus we now know that the corona is reflected light. And this, at any rate, is an important discovery. At Terranova, the other part of the Commission verified one of the bright lines of the corona which were observed by P. Denza. At Syracuse, the weather is said to have been fine; at Catania, partly favourable, partly the reverse. Our English friends under the castle were not able to do anything. The people of the country were a good deal amused, and there was a popular *fête* with music, &c. The rest another time. A. S.

Of the variations in terrestrial magnetism during the eclipse, which it is to be regretted were not investigated by any of the English or American parties, Sig. Diamilla Müller gives the following report in the *Gazzetta ufficiale del Regno d' Italia*, January 17:—

On the 22nd December the needle followed its usual course till the commencement of the eclipse. At that moment it ought to have continued its usual motion from east to west. Instead of this, soon after the first contact, its ascending motion stopped, and it retraced its steps till it reached its *minimum* declination at $1^h\ 58^m$ (Terranova mean time), exactly at the instant of totality. From the moment of totality to that of last contact, as the disc of the sun gradually reappeared, the ascending motion towards the west began anew; and at the end of the eclipse the declination needle had returned to the precise position which it had quitted at the beginning of the phenomenon.

The following are some of the more important results arrived at by other members of the Italian Eclipse Expedition parties at Terranova on the south coast and Augusta, and communicated on the 8th of January to the Scientific Society of Palermo:—

Professor Donati, with an equatorial to which was attached a spectroscope of six prisms, on examining one of the prominences which he had studied before the eclipse, found a bright hydrogen line, and a yellow line more refrangible than the sodium lines, but no trace whatever of iron lines.

P. Denza, who also made spectroscopic observations, discovered a bright line near E, and another probably due to nitrogen.

From Terranova Sig. Tacchini reported that exact measurements had been made of various bands, amongst which was the bright coronal band, whose position was fixed by three separate observations; so that this may be regarded as finally determined.

Nobile and Whitting together observed this line, so that the one set of results may be checked by the other.

Sig. Tacchini also said that a comparison of the forms of the protuberances, as seen with the naked eye during the eclipse, and of those seen in the bright lines of the spectroscope in full sunlight, showed the accurate agreement of drawings made in entire independence of one another.

But by far the most important of these were the examinations of the corona by Professor Blaserna for polarised light. Using a Savart's polariscope attached to a telescope, he examined three points situated at a distance of 45° from one another; the polarisation was most pronounced, and nearly of the same intensity as that of the atmosphere seen on a clear day at a distance of 50° from the sun. At the distance of three lunar radii, there was no trace of polarisation, all errors due to the influence of the atmosphere having been eliminated.

Summing up his observations, Blaserna said that "he found that the corona was strongly polarised, whilst at a slight distance from the sun there was no trace of polarisation. The direction of polarisation was determined in three distinct points, and proved to be identical with the plane of the tangent or of the solar radius. This shows that the corona has no light of its own, but receives it from the sun's photosphere. In reference to a doubt expressed by Father Secchi in one of the Florentine journals with respect to the trustworthiness of these observations owing to the cloud, he insisted that the action of the thin clouds consists in destroying or at least diminishing the amount of polarised light, but they do not polarise a light which is unpolarised, so that, if, notwithstanding the clouds, the light of the corona remains polarised, this proves *à fortiori* its polarisation." Professor Blaserna added "that it was a clear result of his observations that the plane of polarisation is different for different parts of the corona, and that the only question left undecided owing to the special nature of his own instrument was whether this plane coincides with the solar tangent or radius.

Scientific Notes.

Biology.

Migration of White Blood Corpuscles.—In the last part of *Humphry and Turner's Journal of Anatomy and Physiology*, Dr. Caton, of Liverpool, contributes an important communication on the Cell-Migration Theory, in which he gives the results of his examination of the blood-vessels of the mesentery of frogs, and corroborates in all essential points the observations of Addison, Cohnheim, Stricker, and others, respecting the escape of the white corpuscles of the blood through the walls of the smaller arteries and capillaries. Dr. Caton observes that he operated on nearly a dozen frogs in succession without seeing anything more than, first, a dilatation of the vessels, secondly, a gradual retardation of the flow of blood till complete arrest occurred, the parts being always considerably congested, and, thirdly, a tendency of the white corpuscles to arrange themselves on the inner surface of the vessels, presenting at the same time active amæboid movements. In none of these cases was the passage of the corpuscles through the vascular walls observed. At a later period, however, when operating, near the commencement of summer, on strong healthy frogs, the migration of the cells was distinctly witnessed; and he gives sketches of the forms assumed by the corpuscles as they traverse the walls. He has not observed any migration of red corpuscles. Fishes did not prove good subjects for this kind of experiment, but the migration process was observed in perfection in tadpoles.

Consciousness and the Seat of Sensation.—Dr. Cleland of Galway contributes to the same periodical an interesting essay on the physical relations of consciousness and the seat of sensation, in which he calls in question the generally received doctrine of sensation which necessitates the assumption that "the functional union of the parts of the periphery with different termini in the brain is primordial, and that the surface of the body is minutely represented or repeated by a number of points in the brain, which, however, confusedly massed together, derive their

properties from their connections," and maintains that "the consciousness extends from its special seat so far as there is continuity of the impressed condition; that when an irritation is applied to a nerve-extremity in a finger, or elsewhere, the impression (or rather impressed condition) travels as is generally understood, but exists for at least a moment along the whole length of the nerve, and that as soon as there is continuity of the impressed condition from finger to brain, the consciousness is in connection with the nerve, and is directly aware of the irritation at the nerve extremity. Or, the position may be shortly stated thus: functional continuity between nerve extremity and brain is proved to be necessary for sensation, while, on the other hand, existence of distinct routes of sensation between them is highly improbable; and, seeing that functional continuity is sufficient of itself to explain the phenomena, we are not entitled to assume the existence of distinct routes, as has hitherto been done."

The Theory of Natural Selection.—In *Nature* for Nov. 10, Mr. A. W. Bennett discusses the theory of natural selection, which he holds to be inadequate to account for the origin of species. Taking as his starting-point the two principles laid down by Mr. Darwin himself, that natural selection always operates through the perpetuation of exceedingly small changes, and that every change thus perpetuated by natural selection must be directly beneficial to the individual, he applies these principles to the phenomena of Mimicry, as illustrated in Mr. Wallace's *Contributions to the Theory of Natural Selection*. Mr. Bennett maintains that in those cases where a butterfly mimics exactly the external facies of a species belonging to a different tribe, the amount of change in the direction of the species ultimately mimicked which can have been established in a single generation, is so small as to be absolutely useless to the individual, and hence, according to one of the cardinal principles of the Darwinian hypothesis, cannot have been brought about by natural selection. He then traces a connection, which he believes to have been overlooked hitherto, between the development of the power of mimicry or protective resemblance, and that of instinct, in the various classes of the animal kingdom, and argues that their parallelism must result from some connection between these phenomena. In conclusion, he contends that Mr. Wallace's abandonment of the theory of natural selection in accounting for the development of man and of the various races of mankind is inconsistent and illogical, and that whatever "intelligence," as Mr. Wallace expresses it, has been operative in the origination of man, the same principle must have been at work also in the evolution of the various lower races of animals. In reply, Mr. Wallace and other naturalists maintain that the steps necessary to transform a butterfly from its normal facies to one imitating exactly an entirely different butterfly of another genus, need not be so numerous as is generally supposed; and that each step may be proved to be directly beneficial to the individual; and hence natural selection is amply sufficient to account for the whole phenomenon. In a subsequent number (Dec. 22) Mr. A. Murray attributes the phenomenon of mimicry to an entirely different cause, that of hybridization, drawing a parallel between the hybridization which he assumes in Lepidoptera and that which is known to take place in plants. This theory is strongly opposed by other entomologists, mainly on the ground that it is unsupported by observed facts, and that from the crossing of plants belonging to different species of the same genus, no assumption can be made that butterflies belonging to entirely different genera and even orders can possibly hybridize.

Botany.

Transpiration of Aqueous Vapour by Leaves.—Dr. M'Nab, of Cirencester College, has just published (*Transactions of the Edinburgh Botanical Society*, vol. xi.) a paper on this subject. A series of experiments which he has instituted led to a number of interesting results, of which the following are the most important: 1. Quantity of water in the leaves. The mean of several experiments gave 63·4 per cent. 2. Quantity of water removable by calcium chloride, or sulphuric acid. This was found to be from 5·08 to 6·09 per cent.; while the sun caused about the same quantity, 5·8 per cent., to be transpired. The remainder, from 56 to 57 per cent., was therefore determined to be fluid in relation to the cell-sap of the plant. 3. Rapidity of transpiration in sunlight, diffused light, and darkness. The results given are, in sunlight, 3·03 per cent. in an hour; in diffused daylight, 0·59 per cent.; in darkness, 0·45 per cent. 4. Amount of fluid transpired in a saturated and in a dry atmosphere in the sun and in diffused daylight. In sunshine the experiments gave 25·96 per cent. in an hour in a saturated atmosphere, 20·52 per cent. in a dry atmosphere; in the shade, none whatever in a saturated, 1·69 per cent. in a dry atmosphere; thus confirming the results obtained some time since by M. Dehérain (see *Academy*, vol. i. p. 46). 5. Quantity of water taken up by leaves when immersed in it. The mean of several experiments gave 4·37 per cent. in an hour and a half. 6. Quantity of aqueous vapour absorbed by leaves in a saturated atmosphere. Dr. M'Nab confirms in a remarkable manner MM. Prillieux and Duchartre's statement (see *Academy*, vol. ii. p. 15), that plants absorb no moisture whatever in the state of vapour through their leaves. 7. Differences in the amount of fluid transpired by the upper and under side of leaves in the sun and in diffused daylight. Under both circumstances the amount was found to be much larger from the under than from the upper surface. 8. Rapidity of ascent of fluid in plants. From $4\frac{7}{12}$ in. in 10 minutes to $8\frac{7}{12}$ in. in 70 minutes. In all these experiments the plant operated on was the common cherry-laurel (*Prunus lauro-cerasus*), and the fluid used for testing the rapidity of ascent lithium citrate, the presence of a very minute quantity of which can be readily determined by the spectroscope.

Stipules of Magnolia.—In a paper read before the Academy of Natural Sciences of Philadelphia, Oct. 25, 1870, Mr. Thomas Meehan states his belief, the result of a series of structural observations, that the stipules of *Magnolia*, *Liriodendron* (the tulip-tree), and other genera of Magnoliaceæ, are in reality two lateral lobes of the leaf, which, by a peculiar process of adnation, became stipular sheaths after having been partially organized as leaf-blade. This would indicate the normal condition of the leaves of Magnoliaceæ to be ternate, and points to a still closer approximation between that order and Ranunculaceæ.

The Colours of Autumnal Foliage.—Mr. H. C. Sorby has a valuable paper on this subject in the January number of the *Quarterly Journal of Science*. The chemical substances which give rise to the varying tints of autumn he divides into five classes or genera:—1. *Chlorophyll*, or the green colouring matter, which is very rarely found pure, even in fresh leaves. It is insoluble in water, but soluble in alcohol or bisulphide of carbon, and the spectrum has a well-marked absorption-band in the red. 2. *Xanthophyll*, or the yellow colouring matter; this is insoluble in water, but soluble in alcohol and bisulphide of carbon; the spectrum shows absorption at the blue end. It is found in various fruits, flowers, and roots. 3. *Erythrophyll*, or the red colouring matter. There is strong absorption in the green part of the spectrum; the various kinds are usually soluble in water and dilute alcohol, but not in bisulphide of carbon. It is found in red flowers and leaves. 4. *Chrysophyll*, or the golden-yellow colours, soluble in water and dilute alcohol, but insoluble in bisulphide of carbon. 5. *Phaiophyll*, or the group of various browns; soluble in water, but not in bisulphide of carbon. These are mostly due to the oxidation of chrysophyll. Unfaded green leaves are coloured mainly by chlorophyll, but the tint is very much modified by xanthophyll, and by colours of the chrysophyll group. The various tints of autumnal foliage are produced by combinations of different members of the above groups; and Mr. Sorby gives the following scheme of their relative abundance:—During complete vitality and growth, we have different kinds of chlorophyll and chrysophyll producing more or less bright green; during low vitality and change, erythrophyll and xanthophyll make their appearance, producing more or less green-brown, red-scarlet, or bright orange-brown; while during death and decomposition phaiophyll and humus (brown-black) usurp their places, and gradually cause a uniform dull brown colour.

Geology.

Eozoön Canadense.—The question of the organic origin of this production, considered by the greater number of geologists as the most ancient fossil yet discovered, has been reopened by Mr. T. Mellard Reade, in *Nature*, Dec. 22. The writer asserts that structures called eozoönal have not yet been discovered in any unaltered rocks, while they are abundant in metamorphosed rocks; and argues, from this and other reasons, that Professors King and Rowney are right in holding the *Eozoön* to be a mere mineral structure occasioned by the metamorphism of the rock. In a subsequent number (Jan. 5), Dr. Carpenter replies, stating that the eozoönal structure is most characteristically displayed in those portions of the serpentine limestone of the Laurentian formation which have undergone the least metamorphic change, and reiterating the arguments derived from the structure itself, which have led him and most other geologists to consider the *Eozoön* as of indubitable organic origin.

Diamonds at the Cape.—It is announced in the *Graaff Reinet Herald* that one party of explorers has found 54 diamonds, one of 150 carats, another of 27, the others being smaller. Altogether their value is estimated at 150,000*l*. These estimates, however, usually undergo considerable modification when the diamonds arrive at the home-market.

Thermal Springs in Cambridgeshire.—These springs, described by Mr. Harmer, have been examined by the Rev. O. Fisher, F.G.S., of Harlton, Cambridge. They are situated in farmyards, and appear to derive their tepidity (65° Fahr. in winter, or even higher) from the warmth caused by the masses of farmyard manure hot and steaming which is stored up, 2 feet or more in depth, before being laid upon the land, above and around these shallows wells. This simple solution of the matter is important, as the presence of true thermal springs would be very difficult of explanation in Cambridgeshire.

Excavations at Portsmouth in the Lower Eocene Beds.—Some very extensive excavations are being made in beds of Eocene age at

Portsmouth for the purpose of forming a new dock. An examination of the beds by Messrs. Meyer and Evans, during the autumn months, has resulted in a large addition to the list of British Eocene Mollusca. Three new crustaceans have also been obtained and described by Mr. Woodward, one of which is referable to the *Corystidæ* and two to the *Portunidæ*. The genus *Palæocorystes* is found in the gault and chalk, and it is represented in our own seas by the living *Corystes*, or "masked crab." Its occurrence in the Eocene bridges over another gap between secondary and recent times. The Portunians will form a new genus, *Rhachisoma echinata*, and *R. bispinosa;* they are both armed with long hepatic spines.

Geological Bearings of Recent Deep-sea Soundings.—Under the above heading Mr. A. H. Green, of the Geological Survey, combats the views put forward by Prof. Wyville Thomson, and adopted by Dr. Carpenter, that we are now living in the cretaceous epoch. He maintains (in an article published in the *Geological Magazine* for January) that a mere similarity, or indeed identity, between certain low forms of life, common to the Atlantic mud and our chalk formation, ought not to be treated as conclusive. The older chalk swarms with *Ammonites*, *Scaphites*, *Baculites*, and *Belemnites*, not one of which will be found imbedded in the chalk of to-day. No marine mammals are found in the old chalk, but many, he thinks, will be preserved in the modern chalk. Some of the largest of the Pterodactyle family, besides *Ichthyosauri* and *Plesiosauri*, have left their bones to whiten in the old chalk mud, none of which survive to-day.

Mammoth in Belgium.—The great attraction of the geological portion of the St. Petersburg Museum consists in one entire gallery of mammoth remains, probably including many nearly entire skeletons, the bones of all of which are in a remarkably fresh state of preservation. Some years since (owing to the exertions of Sir Antonio Brady), an almost entire mammoth's skull with tusks, of colossal proportions, was obtained at the brick-pits at Ilford, in the Thames valley brick-earth, and now adorns the geological gallery of the British Museum. Since the appointment of M. Dupont to the post of keeper in the Brussels Museum, the almost entire skeleton of a mammoth, found some time since, but neither repaired nor mounted, has been diligently mended up bit by bit, till the Museum is now able to boast the possession of the best example of *Elephas primigenius* out of St. Petersburg. One is struck with the comparative height and slenderness of the mammoth's skeleton as compared with the modern elephant, and it seems probable that he was a more active and a lighter-built beast than the Asiatic or African species. It is to be hoped that the British Museum collection will, ere long, be enriched by the addition of a skeleton of the Siberian mammoth. The execution of the fortifications around Antwerp has led to the discovery, not only of elephants' and mastodons' remains, but a most wonderful series of cetacean bones. These are now arranged in a fine gallery in the Brussels Museum, which, under the direction of M. A. de Borre, bids fair to be one of the most attractive of Continental institutions.

Chemistry and Physics.

The Influence of Wind on Pressure.—At a recent meeting of the French Academy of Sciences, M. de Fonvielle called attention to a passage in the works of the celebrated philosopher, M. Mariotte, which throws some light on the reason of an increased pressure generally accompanying fair and a diminished pressure wet weather. Our dry winds, he explains, mostly come from the north or north-east, and hence, travelling from a colder region, have a tendency to descend, and therefore to increase the pressure of the atmosphere, or to cause the barometer to rise. Our rain-laden winds, on the other hand, generally come from the south or south-west, that is, from a warmer region, and consequently have a tendency to rise, or diminish the pressure, and thus cause the barometer to fall.

The Meteorite of Lodran.—Prof. Tschermak, the Keeper of the Imperial Mineral Collection at Vienna, has published (*Sitzungsberichte d. k. Akad. d. Wiss.* Bd. 61) a memoir on the physical and chemical characters of the aërolite which fell at Lodran, Mooltan, India, at 2 P.M. on the 1st October, 1868. The chondritic structure noticed by G. Rose in many meteorites was not observed in this stone, but within its shiny black crust was found a magma of silicious particles of so coarse a kind that the individual granules occasionally measured 2 mm. in diameter. The constituent minerals were carefully isolated before analysis, which showed this aërolite to be composed of—

Nickeliferous iron	32·5
Magnetic pyrites	7·4
Olivine	28·9
Bronzite, with some chromite and anorthite	31·2
	100·0

The nickeliferous iron contains nearly 13 per cent. of nickel, and, when etched, shows figures resembling those of the iron of Senegal. It constitutes a mesh enclosing the silicates, the crystals of olivine not unfrequently leaving a complete impress of their faces in this alloy. Associated with the last-mentioned substance, and occasionally entangled in the silicates, were fragments of magnetic pyrites; they showed no crystalline structure, and dissolved in acid with deposition of sulphur. The Lodran olivine is of a bluish-grey to Prussian-blue colour, and occurs in unusually well-developed crystals, which were found by Prof. von Lang to correspond in all respects with basaltic olivine. The fissures of many of the crystals are filled with a black mineral of a dendritic form; this is assumed to be chromite, and believed to be a secondary formation. By chemical examination the olivine was found to be made up of Mg_2SiO_4 and Fe_2SiO_4 in the ratio of 82 to 18. The bronzite is less perfectly crystallised, faces of but one zone being recognisable; they agreed, however, with those of the bronzite of the Breitenbach siderolite. On examining a microscopic section of this mineral, it was observed to enclose three distint bodies: colourless chondra of a doubly refracting mineral, which the crossed Nicols showed to be twinned, and which is probably a felspar; small round black particles, usually lying in groups, and presumed to be chromite; and fine hair-like bodies lying parallel to the cleavage edges; their nature could not be determined. Deducting the small amount of alumina and lime present, due possibly to the minerals enclosed in it, the bronzite is composed of $MgSiO_3$ and $FeSiO_3$ in the ratio of 78 to 22. It is remarkable that olivine and bronzite contain the same percentage of iron protoxide (12 per cent.). The chromite occurs in fine octahedra often 0·5 mm. in height.

Decomposition of Oxalic Acid.—M. Carles has lately conducted (*Compt. rendus*, 71, 226) a current of pure oxygen through a concentrated solution of oxalic acid, and then through two vessels containing baryta water. At ordinary temperatures no carbonic acid was evolved. When, however, the solution was heated to 100° in a water-bath, a precipitate of barium carbonate was formed. The decomposition of the oxalic acid is not a consequence of its oxidation, for the oxygen can be replaced by hydrogen or nitrogen with the same result. The oxalic acid splits up into carbonic and formic acids. The presence of the latter body is easily recognised by employing a washing bottle filled with silver nitrate. This decomposition more closely resembles the dissociation phenomena noticed by Gernez, and confutes the theory of Bizio, that the decomposition of oxalic acid in solution is brought about by atmospheric oxygen.

Sugar a Normal Constituent of Wine.—During the chemical examination of wines of every vintage and country (*Pol. Journ.* 196, 540), Dupré recognised the presence, in almost every case, of a certain amount of sugar, and was able after precipitation of the acids with lead oxide, and removal of the colour with animal charcoal, to identify the sugar by aid of Fehling's test. This confirms what Jellett had determined with the saccharometer. It seems no longer a matter for doubt that wines, even of the oldest vintages, contain some sugar.

Development of Ozone by Electrolysis.—During the electrolysis of bismuth nitrate, Böttger noticed (*Polyt. Notizbl.* xxv. 320) the production of an unusually large amount of ozone at the anode in addition to bismuth peroxide. Salts of lead and silver under like circumstances also form metallic peroxides, but no ozone.

Synthesis of Conine.—This, the first synthesis of a natural alkaloid, has been accomplished by Hugo Schiff, by the following method (*Reports of the Berlin Chemical Society*, 26th Dec. 1870, p. 946). When alcoholic ammonia is allowed to act on butyraldehyde at temperatures not above 100°, two bases are formed of the following constitution:—

$$\underbrace{C_{16}H_{29}NO}_{\text{Tetrabutyraldine.}} = 4C_4H_8O + NH_3 - 3H_2O$$

$$\underbrace{C_8H_{17}NO}_{\text{Dibutyraldine.}} = 2C_4H_8O + NH_3 - H_2O$$

The tetrabase is the chief product of the reaction, and the two bodies can be readily separated by means of the different solubilities of their chloroplatinates. By subjecting either the free base or its chloroplatinate to dry distillation, water is eliminated, and oily basic substances are formed with an intense suffocating odour. By the distillation of dibutyraldine, indifferent oily bodies are formed, then basic products of higher condensation, and finally a powerful alkaline base which exhibits all the characters of conine. It is formed according to the equation—

$$\underbrace{C_8H_{17}NO}_{\text{Dibutyraldine.}} = H_2O + \underbrace{C_8H_{15}N}_{\text{Conine.}}$$

New Books.

CZUMPELIK, E. Beiträge zur chemischen Geschichte d. a) Cymols. (Academy reprint.) Wien: Gerold.

FITZINGER, L. J. Kritische Durchsicht der Ordnung der Flatterthiere od. Handflügler (Chiroptera), Familie der Fledermäuse (Vespertiliones). 4te. Abth. (Academy reprint.) Wien: Gerold.

KOENIG, J. Beiträge zur Theorie der elektrischen Nervenreizung.

(Aus dem physiolog. Institute d. Prof. Helmholtz in Heidelberg.) (Academy reprint.) Wien : Gerold.

Langer, C. Ueber Lymphgefässe d. Darmes einiger Süsswasserfische. (Academy reprint.) Wien : Gerold.

Leroy, C. G. The Intelligence and Perfectibility of Animals from a philosophical point of view. With a few letters on Man. Chapman and Hall.

Lippmann, E. Untersuchungen über die Phenoläther. (Academy reprint.) Wien : Gerold.

Martin, J. H. Microscopic Objects figured and described. Van Voorst.

von Basch, S. Die ersten Chyluswege u. die Fettresorption. (Academy reprint.) Wien : Gerold.

Zimmermann, R. Samuel Clarkes Leben u. Lehre. Ein Beitrag zur Geschichte des Rationalismus in England. (Academy reprint.) Wien : Gerold.

History.

Prester John in Legend and History. [*Der Presbyter Johannes in Sage und Geschichte. Ein Beitrag zur Völker- und Kirchenhistorie und zur Heldendichtung des Mittelalters*, von Dr. Gustav Oppert.] Zweite verbesserte Auflage. Berlin : Springer, 1870.

The first edition of this work appeared in 1864, and was noticed by me at the time in the *Göttingische Gelehrt. Anz.* pp. 2063, ff. The principal object of Oppert's researches is to prove that there is no authority in original sources for the views of those who suppose Prester John to have been an African king of Abyssinia, or an Indian king, or the chief of a Tartar tribe, especially the Keraite chieftain Unkkhan (d. 1198). His own theory is that Prester John was none other than the Korkhan of Qarakhitay. *Korkhan* signifies "ruler of the country north of the desert of Gobi;" and in its prime the kingdom of Qarakhitay extended from Bokhara and Samarkand in the west as far as to that desert. The eastern boundary was formed by Tangut. According to this, it must have extended lengthwise for about 30 degrees, from 80° to 110° east longitude (Ferro). In the north it reached to the Ulugtag, the greater and lesser Altai Mountains; in the south, to Badakshan and the Muztag, that is to say, about from 35° to 48° north latitude. The rulers of this kingdom, which flourished from 1125 till nearly 1218, all bore the title of *Korkhan*, which Yeliutashé, the founder of the kingdom and dynasty, had received from his subjects. This prince is also the one to whom the oldest Western report about Prester John especially refers, that, namely, in Otto von Freisingen (d. 1158). In regard to the Christianity of the Qarakhitayans, the author has only succeeded in finding one passage containing circumstantial information. The Persian annalist Mirkhond mentions in his short sketch of the history of the Korkhans that the daughter of the last lawful ruler of Qarakhitay was a Christian, and had given her fellow believers all the support and assistance in her power. This notice might perhaps be considered to favour the conclusion that the princess's father, the Korkhan Kushluk, was also an adherent of the Christian faith. As for the name John, Oppert is of opinion that it is a corruption of the title Korkhan, the initial letter of which is frequently changed in West Turkish to *G*, and in the middle of words to *J*, so that Jorkhan would be a possible form of Korkhan. The title Jorkhan might then, according to Oppert, be easily transformed into the Syro-Hebraic name Juchanan, Jochanan, Jochan, and at that time the nations of the West derived their knowledge of Oriental history chiefly from the Syrians. Now, it is well known that the names Johannes, Johann, and John, are derived from Juchanan, and it cannot, he thinks, be denied that there is some resemblance between these forms of the name and the princely title Jorkhan. Professor Schott, of Berlin, one of the principal authorities on the languages of Eastern Asia, has also recently given the support of his name to this derivation.

The title Presbyter or Prester remains to be explained, and on this subject the author observes :—

"It is not easy to indicate the precise connection between the Korkhan, lord of the Qarakhitayans, and the priestly office. On the other hand, it should be remembered that, amongst the Nestorians, it was rather usual to assume it; that the Franciscan Rubruquis testifies that in Central Asia nearly all the males belonging to the Nestorian sect had received ordination as priests, and that an actual descendant of Presbyter John received, as we have seen, minor orders at the hand of John of Monte Corvino, and served in his chapel at high mass" (towards the year 1293).

These are the principal results of Oppert's investigations, and he has maintained them substantially unaltered in the edition before us, in which only a few points of detail have been corrected; as for instance, instead of treating the Travels of Sindbad as the source of the wonderful letters of Prester John, Oppert now prefers to connect them with the Alexander legends. An essay, "On the Origin of the Parcival and Grail Legends," has also been omitted, and only part of it reproduced under the title, "The Grail and the Knights of the Grail in the Poems of Eschenbach." In this Oppert maintains as before, and endeavours to find fresh grounds for the opinion, that the Coral legends have an intimate connection with the Grail myths. He also shows clearly that in Wolfram's glorification of the order of the *Templeisen* of Salvaterra, he had in his mind the gallant contemporary order of Salvatierra (Calatrava), which, like the order of Knights Templar, was founded on the Cistercian rule. Space forbids us to dwell at length on all the parts of this very attractive work, but it may be observed, in reference to p. 9, that Barros, Dec. III. l. iv. c. 1, pp. 359-365, had already called attention to the confusion of the Asiatic Prester John with the king of Abyssinia. The careful index appended to this new edition is particularly welcome, but, on the other hand, a considerable number of annoying misprints have been overlooked; thus p. 36, l. 5 from bottom, there is *tonaliæ* for *tovalie* (meant for the Italian *tovaglie*), &c. &c. Felix Liebrecht.

Philology.

A Shakespearian Grammar; an Attempt to Illustrate some of the Differences between Elizabethan and Modern English. For the Use of Schools. By E. A. Abbott, M.A., Head Master of the City of London School, formerly Fellow of St. John's College, Cambridge. Third Edition. London : Macmillan and Co., 1870.

There is a wide difference between the first and third editions of this work. In his first edition, Mr. Abbott was too cautious, and left many things but half explained. His book showed great industry, but no very firm grasp of the subject, and not sufficient investigation in the right direction, viz. in the observation of the older forms of our language. In this third edition, however, which is called a "revised and enlarged edition," we observe an immense advance. The explanations are fuller, clearer, and more precise. He has, in the interval, more firmly seized the true principle, viz. that the author who would explain various grammatical usages with certainty *must* refer frequently to the older monuments of the language with which he is dealing. He refers freely to Mätzner's *Englische Grammatik*, and to Sir F. Madden's edition of Layamon, and he could hardly have done better. The collection of examples in Mätzner's Grammar, all thoroughly well arranged, is astonishingly copious; the whole field of English literature has been carefully traversed, and so many examples selected that on one and the same page we frequently find quotations from the Towneley Mysteries, Piers the Plowman, Macaulay, Shakespeare, Otway, Chaucer, and Charles Dickens. When the member of the Philological Society who is said to be trans-

lating Mätzner's work shall have completed his great task, we may reasonably hope that to go astray concerning points of English grammar will no longer be tolerated. Then, again, how important a book is Layamon! Written in the time of King John, existing in two excellent MSS., printed (and this is no small matter) by a scrupulously exact and entirely competent editor, it is one of the safest guides we have for exhibiting the manner in which the Early English of "Anglo-Saxon" times gradually changed into the Early English of the 14th century. Mr. Abbott has used these books to good purpose, and refers to his use of them most sensibly in his preface, p. xxiv, though he should have omitted the apology in the fourth line.

With regard to Shakespeare, Mr. Abbott exhibits the results of an astonishing and almost appalling industry, of which the reader reaps the full benefit. The references, the mere enumeration of which fills forty-eight pages closely printed in quadruple columns, tell us not only in what act and scene any particular word occurs, but *in what line;* so that, by using the Globe edition, we find our place at once, instead of having to peruse the entire scene with a large chance of missing the particular *but* or *and* that is under discussion. Particular attention is paid to all the important particles on which so much frequently depends. The articles, pronouns, prepositions, and conjunctions, are as much attended to as are the auxiliary verbs and the forms of the subjunctive mood; besides which, we have examples of elliptical expressions, double negatives, implied nominatives, idioms, compounds, prefixes, affixes, and syntactical arrangements; whilst, for those who are not attracted by these things, there is a most interesting chapter on prosody, bringing out some very curious accents, pauses, and peculiarities of pronunciation. The whole work is remarkable for painstaking and general accuracy, and an obviously sincere desire of attaining to the exact truth. It is at once a trustworthy and perhaps the sole guide to a knowledge of Shakespeare's grammar.

To take an instance. We greatly prefer Mr. Abbott's explanation of the phrase *many a man* to the explanation in Archbishop Trench's *English Past and Present.* The archbishop takes *many a man* to be a corruption of *many of men*, and says there is no doubt about it. But this is just one of those uncritical assumptions where phrases like "no doubt" are employed to gloss over the fact that the proof cannot easily be produced. Not one such instance is offered except the casual one where Wiclif translates the Latin *multos sanctorum* by *manye of seintis* (Acts xxvi. 10). Mr. Abbott (p. 60) refers us to Layamon, where we actually find the *a* declined, as in "monianes cunnes," literally, *of many a kind.* This is conclusive. The *a* is here the article, and not the preposition *of.* Or, in Mr. Abbott's words, "the article or numeral adjective *an* is declined like an adjective, while *moni* is not. The inference is, that *moni* is used adverbially. In the same way the Germans say *mancher* (adj.) *Mann*, but *manch* (adv.) *ein Mann; ein solcher* (adj.) *Mann*, but *solch* (adv.) *ein Mann.* In A.-S. the idiom was *many man*, not *many a man.*" In fact, the use of *many a* in Old English is not confined to the singular number; it is also found with plurals, especially where the plural noun *precedes* the phrase *many a* or *many one* in the sentence. Clear examples of this are the following:—

> "Than telle I hem ensamples *many oon*"
> (Chaucer, *C. T.* 13,850);

> "After tho bokes which of it men fynde,
> Wher this historie preuyd *manion*"
> (*Romans of Partenay*, ed. Skeat, pr. 169);

which means, "according to those books which men find concerning it, where many one (? whether of *books* or of *men*) proved this history."

But sometimes the plural noun was dropped, and *many one* used as a plural without a noun, as—

> "And leten the othre to liue gon,
> Of hem be tudered *manigon*"
> (*Genesis*, ed. Morris, l. 630);

i. e. "and let the others escape alive; of them are many engendered."

Exactly similar is the phrase in Psalm iii. in the prayer-book version, "*Many one* there *be;*" where the use of *be* shows *many one* to be plural, as in the last example. The Bible version avoids the difficulty by simply dropping *one*, and reads, "Many there be;" which is both better and simpler, and, according to the *oldest* usage, more correct. In late English, we meet with the pleonastic form *many a one*, which is etymologically equivalent to *many one one.*

But Mr. Abbot is certainly in error in adding "So after the adverb *ofte*, we have *a day* in—

> "Ful ofte a day he swelde and seyde alas!"
> Chaucer, *Knighte's Tale*, 498.

For this example is not to the purpose. "Ofte a day" means *often in the day;* the *a* being here, as so frequently elsewhere, a contraction of *on.* See a similar passage in *William of Palerne* (ed. Skeat), l. 610—

> "& *ofter* than ten times hit taketh me *a daye*,
> And nine times *on the night*, nought ones lesse."

The error of putting an apostrophe in *Knighte's* we are disposed to attribute to the printer; it is of course superfluous to insert an apostrophe to denote the absence of an *e* when the *e* is, as a matter of fact, present. One short rule may here suffice, viz. that apostrophes never occur in Early English; a fact of which Chatterton, among others, was unaware.

We feel that the subject of English grammar in general, or even of Shakespearian grammar in particular, is too vast to be discussed within reasonable limits. Even with regard to Mr. Abbott's treatment of it, we have had space to criticise but one instance of a peculiar usage. We can only recommend Mr. Abbott's book generally, without endorsing the complete correctness of every article in it. It would not be difficult to point out a few errors of more or less importance. What, for instance, is the advantage of inserting such a sentence as this on the use of the word *and?* Mr. Abbott says, "It is common in ballads, and very nearly redundant:—

> "The Perse owt of Northumberlande,
> *And* a vow to God made he."—*Percy* (Mätzner).

In this case, Mr. Furnivall, we are told, conjectures *and a vowe* to be a mistake for *an avow*, *avow* being the old form of the word *vow.* This is right, but there is no room for conjecture. Any one who reads the ballad of *Chevy Chace through* will meet with the word *avow* again, viz. in the line—

> "As our noble kyng made his *avowe*."

This may serve as a caution against rushing to conclusions. The error is not so much Mr. Abbott's as Mätzner's; and not so much Mätzner's as Richard Sheale's, whose transcript is our only authority. The expression "common in ballads" may probably be taken to mean that a few such corrupt instances may be found.

But we may, to some extent, sum up the chief difference between Elizabethan and Modern English in one word, viz. *freedom.* In the days of Queen Bess, authors were the masters, not the slaves, of words. If they wanted to use a substantive as a verb, or an adjective as an adverb, they did so without the slightest hesitation. If they wanted to alter the number of syllables in a past participle, they made the past tense do duty for it, just as Lord Byron has done in the lines—

> "And the idols are *broke* in the temple of Baal;
> And the might of the Gentile, *unsmote* by the sword," &c.

All this is well brought out in Mr. Abbott's "Introduction," and we quite agree with his opinion that the primary objects of the Elizabethan poets were *clearness* and *force*. Irregular grammar is often perfectly intelligible and expressive; the very defiance of rule sometimes draws attention to particular words, and lends vigour to the phrase. Such bold licenses are frequently successful in their effect, and this alone can justify them. The investigation of them can never fail to be very instructive. WALTER W. SKEAT.

Elucidations of the Student's Greek Grammar, by Prof. Curtius. From the German, with the Author's sanction, by Evelyn Abbott. London: John Murray, 1870.

AN English translation of Professor Curtius' *Erläuterungen zu meiner Griechischen Schulgrammatik* will be welcome to all who have accustomed themselves to use the same scholar's *Grammar of the Greek Language*, translated and edited by Dr. W. Smith. It might, however, have been an advantage if the two books had been worked up into one. The greater portion of the *Erläuterungen* might have served as a very useful introduction to the grammar, and the remaining paragraphs could well have been distributed among the different chapters, so as to throw light in their proper place on any points that seemed to require elucidation. In later editions of the grammar such an arrangement will be a decided advantage.

Professor Georg Curtius has done more than any living scholar for utilising the results of comparative philology in the interest of classical studies, and he has made the University of Leipzig the very centre of philological life in Germany. His school marks, in fact, a decided advance beyond Bopp. Instead of merely collecting the coincidences, real or apparent, in the grammatical structure of cognate languages, such as Sanskrit, Zend, Armenian, Greek, Latin, Gothic, Irish, and Palæo-Slavonic, he has drawn particular attention to the importance of studying each individual language by the light derived from a comparative study of the whole family of speech to which it belongs. The results obtained by this new method have been most valuable, and though Professor Curtius, as standing between two parties, has had to bear the hostility both of the old school of classical and the new school of comparative scholars, he has not betrayed the true interests of either. He has held his own against the best classical scholars of the day, and even the invectives of such a veteran as Professor Pott have not shaken his strong position. In fact he has but confirmed the old rule that the best abused is generally the best man, and his Greek grammar, in spite of all opposition it had to encounter, is at present the most popular grammar in Germany. Its success in England, owing to various circumstances, may be slower, but that it will carry the day in the end, there can be little doubt. Mr. Abbott's translation of the *Elucidations* is very creditable, and shows not only an accurate knowledge of German, but also a familiarity with the principles of comparative philology. A few accidents have happened. On p. 147 we read: "But a further division of the material is hardly incompatible with the requirements of instruction." *Schwer vereinbar* means the very contrary, viz. "it is hardly compatible." Some hints should have been given as to the pronunciation of vowels. On p. 22, we read: "αι and ει were pronounced in some districts as *ä* and *i*." On p. 23: "Hermann recommends a pronunciation of αι midway between *a* and *e*." In each case the vowels *ä*, *i*, *a*, and *e*, must be pronounced as in German, not as in English.

With regard to the original, there is little to remark. It strikes one as strange that so many things which would seem to have long been placed beyond the reach of controversy should still require to be proved and defended. That the stem of neuters like γένος is γένος or γένες would seem to be as certain as that the genitive of *mensa* is *mensae*. Yet "even to the most recent times," Professor Curtius tells us, "these simple stems in ς, *e.g.* γένες (nom. γένος) are ignored by Rost and Krüger." In this respect English are really in advance of German school grammars.

On p. 42, Professor Curtius says: "The most important results of the inquiry which bring the theory of spirants into a consistent whole for the first time are the following: σσ arises only out of a hard mute or aspirate (τ, θ, κ, χ)." This is quite correct, but it required some elucidation. Corresponding to μέσσος or μέσος we have Sk. *madhya*, Lat. *medius*, Goth. *midjis*; and though it is perfectly true that *madhya* would in Greek appear as μεθιος yet such a form lies beyond the horizon of Greek, and is unknown to Greek scholars.

On p. 10, we are told, υια, the fem. of the past perf. act., "has arisen out of Ϝοτια, τ having been weakened to σ and then dropped." If this view is to be maintained, and we are to believe that the change from Ϝοτια to υια took place on Greek ground, it will be neccesary to show that Ϝο can in Greek become υ, as *va* in Sanskrit becomes *u*. On p. 81, such a change is supported by κυν instead of κυον, and by ὕπνός corresponding to Sanskrit *svapna*. Neither case, however, is quite to the point, for κυν, like Sanskrit *s*un, is really a parallel form of κυον, Sk. *s*van, and possibly even more primitive; while in the case of ὕπνος there is nothing to prove that its typical form was *svapna*, and not *supna*, or that such a form as σϜοπνος ever passed Greek lips. I prefer to start with *us-î* as the typical form, which in Sanskrit becomes *ush-î*, in Old-Slavonic *vŭsh-ĭ*, in Greek υ-ι-α.

On p. 174, *Bahuvrîhi*, the technical name of possessive compounds in Sanskrit, is rendered by "much rice," or "rich in rice." This is not quite right. *Bahuvrîhi* means "possessed of much rice," πολυ-ὄρυζος.

On p. 176, it seems at least doubtful whether a compound like ἕλκε-χίτων could strictly be classed with δρυ-τόμος, and ἐπιχαίρε-κακὸς with θεο-είκελος. MAX MÜLLER.

Contents of the Journals.

Zeitschrift für die österreichischen Gymnasien, vol. xxi. pts. 9 and 10.—Joh. Kviçala: Zur Beurtheilung des Sophokleischen Aias. [Refutes Schöll's theory that the Ajax was the first play of a trilogy (Ajax, Teukros, Eurysakes); and shows, by an interesting analysis, the relation of the last scenes to the play as a whole.]—K. Schenkl: Kritische Bemerkungen zu Sophokles Philoktetes.—J. Wrobel: Rev. of Dr. J. H. Reinken's Aristoteles über Kunst, besonders über Tragödie. [A valuable review of, and contribution to, the literature of the subject.]—J. Kviçala: Rev. of C. Pelliccioni, Commentariis doctorum virorum in Sophoclis Œdipum Regem epimetron. [Well meant but unsuccessful effort of Italian scholarship.]—Ad. Mussafia: Rev. of A. Brachet, Dictionnaire étymologique de la langue française. [Appreciative.]—K. Greistorfer: Rev. of Alois Neumann, Mittelhochdeutsches Lesebuch. [Preferred to the books of Weinhold and Reichel.]

New Books.

CORNELISSEN, J. J. Conjectanea latina. Daventriæ, 1870. Berlin: Calvary.

FICK, Aug. Vergleichendes Wörterbuch der Indo-germanischen Sprachen. 2. Abth. 1. Hälfte. (2te umgearb. Aufl.) Göttingen: Vandenhoeck u. Ruprecht.

FORCELLINI, AEGID. Totius latinitatis lexicon in hac editione novo ordine digestum amplissime auctum atque emendatum adjecto insuper altera quasi parte onomastico totius latinitatis cura et studio Prof. Vine. De-Vit. distr. 39 et Onomatici distr. 12. Tom 4. Ls. 593–672 u. Onomast. Tom 2. S. 89–176. Prati. Leipzig: Brockhaus.

GRAMMATICI LATINI ex rec. H. Keilii suppl. Anecdota Helvetica (MS. at Zürich, Einsiedeln, Bern) coll. edid. H. Hagen. Leipzig: Teubner.

HIRSCHFELD, Gust. Tituli statuariorum sculptorumque graecorum cum prolegomenis. Berlin: Calvary.

MODESTOW, B. Der Gebrauch der Schrift unter den römischen Königen. Nach dem Russischen. Berlin: Calvary.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, March 1, *and advertisements should be sent in by February* 24.

NOTICE.

The Academy *will in future appear regularly on the* 1*st and* 15*th of every month.*

General Literature.

The Works of Alexander Pope. New Edition, including several hundred unpublished Letters, and other new materials, collected in part by the late Rt. Hon. John Wilson Croker. With Introduction and Notes, by Rev. Whitwell Elwin. Vols. I. and II. Murray, 1871.

This edition has been twenty years or more in preparing. The time seems long for mere editorial work. But when we examine the mass of minute particulars that have to be sifted, and the mystery in which in this instance all the facts are involved, and when we find that the editor has resolutely grappled with his task, and subjected the whole to a thorough and searching investigation, we do not think there has been undue delay. We should conjecture too, that to Mr. Elwin the labour has been a most irksome one, and that there have been long periods in which he has laid it aside in sheer disgust. It is a standing accusation against editors that they grow too fond of their subject by dwelling upon it, and that the tone of biography becomes panegyrical. In Mr. Elwin's case the process has been the opposite. Weariness of a self-imposed task has grown into dislike of the subject of it. No doubt the investigations he has conducted have been a wearisome and unrewarding labour. It required some passion to sustain the effort. In Mr. Elwin's case this stimulus has been supplied by antipathy. His has been a labour of hate. He pursues Pope, his actions, and his utterances, with an unrelenting animosity, which leaves him neither virtue as a man nor merit as a writer. When we lay down Mr. Elwin's indictment, we cannot help asking the question, "Why reprint Pope at all? The sooner the nonsensical rhymes of such a scoundrel are forgotten, the better."

The first volume comprises, besides the juvenile poems, an introduction of 140 pages by the editor. The introduction, though prefixed to the poems, relates wholly to the letters, which are to follow in later volumes. In it is unravelled, with astonishing patience, the web of trickery which Pope wove round each successive volume of his correspondence. The three motives which at any time influenced Pope in publishing, were vanity, spleen, and the desire of deceiving. In the publication of 1729 he gratified all these base passions at once. He contrasted his own performances at sixteen favourably with those of his dead friend Wycherley at seventy; he duped Lord Oxford, and damaged Theobald. In the P. T. plot which accompanied the next publication of letters in 1735, he tricked Curll, and had the audacity to make a tool of the House of Lords. The worst case of all is the volume of 1741, when he passed a cheat upon his lifelong friend and intimate, Swift. He tampered with the substance of the letters he published, and that not merely to the extent of omitting, or even altering, but did not scruple to make himself say the direct contrary of what he had said. A most gross instance of this is when he writes to Swift: "Lord Bolingbroke is above trifling; when he writes of anything in this world, he is more than mortal; if ever he trifles, it must be when he turns a divine." Thus stands the passage in the *printed* letter. The copy, still preserved at Longleat, has—"Lord Bolingbroke is above trifling; he is grown a great divine." Pope, when he printed the letter in 1741, reversed the language of the original passage, that he might seem to have disapproved the Deism of Bolingbroke before the publication of Crousaz's attack upon the *Essay on Man.*

His habit of falsehood is such that he cannot state truly the dates at which he composed his own poems. He asserts that he wrote the *Pastorals* at the age of sixteen. There is no evidence of this except his own assertion, and he cannot be believed when his vanity is interested. He wished to be thought a precocious genius. It can be shown that the *Pastorals* were not exhibited to his friends till he was past seventeen. When they came out, he pretended he had not designed them for the press, and wrote disingenuously to Cromwell to that effect. "He was in his twenty-first year, an age at which frankness commonly preponderates, and he already abounded in the ostentatious profession of sentiments he did not entertain." The farce of indifference, thus early begun, he continued to enact to the end of his days. "His whole existence was passed in painstaking, almost drudging, authorship; he left no means untried, dishonest as well as fair, to extend his reputation, and he pursued every person with inveterate malice who presumed to question his poetical supremacy. In spite of his boasted apathy, there cannot be found in the annals of the irritable race a more anxious, jealous, intriguing candidate for fame." The new and terrible force with which Mr. Elwin has marshalled the evidence on which these charges rest seems to leave no possibility of escape or palliation. Genius is no extenuation of rascality.

Still the works of genius survive. Though we must learn to loathe and despise the author, his writings need not lose their charm. This is not so. His letters are laboured, artificial, insincere, garbled, tacked to false dates and false addresses. His version of Chaucer "has preserved none of the humour of the original, but is a dead insipid dissertation." In the *Temple of Fame* the romance which constitutes the charm of the original is replaced by a scene of frigid tameness. As for the *Pastorals*, "no ideas can have less to recommend them than the hollow rhapsodies of the *Pastorals*, which are at once obvious and absurd." The *Essay on Criticism* is distinguished by a want of good sense in the critical canons; it is "very superficial," full of contradictions, and "its minor positions are glaringly erroneous." Perhaps in these juvenile poems we ought not to ask for matter, but to be satisfied with the poet's masterly skill in versification. There we should be wrong again. Mr. Elwin agrees with those who think that Pope's metre is prone to a cloying mannerism. "Much of the verse is of a low order; the phraseology is frequently mean and slovenly, the construction inverted and ungrammatical, the ellipses harsh, the expletives feeble, the metre inharmonious, the rhymes imperfect." Pope once inserted "lane" as rhyme to "name" in order to disguise his authorship of a poem which he published anonymously. The disguise would have been greater, his editor observes, if the rhymes had been good. A liberal admixture of faulty rhymes is a common characteristic of Pope.

The most serious count in the long indictment of which the editor's comment consists is that connected with the *Essay on Man.* This poem Mr. Elwin seems to regard as a deliberate attack on Christianity and religion in general, jointly contrived by Pope and Bolingbroke. Mr. Elwin's

composure entirely deserts him at the very mention of the name of Bolingbroke, "a scurrilous deist, whose writings are stuffed with frenzied invectives against the faith and hope of the vast majority of the English people." He assumes the most exaggerated version (Dr. Hugh Blair's) of Lord Bathurst's assertion that Lord Bolingbroke composed the *Essay on Man* in prose, and that Pope put it into verse. Even Johnson, little favourable either to deists or to Pope, admitted that there must be some mistake there. Proceeding upon this basis, the editor institutes a minute examination of the argument of the *Essay*, and finds it, so far as it is not a mass of confusion and contradictions, a system of selfism in morals, and negation in religion. The errors of the text, however, are provided with an antidote in an elaborate refutation, point by point, and a statement of the true views both of ethics and religion, as conceived by Mr. Elwin himself.

With the most sincere respect for the judgment and literary taste of the editor, and hearty recognition of the conscientious pains and research he has bestowed on his work, we must state our conviction that he has here adopted an erroneous hypothesis. We believe, on the contrary, the ordinary account of the origin and character of the *Essay on Man* to be the true one. Pope, in an evil hour, was ambitious of entering the higher sphere of philosophical, or what passed then for philosophical, speculation. He felt that, if he confined himself, as hitherto, to personal themes, he could not be the first poet of the age. He had no speculative interests, no speculative capacity, but he was drawn into the speculative furor of the time by his literary ambition. He took up with any ideas that seemed to him capable of poetic treatment. Being bred a Catholic, he had that general scepticism as to philosophic truth which is generated by the habit of regarding religion as resting on authority. How far he was obliged to Bolingbroke for suggestions in conversation, we cannot tell—no doubt largely. But how far he was assisted by him in writing, we think we know exactly, if we are right in conjecturing that the "seven or eight sheets" supplied by Bolingbroke are contained in the Fragments, &c., now printed in vols. v. and viii. of Bolingbroke's *Works*, and that these memoranda are the MS. seen by Lord Bathurst. However this may be, we have no doubt at all that Pope intended the poem to be on the side of natural religion. From want of understanding, and want of interest in the subject, he so expressed himself as to give a handle to the theological critics, of whom Crousaz made himself the mouthpiece. Here came in Warburton. Warburton availed himself in defending Pope of the same ambiguities and inconsistencies which Crousaz had turned against him. "The *Essay*," says De Quincey, "is a Hebrew word with the vowel-points omitted; and Warburton supplies one set of vowels, while Crousaz with equal right supplies a contradictory set." It is quite true that Warburton strained and twisted passages to mean what it is apparent the poet never meant. But however grotesque may be his distortion of particular lines, he has this justification, whatever it is worth, that the poet's *general* sense was with Warburton, not with Crousaz.

Warburton's commentary was intended only to serve a temporary controversial purpose. It has no critical value whatever, and therefore no place in a classical edition of Pope. We must express our regret that the present judicious editor should have thought it necessary to reprint the "whole of the bulky excrescence," as he justly calls it. Still less can we understand the motive which has prompted him to load his pages with a lengthy controversial refutation of the doctrines which he ascribes to Pope. He follows him paragraph by paragraph, and takes pains first to prove that Pope's meaning is a bad one, then offers a refutation, and concludes with an antidote by laying down the sound view of the question. His anxiety to refute is such, that he more than once stays to controvert lines which Pope has rejected from the final text, and which only appeared in the first edition, or in the rough copy. Sometimes it almost seems as if the zeal of controversy hurried the editor into affixing a sense to Pope's words which they will not bear, in order to found upon them a controversial reply: *e.g.* every one remembers the passage (*Ess.* ii. 275):—

> "Behold the child, by nature's kindly law
> Pleas'd with a rattle, tickl'd with a straw;
> Some livelier plaything gives his youth delight,
> A little louder, but as empty quite;
> Scarfs, garters, gold, amuse his riper stage,
> And beads and pray'r-books are the toys of age."

The thought here, apart from the beauty of the language, may not be very new or very profound. It is indeed rather trite than otherwise. We see in it nothing more than a depreciation of the overeagerness of human pursuit, or the vanity of human wishes; a sentiment sought to be produced in the reader by suggesting an analogy between the toys of childhood and the ambitions of mature life. The stages of the transition are surely a fact of which society in Pope's time offered, as it does still, daily confirmation. Especially the last stage, when ambition, sated or balked, is superseded by devoteeism, was a marked feature of the French society of the close of Louis XIV.'s reign. Boileau has not failed to point many a sarcasm at the *dévots* of his age. His description of the devotee in his 11th satire is as much stronger than Pope's lines, as it is inferior to them in poetical expression. Yet in Pope's words Mr. Elwin reads the doctrine of the inutility of prayer, and considers them designed to "ridicule religious aspirations."

Again, Bolingbroke is known to have held the opinion espoused by the present Dean of St. Paul's in his eloquent *Bampton Lectures*, that the moral attributes of God differ in kind from ours. Warburton, right for once, attacked Bolingbroke on this point. We quite agree with Warburton and Mr. Elwin in condemning a doctrine which destroys natural religion at its roots, but we fail to see an enunciation of the doctrine in the couplet with which the 2nd ep. of the *Essay on Man* opens:—

> "Know then thyself, presume not God to scan,
> The proper study of mankind is man."

The sense of the prohibition is to be gathered from the context. The line, as the word "then" shows, is an inference from the preceding epistle. The small part which we can see of the "stupendous whole," though enough to lead us to the general conclusion that "whatever is is right," is not enough to give us a comprehension of the whole scheme of Providence.

In the interests of literature we earnestly deprecate this introduction of theological polemic into an edition of Pope. If Pope is worth editing at all, it is as a classic, *i.e.* a document of a past age. The didactic effect of the poem was of little consequence in the author's own eyes. It is of none at all in ours. What would be thought of an editor who treated Lucretius as a controversial pamphlet, and who accompanied the poem with a refutation of its doctrines larger in bulk than the text itself?

Mark Pattison.

The Divina Commedia of Dante, translated into English Verse by James Ford, A.M., Prebendary of Exeter. London: Smith, Elder, and Co., 1870.

If any proof were needed of the interest which for some time past has been felt in England for Dante's great poem, it would be found in the numerous translations that have

appeared in our language in the course of a few years. The difficulties in the way of translating the *Divine Comedy* are extremely great; greater, in all probability, than what are presented by any other epic poem. The extraordinary range and mysterious character of the subject, the intense vividness with which scenes are conceived, and portrayed in appropriate language, the elaborately artistic nature of the poem throughout, the fire and the pathos which the author has succeeded in infusing into his expressions, and above all the concentration of thought, and the closely fitting structure of pregnant words and clauses, which cause his sentences to resemble the massive formation of a cyclopean wall—are characteristics which might well deter a person from attempting to reproduce it in another language. And yet, in spite of these difficulties, the English translations have been eminently successful, and that too in very different styles. Until twenty years ago the well-known one of Cary, in continuous Miltonian blank verse, which dates from early in the present century, held almost undisputed sway; and so great is its perfection as a work of art that, whatever competitors it may now have, we should be sorry to see it driven out of the field. Since that time have appeared (to mention only the more important) Dr. Carlyle's prose translation, a more arduous task than might at first sight appear, owing to the difficulty of maintaining a sufficient elevation without the help of metre, and at the same time avoiding a turgid style; that of Mr. Cayley, with the metre and rhyme of the original complete; and lastly Longfellow's, in blank verse, but following the Italian line by line. Of these we venture to consider Mr. Cayley's the cleverest, because he has attempted so much more than the others, and has achieved a very considerable amount of success; though at the same time it is certainly not the most popular, for both in England and Germany the blank verse renderings have been much more generally read than those that have had a more ambitious aim, partly, no doubt, in consequence of the greater facility and simplicity which the absence of rhyme allows. Still, the form of the original is so integral a part of the poem that the ultimate goal of the translator cannot be considered to be reached, unless this also is preserved. It is a proof of the high merits of Mr. Longfellow's work that, in turning to it from a rhymed translation, the luminous clearness of his diction, the forcible and somewhat archaic simplicity of his expressions, and the evenly sustained dignity of his rendering, cause the reader hardly to feel the want of rhyme. In fact, with that exception, he has reproduced Dante in every particular.

To these versions we have now to add that of Mr. Ford, and it is not unworthy to rank among them. Here the *terza rima* has been maintained throughout, and the fact that this has been skilfully accomplished is in itself a claim to high praise. As a set-off against this, we must expect to find that the style is occasionally stiff and the construction involved, but in a language so barren of rhymes as English this is almost unavoidable. If, again, the meaning is sometimes obscure, we can hardly help regarding this as venial, since this source of difficulty is found from time to time in the poem itself, and is certainly not wanting in some of the best original sonnets of the present day. Here and there, indeed, we meet with passages where the translation is either wrong or unintelligible: in the description of the first appearance of Beatrice in the *Purgatorio* (canto xxx.) the lines—

> "Donna m' apparve, sotto verde manto,
> Vestita di color di fiamma viva;"

cannot rightly be translated—

> "Appear'd a Lady, 'neath a mantle green;
> Like the live flame, that tinged her vesture, red:—"

and, similarly, in the preceding canto, the passage—

> "Non che Roma di carro così bello
> Rallegrasse Affricano o vero Augusto;
> Ma quel del Sol saria pover con ello:—"

is made unintelligible by the following rendering—

> "'Tis not, that Rome never rejoic'd, of old,
> Scipio, or Cæsar, with so bright a car,
> That of the sun to this looked poor and cold."

But these are rare instances, and on the whole Mr. Ford's translation is as much distinguished by its accuracy as by its easy, pleasant flow. Occasionally, notwithstanding, the fetters in which he moves, he succeeds in giving the author's meaning with more spirit even than Longfellow. Take, for instance, a passage in the description of the Church Triumphant (*Par.* xxx.), in which Dante gives evidence of the same delight in the observation of the details of nature which we trace in the foregrounds of the early Italian masters:—

> "E come clivo in acqua di suo imo
> Si specchia quasi per vedersi adorno,
> Quanto (*al.* quando) è nel verde e ne' fioretti opimo:"

> "And as a hill in water at its base
> Mirrors itself, as if to see its beauty
> When affluent most in verdure and in flowers:"
> (Longfellow, p. 592.)

> "And as a cliff, fast by some water clear,
> The glassy slope looks down, itself to trace—
> How rich the verdure, rich the flowers appear:"
> (Ford, p. 407.)

Here, though "cliff" and "glassy slope" are not exactly the original, yet we feel that the picture which Dante intended to call up is more accurately given than in the more literal translation. On the other hand, where much depends on the position of the words, as in the following passage from the same canto, the blank verse rendering at once evinces its superiority, to which we must add that Mr. Ford has in part mistaken the meaning of the second line:—

> "Luce intellettual piena d' amore,
> Amor di vero ben pien di letizia,
> Letizia che trascende ogni dolzore:"

> "Light intellectual replete with love,
> Love of true good replete with ecstasy,
> Ecstasy that transcendeth every sweetness:"
> (Longfellow, p. 590.)

> "Light of the mind, replete with love, is here,
> Love of that Good, that every joy supplies;
> Joy, of all joys, most exquisite and dear."
> (Ford, p. 405.)

But it is with Mr. Cayley that Mr. Ford ought most rightly to be compared, as they have both attempted the *terza rima*. Of these two it appears to us that Mr. Ford has the advantage of a greater command of rhyme, and generally his verse has a smoother and easier flow; but Mr. Cayley, though somewhat the stiffer of the two, is more accurate, and certainly more pointed—a feature of the utmost importance in translating so forcible and so graphic a poet as Dante, especially in the more sublime passages. We would refer any one who desires to verify this to their respective translations of Dante's "Address to Ser Brunetto" (*Inf.* xv.), the "Story of Ulysses" (*Inf.* xxvi.), "Ugolino" (*Inf.* xxxiii.), the "Vision of Leah and Rachel" (*Purg.* xxvii.). We should therefore give the palm to Mr. Cayley, though at the same time recognising the great merits of the translation before us. As a favourable specimen of Mr. Ford's ordinary work we may take the following from the *Purgatorio* (canto iii.), where the spirits are amazed at seeing the shadow cast by Dante's body:—

> "Forth from the fold as troop a flock of sheep,
> By one, two, three; while th' others still stand by,
> Timid, and low aground their faces keep,
> And with the leader all at once comply;

Stop, if she stops, quick huddling to her side,
Simple, and still; nor know the reason why;
So saw I those advance, who foremost guide
The movements of that life-predestin'd flock,
In mien so chaste, in step so dignified."

It may, perhaps, be thought that if Mr. Cayley's translation is superior to that of Mr. Ford, the publication of the latter is superfluous; but this objection has been answered by anticipation in the very modest preface to this volume. After speaking of the arduous and hazardous nature of his undertaking, and the improbability that any perfect success can in the ordinary course of things be attained, except after repeated endeavours, Mr. Ford adds:—"If this be so, then neither this nor any translation subsequent to it can fairly be regarded as superfluous and uncalled for; still less as presuming, and derogatory to those that have preceded it."

H. F. Tozer.

ON THE SITE OF A MULBERRY-TREE;
Planted by Wm. Shakespeare; felled by the Rev. F. Gastrell.

This tree, here fall'n, no common birth or death
Shared with its kind. The world's enfranchised son,
Who found the trees of Life and Knowlédge one,
Here set it, frailer than his laurel-wreath.
Shall not the wretch whose hand it fell beneath
Rank also singly—the supreme unhung?
Lo! Sheppard, Turpin, pleading with black tongue
This viler thief's unsuffocated breath!

We'll search thy glossary, Shakespeare! whence almost,
And whence alone, some name shall be reveal'd
For this deaf drudge, to whom no length of ears
Sufficed to catch the music of the spheres;
Whose soul is carrion now,—too mean to yield
Some tailor's ninth allotment of a ghost.

Stratford-on-Avon. D. G. Rossetti.

LITERARY NOTES.

By the death of the Minister of Public Instruction, Baron Joseph Eötvös, of Vásáros-Namény, Hungarian literature has lost one of its most distinguished representatives. He was born at Buda, September 3rd, 1813. On finishing his legal studies at the University of Pesth, in 1831, he served first in the administration of a Hungarian county, and afterwards in the Hungarian Chancery at Vienna. During this time he wrote two or three original dramas, and translated Goethe's *Götz von Berlichingen*. From 1837 to 1848 he wrote pamphlets on the improvement of prisons, the emancipation of the Jews, and similar measures of reform, and was especially distinguished as the champion of a parliamentary and ministerial form of government, as opposed to the system of municipal autonomy advocated by M. Kossuth, and the far larger portion of the liberal party. In company with his friend, the historian of Hungary, M. Ladislaus Szalay, he started the *Budapesti Szemle*, in imitation of the English quarterly reviews, and took part in the management of the influential newspaper, *Pesti Hirlap*, when in 1843 it passed out of M. Kossuth's hands. His literary fame in his own country was, however, first definitely established by *The Carthusian*, a sentimental romance of the school of Byron and Châteaubriand, which procured him in 1841 his election as honorary member of the Hungarian Academy. He wrote two other novels, illustrating and enforcing his political views—*The Village Notary*, satirizing the county administration of that time, and *Hungary in* 1514, depicting the insurrection of the Hungarian peasants. *The Village Notary*, to the great damage of the author's popularity after 1848, was translated into German by Count Mailáth, and from thence into English. In the first Hungarian Ministry Baron Eötvös was made Minister of Public Instruction, but when the peaceful revolution developed itself into civil war, he felt himself out of his element, and retired to Munich, where he lived till 1851. His pen was, however, not idle, and in 1850 he published at Leipzig a pamphlet in the German language entitled *Ueber die Gleichberechtigung der Nationalitäten in Oesterreich*. This was followed in 1851 by the first volume of his work entitled *The Influence on the State of the Prevailing Ideas of the Nineteenth Century;* the second volume of this work appeared in 1854. These volumes were published both in German and Hungarian, the former being the original written by Eötvös himself. He was engaged during his last illness in the correction of the Hungarian version. Of the Kisfaludy Literary Society he had been elected president in 1847, and in 1855 he was elected vice-president of the Hungarian Academy. Between that year and 1859 there appeared from his pen a novel and a small collection of poems. During this period he also published anonymously, in German, a work entitled *Die Garantien der Macht und Einheit Oesterreichs*, which also caused him a certain amount of unpopularity, as it was appealed to by M. Schmerling and the Viennese constitutional centralists as foreshadowing their own system. In 1860 he published, at Leipzig, another treatise in German, qualifying the deductions legitimately or illegitimately drawn from its predecessor, and entitled *Die Sonderstellung Ungarns vom Standpunkte der Einheit Deutschlands*, translated into Hungarian by M. Toldy. During the last few years he has again retired into literary life, producing a volume of maxims and an important pamphlet on the mutual relations of the nationalities in Hungary. On the death of Count Emil Dessewffy, in 1866, he was elected president of the Hungarian Academy. On the re-establishment in January, 1867, of the Hungarian constitution he again became Minister of Public Instruction, which post he held till his death. Collections of his parliamentary speeches and of his orations delivered before the Hungarian Academy and the Kisfaludy Society have been published.

Personally Baron Eötvös was a most amiable man, beloved and respected by all who knew him. He had the merit of having early perceived the necessity of raising the standard of culture and extending education among his countrymen of all classes. His European education and admiration of M. Guizot's system of government placed him often in opposition to the majority of Hungarian politicians, by whom he was called a *doctrinaire*. In writing Hungarian his involved style betrayed the influence of his German studies.

Speaking of the losses which the interests of literature and science have sustained through the siege of Paris, the *Pall Mall Gazette* says that not a few eminent professors and members of the Institut have been serving in the ranks of the National Guard and Army of Defence, and it is hardly possible that they can all have escaped without injury. Already we learn that the editor of *Les Mondes* has been wounded by the explosion of a shell; that M. Desnoyers fils, of the Museum Library, has been killed, and that M. Thénard is a prisoner in Germany. The Galleries of Zoology and Mineralogy have both been penetrated by shells; the Collège de France has not escaped unhurt; and the Meteorological Observatory lately erected in the Champ de Mars has been converted into barracks. In the Jardin des Plantes and Jardin d'Acclimatation the ruin has been complete, all the animals having been slaughtered either for food or by way of precaution, and the rare trees—some of them of priceless value—cut down for defensive purposes or else to make charcoal. In the gardens and nurseries outside the city the devastation has been equally severe. Châtenay, the chief establishment of M. Croux, formed the headquarters of the Bavarian artillery; the large palm-house was turned into a stable and the flower-tubs used as cribs. Sheep and cattle have been depastured in the Jardin pour les Études pomologiques, near Aulnay, and everywhere the young trees have furnished stakes for gabions and branches for faggots.

Professor E. Böhmer gives in No. 4 of *Im Neuen Reich* an interesting account of the *Almana provencau* for 1871. This almanac is written entirely in the southern patois, the wreck of the magnificent langued'oc, and the chief aim of its editors, the Felibre brotherhood, is to preserve the national language and customs of Provence against the centralising tendencies of Parisian civilisation. Not long ago Professor Böhmer gave us instances of the strong anti-northern feeling expressed in such poems as "The Countess," the fair lady, brown with the sun and crowned with the fruits and flowers of the south, who was kept in confinement by her nearest kindred for the sake of her riches. In the present emergency, however, the sympathies of the Provençaux seem to be patriotic to a degree, and the chief part of the almanac is filled with songs of hatred and defiance against the German invader.

One peculiarity of the Provençal literary movement is its religious character, which is represented in the almanac by a penitential psalm by Mistral, and some "Provençal Prophecies," the latter containing an account of two marvellous apparitions of the Blessed Virgin, who, as the author remarks with patriotic pride, "on both occasions used the Provençal language."

Prince Hermann of Pückler-Muskau, the well known author and traveller, died on Feb. 4, in his castle of Branitz, aged 85.

His celebrity dates from his book, *Briefe eines Verstorbenen*, which made a great sensation forty years ago. Under the name of "Semilasso" he described his travels in Asia and Africa, and appears in the satirical part of Immermann's classical romance, *Münchhausen*. In his character of aristocratic *blasé* he was also severely handled by Heine and by Börne.

In a recent pamphlet of twenty-three pages, by Mr. W. E. A. Axon, is a list of all the works written in the Lancashire dialect known to the compiler, whose own contributions to it are *Cousin Liz*, *The Haunted Bridge*, *Dr. Rondeau's Revenge* and other sketches, *Folk-song of Lancashire* (not yet published), *The Black Knight of Ashton*, and the *Boggart of Orton Clough*. One of the most important books of the series is Tim Bobbin's *Dialogue between Tummus and Meary*, the real name of the author being John Collier. The list is a tolerably extensive, but not quite exhaustive one. We should certainly be justified in adding to it Mr. J. P. Morris's *Glossary of the Words and Phrases of Furness* (London: J. R. Smith, 1869), and the various tracts in the Furness dialect, since Furness belongs to North Lancashire. The dialect is an important one, and serves to illustrate many of our older poems.

The new number of the *North British Review* contains an article on "Provençal Versification," in which the writer dwells at length on the high artistic finish of the poetry of the Troubadours. Besides the works of the poets themselves, the chief sources laid under contribution are the old Provençal metrical book *Las leys d'amors*, and the *De vulgari eloquentia* of Dante, the application of whose rules to Provençal canzos throws a new light on the construction of the stanzas. The harmonious forms of these skilful combinations are traced back to their metrical and, as far as possible, musical principles. Considering, however, how little is known on the subject in this country, the writer might have done better if he had prefaced his difficult bit of exposition by a literary article of more general interest.

No part of Spain is less known than the mountain region of Galicia and the Asturias, the cradle of the Christian monarchy. Yet this north-western corner is unsurpassed in the beauty of its scenery, the extreme antiquity of its churches, and the interest attaching to its songs and traditions. The Gallego language, now only spoken by the common people, but just missed being the court language of Spain in place of Castilian. Alfonso the Wise, as is well known, wrote his "Cantigas" in Gallego. In the last number of the *Revista de España*, a continuation of Señor Fulgosio's notes of a journey through Galicia contains a detailed account of Orense and its cathedral, with some specimens of the Gallego dialect.

New Publications.

Carrière, Mor. Die Kunst im Zusammenhang der Culturentwicklung und die Ideale der Menschheit. Leipzig: Brockhaus.

Dido and Æneas; a Dramatic Cantata by N. Tate, composed by H. Purcell, edited from several MSS., with Preface and Pianoforte Accompaniment, by E. F. Rimbault. Metzler and Co.

Deutsche Dichter des siebzehnten Jahrhunderts. Herausgegeben von K. Goedecke and J. Tittmann. Band 4: Dramatische Dichtungen von Andreas Greyphius, hersg. von J. Tittmann. Leipzig: Brockhaus.

————. Band 5: Dichtungen von Hans Sachs. 2ter Theil: Spruchgedichte, hrsgb. von J. Tittmann. Leipzig: Brockhaus.

Gregory's Pastoral Care, King Alfred's West Saxon Version of. Ed. Henry Sweet. Part I. (Early English Text Society.) Trübner.

Hamerling, Robert. Danton und Robespierre. Eine Tragödie. Hamburg: Richter.

Joseph of Arimathie, an alliterative poem, circa A.D. 1350. Ed. W. W. Skeat. (Early English Text Society.) Trübner.

Leyser, T. Goethe in Strassburg. Ein Beitrag zur Entwicklungsgeschichte des Dichters. Neustadt a. d. H.: Gottschick-Witter.

Morley, Henry. Clement Marot and other Studies. Chapman and Hall.

Art and Archæology.

Cornelius. [*Cornelius der Meister der deutschen Malerei.* Von Hermann Riegel.] 2nd ed. Hannover: Carl Rümpler, 1870.

Cornelius has occupied for more than half a century a pre-eminent position in the world of German art. Born in 1783, he now lives to see his influence amongst his countrymen still active, to see himself still the object of increasing honour and devotion, and to see the story of his own long life and indefatigable labours told by a worshipper whose ability equals his zeal. Whatever may be the difference of opinion as to the merits of Cornelius as an artist, all students will feel that some account of the career of one who is put forward as the chief and representative man of a school at once so respectable, so numerous, and so active, is a desirable contribution to the history of art during the present century. The second edition of Hermann Riegel's *Cornelius der Meister der deutschen Malerei* amply fulfils all our requirements. Two catalogues are appended to the work, the first giving a chronological list of all the works of the master, and the second arranging them according to the places in which they are at present located, the notes are ample; the text contains elaborate descriptions of, and sympathetic disquisitions on, all the principal undertakings of Cornelius, and an entertaining account of all the chief incidents of his life. In this last respect Dr. Riegel has behaved with admirable judgment: whilst giving a sufficient quantity of personal matter to make his readers take an interest in his hero as a man, he has omitted from his pages the trivial domestic details with which too many biographies are crowded, and as soon as the awkward moments of *Kinderzeit* and *Jünglingsjahre* are passed, the book may be read with undiminished interest to the last.

The picture which it presents to us is a very strange one; we have the ordinary life of the German artist set before us on a large scale. In the foreground stand the master and his scholars bound to him by a strong sense of common interest; and sharing even the feeling with which he regards the poor thrifty plebeian household in the background, we see the daily round of steady grinding work measured out by a fixed plan, and varied at stated intervals with moments of *hohe Begeisterung*, attained by the help of a *Humpen Bier und dreimal hoch!* With ever increasing wonder the reader realises the poverty of the general mental culture of these exponents of an art which has its root in learned theory. How were these men, living in their miserably narrow sphere of interests, lit up only by a sincere enthusiasm for the poets and romancers of the Fatherland, to treat as they professed to do with learned intelligence what they called the highest ideas of philosophy, and the epics of Greece and Rome? Niebuhr, writing from Rome, speaks of his confidential intimacy with Cornelius and the other German artists residing there, but complains, "only our talk is not inexhaustible. Matter fails them, and I must go over into their circle of ideas; they cannot enter mine." This was written in 1817, when Cornelius was no longer a youth, who might be supposed to be wholly absorbed by the demands of his early training, but a man of between thirty and forty years of age, who had already been engaged on some considerable works. There were the decorations of the Casa Zuccaro, undertaken by Cornelius, Overbeck, Veit, and Schadow, for their friend Bartholdy, and later the frescoes of the Villa Massimi, on which he was engaged when the important works in contemplation at Munich gradually absorbed all his thought and time. He had first signalised himself in what Dr. Riegel calls the *deutsch-nationale* epoch of his activity, by his illustrations to *Faust*, and later to the *Nibelungenlied*. These

illustrations were conceived under the influences of the romantic school, influences which were soon dispelled in Rome. A comparison of these early drawings with the decorations of the Glyptothek at Munich will show how entirely the character of his work had been changed during his sojourn in Italy.

We now come to a curious moment of his life. After a while the atmosphere of Munich began to tell upon him, and a strong Catholic bias, which characterises his fourth period, is evident in the frescoes of the Ludwigskirche, his last work there. But a call to Berlin arrived at the critical instant. Cornelius, a born Roman Catholic, had too much vigour of mind and soundness of nature to sink into a second Overbeck. The cooler air of the northern city brought a reversion of sentiment, and he regained in his old age the standpoint of his middle life. In 1842, Cornelius left Munich for Berlin, and the twenty-eight years which have since then elapsed, are included by Hermann Riegel, under the title of *classische Epoche*. King Frederick William IV., by the execution of two vast projects, hoped to make Berlin as the art capital of North Germany the rival of Munich. A Protestant *Dombau* was to take the place of the Ludwigskirche, and instead of the Glyptothek there should stand in connection with it a churchyard built after the fashion of the Campo Santo at Pisa, reserved as a burialplace for the royal house. Cornelius received the commission to execute the frescoes which should line the walls surrounding the court, and also an order to design the picture for the centre of the apse of the Cathedral. His drawings for the walls of the Königsgruft, which are now in the Weimar Museum, were engraved and published by Wigand, of Leipzig; his early illustrations are also accessible in the form of engravings, but as his main efforts have been expended on mural painting, we cannot gain any adequate idea of the capacity of Cornelius unless we visit his works on the spot. It is difficult for one not German by birth to fairly estimate Cornelius. The very ground on which these philosophical histories and epics are built seems unsound in the eyes of those not trained in the same school. Dr. Riegel, who may be taken as the mouthpiece of a large body of his countrymen in this matter, states that the great problem of the century was for Germans to embody *deutschen Geist* in forms of Hellenic beauty. This, he says, was done in literature by Goethe, in art by Cornelius. Through him the German school has been the heir of classic art. The mantle of Phidias was seen to fall on the shoulders of Cornelius as he contemplated the Elgin marbles in the British Museum. It is hard, Dr. Riegel frankly acknowledges, to contemplate or understand the pictures of Cornelius, and he adds with less certain truth, the more beautiful and full of thought they are, the harder. Here we come to the very point on which Germany must join issue with the rest of the civilised world. If beauty is wholly supersensuous, if lofty and serious aims alone can make a consummate artist, undoubtedly we must hail Cornelius as such. But it must be understood that the theory which places him upon this pedestal is an inversion of all previous theories respecting art, and that, if a large share is to be allowed to the sensuous element, his claims must be moderated. In 1811 Goethe wrote to Cornelius in warm and ready commendation of his seven first illustrations to *Faust*, but it is evident from the concluding portions of the letter that he perceived a something lacking in the work. What the quality was which he missed, he was clear about, but how it came to be absent was not so plain; so he fastens on the influence which early German masters had apparently had on their conception, and suggests that the exclusive study of those Italian painters who flourished when their school had reached its fullest development might ripen *Sinn und Gefühl* in Cornelius. *Sinn und Gefühl* are the two qualities indispensable to the making of a genuine artist; if inborn, they may indeed be ripened by exterior influences, but no contemplation of perfect models, however assiduous, no study however zealous, can implant them where by nature they are not. These are the qualities which appear to be wanting not only in Cornelius himself, but more or less in the whole of that great German school of which he is the representative. Those to whom the German atelier is familiar know its conspicuous merits: the quiet masterly draughtsmanship, the sober renunciation of flashy work and unsound methods; but these are counterbalanced by slavery to set plan, and the rooted convictions that once for all the laws according to which alone the art of the future can develop itself have been fixed, and that only by stout adherence to the course initiated by the German artists settled in Rome in 1810 can legitimate results be achieved.

Great results are achieved, work is done so good that it seems mere impudent presumption to say, it is not good; but no amount of human intelligence and industry can produce the subtle flame which kindles life; indeed the very perfection of the science with which we bring them to bear destroys the spontaneity of inspiration. Cornelius is a man of commanding ability, of exalted character, sincere in zeal, lofty in aim, unremitting in endeavour, considerable in achievement, but he himself has said: "*Ich erkenne nichts als Kunst an, was nicht lebt.*" This is a high standard, the highest and yet the only one in art, and it is, when tried by this test, that he himself falls short. E. F. S. Pattison.

THE DATE AND SUPERSCRIPTION OF MR. FULLER MAITLAND'S BOTTICELLI.

(No. 278 at Burlington House.)

TO THE EDITOR OF *THE ACADEMY.*

Sir,—With your leave, and by way of supplement to Mr. W. B. Scott's remarks upon the above picture, I beg to submit the following notes of the very singular legend in Greek capitals written in two and a half lines just below the frame. Here are the words as I read them:—

ΤΑΥΤΗΝ · ΓΡΑΦΗΝ · ΕΝ · ΤΩι · ΤΕΛΕΙ · ΤΟΥ · ΧΣΣΣΣΣ · ΕΤΟΣ ·
ΕΝ · ΤΑΙΣ · ΤΑΡ ΤΗΣ · ΙΤΑΛΙΑΣ · ΑΛΕΞΑΝΔΡΟΣ · ΕΓΩ ·
ΕΝ · ΤΩι · ΜΕΤΑ · ΧΡΟΝΟΝ · ΗΜΙΧΡΟΝΩι · ΕΓΡΑΦΟΝ · ΠΑΡΑ ·
ΤΟ · ΕΝΔΕΚΑΤΟΝ · ΤΟ · ΑΓΙΟ · ΙΩΑΝΝΟ · ΕΝ · ΤΩι ·
ΑΠΟΚΑΛΥΨΕΩΣ · ΒΩι · ΟΥΑΙ · ΕΝ · ΤΗι · ΛΥΣΕΙ · ΤΩΝ · Ι ΑΙ ·
ΗΜΙΣΥ · ΕΤΩΝ · ΤΟ · ΔΙΑΒΟΛΟ · ΕΠΕΙΤΑ · ΔΕΣΜΟΘΗΣΕΤΑΙ ·
ΕΝ · ΤΩι · ΙΒΩι · ΚΑΙ · ΒΛΕΨΟΜΕΝ · ΠΑΤ ΝΟΝ · ΟΜΟΙΟΝ ·
ΤΑΥΤΗι · ΤΗι · ΓΡΑΦΗι.

Most of this is quite plainly written; the only doubtful places being—

(1) The lacuna after ΤΑΡ in the eleventh word, where the canvass has been rubbed bare. This, I think, may with confidence be filled up thus: ΤΑΡ[ΑΧΑΙΣ].

(2) The effacement of parts of two letters between Ι and ΑΙ at the twenty-seventh word. These, for reasons afterwards to be seen, we may certainly read [Γ Κ]ΑΙ.

(3) The indistinctness of the letters which I read ΠΑΤ, and the lacuna (consequent on repainting) which follows them, in the fifth word from the end. Here I am inclined, although with diffidence, to supply ΠΑΤ[ΟΥΜΕ]ΝΟΝ.

The inscription I would then read, point, and construe thus:—

Ταύτην γραφὴν ἐν τῷ τέλει τοῦ χσσσσσ ἔτους ἐν ταῖς ταραχαῖς τῆς Ιταλίας Αλέξανδρος ἐγὼ ἐν τῷ μετὰ χρόνον ἡμιχρόνῳ ἔγραφον, παρὰ τὸ ἑνδέκατον τοῦ ἁγίου Ιωάννου, ἐν τῷ Αποκαλύψεως δευτέρῳ [βωι] οὐαί, ἐν τῇ λύσει τῶν γ' καὶ ἡμισὺ ἔτων τοῦ διαβόλου. ἐπεῖτα δεσμωθήσεται· (ἐν τῷ δωδεκάτῳ [ιβωι]) καὶ βλέψομεν πατούμενον ὅμοιον ταύτῃ τῇ γραφῇ.

"This picture I, Alessandro, painted at the end of the year 1500, in the troubles of Italy, in the half-time after the time, during the fulfilment of the eleventh of John, in the second woe of the Apocalypse, in the loosing of the devil for three and a half years. Afterwards he shall be chained, and we shall see him trodden down as in this picture."

Proceeding to details, it must be premised that the Greek is of course base from beginning to end.

ΧΣΣΣΣΣ. I do not know how these numerals can be legitimately explained. It is hardly doubtful that 1500 is the date indicated, as it has been read by Messrs. Crowe-Cavalcaselle and by Mr. Scott; but how? In Greek numeration X = 600, Σ = 200; but this will not hold here. It is much more probable that X is put as short for χίλιοι = 1000, and that ΣΣΣΣΣ = 500; but what I have not yet been able to find is a precedent for Σ in this sense of 100. It has been suggested to me that Botticelli may have taken it into his head that, as in Greek Σ and C are forms of the same letter, and in Latin C = 100, therefore also Σ = 100. Or can he have learnt that P is the true symbol for 100, and gone off and used the next letter of the alphabet by mistake? Without entering into this difficulty at all, Schorn in his notes on Vasari (vol. ii. 243–4) says that the last Σ may be read Ξ (which it quite certainly may not), and that then the date would be 1460. And Dr. Waagen, without a word, and for no reason that I can conjecture, reads it as 1511. On historical grounds alone each of these dates is equally inadmissible. Alessandro, the son of Filipepi, was born 1437 and died 1515. Schorn would thus hold the picture to have been painted at 23, when he would have been a disciple of Lippo Lippi's fresh from the goldsmith's shop; Waagen at 74, within four years of his death, and therefore at a time when he would have already become, in the words of Vasari, "old and helpless," walking with two sticks because he could not hold himself upright, "infirm and decrepit." The execution of this picture is as much too free and confident for a juvenile work as its invention is too passionate for a senile. Let us accept hypothetically the date 1500.

ΕΝ ΤΑΙΣ ΤΑΡΑΧΑΙΣ ΤΗΣ ΙΤΑΛΙΑΣ. "In the troubles of Italy." The appropriateness of this is obvious. The troubles of Italy, dating from the invasion of Charles VIII. in 1494, were still at their height in 1500. The previous year had seen the treacheries and vicissitudes of the war between Florence and Venice for the occupation of Pisa, the ever-shifting intrigues of Lewis Sforza with Lewis XII., with Maximilian, with Bajazet, with the Pope, his war against France and the Venetians; this year saw his disaster and imprisonment, the French victorious in the Milanais, the aggravation of local tyranny under the Pontifical Vicars, the sinister alliance drawn closer between Cæsar Borgia and Lewis XII., universal warfare, spoliation, depopulation.

ΕΝ ΤΩι ΜΕΤΑ ΧΡΟΝΟΝ ΗΜΙΧΡΟΝΩι. "In the half-time after the time." This is a reminiscence, or loose quotation, of more than one Scriptural prophecy. The mystical period of three and a half years occurs in Daniel, first as "a time and times and the dividing of time" (vii. 25), and again as "a time, times, and a half" (xii. 7). In the Apocalypse we have the "three days and a half" (xi. 9 and 11), during which the dead bodies of the two witnesses are to be seen by "them of the people and kindreds and tongues and nations;" and the "thousand two hundred and threescore days" (= 3½ years), during which they shall have prophesied before their death (xi. 3); and we have again the same "thousand two hundred and threescore days," as equivalent to the "time and times and half a time" (*καιρὸς καὶ καιροὶ καὶ ἡμισὺ καιροῦ*), during which the woman persecuted by the dragon is to be nourished in the wilderness (xii. 6 and 14). Interpreters of prophecy have not agreed whether this period is to be understood literally or only mystically. If, as I think probable, Botticelli did understand it literally, it is still doubtful whether by his incorrect phrase *μετὰ χρόνου ἡμίχρονος* he meant to express *καιρὸς καὶ ἡμισὺ καιροῦ* (= 1½ year), or, as I again think probable, the entire *καιρὸς καὶ καιροὶ καὶ ἡμισὺ καιροῦ* (= 3½ years). In the former case he would date the beginning of the period of affliction a year and a half before his time of writing, *i.e.* in the first half of 1499; in the latter case, three years and a half before, *i.e.* in the first half of 1497.

ΠΑΡΑ ΤΟ ΕΝΔΕΚΑΤΟΝ ΤΟΥ ΑΓΙΟΥ ΙΩΑΝΝΟΥ. "During the fulfilment of the eleventh of John." It is very possible that *παρά* is simply a barbarism for *κατά*, "according to;" but the meaning "synchronous with," "at the time of," gives, I think, better sense as well as slightly better Greek. The reference to the eleventh chapter clearly shows that the particular visitation which the painter has in his mind is the killing of the two witnesses by the "beast that ascendeth out of the bottomless pit" (Rev. xi. 7). We know that Botticelli was a persistent follower of Savonarola—"*ostinato a quella parte*," says Vasari—and I think it is probable on the face of it that in the martyrdom of Savonarola and his companions (on the 28th of May, 1498) he saw the fulfilment of the above prophecy. The *two* witnesses would be Savonarola and Domenico Buonvicini di Pescia, whose fame almost equalled that of his master (Silvestre Maruffi, the third martyr, being a person of altogether subordinate importance).

ΕΝ ΤΩι ΑΠΟΚΑΛΥΨΕΩΣ ΒΩι ΟΥΑΙ. "In the second woe of the Apocalypse." This clause is added in epexegesis to that preceding it, and shows that Botticelli comprehends by the "second woe" the slaying of the witnesses. The first paragraph of the same eleventh chapter of the Revelation ends with the words, *ἡ οὐαὶ ἡ δευτέρα ἀπῆλθεν· ἰδοὺ ἡ οὐαὶ ἡ τρίτη ἔρχεται ταχύ*. St. John thus makes *οὐαὶ* feminine; but we have seen that Botticelli's scholarship is small; and again (as Professor Lightfoot has been kind enough to point out to me) he is writing in all probability with no Greek Testament before him, its first publication having been in 1516; and the natural gender of the word would be neuter, as Dr. Lightfoot has in fact found it in the *Apostolic Constitutions*, ii. 10.

ΕΝ ΤΗι ΛΥΣΕΙ ΤΩΝ Γ ΚΑΙ ΗΜΙΣΥ ΕΤΩΝ ΤΟΥ ΔΙΑΒΟΛΟΥ. "In the letting loose of the devil for three and a half years." A further epexegetical clause, indicating that the half-time after the time, the fulfilment of the eleventh of John, the second woe of the Apocalypse, and the letting loose of the devil for three and a half years, are all identical and all synchronous with one another and with the troubles of Italy. Here the writer's recollection seems to have supplemented or mixed up Rev. xi. 7, which speaks of the dragon ascending out of the bottomless pit against the witnesses, with Rev. xx., which speaks of him as being "loosed for a little season" after having been bound for a thousand years (verses 3 and 7); and to have further confused or identified this "little season" with the "time, times, and half a time," above discussed. Hence the obvious restoration of [Γ Κ]ΑΙ = 3½ years.

Reverting to the supposition that Botticelli at the end of 1500 conceives himself to be living literally in the last half-year of three and a half years of persecution, what events occurred in the early part of 1497 to which he could allude as its beginning? I think the embittered measures of Alexander VI. against Savonarola in the spring of that year (bull of excommunication, May 12) and the increasing pertinacity of the Arrabbiati in Florence, together with his loss of credit at the time of the plague in June and of the execution of the Medicean conspirators in August—I think all these things, in spite of the temporary triumph of his party in the first two months of 1498, might well be taken to mark the time of the loosing of the beast and his "making war against" the witnesses, *i. e.* the first great shock given to the power of Savonarola and the Piagnoni in the state. I do not know of any occurrences in the first half of 1499 to which a similar significance could be attached.

ΕΠΕΙΤΑ ΔΕΣΜΟΘΗΣΕΤΑΙ ΕΝ ΤΩι ΙΒΩι. "Then he shall be chained in (or according to) the twelfth." Rev. xii. 7–9 tells how there was war in heaven, and how that old serpent was cast out into the earth, and his angels were cast out with him. There is nothing here of "chaining;" but I think Botticelli has again confused or identified with this passage the "binding him," "shutting him up," "setting a seal on him" (*ἔδησεν, ἔκλεισεν, ἐσφράγισεν*), of Rev. xx. 2 and 3. In the picture itself, the five devils that have fallen transfixed on the ground, with a half-buried devil's face almost lost in the right-hand corner, would precisely illustrate the casting out of Satan and his angels after the war in heaven.

ΒΛΕΨΟΜΕΝ ΠΑΤΟΥΜΕΝΟΝ ΟΜΟΙΟΝ ΤΑΥΤΗι ΤΗι ΓΡΑΦΗι. "We shall see him trodden down as in this picture." If this reading is right, Botticelli alludes to the position of the vanquished devils about the feet of the men and angels who embrace in the foreground of the picture; and indicates his belief that at the end of the half-year in Italy the Devil will be controlled and the troubles stayed by some supernatural intervention.

We have thus seen (at sad length I fear) how something like a coherent meaning, although far from a certain one, can be traced in this mystical inscription; of which it is hardly possible to overrate the interest, as throwing light at first hand on the actual thoughts of an artist who, for all his speculative and self-conscious habit—"*per essere persona sofistica*," as Vasari puts it—yet lost nothing of the freshness of inspiration. It is of course possible that one goes wrong in trying to give a precise interpretation to what may have been only the semi-Scriptural expression of a vague sense of visitation, and a vague hope of its end.

It might give us greater certainty in the matter if we were in possession of Savonarola's own interpretations of the Apocalypse, but nothing precise is recorded of these. His expositions of the book

belonged to an early course of sermons, begun in August of the year 1490, and never published; he only tells us vaguely (*Compendium revelationum*) that in them he developed the three propositions—"that the renovation of the Church would take place in our own time," "that before that God would visit Italy with a great scourge," and "that these things would happen speedily."

Having given the best account I can of this inscription, it is necessary to point out what is clearly wrong in that of Schorn (*loc. cit.*), the only critic who has gone into it in detail. Schorn reads it as above, only putting TAI for TAP before the first lacuna, IAΦ for ΓΑΤ before the last, and then reconstructs as under:—

ταύτην γραφὴν ἐν τῷ τέλει τοῦ χσσσσσ (or *χσσσσξ*) *ἔτους ἐν ταῖς χώραις* (!) *τῆς* Ιταλίας Αλέξανδρος *ἐγώ ἐν τῷ μετὰ χρόνον ἡμιχρόνῳ ἔγραφον, παρὰ τὸ ἑνδέκατον τοῦ ἁγίου* Ιωάννου *ἐν τῷ* Αποκαλύψεως *βιβλίῳ.* Οὐαί *ἐν τῇ λύσει τῶν γ' καὶ ἡμισὺ ἐτῶν τοῦ διαβόλου. ἐπεῖτα δεσμωθήσεται ἐν τῷ ἀβύσσῳ* [ABΩι] *καὶ βλέψομεν* Ι[*ησοῦν*] *ἀφ* [*ημένον*] *ὅμοιον ταύτῃ τῇ γραφῇ.*

To conjecture *χώραις* where he finds TAI is strange. BΩι is much less likely to be a contraction for *βιβλίῳ* than a symbol for *δευτέρῳ.* Οὐαί *ἐν* is an improbable construction. It is pure violence to substitute ABΩι for IBΩι, and makes it a contraction for *ἀβύσσῳ.* I might possibly be short for Ι*ησοῦν*; but what would be the sense of *ἀφημένον*, "sitting apart"? Schorn translates it merely "sitzend;" but I doubt if such a Graecist as even Botticelli would so use it.

Before parting from the picture, I should also notice the slip by which Messrs. Crowe-Cavalcaselle speak of the inscription as being at "the foot" instead of the head.

The inscriptions on the banderols contain some further puzzles. On those of the upper choir of angels can be traced GLORIA IN EXCELSIS twice repeated, the word SACRARIVM several times, REGINA SOL more than once, and the syllables CELEST and SPES IN. The left and right hand angel on the ground both carry upon theirs the sentence (or part of it) HOMINIBVS BONÆ VOLVNTATIS.

Sidney Colvin.

EXHIBITION OF WORKS OF THE OLD MASTERS AT BURLINGTON HOUSE.

III.

FLEMISH SCHOOL.

The greater attractions of this large gathering are to be found in the Venetian and other pictures of the Italian schools, which are of a beauty and poetry quite superior in kind as well as in quality to the works of men north of the Alps, but it is nevertheless very interesting to turn to the latter and analyse the difference here, where the productions of all countries, true and false, hang side by side.

In the earlier ages of painting both in Italy and in Flanders we find the different national character less decisively marked, and we must remember that the arts were sooner important in Italy than anywhere else, and that the antique remains made an inestimable educational difference, the art of sculpture preceding that of painting perhaps a century. These considerations, however, leave the vast gulf of separation unbridged, and we are forced to fall back on distinct national character as the explanation. It is true the fourteenth and fifteenth centuries in Italy are scarcely represented here, but in the Triptych by Fra Angelico (313) we have one picture of importance which we may accept as truly representative of the early 1400, and contemporary with Van Eyck. In Fra Giovanni, grace and loveliness make us forget the childish gorgeousness of costume, and the painful mythologic mediævalism, and if we go back even to the beginning of Italian as distinguished from Byzantine art, we find the same motive. Beauty and the direct expression of it for its own sake is in every line, while a century and a half later north of the Alps we can detect no such artistic inspiration. The centre of the triptych we have mentioned is the Last Judgment, and in it the angels are every one of them diapered and flounced with patterns in gold, and behind the figure of Christ at the top of the picture the mass of angels' wings, all covered with eyes like the tails of peacocks, is surprising and in a way delightful; in a way only, because the attempt to elevate the angelic nature by assimilating it externally to that of this foolish bird is only childish; while below, the elect who are embraced by the heavenly messengers sent to conduct them home are nearly all tonsured. As to the damned, they have no golden raiment—one would say, pride of apparel was not their sin. On one side the volet exhibits the ascension of the blessed, and here Fra Angelico is worthy of his name: nothing has ever been done on canvass more pure and innocent in sentiment, and more graceful and lovely in expression, than those pairs of saints and angels ascending from the earth to the firmament.

No invention comparable or even analogous to this is to be found in early German or Flemish work. The northern painters kept to the solid earth, and the real facts of their neighbourhoods, but at the same time it was also impossible they should clothe angels in cloth of gold and make them into peacocks. In their works invariably, as far as we remember, the angels are in white raiment, with doves' wings. Exceptions to this there may be, but where such is the case, an explanation is to be found. In the "Celebration of the Mass" (326) by John Van Eyck, an angel descends with benediction, and this, the only example we can point to here, will illustrate our comparison. It is not lovely, certainly, and the drapery is folded about the figure in the complicated small folds prevailing down to the times of Dürer and Lucas of Leyden, but the motive of splendid colour being absent, we have propriety of conception. A little later we find in Venice and elsewhere that art for its own sake becomes entirely objective, a pleasure to the eye and a mystery to the uninitiated. It is needless to ask the meanings of things, and the amateur critic begins to talk nonsense in attributing occult reasons and intentions where the artist meant only chiaroscuro and colour, variety and gladiatorship.

Of Van Eyck we have here three pictures. The first of these, St. Jerome, called foolishly in the catalogue "A Philosopher in his Study," it is perhaps impossible to affirm positively to be from that master's hand, but it is inestimable as an early Flemish work of the finest order. The saint is mounted on a platform with his desk before him, and his shelves with his few books behind. These are open for reference where he sits at his *opus magnum*, and every detail is made out with propriety and delightful *naïveté*. At the bottom of the steps to his platform lie the shoes he has thrown off before beginning his work, and his lion, not having found himself wanted, is to be seen round the corner as if he had taken a constitutional, and was now on his way back. Against the wooden wall behind the doctor's desk there is a little white label pinned up with an appearance of writing on it. But here the dear old Fleming has dared to be guilty of a little ruse, as we found on going armed with a microscope that nothing was to be read on the same. The second Van Eyck is Mr. Beresford Hope's "Madonna and Child" (273). This well known and perfect little panel it is a great pleasure to see again; and the third is the "Celebration of High Mass," with the angel descending. So awkwardly does he fly indeed that he seems to be sitting on the bar on which a curtain runs, but still with a great charm of reality and naturalness, so that the total want of surprise or even observation on the part of the human actors is perfectly just. The subject of this admirable piece of Flemish elaboration must be within reach of a little study, the principal figure (after the officiating priest) being an emperor, with the German Kaiser's crown on his head. Much as we have seen of elaborate making out of stuffs and materials with patterns and gold thread, this small picture, 24 in. by 18 in., is even exceptional in this respect. Behind the raised arms of the priest is a golden reredos of Byzantine work, the subject being Christ in the centre and the four Evangelists round in elaborate borders. The whole is *repoussé*, set with precious stones, an inestimable labour of the goldsmith's art, which must have been carefully and exactly elaborated from an original. Indeed, the whole interior strikes us as being a portrait of some place, although the position of the altar at which the mass is being said requires explanation. On the prie-dieu, covered with a velvet pall, at which the Kaiser kneels, his coat of arms is emblazoned in gold embroidery, another instance of miraculous elaboration. What time must have been spent, and what chemical tests employed, before this picture and the "Madonna and Child," and the portraits in the National Gallery, inscribed "Johannes de eyck fuit hic, 1434," were painted! And now, after four centuries and a half, they promise to remain intact for ever, while all the frescoes in Italy are crumbling to pieces, and the oil pictures becoming black. The early tempera paintings

only will ultimately remain visible to the world a thousand years hence; but those by Van Eyck, supposed to be in oil, as far as we can see, will undergo no change.

In the "Virgin and Child under a Canopy" (226), by John de Mabuse, we have the production of a century later than those we have examined, and yet little progress is apparent. Here the oil is certainly undergoing its usual darkening, but the ambition of the artist has manifestly been no other than the elaboration of details. The character of the Madonna is common, and yet the individuality is lost: the background of renaissance ornament is really the interest of the painting, and this is so little admirable now, and so overdone in quantity, that the impression is rather painful than otherwise. The period of change in northern art followed the reformation, not beneficial at first but still emancipation, leading to freedom and such victories as those of Rubens and Rembrandt. This transition time is represented here by two pictures (297, 301) by Henry Goltzius, in which, however, we fail to see the bizarre excess of style characterizing his engraved designs. Of the two greater masters we have mentioned here are many and noble examples; indeed both but especially Rembrandt, are admirably represented; as in "Christ Preaching" (345) and the portraits. Of these, how absolutely perfect are the Marquis of Westminster's well known pair, "Portrait of a Man with a Hawk" (126), and "Portrait of a Lady with a Fan" (136). The wonder in this art of Rembrandt is that breadth and detail, roundness and precision, are equally given; and that while art was everything to him, so that colour, light and shade, and other technicalities in manner were all in all, the result is so true to nature, the eyes are thinking, the lips moving, and the whole action of body, face and hands of this little woman with the fan, for example, has the unmistakable unity we recognise in life. In the head-dress, attached in some way, there is a crimson feather, very much kept down so as to be scarcely visible, the only exceptional point, both in the costume and colour of the picture. With Rembrandt it was always an effort to exclude his rubbish of caftans, feathers, turbans, and what not, things he called his "antiques," in derision of those who admired the sculptures of Greece and Rome. This little woman, who is undoubtedly a lady, perhaps insisted he should darken this feather nearly out of existence.

W. B. Scott.

THE DUDLEY GALLERY EXHIBITION OF WATER COLOURS.

This pleasing little exhibition is not one of those that need to occupy our space very largely. It has this year quite attained its level, and will be visited by all who like the charming small landscapes from nature with which it abounds. Apart from these, there is very little indeed calling for notice, and the only pictures that presume to rise to dramatic emotion and poetical character are two by ladies. Highly accomplished works there are besides, no doubt, especially those of Messrs. Marks and F. W. Burton; but in subject Miss Lucy Madox Brown, and Miss Spartali are more ambitious, and have succeeded so remarkably that they seem to demand more detailed notice than the better known and able men we have mentioned. At the same time it is seldom we see anything so thoroughly complete and harmonious as the Roman child, "La Romania" (172), by Mr. Burton, making up her bouquet, sitting nestled among the carved fragments of antique marble; and Mr. Mark's "Thoughts of Christmas" (269) is one of the most enjoyable pictures he has ever done. The background of forest-tree stems in a dry autumn is very good indeed, and the swine are unexceptionable. They have that queer winking twinkle in the eye, a mixture of watchfulness and contentment, while the "Friar Dan," who mentally picks out his Christmas dinner among them, although there is something porcine in his physiognomy, is not the least of a brute; on the contrary, he is a rather fine fellow, and has been reading his book as he takes his walk.

"Romeo and Juliet" (336), by Miss Madox Brown, takes us rather by surprise. It is the scene in the tomb of the Capulets, when Romeo, with murder on his hands and self-sacrifice in his heart, looks on the sleeping not dead Juliet, and calls out, "O, my love! my wife! Death, that hath sucked the honey of thy breath, Hath had no power yet upon thy beauty:" and yet, madly believing that she was dead, takes the poison. His face is lit, not by the torch that attracts Friar Lawrence, who asks a few minutes after, "What torch is that? It burns within the Capels' monument!" but by the moonlight that streams down the steps of the tomb, not directly on the face of the doomed boy, but reflectedly, principally from the white dress of Juliet. This substitution of moonlight is an admirable thought, and shows a true poetic instinct in the painter, which is further borne out by the invention of the picture in all its parts, the bier with its pelican embroidery, the iron-work behind Romeo, and the churchyard above the steps, with the page or Balthasar sitting under a tree with his lantern by him. All this is, of course, in such a subject, secondary to the passion expressed on the faces of the actors; and here Miss Brown sustains her noble task. She has not indeed given the respective ages with accuracy; Juliet, as we learn from the nurse, being only fifteen, while Romeo is old enough to have had a first love before their meeting at the masque; but the profile of the face of Juliet is very fine and true, the whole line of the figure admirable, and the passion in the eyes and mouth of Romeo worthy of a Shakespearean illustrator.

"Antigone gives Burial Rites to the Body of her Brother Polynices" (75) is Miss Spartali's picture, the single other poetical picture, except some landscapes, particularly those by Madame Bodichon in this collection of 665 productions. Polynices, who died in single combat with his brother Eteocles, to prevent the battle, is carried out dead at the end of the drama, *The Seven before Thebes*, while the chorus of Theban virgins determine to follow him—"Unwept, unpitied, unattended, save by a sister's solitary sorrows;" and the semi-chorus say also, "We will go, attend his funeral rites, and aid his sister to place him in the earth." The herald and the bearers have thrown the body out on a heath, where Antigone, who is to suffer death for her piety, laments over it and over the woes of her house, throwing the earth in handfuls upon it. The colour of this picture is very fine indeed, and has that unity about it which distinguishes the true painter, excellent colour being, after all, not splendour of hue but harmony. The head of Antigone is nobly felt, and her action also; but still we miss the real subject, and the few pieces of earth lying on the drapery of the dead brother are the only symptoms of her having administered or intending to administer any funeral rites, although some symptoms of preparing a fire are apparent in the background, which seems to contradict the throwing of earth on the body; on the contrary, anointing it with oil would be the proper archæological treatment.

Other ladies there are, exhibiting figure-pictures here, who ought to be mentioned, particularly Miss Ellen G. Hill, in her chalk drawing called "Listless," a very well drawn figure of a half-cast negro trifling with a guitar. It is a great proof of original artistic power in a woman when she does not paint women. The greatest paintress living, or we may say, who ever lived, Rosa Bonheur, never painted a woman in her life. Men are attracted to the opposite sex and its charms of both face and body, as the subject for painting, but women are not so attracted or interested. This test, we imagine, would be unfailing and absolute but for the trenchant fact that no figure-paintings *sell* in England but those wherein female beauty is the attraction. Before leaving the Dudley, let us notice two pictures by a name we do not remember to have met before, Hubert Herkomer. His pictures are "At Trèport—War News; July, 1870" (57), and "The Orchard" (344). What country Mr. Herkomer belongs to we know not, only his pictures are truly English in manner, and of very remarkable beauty and finish, as well as fulness of invention. The style is exceedingly fine and minute, without any triviality. The second picture looks like a portrait composition, but the other is full of figures, all of them admirably drawn and full of character. Wanting space for detail or description, would the reader care to know what particular pictures we have marked in our catalogue, and would recommend him to look at? For lovely sentiment, "Even Song" (530), by Edward R. Hughes; "Cinderella and her Sisters" (123), by C. N. Henry; 199 and 371, by Tom Gray, figure-pictures with singular distinctness of characterization; and 347, a girl's head merely, by Charles F. Murray. Among the landscapes, the works by Madame Bodichon, Messrs. Ditchfield, Donaldson, Arthur Severn, Albert Goodwin, Field Talfourd, and more especially "Blanchisseuses bretonnes" (28), by Joseph Knight, "St. Peter's, from Monte Mario" (182), by J. C. Moore, and "A Pastoral" (517), by E. J. Poynter.

W. B. Scott.

ART NOTES.

Mr. Simeon Solomon is about to publish, under the title of *A Vision of Love Revealed in Sleep*, an ornamental book of some forty pages, with an original drawing photographed for frontispiece. The style of the piece is a poetical prose, and it deals with the same order of ideas that have been illustrated by the author in his imaginative pictures and designs.

Mr. G D. Leslie is engaged upon a painting of the subject of Nausicaa and her handmaids surprised by Ulysses, from the sixth book of the *Odyssey*.

The new number of *Im Neuen Reich* opens with a lecture on the Roman catacombs, delivered by Theodor Mommsen, on the 13th of January last, before the Berlin Unionsverein. The subject is treated popularly, and with the writer's usual brilliancy. His chief points are to show that underground burial-places in antiquity (originally κρυπτά) were not a specifically Jewish or Christian invention; but proper to the poorer class in crowded cities, and hence most of all to Rome under the Empire. He brings evidence to show that, on the one hand, there existed a pagan necropolis of this kind at Alexandria, and that, on the other, the Christians at Cæsarea and Carthage were buried in open "areæ" or graveyards. He scouts the notion of these burying-places having been constructed in secret, or without the sanction of the imperial police, but admits that they were employed by the Christian community as a shelter for such among their practices as may have been obnoxious to the existing laws. In describing the catacomb now known by the name of Domitilla, he pays a high compliment to the "equally acute and conscientious Giambattista de' Rossi," though not convinced by his arguments on this particular question of appellation. Finally, dating the disuse of the catacombs from the Gothic capture of Rome, he has thought fit to point his narrative with a series of allusions: thus—"In spite of the enormous circumference of the walls, the twelve gates were all beset, commerce on the Tiber was stopped: the pressure of hunger began, they began to ration out the bread. . . . . The government resided far away in Ravenna, inaccessible and impregnable among its swamps; it sent armies to raise the siege, but they never reached, and were separately crushed. The Goth did his best to bring about a peace; his demand was for contributions in money and kind, and the cession of Venetia, Noricum, and Dalmatia. They offered him gold and silver as much as he would, but beyond that nothing was to be got," &c.

To many the name of Sir George Hayter, who has recently died, will carry no very certain impression, and yet he was long a portrait painter of great practice, and in the very core of fashion. When the Princess Charlotte married Leopold, afterwards chosen king of the Belgians, Hayter, then little more than twenty, was appointed their court painter, and painted their portraits, so popular during her short married life, both in miniature and in oil. His early successes made him indifferent to the distinctions artists of his moderate abilities usually covet, and for a considerable time past he has been little before the public. Mr. G. Sant, R.A., has succeeded to the office of Painter in Ordinary to the Queen.

Mr. Henry Green, the author of *Shakespeare and the Emblem Writers* (see *Academy*, vol. i. p. 173), has ascertained that no less than four hundred writers have treated the subject of emblems in no less than three thousand distinct works. He is himself about to bring out a life of Andrew Alciat, with notices of about seventy editions of his emblems. The principal English libraries, both public and private, have been searched for the materials of this work, and the indefatigable bibliographer has also obtained returns from the librarians of all the chief European libraries of the various editions of Alciat which are in their charge.

Mr. Ford Madox Brown has just finished his picture, "Foscari's Wife Visiting her Husband in Prison," a subject taken from Byron's tragedy.

The collection of paintings preserved in three rooms of the Hôtel de Ville at Strasburg was burnt during the siege. The loss is serious, and includes the "Marriage of S. Catharine" by Memmling, a fine Madonna by Perugino, portrait of woman by Miereveldt, and several altarpieces by Philippe de Champagne.

The frescoes by Guffens and Swerts, in the *Liebfrauenkirche* of St. Nicolas, at Antwerp, were uncovered on December 8th with much ceremony. By their extent alone they rank amongst the most important of late undertakings of this kind.

Music.

UNPUBLISHED LETTERS OF ROBERT SCHUMANN.

II.

The following three are Schumann's letters to "Zuccalmaglio," written in 1836:—

(4)

"*Leipzig, Good Friday*, 1836.

"Dear Sir,—I congratulate you heartily on your safe return. Don't keep me long waiting before you tell me about your adventures, and what you have seen: send an account of yourself as soon as you can. Something about Moscow would delight me especially. The name of Moscow always sounds in my ears like the sonorous stroke of a great bell. If you like the tone of the Davidsbündler letters from Augsburg, Berlin, Dresden, and Munich, you would do well to adopt it in your own. This is a good way of working up in an attractive manner a number of facts and circumstances; it gives a certain compactness and colour to the journal, and the people like it. You may picture to yourself the Davidsbund as a kind of spiritual brotherhood, though its visible branches are really pretty widely extended, and will in time, I hope, bear plenty of golden fruit. The secrecy of the thing possesses a peculiar charm for many; and, like everything mysterious, a peculiar power. Not that your former letters from Warsaw did not please me exceedingly; indeed I regard them as some of the best in my journal, as I have told you several times. Your last letter but one enclosed the collection of the *Mosellieder*, and two essays which by this time you will have read in print. The other MSS. (*Fest zu Malin* (?), &c. [name doubtful]) are safe in the hands of my brother. Whether he will print the *Mosellieder* even on commission, I have my doubts. He has at present a great undertaking on his hands, the *Universal Dictionary of Commerce*, by R. Schiebe, which employs a good deal of his time and resources. About the publication of your other manuscripts I hope soon to be able to tell you for certain, as I shall see my brother some weeks hence at the Leipzig fair. Your idea of laying the scene of a tale at Moscow, I think a particularly happy one. Perhaps I shall be able to do something for your manuscript, but can't promise yet. I long to receive your Moscow letters, and anything else from your pen. If you don't hear from me for a considerable time, you must put it down to a trip to the Rhine, whither I am thinking of going with Mendelssohn at the end of April. I told Sonnenwald to send you your copy of the *Zeitschrift* long ago, and have just stirred him up again to despatch it. You had better enquire at Sonnenwald's.

"Yours truly,

"R. Schumann."

(5)

"*Leipzig, July* 2, 1836.

"Dear Sir,—The reason for my long and ungrateful silence has lain in a good deal of distress of mind, out of which I found it impossible to rouse myself for work. It was music at last, and some original musical work of my own especially, and above all the restorative force of a young constitution, the woods and the green leaves, which have brought back courage and energy.* My first lines are to you. Like a child at a Christmas tree, I stood before your presents, and turned them

* The crisis alluded to, however, exercised a highly favourable influence on his creative power, as we also see from a passage in a letter to his friend Dorn (dated 1839) in which Schumann says: "There is certainly much in my music of the struggle which it cost me to win Clara, and I am sure you have understood it."

carefully over and over. Then I grow angry with myself that I can do nothing with the booksellers, and can never get anything more encouraging than 'to-morrow' out of them, spite of all my pains. And the worst of them all (though it must be said in his defence that he has a great bit of work on his hands) is my own brother, with whom, by the bye, your MSS. are all left. This is why I wanted to wait, so as to prepare a little surprise for you, but here I am again with empty hands. This of itself, after so much as I have received from you, is enough to make me sad. Have sent to G. Schwab; and shall to the *Elegante Zeitung*. But why are you so slow to write in your own name? I called on your friends as soon as I received the letter, which came to me by a round-about way. And when I took my chance of finding them at the Hôtel de Russie, they had just left. A great pity indeed. If you want a complete copy of the journal, please say so. Some weeks ago I sent you, through Sonnenwald, a parcel with all your essays, a pretty big collection. I read out your last letter but one to Mendelssohn: we both enjoyed it vastly. He says he doesn't care for male part-songs (*Männergesangquartette*), and doesn't think he can do anything in that way. I hardly think so either. But he will send you something next winter. Your Oratorio I will forward him to Frankfort in a day or two, if he doesn't see it before in print. It seemed to make such an excellent beginning to my new volume that I anticipated your permission to publish it. The last four lines I should like perhaps a little altered: the repetition of 'fest' is a little disagreeable. You will pardon my candour. My proposed journey to the Rhine (your native place, isn't it?) never came about: my distress had quite knocked me down. Since that, however, some new airy shapes have found their way out of me: one of them I should like to bear your name, *i.e.* I should be glad to dedicate something to you.

"There are some things in my music which you will positively dislike, if I may judge from your former articles; but our new movement cannot fail to be intelligible, as a whole, to such a keen eye as yours, and is sure to meet with your sympathy and help. I seem to feel that we are standing at the beginning of a new time, and that strings might now be touched which have never been heard before. May the future be with it, and some good genius bring it to perfection.

"Good bye for to-day. Send me whatever pearls you have in store. In my manifold occupations I want the assistance of others, and chiefly that of trustworthy men like you.

"Yours truly,
"Robert Schumann."

(6)

"*Leipzig, October* 18, 1836.

"I received with joy everything you mention, and only wish it were more. A biographical sketch of [name illegible] would be particularly welcome to my readers and myself. To judge by one of your former letters, you seem to believe that some of your MSS. are not yet printed, but this is the case only with one—the Dream about the prize symphony; sometimes I look at it with real reluctance. There is so much in it that I like, and yet I think it would do better for any other paper than the *Neue Zeitschrift*, which once for all is devoted to youth and progress. Besides, the symphony of Berlioz has just been so favourably reviewed in our journal that a new and entirely different opinion is more likely to puzzle the reader than to be of any use.

"Hr. Freier's songs are going to be noticed. On the publishers of this place I have no influence whatever. I think it better for Hr. Freier to apply directly to Hofmeister. I have tried myself several times to find a publisher for other people's MSS., but have met with so many refusals that I really don't care to ask any more. You can scarcely believe how sorry I am for being obliged to say this to you, to whom I owe so much.

"Will you be kind enough to go once more through your file of the *Zeitschrift*, and tell me exactly which numbers are wanting. I sent you some time ago separate copies of all your articles; have you received them? A Warsawian composer, Nowakowski, who was here for some weeks, mentioned to me a musical periodical in the Polish language. Could you tell me at all what it is like? Last summer you announced to me a Moscowite friend of yours, but nobody has appeared yet. The musical season here is at its height. Lypinsky is sure to pass Warsaw. I like him very much, both personally and as an artist. I gave your MS. of the poem, 'Die Tonkunst,' to Mendelssohn; he sends his thanks and kind regards; but for the present he cares more for making love to his chosen than for composing. Have you seen the *Papillons*, and the sonata by Florestan and Eusebius? I wish you would let me know your opinion of them at once. You will soon read a comprehensive article about them by Moscheles, who is now in London.* Don't you think it better to give sometimes another form to your contributions? Gottschalk† has become such a dear friend of mine that I should be sorry to miss him; but I am obliged to plead for my readers. Besides, new forms bring new ideas.

"Please ask me to do something for you which is very difficult, otherwise I shall be too light in the balance. I long for news of you; please send me your letters direct by post. New Year is coming on; do you know anything to begin the new volume with?

"Yours, faithfully,
"Robert Schumann."

In order to understand the last letter, it is necessary to state the following facts. The Vienna Kunstverein had promised a prize to the composer of the best symphony. Herr von Zuccalmaglio seems to have been afraid the committee might decide in favour of Berlioz, or a composer of his school, and, to prevent this unpatriotic proceeding, he wrote, under his favourite pseudonym, "Gottschalk Wedel," the dream mentioned in the letter, which, notwithstanding its romantic form, showed a good deal of German philistinism. In it he abuses Berlioz' dramatic symphony, "Épisode de la Vie d'un Artiste," the great merits of which Schumann himself had gladly acknowledged in the article alluded to. His fear, however, proved to be unnecessary, for Lachner, a Munich composer, won the prize. Schumann inserted Z.'s article with a note of his own, in which he entirely disagrees with the views of his friend and of the Vienna committee. Schumann's and Z.'s article may be read now in the former's *Gesammelte Schriften*, 2nd ed. i. 68 and 131. Fr. Hüffer.

(*To be continued.*)

NOTES.

Herr Nottebohm, the well known Beethoven scholar, publishes in No. 5 of the *Allg. Mus. Zeitung* a newly discovered "Stammbuch," in which, according to the German custom, the young master's friends in Bonn wrote a few kind words of remembrance on the occasion of his leaving his birthplace for Vienna, where he ultimately took lessons of Haydn. The contributions in prose and verse are full of the sentimentality of the time (1792); for the poetical part the works of contemporary poets, and chiefly those of Klopstock and Schiller, had been ransacked successfully. Apropos of his journey, Beethoven is admonished by Count Waldstein "to receive from the hands of Haydn the genius of Mozart."

Liszt's oratorio, *Die heilige Elisabeth*, has been performed by the Liederkranz Choral Society in New York.

The *Musikalische Wochenblatt* says that Dopler's new opera, *Judith*, has just been performed in Vienna with great success. The author is a disciple of Wagner.

Der Haideschacht (*The Mine on the Heath*), a new opera by the Leipzig composer, Franz von Holstein, has been recently performed in Bremen with the same success as it had met with in Dresden and Leipzig. The libretto is derived from a novel of Hoffmann's, and written, after Wagner's example, by the composer himself, who however in other respects seems to be an adherent of the school of Schumann.

Mr. Darnreuter is at present engaged on a translation of Wagner's *Letter to a French Friend*. The musico-philosophical views which are contained in Wagner's voluminous works are here resumed in a lucid and very readable form. The "Letter" will be preceded by a biographical and critical essay by the translator.

* This sonata appeared under the title, "Pianoforte-Sonate, Clara zugeeignet von Florestan und Eusebius," op. 11. Moscheles' criticism on it (dated London, October, 1836) may be found in Wasielewsky's *Life of Schumann*, 1st ed. 320.

† Gottschalk Wedel, the *nom de plume* of Zuccalmaglio, already explained.

Theology.

THE DOGMA OF PAPAL INFALLIBILITY.

II.

Voices from Maria-Laach. [*Stimmen aus Maria-Laach. Die Encyclica Papst Pius' IX. vom* 8. *Dezember* 1864. *Neue Folge. Das Oecumenische Concil.*] Herausgegeben von Florian Riess und Karl von Weber, Priestern der Gesellschaft Jesu. Freiburg im Breisgau: Herder, 1868, 1869, 1870.

Even the slight sketch which I have given of the state of opinion among Catholic professors in Germany is sufficient to show the motives for the definition of the papal infallibility. The real question at issue was whether professors of universities were to be allowed to say precisely what they pleased until an Œcumenical Council could be assembled. In other words, was the keeping of the Christian revelation to be entrusted to erudition or to a supernatural gift of infallibility? The composition of the minority is already enough to show that the question is by no means identical with that which was agitated in the last century under the name of Gallicanism. The old doctors of the Sorbonne would have stopped their ears with horror at the notion of "freie Wissenschaft." The real centre of opposition was not Paris, but Augsburg.

I now turn to another of the Maria-Laach series for an explanation of the decree itself. Father Schneemann's treatise on "The Power of Teaching in the Church" contains an able exposition of the whole subject. He begins with a review of the notion of the gift of infallibility, its objects and extent. He then turns to the infallibility of the Holy See as one form of the infallibility of the Church. Of course, what I have hitherto said only proves the usefulness of the gift in checking the autocracy of erudition; no amount, however, of usefulness will justify the decree unless Christ really gave it to the successors of St. Peter. Into this part of Father Schneemann's treatise the space allotted to me forbids me to enter. I turn at once to a portion which gives the key to the meaning of the decree itself; and in doing so I will, as far as possible, use his words instead of my own.

The decree, as is well known, runs as follows:—

"Nos traditioni a fidei Christianæ exordio perceptæ fideliter inhærendo, ad Dei Salvatoris nostri gloriam, religionis Catholicæ exaltationem et Christianorum populorum salutem, sacro approbante Concilio, docemus et divinitus revelatum dogma esse definimus: Romanum Pontificem, cum ex cathedra loquitur, id est cum omnium Christianorum pastoris et doctoris munere fungens pro suprema sua Apostolica auctoritate doctrinam de fide vel moribus ab universa Ecclesia tenendam definit, per assistentiam divinam ipsi in beato Petro promissam, ea infallibilitate pollere qua divinus Redemptor Ecclesiam suam in definienda doctrina de fide vel moribus instructam esse voluit; ideoque ejusmodi Romani Pontificis definitiones ex sese, non autem ex consensu Ecclesiae irreformabiles esse."

What is the meaning of the last words? the startled world cries out: if it be so, what check is there upon the authority of the Sovereign Pontiff? why may he not to-morrow promulgate a totally new faith to be believed under an anathema by all Christians? The question really requires an answer, and involves the whole view of the relation between the Pope and the Church. Of course, I might truly answer that the Holy Spirit could only speak truth by the mouth of the successor of St. Peter. As, however, the Holy Spirit has not promised to the Sovereign Pontiff the gift of inspiration, but of a non-miraculous assistance, it is fair to ask what in the constitution of the Kingdom of Christ is the check upon the promulgation of absolutely novel doctrine. I answer, the check lies in the faith of the Church itself. "One thing is certain," says Father Schneemann, "when the Pope puts out an *ex cathedrâ* pronouncement, that is, obliges the whole Church to believe a doctrine, we know infallibly that this doctrine was revealed and at least implicitly believed ever and everywhere, and is now only afresh and expressly put before us as an article of faith. The Pope, as he is the head, so is he the mouth, the representative, of the Church, the authoritative interpreter of the conviction living in the whole Church. Furthermore, if infallibility belongs to an Œcumenical Council because it represents the whole Church, so infallibility must, by a logical consequence, be attributed to the Pope because he, as the head of the whole Church, and possessing the plenitude of ruling power over her, also represents the whole Church, and therefore authoritatively expresses her faith. Thus far we may say that the Pope, as often as he speaks *ex cathedrâ*, speaks in the consciousness of the faith of the whole Catholic Church. Still we must take care not to set up this property of an *ex cathedrâ* decision as a note to know it by. We must not withhold our adhesion to an *ex cathedrâ* decision on the ground that the Church had not previously, by an act of assent, recognised it as her faith, or until she shall have subsequently so assented to it. The theory according to which a man would so act is, in point of fact, Gallicanism. Even before such an assent of the Universal Church, and independent of it, we know from the mere fact of the papal decision as such, that all which it defines agrees with the faith of the Universal Church, and that the Church will assent to the definition, not only because it is its duty to do so, but also because in the papal decision it sees only the infallible expression of its own conviction. Thus the ultramontane view, according to which the papal decision, *ex cathedrâ*, expresses with undoubted certainty a Catholic doctrine, that is, something which has been ever and everywhere believed, supposes the most intimate reciprocal intercourse between the Pope and the Church. As the Pope draws out of the great fountain of the Faith of the Church, and only defines it, so on its side the Church believes unconditionally the decision of its Head. In this process there is an outflowing and reflux of the stream of the same faith and life from the Head to the Body of the Church and from the Body to the Head."

This is an important passage, which throws a great light on the decree. In the process of a decision *ex cathedrâ* we must carefully distinguish the norm according to which the Pope judges, and the subsequent conduct of the Church in its acceptance of his decision. The question which the Sovereign Pontiff asks himself is, what is the doctrine of the Church? I am quite aware that the formation of his judgment is by no means a mechanical operation. The doctrine of the Catholic Church is not contained in a number of written formulas. If it were so there would be need neither of Church nor Pope. It is written in the hearts of two hundred millions of men. Out of its inexhaustible system arise new questions touching on every possible department of human morals, science, and politics. To conceive in proper thoughts and to express in proper words the faith of the Church is a work of the intellect, and therefore requires a special promise of our Lord that the gates of hell shall not prevail against the rock of Peter. But to say that on account of this gift the Pope can arbitrarily impose what he pleases on the Church is simple nonsense. To hold up a lie before the faces of hundreds of millions of men, and tell them that this is conformable to what they have always believed, would be a hopeless enterprise indeed. The Catholic doctrine is something perfectly definite and known. We have no esoteric doctrine. The whole is known to the Irish apple-woman as it is to the Archbishop of Westminster. The most abstruse notional question has something of the real in it. The mob of Alexandria no doubt had but a dim view of the meaning of personality, but it knew quite well what was involved in Mary's being the Mother of God. The old

Irishwoman probably never heard of Gallicanism, but she has wit enough to see that the Pope, being the divinely appointed centre of unity, must be infallible, else the living Church would be bound to the dead, and the infallible Church might have a Head which, as such, could speak lies. I should, as a matter of curiosity, have liked to see her feelings supposing the opinion of the minority had prevailed, and the Council had decreed that the Pope could, in his capacity of Head of the Church, make a mistake, and, for instance, define Protestantism to be true. Of course this is absurd; but the violence of the absurdity is the measure of the impossibility of imposing on the Church what is in opposition to its faith. It was for this reason that in the Council by far the greater part of the minority laid stress on the inopportuneness of the definition, and dared not attack the doctrine. All knew the utter hopelessness of imposing on the Church the belief that the doctrine was false. The impossibility could be seen and felt. The whole Church already believed in the infallibility of the Pope. Precisely in the same way the Sovereign Pontiff could not, if he wished it, impose on the Church the belief, for instance, that the Blessed Virgin is the fountain, not the channel, of grace. His gift of infallibility prevents his imposing it, and the faith of the Church is a second obstacle, which "makes assurance doubly sure." The universality and perfect definiteness of the Catholic belief would be sufficient to preserve the Church from arbitrary decisions. They are impossible supernaturally and naturally.

The infallibility of the Pope is no doubt supernatural, but its exercise, even looked at as a matter of ecclesiastical constitution, cannot be wanton or arbitrary. The gift of infallibility does not mean the power of promulgating any opinion whatsoever. You might as well say that the gift of impeccability, supposing that it were conferred on a being, would mean the liberty to commit all sin, on the ground that whatever sin he committed would *ipso facto* become virtue. As the strong foundations of morality would not be shaken, but exhibited, by the gift of sinlessness, so the unchangeableness of the faith at once guarantees and finds its expression in the infallibility of the Sovereign Pontiff. We need not fear: the steadiness of the Rock can only steady, not shake, the Church. The gift of infallibility means a divine promise that the Pope will always decide in accordance with the Catholic Faith; how does this render his decisions arbitrary?

What, however, is the meaning of the last words of the decree, that "the definitions of the Roman Pontiff are irreformable in themselves and not by virtue of the consent of the Church"? They mean that from the *ex cathedrâ* decision there is no appeal; and that, consequently, Catholics are bound to receive it at once without waiting for the consent of the Church. It is perfectly plain that, if they could thus withhold their assent, the very notion of infallibility would be nugatory. Let me take the case of this very Vatican Council which has passed the decree. One of the reasons alleged for withholding assent to its definition is this very principle, that for its validity as an Œcumenical Council the assent of the Church to its proceedings is necessary. The theory is expressly held by a celebrated German theologian that a council is only infallible by virtue of the subsequent consent of the Church. Is it not plain that this is practically denying its infallibility? A man may on this principle withhold his submission to an Œcumenical Council for an indefinite period, as we see that in point of fact the authority of the Vatican Council, which is as plainly œcumenical as any ever held in the Church, is denied on that very account. That the consent of the Church will follow—nay, has already followed—is certain; but the Council was œcumenical before the consent. The same thing is true of the infallibility of the Sovereign Pontiff. Whenever a Pope has put forth an *ex cathedrâ* decree, the Church has ever recognised her own faith. That decree may have been a new judgment, but the Church has seen that it was implicitly contained in, or conformable to, the faith. She has ever said in effect: this reflex judgment is in complete accordance with my intuitive belief. She receives the decree at once because she knows that the Pope cannot make a mistake, but in accepting it she sees that it is no ways contrary to her faith. Previous, however, to her consent the decree was, according to the Council, irreformable—that is, without appeal.

In conclusion, I can strongly recommend the labours of the fathers of Maria-Laach to all who wish to get in a short space a view of the bearings of the celebrated Encyclical. Father Schneemann's pamphlet on the "Honoriusfrage" is one of the very best in the weary controversy. The Fathers have also undertaken, under the title of *Collectio Lacensis*, a continuation of Hardouin, bringing the councils down from the Council of Trent to the present time. The first volume has appeared, and no great library should be without the collection. J. B. Dalgairns.

Notes and Criticisms on the Hebrew Text of Isaiah. By the Rev. T. K. Cheyne, M.A. Macmillan and Co., 1868.

These *Notes and Criticisms*, which examine about fifty more or less obscure passages in the Book of Isaiah, form a valuable contribution to the more scientific study of the Old Testament. Their merit consists not so much in the novelty of the critical conclusions as in the thoroughness of the investigation and the originality of not a few of the arguments. The sharpness with which, according to the preface, the author proposes to keep philology distinct from exegesis cannot fail to obtain the applause of all competent judges. He has also devoted a commendable degree of attention to the improvement of the text with the help partly of the ancient versions, partly of conjecture. The hope expressed in the preface (p. vi) that very old MSS. may yet be discovered may easily be disappointed; but it must be remembered that the value of MSS. depends less upon their age than upon the accuracy of the copyist, and still more upon that of the correctors. As regards the versions, that of the LXX has many grievous defects; but it has the merit of dating from a time when the text had not yet petrified under the superstitious though conservative care of the Rabbis. Mr. Cheyne's new MSS. matter is interesting, though, as might have been expected, the critical results are inconsiderable. It comprises an original though of course partial collation of Saadiah's Arabic translation of Isaiah, and also of a MS. Hebrew-Arabic Lexicon by the Karaite David Ben Abraham, both preserved in the Bodleian Library.

We mention some of Mr. Cheyne's best and most original points. The remark is new that מֵת in an earlier stage of the language meant "hero," just as גֶּבֶר in the later Hebrew comes to be quite synonymous with בֶּן־אָדָם. It is clearly shown also that עלמה (vii. 14) is generally used of an unmarried woman. Recent expositors have made too much of the etymology, in opposing the Messianic interpretation. Much light is thrown by the remarks of Mr. Cheyne upon the difficult passage, viii. 19-23. We quite agree that בעד in verse 19 cannot stand for תחת; but we do not quite see that אם לא must have an asseverative force. Our author renders the difficult words in xviii. 1, "the land of the whizzing of wings," "the musquito and tsetse-flies which abound on the banks of the Nile being taken as emblems of the enterprising Æthiopian warriors" (p. 21). But the dual כְּנָפַיִם seems to suggest rather the division of the branches of the river

between which Meroe lies; thus the phrase would mean "the land of the murmuring on both sides." The author's philological acuteness and sobriety is very strikingly shown in his note upon xxiii. 13, where, among other alternative conjectures, *e.g.* those of E. Meier and Olshausen, he suggests that the entire verse may be misplaced, and have belonged originally to an oracle against Babylon; in this case "we should have to read מִדֵּי יִסְדָתָה; comp. a strikingly similar description in xiii. 17-22" (p. 24). In xxviii. 10, the difficult word צו is ingeniously accounted for as an abbreviation, taken from the popular dialect, and identified with מצוה. We had marked other passages for commendation, especially the note on חנף, pp. 13-16, but the above may be sufficient for a sample. A review of Mr. Cheyne's more popular work upon Isaiah will appear shortly. We are sure that many of his remarks in the present pamphlet will in the course of time find their way into the best commentaries. L. Diestel.

Contents of the Journals.

The Contemporary Review for February contains a slight but graceful sketch of the late Dr. Alford, as a scholar and an ecclesiastic, by Dean Stanley, supplemented by some biographical details by the Rev. E. T. Vaughan. The time for criticism, as both writers naturally felt, has not yet arrived; we can but deplore the loss of one whose industry was so indefatigable, and whose scholarship so truly progressive. We may be allowed, however, to follow Mr. Vaughan in describing the labours of Dr. Alford as essentially preparatory. He saw that a pioneer in the critical study of the New Testament was required, and he deliberately accepted the position. "The work which he did in making those critical and exegetical helps, which had hitherto been the property in England only of a few readers of German, to become the common heritage of all educated Englishmen, was a work which no other man of his own generation could have achieved equally well, or was likely to have attempted."

The **Theologisch Tijdschrift** for January opens with a suggestive paper by Professor S. Hoekstra, based on two works, by Herr Seinecke, on Job and on Isaiah xl.–xlvi, and maintaining—1. That the hero of Job is not an individual, but an impersonation of the suffering people of God; 2. That Job is a distinct imitation of the servant of Jehovah in Isaiah xl.–lxvi.; and 3. That the description of the latter is based on Jeremiah's description of his own sufferings. Herr Seinecke's work on Isaiah (Der Evangelist des Alten Testaments; Leipzig, 1870), and Prof. Hoekstra's review, deserve the most careful perusal, though the problems suggested by what may be called the Jeremianic literature have, we think, not yet received a satisfactory solution.

The **Zeitschrift für wissenschaftliche Theologie**, 1871, No. 2, contains four important articles:—1. By Prof. Pfleiderer, On the Pauline πνεῦμα ("What is the relation of the new πνεῦμα of the Christian to that of the natural man?").—2. On the Christ of Paul, by Prof. Hilgenfeld. [*Inter alia*, a refutation of Baur's view that Philippians contains an un-Pauline Christology.]—3. Emendations of Exodus, on the basis of LXX, by C. Egli. [Occasioned by the critical defects of Knobel on Exodus.]—4. The Epistle of Barnabas in an old Latin version, by Prof. Hilgenfeld. [With variants from the Petersburg MS.] —Among the books noticed is Sinker's The Testaments of the XII Patriarchs. [Not unfavourably, though from an opposite point of view to the author.]

The **Studien und Kritiken**, 1871, No. 2, contains a reply by the Rev. A. H. Sayce to a paper by Prof. Schrader on Sargon and Shalmaneser.

The North American Review for Jan. contains the most competent review (by Prof. Whitney?) of Cox's Aryan Mythology which we have yet seen. It describes the author as deficient in the power to distinguish between the probable and the improbable in Max Müller's conjectures. Cox's etymologies are untrustworthy, especially when, as in the case of Consus (vol. i. p. 347, note), they are original. He is also inconsistent in his interpretations of myths. But "under and along with the exaggerations we, for our part, are confident that there is a great deal which is solid and valuable."

New Publications.

Eitel, E. J. Handbook for the Student of Chinese Buddhism. Trübner.

Schulte, J. F. von. Die Macht der römischen Päpste über Länder, Völker, Individuen, nach ihren Lehren u. Handlungen zur Würdigung ihrer Unfehlbarkeit. Prague. [Hostile to the new dogma; the author was till lately a favourite of the Ultramontane party.]

Vaughan, R. B. Life and Labours of S. Thomas of Aquin. Vol. I. Longmans.

Physical Science.

Contributions to the Theory of Natural Selection. By Alfred Russel Wallace. London: Macmillan and Co., 1870.

Amongst the immense number of writings which the publication of Darwin's *Origin of Species* has called forth, the present work is noteworthy in more than one way. Mr. Wallace arrived at the theory of natural selection contemporaneously with Mr. Darwin, but independently of him. This collection of ten essays, published between the years 1855 and 1870, is interesting not only in their relation to the great theory, but also from the light which they throw on the gradual development of a remarkable man.

The first essay is headed "On the Law which has regulated the Introduction of New Species." It is worth remembering that this essay was written in Borneo; whilst it was in South America that Darwin, as he himself says, first came face to face with the great problem the solution of which has been the work of his life, and which has exercised such a fruitful influence on the whole of human thought. It is also worth noting that both enquirers received their first impulse towards a successful solution of the problem from Malthus's celebrated work *On Population;* and doubly interesting again is it to see how the great idea has worked itself out in its two principal representatives, until they culminate in very divergent results—an example ready to hand of the Darwinian law of the divergence of character.

The law which, according to Wallace, has regulated the introduction of new species, is as follows:—"Every species has come into existence coincident both in space and time with a pre-existing closely allied species." In this primitive and indeterminate form, it is difficult as yet to recognise the clear apprehension of the principle of natural selection arrived at some years later: but still it takes its stand in the most definite manner on the basis of the theory of descent, which had been so completely stamped out since the time of Lamarck. It claims, indeed, "a superiority over previous hypotheses (and therefore especially over that of Lamarck), on the ground that it not merely explains but necessitates what exists; granted the law, and many of the most important facts in Nature could not have been otherwise, but are almost as necessary deductions from it, as are the elliptic orbits of the planets from the law of gravitation." There is a firm ring about this statement, very different from the timid asseveration of most of the naturalists of that time, for whom all enquiry into the origin of the wonderful manifoldness of the organised world was an attempt to transcend the limits of human knowledge, and for whom the efforts of Lamarck and Geoffroy St. Hilaire, even of Goethe, were only matter for a shrug or a smile. It required considerable boldness to undertake a problem, regarded at that time by almost every one as unscientific, beneath the tropical sun of the Sunda Islands; it was only three years later, however (a year before the publication of Darwin's *Origin of Species*), that the second essay of this collection was written at Ternate, "On the Tendency of Varieties to depart indefinitely from the Original Type," opening a vista of new and undreamt-of relations between phenomena not hitherto understood.

It is this essay which Wallace sent to Darwin to be read before the Linnean Society, and which Darwin gave to the world side by side with the results of his own prolonged researches. The close *rapprochement* between this essay and the *Origin of Species*, which appeared soon afterwards, may be seen by a comparison of the titles of the various sections of the former with the facts and considerations that form the basis of the latter. As these two essays form together the one fountain-head from which the theory of natural selection

has flowed, so we may recognise side by side with the mighty development of Darwin a perfectly independent position for Mr. Wallace.

After his return to England in 1862, our author occupied himself with the working-up of the extensive material which he had collected, as well as with the development, and especially with the defence, of the new theory. As the first-fruit of this work we have the essay dated March, 1864, "On the Malayan Papilionidæ or Swallow-tailed Butterflies, as illustrative of the Theory of Natural Selection," the fourth in this series. This essay is a model of weighty and acute research. From the apparently unimportant theme which the history of a family of butterflies supplies, we are led on, step by step, through definition of the word species, laws and modes of variation, the occult influence of locality on form and colour, phenomena of dimorphism and mimicry, the modifying influence of sex, and general laws of geographical distribution, to indications of previous changes in the surface of the Earth. The third and seventh essays show how, on the theory of natural selection, the colour and marking of animals are phenomena subject to law. The third, "On Mimicry and other Protective Resemblances among Animals," and the seventh, "A Theory of Birds' Nests," showing the relation of certain differences of colour in female birds to their mode of nidification, open a new field of biology, as well for laymen as for trained enquirers.

"Creation by Law" (the eighth essay) is a critical essay, or rather a rejoinder to the criticism of the Duke of Argyll, and to an article on his *Reign of Law* which appeared in the *Times*, and which contained a number of ridiculous statements about the theory of natural selection. The Duke's argument was that the harmony and beauty of creation is so perfect, as to be inexplicable except upon the hypothesis of a constant supervision and direct interference of the Creator; and, as Mr. Wallace says, is a fair representation "of the feelings and ideas of that large class who take a keen interest in the progress of science in general, and especially that of natural history, but have never themselves studied Nature in detail, or acquired that personal knowledge of the structure of closely allied forms which is absolutely necessary for a full appreciation of the facts and reasonings contained in Mr. Darwin's great work."

We have at present concerned ourselves only with those essays in which the principle of natural selection is employed by the author as the *ultima ratio* of all explanation of organic nature. But the volume contains four additional essays, in which the author strikes out another path, and maintains with great emphasis that there are very important facts in Nature for whose explanation this principle does not suffice, and will never suffice. These essays are entitled (5) "On Instinct in Man and Animals;" (6) "The Philosophy of Birds' Nests;" (9) "The Development of the Human Races under the Law of Natural Selection;" and (10) "The Limits of Natural Selection as applied to Man." Of the time of the composition of the first of these essays we are not informed; the second and third were written in 1867, but the third contains some very important modifications in the present reprint; the fourth is new, and contains, in the author's own words, "the further development of a few sentences at the end of an article on 'Geological Time and the Origin of Species' which appeared in the *Quarterly Review* for April, 1869."

The essays on instinct in man and animals, and on the philosophy of birds' nests, contain not unimportant deviations from the 7th chapter in Darwin's *Origin of Species*, in which instinct is discussed also in its relation to the theory of natural selection. Darwin saw in this question one of the greatest difficulties of the theory; since he is not satisfied to name in a general manner those cases in which the heredity of instincts is indisputably carried out, but has brought forward special instances from the life of ants, which are in fact excessively difficult to harmonise with the theory of natural selection. We cannot here allow ourselves to discuss whether Darwin has successfully conquered this difficulty, or at least has pointed out the way in which it may hereafter be overcome; it only interests us at present to note that Darwin insists on the direct transmission of complex instincts. He says, for example: "We can understand, on the principle of inheritance, how it is that the thrush of tropical South America lines its nest with mud in the same peculiar manner as does our British thrush; how it is that the hornbills of Africa and India have the same extraordinary instinct of plastering up and imprisoning the females in a hole in a tree, with only a small hole left in the plaster through which the males feed them and their young when hatched; how it is that the male wrens (Troglodytes) of North America build cock-nests to roost in, like the males of our kitty-wrens, a habit wholly unlike that of any other known bird." Wallace, on the other hand, sets aside the view that all instincts are congenital, and thus brought about by inheritance, and maintains that all phenomena of this kind may be explained either from the instruction of the young by the parents or by some other kind of earlier experience. He is also of opinion that much of what is ordinarily called instinct is the result either of organization or of habit. If the newly born calf can walk from the moment of its birth, this is a consequence of its organization, which makes walking both possible and pleasant; if we ourselves stretch out our hands in order to protect us from falling, this is an acquired habit which the child does not possess. It seems therefore extremely difficult to say what is the difference between an act of instinct and an act which follows the necessities of organization. When Wallace defines instinct as "the performance of complex actions by an animal, absolutely without instruction or earlier acquired knowledge," and from this attempts to prove that it is not present either in the case of cell-building bees or nest-building birds, or at least cannot be proved by observation, we may adduce, on the other hand, all those cases where the completion of such "complex acts" as Wallace never had in his mind are evident, and yet all possibility of instruction and experience is excluded; and the alternative of an organic force, as Wallace appears to understand it, or of an acquired habit, also appears inadmissible. Such an instance is furnished in another place by Mr. H. Higgins, who adduces the case of the young of an Epeira, which, separated from their parents, after a comparatively short time, constructed the same elaborate web which the parents had made, and thus formed their own erection without observation of the act of construction of the parents or instruction from them. How, again, can we explain the following fact, which I have very often observed, and which any one may verify for himself? It is well known that the larvæ of the caddice-worm live in water, and build around the tender hind part of their body a house constructed of all kinds of vegetable, mineral, and even animal materials, bound together by spinning-threads. During my studies of insect-embryology, I have often examined the eggs of these caddice-worms, which are found in clusters wrapt up in a gelatinous mass on water-plants, and have hatched the eggs myself in a small aquarium. After the lapse of a few days, the larvæ begin to glue together a protecting ring of little pieces of leaf, which they bite off for that purpose, and then gradually enlarge it, until it covers like a tube the whole of the hinder part of the body, and increases in length with that of the animal. The construction of such a tube appears perfectly analogous to

the building of nests by birds; and here it is as little admissible to suppose any instruction, or any learning by experience, as it is to attribute the building of the tube about the hinder part of the body to an organic necessity. While it is indisputable that in other instances instruction, experience, and imitation may be of considerable and indeed of unique importance, these great and important questions must nevertheless be allowed to remain open ones; and thus naturalists and laymen become interested in their solution. And to this end these essays of Wallace will give a great and healthy impulse.

The question of the relation of so-called instincts to the complicated process of natural selection leads us to the last two essays in the volume, the relationship of man, and of his corporeal and spiritual nature, to the principle of natural selection.

Anton Dohrn.

(*To be continued.*)

Scientific Notes.

New Geographical Explorations.

From *Petermann's Mittheilungen* we learn that Dr. Nachtigal, the bearer of presents, in acknowledgment of services rendered to the German travellers Barth, Vogel, von Beurmann, and Rohlfs, from King William of Prussia to the Sultan of Bornu (a district round Lake Chad in Central N. Africa), arrived safely at Kuka, its capital city, on the 16th of July last year,* after a long delay at Murzuk, and a perilous journey across the Sahara in the hot season. Among the other gifts a harmonium had suffered so much from the heat and dryness as to be able to produce only the most dismal discords.

Of still greater interest is the intelligence that in December the Russian steam corvette "Witiaz" left Europe in charge of the explorer Nicolaus von Miklucho-Maclay, for a seven or eight years' cruise among the islands of the Pacific, the first two of which are to be devoted entirely to the survey of the rich island of New Guinea or Papua (three times the extent of Great Britain), one of the most completely unknown parts of the earth, never traversed by any European, though its coasts were discovered nearly 350 years ago.

From Aden the well known traveller Richard Brenner writes that his expedition would leave that place for Zanzibar on the 1st of December, thence to proceed again to the further exploration of the Juba, Dana, and Ozi rivers, and afterwards to move southward towards Mozambique and Madagascar. In Aden Brenner met with the leaders of a French expedition, fitted out in two steam-vessels by the Maison Roux of Marseilles, also on the point of starting for the river Juba and its neighbourhood.

In South Africa the survey of the districts of the gold and diamond fields is proceeding with the greatest activity, and new chartographical materials of the highest value are constantly arriving from the discoverers there, Mohr, the geologist Hübner, Baines, Erskine, Forssman, Moodie, Jeppe, and Merensky.

Physiology, &c.

Ciliary Movement.—In the *Biologische Studien*, his latest contribution to scientific literature, Professor Haeckel gives the result of some highly important observations on the nature of ciliary movement. The most recent investigations on this subject, viz. those of Dr. W. Engelmann (*Jenaische Zeitschrift*, 1868, vol. iv. p. 321), as also the earlier ones of Dr. M. Roth (*Virchow's Archiv*, Bd. 37, p. 184), have shown that physiologically the ciliary is much more nearly related to the amœboid movement than to the muscular. Professor Haeckel's observations show that the ciliary movement is merely a modification of the amœboid movement of protoplasm. Ciliated cells are of two kinds. In the one kind (epithelium flagellatum) each cell is provided with a single long flagellum or lash—sponges possess only this kind; in the other (epithelium ciliatum), numerous hair-like appendages take the place of the flagellum. This is the kind found in most of the higher animals. The old notion, that in ciliated cells the cilia are attached to the outside of the cell membrane must now be considered as entirely set aside. Many, probably most, ciliated cells are destitute of a membrane, and the appendages, whether flagella or cilia, are direct processes of the protoplasm of the cell. Prof. Haeckel's observations on lower organisms during the last year have led him to the conclusion that ciliated cells arise directly by the transmutation of amœboid cells. This transmutation he has observed in the case of the motus flagellaris, in Monera, such as *Protomyxa aurantiaca*, and *Protomonas Huxleyi*. The swarm spores of these species, when they leave the parent cyst, are pear-shaped, with a single long hair-like flagellum, by the lashing movement of which they swim about. After a time they settle, whereupon the flagellum becomes an amœboid process. These are merely eytods, but the same phenomenon has been observed in the case of swarm spores with a nucleus, *i.e.* real cells, and described by De Bary, in his monograph of the Mynomycetæ. The same thing was seen in the epithelial cells of sponges of the order Leucoselearia by Prof. Haeckel, whilst at Bergen, in Norway, in August and September, 1869. But by far the most interesting observations of the Professor on this subject are those made in the Canary island Sanzerote. Here he has been able to observe the direct origin of the motus ciliaris from amœboid protoplasmic movement, first, in the spherical masses arising from the division of the egg in the Siphonophora; secondly, in a new and very remarkable form which he has discovered, and which he calls *Magosphaera Planula*, and considers to represent a new and separate group of the kingdom Protistæ. This creature has a ball-like body, consisting of pear-shaped cells, bedecked with many cilia. These ciliated cells not only can be seen to develop out of amœboid cells, but also subsequently to resume that condition. For after the ciliated ball has swum about for some time, its component ciliated cells separate from one another, and gradually pass into an amœba form. These observations of Prof. Haeckel are not only of importance as confirming physiological results, but also of classificatory value, as showing that their possession of cilia, as opposed to the exhibition of an amœboid movement, must not any longer be considered as a ground for placing the Infusoria in a separate group.

Physiological Effects of Exposure to Increased Atmospheric Pressure.—Most people are aware that certain disagreeable sensations are experienced by the inmates of a diving-bell, during its descent, even to a few feet below the surface of the water, but the opportunity seldom occurs to note the effects produced by a descent to so great a depth that the pressure amounts to four atmospheres, or no less than 60 lbs. on the square inch. Yet exposure to this pressure has been experienced by the workmen engaged in laying the foundations of the piers of the St. Louis bridge over the Mississippi, and Dr. John Green has published in the *Transactions of the American Otological Society* the results of some observations he has recently made. It was found necessary to use considerable precaution in admitting the workers into the chamber containing the condensed air; an intermediate chamber or lock was therefore constructed, into which the condensed air could be admitted gradually, occupying, for the higher degrees of pressure, from five to ten minutes. The exit was through the same lock, and occupied the same time. The increased oxidizing power of the condensed air was shown by the rapid wasting and guttering of the candles, which burned with a streaming smoking flame, and, when blown out, rekindled spontaneously from the glowing wick. During the later stages of the work the men could only work for an hour at a time, and a remarkable form of palsy was prevalent, from which nearly a dozen men died. The first effects of the gradually increasing pressure in the lock were a distinct sensation of pressure upon the tympanic membranes of both ears, which, however, was immediately relieved by swallowing, or by inflating the ears from within. The respiration and cardiac movements remained unaltered until exertion was made, when they quickly became accelerated. It was found to be impossible to whistle. The ticking of a watch was heard with great distinctness. On leaving the chamber a strong sensation of cold was experienced, and catarrhs were frequent amongst the men. The condensed air escaped from the tympanum through the Eustachian tube in a series of puffs. Too sudden exposure to the condensed air in one instance caused rupture of the membrana tympani, and too sudden removal of the pressure in the same person spitting of blood.

The Aëroconiscope.—The lectures of Dr. Tyndall on dust and on the impurities of water have led to much discussion as to whether the particles of organic nature (as indicated by their destruction when exposed to heat) are the germs of the lower forms of animal and vegetable life, or are merely dried and floating fragments of dead organisms that have been taken up and are in course of transportation by currents of air. To determine this point, we may resort to microscopical analysis, or we may adopt a still more satisfactory method, namely, that of cultivating the germs upon a proper soil, and Dr. Maddox has just read a paper before the Royal Microscopical Society, in which he gives the results of his investigations with an instrument to which he has applied the term Aëroconiscope. This consists of a small chamber open at one side, on the floor of which a small quantity of treacle mingled with acetate of potash and water is spread, and which is placed on a base revolving with the set of the wind, so that the opening is always directed

* The letters announcing this were received in Gotha on the 26th of December.

windward. The results obtained have been interesting, for he found that there was no relation between a prevalence of the germs and the direction of the wind from any one point of the compass more than another. The amount of spores collected varied from 250 on a cultivating surface of $\frac{1}{8}$ inch to a very few. The prevailing spores were pale, olive-coloured, and oval. Some commenced germinating on the second day; others not before the twentieth. No attempt is made to name them, but they appear to be chiefly the spores of Fungi. By far the largest proportion of the collections was made during the months of July and August.

The Power of Numerical Discrimination.—Prof. W. S. Jevons has a very interesting article on this subject in *Nature*, No. 67, for Feb. 9. Sir William Hamilton had maintained, in support of Ch. Bonnet and Destutt, that the mind had the power of grasping as many as six distinct objects at once, while Abraham Tucker limited the number to four. Prof. Jevons considers the lower number to be nearer the truth. By throwing a number of uniform black beans, fewer than 16, into a round white box standing in a black tray, he estimated the number which fell into the box at the moment of their coming to rest. Three and four he found were always estimated correctly; with five there was an error amounting to about 5 per cent. of the number of trials, which gradually increased with higher numbers up to 15, when only two out of eleven trials were correctly estimated. From a statistical table of the results, he calculated the empirical law for error to be—

$$\text{error} = \frac{n}{9} - \frac{1}{2},$$

n being the real number. The limit of complete accuracy, if there were one, would be neither at four nor five, but half-way between them.

Geology, &c.

Fossil Birds, Reptiles, and Batrachia of America.—The second part of Prof. Cope's *Synopsis* has appeared. The author's design is to describe only those species and types which are new, and those portions of imperfectly known forms which will throw additional light on their relations and affinities. In the course of his investigations extending over six years, he has arrived at the following general conclusions:—1. That the Dinosauria present a graduated series of approximations to the Birds, and possess some peculiarities in common with that class, standing between it and the Crocodilia. 2. That serpents exist in the Eocene formations of America. 3. That the Chelydra type was greatly developed during the American Cretaceous period, and that the Reptilia of the American Trias belong to the *Belodon* type.

Vertebrate Remains from the Newcastle Coal-field.—In the *Annals and Magazine of Natural History* for February, Messrs. Hancock and Atthey record the occurrence of a mandibular ramus of *Anthracosaurus Russelli* from the ironstone-shale of Fenton, in the Newcastle coal-field. This Labyrinthodont was first described by Prof. Huxley in 1862, from a specimen obtained in the Lanarkshire coal-field. The authors furnish notes on another Labyrinthodont, *Loxonema Allmanni*, also from Fenton, and on a large fish, *Archichthys sulcidens*, from Newsham.

Tertiary Shells of the Amazon Valley.—Recent explorations by Prof. J. Orton and Mr. Hauxwell have determined the occurrence, on the borders of the Amazons, at Pabos and Cochaquinas, of Tertiary deposits yielding numerous shells. The species indicate fresh- or brackish-water conditions, and their perfect preservation indicates a quiet lake or estuary. These deposits are noticed, and the shells, which include two new species, are described by Mr. Henry Woodward in the *Annals and Magazine of Natural History* for January and February. The papers are illustrated by a capital plate of the fossils. Mr. Hauxwell's discovery proves that the estuary of the Amazons was once more than 2000 miles above its present position.

Faunas of the Red Sea and Mediterranean.—The results of a dredging excursion in the Gulf of Suez, undertaken in the spring of 1869, by Mr. MacAndrew, were published last December. Three hundred and fifty-five species, many of them new to science, have been added to the Red Sea fauna. Further researches only tend to confirm the distinction between the Red Sea and Mediterranean species of Mollusca, so that a barrier between the seas must have existed from very remote time. This, however, is quite consistent with Prof. Issel's statement, that an examination of the geological conditions of the isthmus leads to the conclusion that the two seas were united during the Eocene and Miocene periods.

New Form of Terebratulid.—Professor W. King describes in the February number of the *Annals of Natural History* a curious new genus of Terebratulidæ, which is remarkable for having its beak pointed, and not foraminate at the apex; in this respect, as in general form, presenting a resemblance to *Rhynchonella*. In the character of the loop it agrees with *Terebratula vitrea*; and the shell has the branching tubulation characteristic of *Terebratulina Caput-serpentis*. The species was obtained in rather deep water on the Agulhas Bank, and is described by Professor King under the name of *Agulhasia Davidsonii*.

Physics and Chemistry.

Influence of Intense Cold on Steel and Iron.—The correctness of the popular idea (strongly encouraged by railway companies) that intense cold renders iron and steel more brittle, and may hence occasion the fracture of the tires of wheels during severe frost, which has caused many deplorable railway accidents, has long been doubted by practical physicists. The subject has now been again investigated; and from some papers read at a recent meeting of the Manchester Literary and Philosophical Society (and published in *Nature*, No. 65, Jan. 26) by Sir W. Fairbairn, Dr. Joule, and Mr. Spence, it would appear to be satisfactorily determined that a low temperature has no effect in rendering iron more brittle. Dr. Joule's experiments were particularly decisive, and consisted of applying weights suspended from the middle of steel needles at different temperatures, and letting the blunt edge of a steel chisel fall on cast-iron nails under similar circumstances. His general conclusion is that frost does not make either iron (cast or wrought) or steel brittle; and that accidents arise from the neglect of the railway companies to submit wheels, axles, and all other parts of their rolling stock, to a practical and sufficient test before using them.

Henderson's Patent Process for Refining Cast Iron.—We gave recently (see *Academy*, vol. ii. p. 72) an account of a new process for the production of steel by the partial decarburization of cast iron, invented by Mr. James Henderson, of New York. From *Nature*, No. 64, Jan. 19, we condense the following account of a process invented by the same authority for refining cast iron. The agents used are fluorine and oxygen combined. The fluorine is derived from any fluoride, and the oxygen from any substance containing, or capable of evolving, oxygen; fluorspar and pure rich iron ores are the most available and economical substances, and are applied finely powdered and mixed. The most economical mode of application is to treat the cast iron in the condition in which it flows from the blast-furnaces, with fluorspar and iron ore applied in the "chills," or pig-moulds, used at blast-furnaces, by being spread over the bottom of the moulds. The iron, when tapped from the blast-furnace, flows into the mould thus prepared; the heat of the iron causes fluorine and oyygen to be liberated; and, by reason of the affinities of these substances for silicon and phosphorus, these impurities are removed in the form of vapour. The reactions in the "chills" are similar to those of the boiling puddling process, and last about five minutes. The metal during this period is covered with jets of flame and smoke. The resulting metal, with respect to silicon and phosphorus, is as pure as wrought iron. The advantages claimed for this process are:—1. Better quality, due to the purity of the refined metal. 2. Less skill required to work it, and greater certainty of the quality of the product. 3. Large saving in the cost of production. 4. Saving of fuel per ton of iron, to the extent of one-half. 5. Reduction of general business expenses. 6. Reduction of wages to the extent of 40 per cent. per ton of iron. 7. The puddling-furnace cinders, when smelted, produce better qualities of pig iron.

A New Deodorizing Material.—In the discussion which followed the reading of a paper, by Prof. Frankland, on the growth of Fungi in potable water, before the Chemical Society, on Feb. 2nd, Dr. Voelcker alluded to his discovery of the use of pulverised or spongy iron as a deodorizing material of greater potency than animal charcoal. Sewage-water passed through a filter of this substance is completely purified, a much smaller quantity of the substance being required than in the case of animal charcoal; and this filtered water, after having been kept six months protected from the air, remains perfectly sweet, no trace of fungus-growth appearing in it. The spongy iron is obtained by calcining a finely divided iron ore with charcoal.

New Books.

Duncan, P. M. The Transformations (or Metamorphoses) of Insects. London: Cassell and Co.

Foerster, W. Berliner astronomisches Jahrbuch für 1873, mit Ephemeriden der Planeten. Berlin: Dümmler. 9*s*.

Proctor, R. A. The Sun: Ruler, Fire, Light, and Life of the Planetary System. London: Longmans and Co.

Rodwell, G. Farrer. A Dictionary of Science. (Hayden Series.) London: E. Moxon and Co.

Wretschko, A. Experimental-Untersuchungen über die Diffusion von Gasgemengen. (Academy reprint.) Wien: Gerold.

History.

Historicorum Romanorum Relliquiae, disposuit recensuit praefatus est Hermannus Peter. Volumen prius. Lipsiae, in Aedibus B. G. Teubneri, 1870.

The collections which have hitherto been made of the Fragments of the Roman historians extended only to the end of the Republic and the first beginning of the Empire. The characteristic advantage of the present work of the learned editor of the *Scriptores Historiae Augustae* (son of the author of the Roman history) is that it includes the Fragments of the historians of the Empire. These we are to expect in the second volume of the work: the contents of the present being restricted to the historical area already traversed by others, but possessing an interest of its own. The materials with which it deals have for more than three centuries, since the first work of this kind appeared (Ant. Riccoboni Rhodigini *de Historiâ Liber cum Fragmentis Historicorum Veterum Latinorum*, &c., Venet. 1568), been repeatedly published, and especially as an appendix to the editions of Sallust, and even the last few decades have produced two similar collections. These, however, as Herr Peter very justly remarks in the beginning of his preface, are inadequate to the historical and critical purposes for which they are required. One of these, Aug. Krause's *Vitae et Fragmenta Veterum Historicorum Romanorum*, Berlin, 1833 (not 1853, as Herr Peter's printer has it), is destitute at once of critical acumen as of textual ἀκρίβεια, not to mention the necessary critical apparatus. This last was at that time not attainable in any complete shape, and the want of it constitutes a defect in the second of these editions made by the lamented Professor C. L. Roth, of Basel, which forms the principal part of one of the numerous editions of Sallust, which we owe to Herr Franz Dorotheus Gerlach, Basel, 1852 (not, as Herr P. again wrongly prints, 1853). This collection has no literary or historical introduction, is carelessly arranged, and has the further inconvenience of giving only Latin translations of the Greek documents.

In framing his very complete introduction on the literature and the history of the Fragments, our author has also made careful use of a number of other works. Thus in determining his text he has not only worked up and embodied in his book the critical material to be found in the best editions of his authorities, but also in such cases as Varro, Gellius, Servius, Orosius, in which the principal Fragments are imbedded, he has been able to collate the MSS., and for Nonius to make use of that at Wolfenbüttel, and even the two at Leyden.

The short preface, in which these points are treated amongst others, is followed by four chapters of Prolegomena: I. De Annalibus Maximis; II. De Litterarum Monumentis Privatis; III. Historiae Romanae Aetates primis lineis adumbratae; IV. Qua ratione hae relliquiae nobis traditae sint (pp. i–lxv), followed (pp. lxvii–ccclxvii) by a complete account of the lives and writings of the historians of the Republic, from Q. Fabius Pictor and L. Cincius Alimentus to the time of the Second Punic War, including all the annalists, Cato, Piso, &c., down to the last representatives of this kind of literature, Q. Aelius Tubero, Procilius, and Scribonius Libo, and, lastly, by way of appendix, the historians of uncertain date, Sulpicius Blitho, Alfius, and C. Piso.

We may add that the careful investigation of the minutest details has not prevented Peter from keeping in view the general historical movement, as he has himself indicated in the third chapter of the Prolegomena. Not that in a topic so difficult and open to controversy there will not be any more dubious and disputed points; about many questions it will never be possible to come to a definite conclusion, but the opinion of the author is always founded on independent and judicious investigation. On some points, about which I am at issue with the author, I shall speak in greater detail in the preface to the next *Index Lectionum* of the Breslau University.

The second part of the work (pp. 1-321) contains, in the same order, the Fragments of the historians, and first among them the few remains of the *Annales Maximi*. Here also the editor has made a conscientious and methodical use of the rich material at his disposal both in arranging and in determining the text of the Fragments. In two distinct sets of notes all necessary material for estimating and explaining the author's text is given; that some points still remain to be cleared up cannot be denied, although the work doubtless marks an immense advance. The author also knows how "nescire fateri," as, for instance, in that desperate Fragment of the 3rd book of Claudius Quadrigarius given in Priscian, vi. p. 697, Putsch (Claud. Fr. 49, p. 222), or in the passage of Livy, xliv. 14, 8 (Claud. Fr. 67, p. 228). In other places he has gone back to the authority of the manuscripts which had been doubted by others, *e.g.* in the interesting Fragment (1, p. 178) of Sempronius Asellio, given in Gellius, v. 18: "Nam neque alacriores ad rem publicam defendendam neque segniores ad rem perperam faciundam annales libri commovere quicquam possunt," where, however, I had already (in my edition of 1853) silently given up a former conjecture of mine (see *Jahrbücher für Philologie*, ci., 1870, pp. 303 foll.). In other places again he has attempted emendations of his own, some of them in the modest obscurity of the notes, *e.g.* in Coelius Antipater, Fr. 46, given in Nonius, s. v. *exfundare*, where *amisso* is declared to be a gloss; or in Sisenna, Fr. 20, from the same, s. v. *manipuli*, where the text is restored by a clever combination of several older conjectures. The new reading *coactus* instead of the traditional *conmutus* in the reading of the author must remain doubtful. The passage now stands: "Coactus tamen ex tempore signa constituit et, sicut steterant manipulos obverti jussit," in which *ex tempore signa* instead of *et tempora singula*, and *steterant* for *steterat*, as found in the manuscripts, were corrected, the former by Lipsius, the latter by Guilielmius. In the first word I think we must look for a proper name, viz. that of the Samnitic consul, C. Mutilus, who is known to have been at the head of the rebels in the "Social War" here described by Sisenna. The work is concluded by the handy indices (pp. 323-377), already mentioned, to the dissertation on the literary history and to the Fragments: I. Temporum index; II. Tabula rerum Romanarum quae his relliquiis continentur ex temporum ordine digestarum; III. Index verborum et nominum propriorum rerumque memorabilium; IV. Index locorum quibus haec fragmenta servata sunt; V. Index locorum ex horum fragmentorum numero ejectorum — together with references to those pages of the introduction where the grounds of this exclusion are given.

A few "Addenda et Corrigenda" on the last page conclude a book already valuable to the scholar even in its present unfinished state.

Martin Hertz.

Cicero. Select Letters, with English Introductions, Notes, and Appendices, by Albert Watson, M.A., Fellow and Lecturer of Brasenose College, Oxford. Oxford: at the Clarendon Press, 1870.

It is curious how completely Cicero's Letters have been passed over hitherto by English scholars. With the exception of an edition of a small selection from them by Mr. Parry, which is a mere school-book, humble in design and inaccurate in execution, there is no English work on

the subject which either does appear or could have appeared in Mr. Watson's list of authorities. And yet this is not from any want of intrinsic interest in the subject. Whether from a literary or a historical point of view, Cicero's letters are unique in classical literature. Their style is as pure and less ponderous than that of his orations, and even the most serious of them are full of life and freshness, such as could only spring from perfect candour, not unmixed with egotism in the writer. The present series is mainly confined to the political letters, in which we miss to some extent the playful fancy which characterises his more familiar writings; but the unrestrained *naïveté* with which he unfolds all his thoughts to his intimate friends, especially to Atticus, prevents even his business-letters from becoming dull. Historically these letters are invaluable. Though he doubtless overrates his own importance, yet Cicero was throughout his public life in the midst of the administration of affairs, and at times he played a very leading part. Hence he was in a position to impart information of the greatest interest; and this is communicated with an absence of reserve which opens to us all the intrigues of a most complicated period. There are few works of contemporary history which place us so completely behind the scenes; and when we bear in mind how very scanty and untrustworthy the other materials are for a history of the last years of the Republic, we shall be inclined to agree with Mr. Watson that "Cicero's correspondence furnishes the most detailed and trustworthy commentary on a very interesting period of Roman history." We should hope that Mr. Watson's own labours may induce many to study this commentary for themselves, who have hitherto been repelled by the vastness and want of arrangement in the materials before them. He has brought together 148 of the most important political letters, arranged in due order, and illustrated by annotations which are remarkable for the care with which they leave no difficulties unexplained. We do not always quite agree with his notes, and we think that he too often refers to grammars when a single line might have explained a grammatical peculiarity on the spot, as notably in reference to "sunt qui putant," in Ep. 29: but we feel that his notes may enable any scholar to read the letters rapidly and pleasantly without fear of being ever seriously misled. The translations suggested are generally accurate and pure in style, though he is sometimes too easily satisfied without reproducing the form as well as the meaning of Cicero's expressions: as in repeatedly translating Cicero's favourite metaphor "refrigescunt res," without any allusion to the passing away of "the heat" of business. In the sixth letter he has missed an evident joke of Cicero's, that he cannot find a messenger who will carry a letter *of more than ordinary weight* ("paulo graviorem," which Mr. Watson renders "conveying news of any importance"), without lightening it by reading its contents. In his note on "non quo," p. 87, he might have added that the reason suggested by these words is always not only not the true reason, but a hypothesis itself untrue in fact. In p. 188, Mr. Watson has become involved in difficulties yet more unusual with him, and though his suggestion rests on so high anthority as that of Mr. Merivale, we cannot readily believe that Cicero would speak of interest at 96 per cent. without any token of surprise, when we remember that the wildest flights of the satirists only make their usurers exact 36 or 60. Taking the notes, however, as a whole, they are careful, clear, and adequate; and would alone render the volume a valuable addition to the series in which it appears.

But the highest part of Mr. Watson's work consists in the prefaces and appendices to the several divisions of the letters. In the former he gives us a continuous history of the period which they embrace; and though the brevity which was enforced upon him naturally renders this a little dry, yet the purity of his style, and the clearness of his views, prevent it from ever being dull. He hits the salient points in a manner which betokens thorough knowledge of his subject, and lays before us briefly a vivid picture of the political struggles of the day: showing that he is well read in all the principal authorities for the history of the period; but yet maintaining throughout all a consistent independent view.

Of the appendices, perhaps the most valuable is the last, "On the meaning of the words 'Colonia,' 'Municipium,' and 'Praefectura:'" and any one who has been perplexed by the apparently hopeless confusion with which these words are used in Latin writers will be grateful for the assistance here provided for their elucidation. Throughout the book Mr. Watson shows a knowledge of Roman jurisprudence, and a special acquaintance with the history of the last century B.C., which have made him singularly competent for the task which he has undertaken, and we trust that his book may do much to encourage the study of a portion of literature which has been too generally overlooked.

J. R. King.

History of the City of Rome. [*Geschichte der Stadt Rom.* Von Alfred von Reumont.] Dritter Band, II. Abtheilung.

The conclusion of A. von Reumont's work appears at a not inappropriate time, for the subject of this volume is Rome and the modern Papacy from the restoration of the Temporal Power by the warlike Pontiff Julius II. to the present day. The author has the advantage or disadvantage of a close personal acquaintance with his subject, for he saw the rising in the Romagna in Gregory XVI.'s time, and witnessed the failure of Pius IX.'s attempt in 1848 to conciliate the Catholic with the Liberal idea. It is almost a pity that he could not have given a sort of epic unity to his book by relating the union of Rome with Italy, but the work was completed in the spring of this year. Naturally von Reumont has passed over later events more lightly, and given his chief attention to the time of the Renaissance and the Counter-Reformation. Probably the two most interesting chapters are that on the literature and art of the Medicean age, and that on the culture of the last three centuries. After an account of the earlier period of the Renaissance, he proceeds to show in what the age of Leo X. differed from it. The whole period was one of great misery for Italy, and the elegant literary life of the upper classes seems to us much like the life of the gay company in Boccaccio's tale, who while away the time of the plague, and drive away unpleasant thoughts, by music and light—too often loose—conversation and story-telling. The moral indifference of Machiavelli would be alone sufficient to characterise an age, but the minute descriptions in Guicciardini of the doings of popes and emperors help us to understand it. Under Leo X. and Clement VII. the classical enthusiasm yields somewhat to the claims of Italian. The Court of Urbino owes its fame to the *Cortegiano* of Castiglione, which in the form of dialogue discusses moral and literary questions, as they were discussed by the men who gathered round the dukes and the two princesses Elisabetta Gonzaga and Emilia Pia, who owe it to Castiglione that they are still remembered, as the Lady of Ferrara owes her immortality to Tasso. Prose had greater difficulty than verse in extricating itself from the trammels of classicalism, for Dante and Petrarch had already made the claims of Italian poetry secure. Machiavelli had not yet made his native tongue the natural language of political science and of history. The earlier Renaissance was confined to a learned few;

the use of Italian made culture possible for the people. Not that Latin lost its place, but it had to admit a companion to share it. Grammarians, too, began to compare Italian with Provençal, and commentaries on Dante had already appeared, with some attempt at corrections of the text. It is curious how few of the great writers are Romans, but we may extend the remark to heathen times and Christian literature. No one of the great Latin authors except Cæsar was of Roman origin, and the Latin fathers wrote at Carthage, while the Christian writers at Rome mostly wrote in Greek. Theology and philosophy were at a very low ebb in Italy in this age; Italy was utterly unprepared for the Reformation. The want of any earnest belief is remarkable. In poetry, Ariosto only half maintains the tone of romance; the constant recurrence of monsters and wonders seems always tempting him into satire, and indeed satire is natural to an Italian writer. Quintilian already observed, "in other respects the Greeks excel us, but satire is all our own." Only in the poetry of Vittoria Colonna and of Michael Angelo is there anything like religious and earnest feeling; the rest is only comedy and sonnets. Preaching had been destitute of any true feeling even in Dante's time, and relied for effect on impostures and fables (*Paradise*, canto xxix.).

But now came the Counter-Reformation, and this too strengthened the cause of the national language as against Latin. In Germany the appeal of the Reformers was from the first to the people; the German Bible and service-books and hymns were the main instruments of the great change. Hence we have the sermons of the Jesuit Paolo Segneri, which made a great impression, though even these compare ill with the sermons of the great masters of French eloquence. And though Baronius wrote the *Annals of the Church* in Latin yet it was necessary to meet Paolo Sarpi's *History of the Council of Trent* by Pallavicino's *History* also written in Italian. The classical period, in fact, may be defined by two of the great Church Councils; it began with Constance, its power ended at Trent. Even in this volume of 900 pages much condensation is required to bring the matter within reasonable limits, and we can only refer our readers to the work itself. Von Reumont's summaries of the reign of each pope are clear and good, and in this part he has the advantage of having Ranke's impartial summing up before him; the later popes he himself touches on only lightly, though as one who sympathises with them, and is true to the Rome of the Papacy in which he has lived so long. The architecture and topography of Rome, of course, receive due attention, and there is something, though not as much as we could wish, on the state of the land, especially in the Campagna. The excavations also and the various discoveries from time to time are chronicled, and all is made available by a good index. There are also two maps, of Rome and of the Campagna, which in such a history one has constant need to refer to. Our author rightly lays stress on the reigns of the great Popes, from Julius II. onwards, who restored Rome from its ruins. Their efforts were naturally directed to the Vatican district, and this is one main reason why the ancient seven hills are now deserted, while the modern city is built on the old Campus Martius and the ground on the other side of the river. Rome, too, had now lost her connection with the East, and was looking westwards and northwards, and houses were naturally built along the most frequented roads. The whole work gives a complete history of the city from its foundation to our own time, and if the author has avoided some of the difficult topographical questions as to ancient Rome, the want of space may plead his excuse for omitting discussions which are likely to be soon perhaps ended by the rapid progress of discovery.

C. W. Boase.

PROPOSED HISTORY OF THE COMUNIDADES.

Mr. Clements Markham, the accomplished author of the *Great Lord Fairfax*, is engaged upon a history of the Spanish *Comunidades*.

The revolt of the *Comunidades*, or commons of the cities of Castille, against the illegal and tyrannical conduct of Charles and his regency (1519-23) is the turning point in Spanish constitutional history. Its success would have ensured to Spain a free government and liberal institutions. Its failure led to three centuries of misgovernment at home, and turned the genius and aspirations of the people into the paths of foreign conquest, colonization, art, and literature. Their success in those paths, due to the centuries of freedom in which their fathers had been educated, and not to the patronage of any Austrian or Bourbon, proves how great would have been their triumphs as statesmen and administrators in a free State. The history of the gallant stand against tyranny made by the *Comunidades*, under the leadership of Don Juan de Padilla, would appropriately be introduced by a sketch of the previous constitutional history of Spain, which is older and more complete than that of England. Such an introduction would be mainly based on the invaluable treatises of Marina.*

The best known account of the *Comunidades* is contained in the history of Charles V. by Bishop Sandoval. Besides a narrative of the events, Sandoval gives many of the letters addressed by Toledo and other cities to each other; and we also owe to him the preservation of those noble epistles which were written by Padilla to his wife, and to his beloved city of Toledo, an hour before his death. Though Sandoval is the "Clarendon" of the Spanish contest, and the defender of all royal acts, he shows a far more generous spirit than Clarendon, and speaks with respect of the champions of liberty. Besides Sandoval, there are several other accounts of this memorable struggle, namely: Gonzalo de Ayora (*Historia de las Comunidades de España*, MS.); Alcocer (*Comunidades de España*, MS.); Pero Mexia (*Historia de las Comunidades*, MS.); Maldonado (*El movimiento de España*); Sepulveda (*Historia de Carlos V*); and the epistles of Martin de Angleria. A very complete picture may be drawn of the cities themselves, and of their state at the time of the revolt, from the local chronicles of Cobezudo (*Antiguedades de Simancas*); Colmeneres (*Historia de Segovia*); Rico (*Historia de Cuenca*); Sangrador (*Historia de Valladolid*); Lopez Osorio (*Grandeza y caida de Medina del Campo*, MS.); Pisa (*Descripcion de Toledo*).

The modern accounts of the revolt of the *Comunidades* are by Ferrer del Rio (*Decadencia de España*), and Lafuente (*Historia de España*, III. lib. i. tom. xi. caps. ii.-vii. pp. 96-259). English readers at present only have a narrative of this famous event in Dr. Geddes's *Tracts*, written in the time of Queen Anne, and now little known; and in Robertson's *Charles V.* The sole authority referred to by the former is a bad English translation of Sandoval, published in 1652, while Robertson quotes Martyr's *Epistles*, Sandoval, Miniana's continuation of Mariana, and Geddes. The history of this period, based on a complete examination of accessible authorities, has never yet been submitted to English readers.

Contents of the Journals.

Von Sybel's Historische Zeitschrift, 1871, pt. 1.—Horowitz: National History in the 16th Century. [Contrasts the national character of the historical spirit bred in Germany by the Renaissance with the classical and purely antiquarian type in Italy. An analogous revival took place in England under the Tudors.]—Henke: On the French Women of the Reformation Time. [Points out their rising influence and superior education.]—In a review of Freeman's and Froude's last volumes, Pauli points out the unfairness of the latter to Elizabeth and the Anglican Church, his carelessness as to foreign names and events, the neglect in the later volumes of the social state of England, and of the relations between Crown and Parliament.

The last number of the *Westminster Review* contains an article on "The Social Condition of England under Henry VIII.," in which the discrepancy between Mr. Froude's account and those of Polydore Vergil and other contemporary chroniclers is insisted on. The author exaggerates the amount of arable land absorbed into pastures for the wool

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* *Teoria de las Cortes. Ensayo historico-critico sobre la antigua legislacion de los regnos de Leon y Castilla.* (Madrid, 1808.)

trade, and fails to confute Froude's statements as to prices (vol. i. pp. 21, foll. ed. 1856). Too much stress is laid on ballads and other vague sources of information.

In the last number (Nov. and Dec.) of the *Bolletino dell' Instituto di Corrispondenza archeologica*, Friedländer draws attention to a coin apparently struck at Dium, in Macedonia, by Brutus during the Civil War. It seems to speak of him as *Princeps*.

In the last number of the *Nuova Antologia*, F. Ferrara reviews a book on the banking system of Venice from the 13th to the 17th century, and avails himself of some new information to give a summary of the whole subject, rejecting utterly the legends which beset the "origines" of political economy, as they do of other sciences. The curious thing is that the State is always borrowing of the early banks without (apparently) paying any interest. No wonder that the banks of the families Soranzo, Garzoni, Pisani, Lippomani, were called the "four pillars of the State," but neither can we wonder at their bankruptcy. There may have been some secret arrangement with the government which we have not yet discovered which suddenly came to an end.—In the same number Bertolini gives a summary of the progress of critical enquiry into the early ages of Rome.

New Publications.

Confidential Letters of the Right Hon. William Wickham to the British Government. Edited by his grandson, William Wickham. Bentley.

Montriu, W. A. Some Precedents and Records to aid Inquiry as to the Hindu Will of Bengal. Stevens and Sons.

Ortolan's History of Roman Law. Translated from the French by J. T. Prichard and Dr. Nasmith. Butterworth.

Rossbach, J. J. Geschichte der Gesellschaft. Vol. 2, Abth. 2: Die Mittelklassen in der Culturzeit der Völker. Würzburg: Stuber.

Schulte, J. F. Die Compilationen Gilberts und Alanus. Vienna: Gerold's Sohn.

Vivenot, A. Thugut und sein politisches System. Vienna: Gerold's Sohn.

Philology.

On the Pronunciation of *c* before *e, i, y, ae, eu, oe,* in Latin.

In trying to introduce a more correct pronunciation of Latin, the great stumbling block has always been the hard pronunciation of *c* before *e, i, y, ae, eu, oe.* "Are we to pronounce *Kikero, et ketera, skiskere?*" has generally been considered, if not a convincing, at all events a most telling, argument against phonetic reformers. It must be admitted also that even scholars who are fully convinced that *c* before *e* and *i* was during the Augustan period pronounced like *k* have seldom ventured to adopt this pronunciation, whether from fear of ridicule or from a dislike of the harsh and disagreeable sound of such words as *Kikero, fakit,* &c. I have never heard *c* pronounced as *k* before *e* and *i* in any school or university of Germany and France,* though I believe there is hardly a scholar who has not declared his decided opinion that this is the right pronunciation.

If, therefore, we decide to pronounce *c* before *e* and *i* as *k*, most of us, I suspect, would do so reluctantly, and if there were any escape, many would gladly avail themselves of it. It is for this reason that I have put together what might be pleaded at least in mitigation of punishment for those who, in pronouncing Latin, wish to keep up a distinction between *ca, co, cu,* and *ce, ci, cy, cae, ceu, coe,* or to give to the latter a more palatal or even an assibilated sound.

Let us consider, first, that, whatever we do, the *k* of *ka, ko, ku,* is, from a physiological point of view, different from the *k* in *ki* and *ke.* The former is produced by contact between the root of the tongue and the soft palate, the latter by contact between the back of the tongue and the hard palate. The *k* pronounced in the former way may be called *guttural,* in the latter, *palatal.* It is this palatal position which is liable to many modifications. At first we hear a furtive *y*, as in *kyind;* then we hear the German *ch*, the palatal spiritus, as in *ich*—a sound difficult to pronounce, and therefore by foreigners frequently changed into *sh.* This *sh* preceded by a very slight dental or alveolar contact gives the Italian *ci* (tshi). Further dialectic change may substitute even *ssi* and *thi* for an original *ci.*

This being a recognised process in the pronunciation of *c* before *e* and *i* in many languages, let us now suppose that in Rome, too, *c* before *e* and *i* was pronounced differently from *c* before *a, o,* and *u,* without attempting, however, an exact definition of what that modification was, whether *ky*, or *tsh*, or *ss.* Would the arguments produced by Scheller, Schneider, Corssen, and others, in support of *ce* and *ci* being pronounced *ke* and *ki*, be really unanswerable? I believe not.

Their strongest argument is: "If the Greeks write *Cicero*, they write Κικέρων, and if the Romans write Κέκροψ, they write *Cecrops*" (Corssen, vol. i. pp. 44 *seq.*).

My answer to the first point would be this: Unless we admit that *c* in *Cicero* was pronounced either exactly like ζ or exactly like σ—and this nobody maintains—nothing remained to the Greeks but to use *k* as the nearest approach to the modified *c.*

My answer to the second point would be this: The Romans, after the period of the Decemvirs, never used *k* except in certain words, and even before that time, they never used it before *e;* if therefore they had to transcribe Greek words, they had no choice but to use *c*, which in many cases represented the sound of *k*, and might be trusted to represent that sound even before *e* and *i*, at least in foreign words.

I maintain, therefore, that the supposition of a modified pronunciation of *c* before *e* and *i* in Latin is not incompatible with the evidence derived from Latin words transcribed by the Greeks, or Greek words transcribed by the Romans. Supposing even, what we need not, that *ci* was pronounced in Latin as in Italian or in English, the mere fact that it was not pronounced like ζι or σι would be sufficient for our purpose, because it would have driven the Greeks to have recourse to the approximate transliteration of κι. They could in no case have used ζι, because the ζ was looked upon as a double consonant, and, in the middle of a word, would have made a preceding short vowel long.

Next comes the question, Why, if *ci* had a different sound from *ca* in Latin, was there not a separate letter introduced into the Roman alphabet? This is what, for instance, the Umbrians did. With them the *c* before *e* and *i* had a peculiar, probably an assibilated,* sound, and they therefore introduced into their alphabet a new letter, ȡ, which never occurs before *a*, to represent that sound,† while, when they adopted the Roman alphabet, they used the *s* with a diacritic mark, *ṡ.* Why should not the Romans have done the same?

My answer is that, first of all, even the Umbrians occasionally (Corssen, i. p. 44) retained the *k* before the softening vowels, though they would no doubt have pronounced it quite correctly, whichever way it was written.

Secondly, the Romans, we know, had no taste for diacritical marks. They were attempted now and then, but always became obsolete after a short time. One of the strangest facts in the history of the Latin alphabet (Corssen, i. p. 10) is that during a long period (to 290 B.C.), after the

* I hear that this pronunciation has been successfully adopted at Marlborough School.

* I say "probably assibilated" because in the Latin transcription *s* with the gravis was chosen as the nearest letter. Otherwise the fact that the same letter, ȡ, is used in Umbrian before *l* would rather point to *ky* as its probable sound, the *l* after a *k* and *p* being apt to produce a *y* after the *k;* cf. Italian *chiaro* for *claro*, *piano* for *plano*. See *Umbrische Sprachdenkmäler*, ed. Aufrecht and Kirchhoff, p. 73.

† From *kurnak*, cornix, abl. *kurnaçe*, cornice.

letter *k* had been almost entirely discarded, the guttural tenuis and media were represented by one and the same letter, the *c* (γαμμα). It would be impossible to admit that during that time the Romans had really not distinguished in pronunciation between such words as *acer* and *ager*. All we have a right to conclude is that, having for some unaccountable reason given up the letter *k*,* they were satisfied in representing the guttural tenuis and media by the letter γαμμα, till the inconvenience began to make itself felt, and led them to distinguish the guttural media by a diacritical mark, *G* and *C*. This very fact, that the Romans for a long time wrote *c* only, leaving it to the reader to pronounce *c* or *g*, renders it more intelligible that they should not, like the Umbrians, have invented a diacritical letter to represent the modified sound of *c* before *i* and *e*, satisfied that no one who knew Latin would ever pronounce that letter hard before these vowels.

I do not argue, as others have done, that, because in Umbrian the guttural tenuis before *e* and *i* was modified, therefore it must have been modified in Latin also. I only suggest that, as the Umbrians occasionally retained the unmodified letter, even where it had to be pronounced as modified, the fact that the Romans never invented a modified letter does not prove conclusively that they pronounced the *c* in *ci* exactly like the *c* in *ca*. Practical and fond of ancient customs as the Romans were, they retained *C.* as the abbreviation of *Gaius* and *Gnaeus*, though no one would maintain that they ever pronounced *Caius* or *Cnaeus*.

Another argument in support of the hard pronunciation of *c* before the *i* and *e* is taken from Gothic. It is said that, in words adopted from Latin in the 4th century, *ci* and *ce* are represented in Gothic by *ki* and *ke* (Corssen, i. p. 45). It is so, no doubt. We find *aikeit-s* for *acetum*, *karkara* for *carcer*, &c. But, first of all, these words may have reached Ulfilas in their customary Greek transliteration, in which case he would naturally have rendered the Greek καρκερ by *karkara*. Secondly, even if he heard these words pronounced, and heard them pronounced with a modified *c*, he had no such letter in his alphabet. He could not have represented the palatal tenuis by either his soft *z* or *s*. He found himself, in fact, in exactly the same dilemma as the Greeks, and had to be satisfied with some approximate sound. Besides, this argument would prove too much. Ulfilas represents γραϊκός, *graecus*, by *kreks*, yet no one would suppose that either Greeks or Romans pronounced *g* like *k*. In other cases Ulfilas clearly represents letter by letter, not sound by sound; and in imitation of Greek, he actually writes *aivaggeli*, εὐαγγέλιον, using γγ for *ng*, and adopting that spelling even in purely German words.

I now come to another point, which those who consider it inevitable that we should say *Kikero* have not sufficiently considered, and which would show that *ci*, if followed by another vowel, was not only modified, but really assibilated, in Latin.

I begin again with the Umbrian, which assibilates both *t* and *c* before *i* (Corssen, i. p. 62). Thus *ki* becomes *çi* (çj) and *si* (sj), and sometimes *s*; *ti* becomes *si* (sj), and is also written *çi* (çj), sometimes *ç*. These changes had taken place in Umbrian, partly also in Oscan, before the first Punic war. Now it is quite true that this does not prove that the same change took place in Latin, but unless it did, one fact, admitted by the best authorities, would remain unexplained in Latin. Corssen has very well proved that *tius* and *cius* are not interchangeable in Latin at random, that some words, like *nuntius*, are always spelt with *t*, others, like *condicio*, always with *c*. But he has also proved (p. 54) that from about 200 A.D. words with *ti* began to be spelt with *ci*. How was that possible? If *ci* was always pronounced *ki*, then assibilated *ti* could never have been written *ci*. The only point where these two letters can possibly meet is the assibilation. *Ti* may go as far as *tsi*, but unless *ki* also went as far as *tshi*, the two could not have met, and no Roman, whether in Italy or in Africa, could have attempted to write *renuntiatio* by *renunciatio*. The argument taken from Gothic, where *lectio* is spelt *laiktio* in the 4th century, proves nothing, because Ulfilas may here have transliterated letter by letter. In another Gothic document (Mon. Neapol.) we find the Latin *cautio* rendered by *kautsjo*, which clearly shows that the assibilated pronunciation of *tio* existed at that time. Besides we know for certain that in the 5th century (Corssen, i. p. 64) it was considered wrong not to assibilate *ti* if a vowel followed ("fit hoc vitium; quotiescumque enim post *ti* vel *di* syllabam sequitur vocalis, illud *ti* vel *di* in sibilum vertendum est"). It is not likely therefore that Ulfilas, who died 381, ever heard either *cautio* or *lectio* pronounced without an assibilated *t*.

Lastly, the argument that Latin words adopted in German dialects have preserved the hard *k* or *ch* proves very little. These words may have reached the Germans through a Gothic channel, and the Gothic language knew of no guttural sound or letter besides *k*, *q*, *h*, *g*, and *x*. *Carcer* in Gothic could only be written and pronounced *karkara*, and this in Old High-German would regularly become *charchâri*, *Kerker*, as κυριακόν became *chirichâ*. As soon as the German language had developed a hard *z*, we find *census* changed to *zins*, *cancelli* to *chanzella*, *macellarius* to *metzeler*, *cella* to *zella*, *circus* to *zirc*. This does not prove that Latin *c* before *e* and *i* was then pronounced exactly like the German *z* or *tz*, but only that German *z* and *tz* came nearer to the Latin sound of *c* before *e* and *i* than German *k* or *ch*.

Looking without any preconceived opinion at the evidence collected by Corssen and others, I arrive at the conclusion that before the 3rd century A.D. *c* before *e* and *i may* have had the same, or nearly the same, sound as *c* before *a*, *o*, *u*; but I maintain that there is no evidence to prove that the *c* before *e* and *i* was not slightly *mouillé*, or even assibilated, if only we do not commit ourselves to the statement that it had the same sound as either ζ or σ. If we insist on the same pronunciation in *ci* and *ca*, we may be, nay, most likely, we are, entirely wrong. If we distinguish between *ci* and *ca*, modifying the *ci* according to the Shibboleth of our own pronunciation, we must know that our peculiar pronunciation in England, or Germany, or Italy, may not be entirely correct, but our conscience need not be aggrieved as long as we keep up some kind of distinction between *ca* and *ci*. That *g* before *i* was differently pronounced from *g* before *a* should also be borne in mind (Corssen, i. 92), as an analogous case in support of the palatal or assibilated pronunciation of *c* before *e*, *i*, *y*, *ae*, *eu*, and *oe*.

Max Müller.

* This happened about the time of the Decemvirs (Corssen, i. 8). *K* occurs very seldom, if ever, before *e* and *i* in Latin. *Keri*, quoted by Corssen, i. 44, is a Volcentian inscription. *Dekem*[*bres*] is taken from a Grecising inscription.

Phœnician Studies. [Phönizische Studien. Von Prof. Dr. M. A. Levy. Heft 4.] Breslau: Schletter.

Professor Levy, mindful of his promised repertory for discoveries in Phœnician epigraphy, has just published the fourth fasciculus of his interesting *Studies*. He admits himself, in his preface, that the harvest gathered since 1863 is not considerable; in fact, except the eighth inscription of the 14 *graffiti* discovered at Abydos, in Egypt, and published by M. H. Zotenberg in the *Journal asiatique*, 1868 (avril-mai), the first inscription of Nora, the second of Sulcis, and the first of Tharros, all three discovered in Sardinia and

published by M. de Maltzan, none of the Phœnician inscriptions found since 1863 contains anything but proper names, the explanation of which we consider at least hazardous, if not even useless at present. But the unproductiveness of Phœnician epigraphy is not M. Levy's fault; he can only tell us what has been ascertained; and, in spite of the scantiness of the discoveries, this fourth part of his *Studies* is not less useful than its predecessors.

Before commencing the interpretation of the inscriptions discovered since 1863, Prof. Levy returns to those designated by M. de Vogüé, Cit. 37, 38, 39, 40, and 41, and to the third of Malta, which has been published several times, accompanying them with various new observations. In the bilingual inscription, Cit. 39, M. Levy reads (p. 4), slightly modifying the reading of M. de Vogüé, פעל ק[סָ]ם, which represents the Greek words ἀνὴρ ἐκπωματοποιός. קסום is compared to the Biblical word קשות, Exod. xxxvi. 16, the meaning of which is still uncertain; besides, as M. Levy observes, the Hebrew has a plural of the feminine form. It would perhaps be more natural to read ק[דר]ם, a word which signifies "pot" in Aramaic. The remarks on p. 8, on the goddess ענת, which represents Ἀθήνη in the bilingual Cit. 41, and on the form יקדש (p. 7), which evidently represents the imperfect, are of great interest. The form of the proper name יתן (p. 4), which Prof. Schlottmann derives from a Phœnician root יתן, corresponding to the Hebrew root נתן, and which M. Derenbourg explains by the Hebrew word איתן, is left undecided by M. Levy (p. 8). Our own view is that the form יתן comes from נתן, and it has its analogy in the names יצחק, יצהר. The *graffiti* (pp. 15-35) are very carelessly written; and it required the sagacity of a palæographer like M. Levy to read them correctly. We cannot reproduce here all the corrections made by M. Levy in the readings of M. Zotenberg. The analogy of the name רמבעל with the Hebrew יהורם (p. 17) is very plausible. The inscription No. VIII. is corrected in several places by M. Levy, and we cannot hesitate to prefer his readings to those of M. Z.; but it is difficult to admit with M. Levy (p. 22) that פטרת stands for the Biblical name פתרס, and still less that there are two consecutive names of towns introduced with the preposition ב, and without being connected by ו. Possibly we should read אנך · · · בא למצרים בפטר תבדמנקרת הנ[ה], "I . . . came into Egypt, when . . . repaired thither;" comp. ויפטר, 1 Sam. xix. 10. M. Levy is perfectly right in rejecting M. Zotenberg's explanation of בפטרת, "at the time of the death." For the first inscription of Nora and the second of Sulcis, M. Levy reproduces the new interpretation of M. de Maltzan, which is by no means satisfactory. He adds, however, some palæographical corrections, and abstains with reason from giving any new interpretation. As for the first inscription of Tharros, M. Levy gives the true reading, and the only possible explanation, except with regard to the word אז, which is not yet confirmed as a demonstrative pronoun. On pp. 66-78 are some interesting remarks on the inscriptions found in North Africa; and pp. 78-85, some *Addenda* to the Phœnician dictionary published by M. Levy in 1864.

Ad. Neubauer.

Pliny's Letters. [*C. Plinii Caecili Secundi Epistularum Libri novem.* Ex Recensione Henrici Keilii. Leipzig: Teubner, 1870.

This is an enlargement and completion of the edition of Pliny's letters published by Keil in 1856. Its importance and interest consist first in the elaborate preface, in which a complete account is given of the authorities on which the constitution of the text must rest, secondly in the useful index of names added by Mommsen.

The most perfect known MS., which contained the nine books of the epistles and the letters to Trajan, is now lost; and all that we know of it is from the readings preserved in the Aldine edition (1508), whose author was the first to make use of it. Of the now existing MSS. Keil makes three families. The first is represented by the Medicean (M) or Laurentian (10th century), the only existing copy which contains the nine books of the epistles, and this only to 9. 26. 8. In this class is also included the Vaticanus (V), a copy perhaps a little older than M, containing only the first four books, and the Pragensis (14th century), evidently copied from M (though some lacunae are filled up from MSS. of another class), and therefore of no independent value. A MS. now lost, resembling M, furnished, in the later books, material for the edition of Schurener (1474).

The second class is represented by the Florentinus (F), 10th century: a copy including from the first book to the sixth epistle of the fifth. The Codex Riccardianus, which was collated by Gori in 1728, but stolen apparently in 1832, exhibits readings mostly coinciding with those of F.

In a third and large class of MSS., evidently copied from a corrupt archetype, the eighth book is omitted, and the ninth put in its place. At the beginning this archetype was often corrected from MSS. of the second class. The correctest representative of this class is the Codex Dresdensis (D), from which Keil shows by a minute argumentation (p. xv) that the archetype of this class must have been cognate to M and V.

Our only authority for book viii. is therefore M and the Aldine: for the end of book ix. the Aldine, and the bad MSS. of class 3: for the epistles to Trajan the Aldine only. For the rest of the letters it follows from what has been said that, as a general rule, the first authority is due to M and V, though even they are full of interpolations: the second to F and D, especially when the latter agrees with M and V: the case becomes doubtful where M stands alone against the rest. The Panegyricus has no MS. authority older than the fifteenth century.

It should be observed that Keil makes no mention in his preface, and very little in his notes, of the corrections of Joseph Scaliger on the Panegyricus made on the margin of the edition of Stephanus now in the Bodleian, and quoted by Hearne in his edition of 1703. A great number of these emendations (so far as I have examined them) are but repetitions of those of Cuspinianus: some are due to MSS. Some, however, might have been mentioned in an edition like this for their interest, if not for their truth: *e.g.* "haveant" (?) for "abeant," c. 2; "mergi spargenti amne" for "mergi et reparari amne," c. 30.

The index of names by Mommsen is useful so far as it goes, but it does not pretend to the fulness of a complete Onomasticon. In the arrangement of the letters Keil has followed the lines traced in Mommsen's interesting article on the life of the younger Pliny in *Hermes*, vol. iii. pp. 31, foll.

H. Nettleship.

Intelligence.

Dr. Giuseppe Pitrè writes from Palermo that a series of meetings have lately been held for the promotion of the study of the Sicilian dialect, under the presidency of Cav. Lionardo Vigo, the accomplished author of *Dante e la Sicilia* (Palermo: L. Pedore, 1870). They were attended by representatives from all the Sicilian provinces, and were remarkable in several ways. The most interesting discussions related to the use of *c* in such words as *ciuri*, *ciume*, representing the Italian words *fiore*, *fiume*, which some non-Palermitan members proposed to change into *sc*, though they ultimately gave in to the feeling of the majority. The transactions of these meetings will be published; but as Dr. Pitrè was secretary to them, he mentions by anticipation that the following important points were settled:—1. Orthography to be

the same over the whole island. 2. This orthography to be based upon the Palermitan idiom, without however reproducing its phonetic corruptions. 3. Popular songs, stories, and fables, on the other hand, not to be reduced to this uniformity of spelling, but rather reproduce, with a "photographic" accuracy, the varieties of their vernacular dialects. The orthographic rules proposed by Vigo (not a Palermitan) were discussed and approved by a committee appointed for the purpose, consisting of members from all the provinces, and afterwards sanctioned by the whole congress. The congress was then constituted as a Literary Academy, competent to be re-opened at the invitation of the secretary on the request of ten members. The subjects for the next meeting are:—1. "Terms and expressions in the living language of Sicily which have become antiquated in Italian." 2. "Terms of arts and trades."

Mr. R. C. Jebb, Public Orator of Cambridge, will publish in the course of this year a collection of his translated compositions in Greek and Latin.

Contents of the Journals.

Studien zur Griechischen und Lateinischen Grammatik, herausg. von G. Curtius, vol. iii. p. 2.—Fr. Allen: De dialecto Locrensium. [By the help of two inscriptions, a treaty between two cities of the Locri Ozolae, published in 1850, and a still more recently discovered document, relating to a colony sent to Naupactum from the Locri Hypocnemidii (probably = Opuntii), the Locrian dialect has become one of the best known varieties of Doric. Mr. Allen's paper contains an excellent discussion of its forms, occupying pp. 205–280. These show on the one hand a leaning to "stricter" Doric—due, however, as is suggested, to the greater antiquity of the inscriptions—especially in preserving the *F*, and contracting *οε* and *οο* to *ω*; on the other hand, a close affinity to Phocian and Ætolian, and through them a resemblance to Æolic: *e. g.* *-οις* in the dat. pl. of the 3rd decl., *ἐν* for *εἰς*, a pres. part. in *-εἱμενος*, and *ὕδωρ* (Bœot. *οὔδωρ*) for *ὕδωρ*.]—A. Clemm: Beiträge zur griechischen und lateinischen Etymologie. 1. *Σαῦλος σαῦρος σαυρωτήρ.* [From a root *sva*, with various determinants, come *σεύω*, *σαίνω* (Germ. Schwanz), *σόβη* (Schweif), *σάλος* (O. H. G. swellan); *σαυρωεήρ* means tail-piece.] 2. *γρῦ.* [Root gar, to crumble; grânum, *γῦρις*, fine meal; Sanscr. *garas*, age, *γέρων*; distinct from *γρῦ*, a grunt.] 3. *λίγδην.* [*λακ* or *Fλακ*, to break.] 4. *αἴσυλος ἀήσυλος.* [Takes the latter to be probably *α-ἴσυλος*, iniquus, by itacism. Or the root is *ἀFε*, to harm, in *ἀάω*, &c.] 5. *δεῦρο, δεῦτε.* [Explains them in a very interesting way as pronominal words: *δε* is the prevailing "deictic" element in *ὅδε*, *οἶκόνδε*, *δεῖνα*, *-δις*; Sanscr. idam, Lat. idem; *υ* appears in *οὗτος*, *ἐνθαῦτα*, or *ἐνταῦθα*; *-ρο* is parallel to *πρό*; *-τε* either as in *αὖτε*, or, as Curtius suggests in a note, contains *ἴτε*.] 6. *μάχλος.* [*μακ* in *μαῖμαξ*, stormy, &c. For the asp. cf. *ἀκραιφνής* for *ακραπινής*, *νεοχμός*.] 7. *κίβδηλος.* [*κίβδη*, slag or dross.] 8. sons. [Part. of *sum*, hence the real guilty person; *sonticus morbus*, a real grave disease; *sontica causa*, a good reason.]—Moritz Schmidt: Das Tzakonische. [An elaborate résumé from the existing sources—Leake, Thiersch, Deville, and others—in anticipation of a work by a native Tzakonian, Demetrios Chaliotes.]—G. Curtius: Zur Geschichte der griechischen zusammengezogenen Verbalformen. [A masterly analysis of the forms of verbs in *σω*, *εω*, *οω*, with the Homeric *φορήμεναι*, *ὀνήμενος*, *ὁμαρτήτην*, the Æolic verbs in *αιμι*, *ημι*, and *ωμι*, and the Latin forms. Hirzel's view, that the peculiar Æolic conjugation arose from analogy, and Allen's, that *φιλήμενος* is from *φιλη-έμενος*, by assimilation for *φιλη-όμενος*, are rejected: everything is explained if we suppose that ajâmi became ajêmi, thus giving a conjugation with *ε* as characteristic throughout, but that afterwards the *ω*-conjugation partly or wholly took its place, giving *φιλήω* (later *φιλέω*), &c., just as *ὄμνυμι* is succeeded by *ὀμνύω*. The paper teems with scientific interest.]

Rheinisches Museum, vol. xxvi. pt. 1.—A. W. Zumpt: On the Lustra of the Romans. [Exemplification of the theory advocated in the previous volume of the R. M.]—W. Vischer: A Locrian Inscription from Naupactus, now in the Woodhouse Collection. [In the British Museum. It seems to show that the Opuntian Locrians sent a colony to Naupactus just *after* the close of the Peloponnesian war, when all that district was deserted, though Oekonomides, the Athenian editor, would date the settlement fifty years earlier. The inscription is given at length, together with a facsimile and an interesting philological commentary.]—K. Dziatzko: The *deverbia* of the Latin Comedy. [Discusses the orthography of the word, and seeks to establish that it was, like the Greek *καταλογή*, a technical name for the recitation in a comedy.]—R. Rauchenstein: On the Antigone of Sophocles. [Emends the text in sundry places.]—J. Savelsberg: Latin Particles ending in *d* and *m*. Part 1.—W. Schmitz: On the Tironian Notes. X. [Gives a description of the MS. which perished along with the rest of the treasures of the Strasburg Library; it is satisfactory to find that an accurate collation of it was made in 1869.]—N. Wecklein: On Æschylus, Agam. 717, seqq.—J. M. Stahl: On Thucydides, iii. 37.—M. Voigt: On Plautus, Pseud. iv. 6, 14.—E. Bährens: On Phaedrus. [ii. epil. 12; iv. 1, 8; iv. 18, 18.]—L. Müller: On the Bern Scholia to Lucan. [Considers the scholium on Lucan, ii. 2, and the emendation proposed by Haupt in the last volume of the Hermes.]—H. Usener: Prof. Haupt and the Scholia to Lucan. [A crushing reply to Haupt's strictures on Usener's view as to the words "natura naturam vincit et dii deos," quoted by the Scholiast from a writer whom he describes simply as "antiquissimus poeta:" Haupt, assuming him to be a Latin poet, makes a senarius out of the words.]—M. Voigt: On Cicero ad Att. xv. 26.—H. Anton: On Cæsar, B. C. iii. 59.

Philologischer Anzeiger, herausg. von E. von Leutsch, vol. ii. part 9. (Selected reviews.) Analecta Philologica Historica. 1. De rerum Alexandri Magni scriptorum imprimis Arriani et Plutarchi fontibus diss. Alf. Schoene. [Shows that Arrian did not derive his narrative so directly as has been supposed from the writings of Alexander's officers: makes it probable that the immediate source of Arrian and Plutarch was a compilation made about the 2nd century B.C. There are two reviews, the first by E. S.]—Zur Frage über die Reihenfolge der olynthischen Reden, von J. von Klebelsberg. Rev. by B. [Defends the traditional order.]—Studien zur Redekunst, von C. Schmelzer. Rev. by B. [For the rhetorical and æsthetical studies in the higher schools.]—Gul. Studemund commentatio de Vidularia Plautina. [With an important fragment of four pages, preserved in the Ambros.]—Titi Livi ab urbe condita libri, erklärt von W. Weissenborn; Bd. iv. fourth edition. Rev. by E. von Leutsch. [Wishes that Weissenborn had paid more attention to the criticism of Livy's speeches; showing by the instance of Hanno's speech, xxi. 10, that they have sometimes a merely artistic or poetical value.]—Dr. E. Hedicke: de codicum Curtii fide atque auctoritate. Rev. by A. H. [Valuable.]—Dr. E. Grunauer: Beiträge zur Texteskritik des Q. Curtius Rufus. Rev. by A. H.—Part 10. Corssen: Aussprache, Vokalismus und Betonung der lateinischen Sprache. [The reviewer confines himself mostly to prosody: he makes a good many complaints of hasty work. See *Academy*, vol. ii. p. 81.]—Pindar's Siegesgesänge, mit Prolegomenis über Kolometric und Textkritik, von Moritz Schmidt. 1. Band. Olympische Siegesgesänge. Rev. by E. Krüger. [Regards M. Schmidt's system as radically false. The reviewer's own remarks, especially on the difference of prose, poetry, or rhythmical speech and song, are most instructive.]—Marco Antonio Canini, Fragment du Parthénée d'Alcman. Rev. by F. Blass. [The same of which Blass gave a collation and restoration in the Rhein. Mus.]—Theocriti Idyllia, iterum edidit et commentariis criticis et exegeticis instruxit A. Th. Fritzsche. Rev. by E. v. Leutsch. [A valuable edition: complaint of the form of the notes, and of the mass of references.]—De Aristidis Quintiliani doctrinae harmonicae fontibus. Scr. Herm. Deiters. Rev. by C. von Jan. [Little due to Aristoxenus, and that not directly; more to the school of Damon, and generally to Platonic influence.]—Ad. Michaelis: Ueber die Composition der Giebelgruppen am Parthenon. C. Strube. Studien über den Bilderkreis von Eleusis. [Good archæological essays.*]—Otto Benndorf: Griechische und sicilische Vasenbilder. 2. Heft. H. Heydemann: Griechische Vasenbilder. [Archæological works of great importance.]

Zeitschrift für ägyptische Sprache, Dec.—The Building and Measurements of the Temple of Edfu. Part 1. By H. Brugsch.—On a Pillar in the Turin Museum, by F. Chabas. [Contains a minute description of the felicity which the ancient Egyptians prayed for in this life and the next.]—The Double Calendar of Mr. Smith, by A. Eisenlohr.—On the same, by R. Lepsius.—Hieroglyphic Glossary for 1870.

Literarisches Centralblatt, Jan. 7.—Land's Anecdota Syriaca, rev. by Th. N. Jan. 14.—Haug's Essay on Pahlavi, by J. [Criticism of philological details.] Jan. 21.—Strauss's translation of Laò-Tse, by P. [Depreciates the value of Laò-Tse as a religious philosopher.]

Theologische Quartalschrift, 1870, No. 4.—The Inscription of King Mesha, by Prof. Himpel. [A translation, with notes which contain but little of interest, and a minute criticism of Dr. Kaempf's treatise. The refutation of Dr. K.'s conjecture בן ישי in line 5 is complete.]—Roorda's Commentary on Micah, by the same. [A model of fairness in criticism.]

New Publications.

Edkins, J. The Miau-tsi Tribes; with vocabulary. Trübner.
Flasch, Ad. Angebliche Argonautenbilder. München: Franz.
La Roche. Homers Ilias für den Schulgebrauch erkl. Th. V. Ges. 17–20. Berlin: Ebeling u. Plahn.
Müller, F. Bemerkungen über zwei armenische Keil-Inschriften. (Academy reprint.) Gerold's Sohn.
Paspati, A. G. Études sur les Tchinghianés ou Bohémiens de l'Empire ottoman. Constantinople. 1*l.* 15*s.*
Wright, W. Catalogue of Syriac MSS. in the British Museum acquired since 1838. Part 1. Printed by Order of Trustees. Asher and Co

* C. Strube died of a wound received at Mars-la-Tour.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of The Academy *cannot undertake to return communications which are not asked for.*

The next number will be published on Wednesday, March 15, *and advertisements should be sent in by March* 11.

NOTICE.

The Academy *will in future appear regularly on the* 1*st and* 15*th of every month.*

General Literature.

Catalogue of Prints and Drawings in the British Museum. Division I.: Political and Personal Satires. Vol. I. Printed by order of the Trustees, 1870.

It is not quite clear what proportions the entire scheme, represented by this handsome volume as its first instalment, is intended to assume. Is it proposed to catalogue, in a similarly full illustrative manner, all or several of the various classes of subjects into which the Museum prints and drawings might be arranged, or is it only in contemplation thus to describe such prints and drawings as can be termed political and personal satires? The title-page would rather lead us to the former inference. If such *is* the intention, the work taken in hand is indeed a vast one; and, even supposing the second alternative of the two, the enterprise involves a huge amount of steady, systematic, and intelligent labour. The volume now before us contains 752 large and often closely printed pages, and 1235 several items; yet it only takes us up to April 1689 in chronological sequence. The items of a date earlier than 1600 are but few, 55 altogether; practically therefore it may be said that the whole volume is engrossed by about 89 years of the 17th century. Considering that 182 years have elapsed since then, we should have, at the same proportional rate, about 2440 satirical prints and drawings remaining to be catalogued: but the reader need not be reminded that in fact the rate would not be in the same proportion, but enormously increased. And, after all the satirical works shall have been disposed of, it would seem that *some*, at any rate, of the other classes of works are to be taken in hand; else why the phrase "Division I." in the title-page?

The British Museum may be congratulated upon having undertaken this solid and interesting work, and also, and still more especially, upon having got hold of a good, honest, capable worker to execute it—one who has a turn for such employment. As the introduction informs us, "the Catalogue has been prepared, under the direction and supervision of the Keeper of the Prints and Drawings, by Mr. Frederic George Stephens:" I apprehend, therefore, that the Keeper, Mr. Reid, is entitled to the chief or sole credit as originator of the scheme, and Mr. Stephens as its executant. They may both look with complacency upon a large amount of sound and useful work ably done.

The volume, though properly entitled a catalogue, is in truth something much more than that. By the very nature of its contents, it becomes a sort of tableau of the highways and byways of history, with the crooked turnings of personality; a chart in which the subjects uppermost in the mind of the public (mainly the British public) for some centuries past may be read well-nigh as readily as the eye takes in the meaning conveyed by a geological or statistical map. Besides this value, inherent in its subject-matter, the book furnishes an immense quantity of curious information, frequently in a very entertaining form; out-of-the-way details of news, rumour, or gossip, scraps or long smatches—sometimes unabridged pieces—in verse, and generally whatever can best serve to illustrate without overloading the immediate object of the catalogue-compiler's attention, the satirical print or drawing under his view. Each of these art-items is described with neatness and precision; the reader is enabled to understand accurately what it represents, with next to no critical expansion or dictation, in any part of the volume, as to the artistic merits or demerits of the works. The majority of the prints and drawings thus treated are in the department of the Museum appropriated to works of this class: Mr. Stephens, however, has not limited himself to these, but has included a large number of similar productions proper to the Departments of Printed Books and of MSS. in the same institution. Nor is this all; for a great deal of the illustrative information which his catalogue furnishes, as apposite to the prints and drawings enumerated, comes from other tracts and broadsides in the Museum, which were found to impart relevant facts, though no additional designs. It is notified that Mr. Stephens has thus examined more than 35,000 pamphlets, &c.; this being the first regular exploration of these obscure heaps that has ever been effected—obscure, but often yielding light to the adventurous enquirer. The book is in fact a mine of subsidiary or collateral details, in a high degree important to all students of the period of history here covered, conveniently arranged for reference, and set forth with the double advantage of the *ipsissima verba* of the original statement (in numberless instances), and of modern sifting and collation.

The earliest date included in this volume is 1320, which year yields a satire against that unfailing target, the clergy—"The Fox, as a Bishop, preaching to the Goose, Redbreast, Drake, and Stork." There is one more subject of the same date; and we next go on to two items proper to 1430, and then to 1537—well on in the reign of Henry VIII. It is no derogation from the historical value, and scarcely from the general interest, of the book, to say so; but it is, I think, a fact that an inspection of these satirical or personal outpourings of the Tudor and Stuart period, from first to last, is little adapted to increase one's respect for the spirit in which our English forefathers fought out their conflicts. Their motto might have been, "Nothing extenuate, and set down all in malice." There is throughout one seldom varying tone of low detraction—dogged, determined, plebeian insult—conscious, transparent misrepresentation. There is hardly a trace of a chivalrous, or even an honest, wish to do justice to an adversary; nor magnanimous superiority to the spite or the lie of the moment; nor sacred pity over an enemy fallen from the height of fortune, or buried in a bloody grave. The tone is gross—not so much because of the positive indecencies scattered here and there, as because it corresponds to the coarse impulses of minds mostly sullen or malignant in their serious moods, or unbending with roystering loudness. No doubt some people have an excuse for being malignant. A friend of a well-intentioned Puritan whose ears had been cropped off at the bidding of Laud had much palliation for malignity against that archbishop; but this would be no reason for denying him to be malignant. From a mere literary point of view also the satires can rarely indeed be called brilliant, or at all approaching to brilliancy. Several are pithy, clever, and expressive; others are forcible in a certain way—there is considerable force in the descent of a paviour's rammer; but anything like airiness or aroma of wit, or the fineness of

touch natural to a keen rapier in a delicate hand, is markedly wanting. The subtle Italian or the sparkling Frenchman would scarcely call such work satire at all, but simply abuse: it proceeds, not by way of deadly insinuation, but of rude blurting-out. The whole volume moreover is essentially insular. Besides the English works, in overwhelming majority, there are a goodish number of Dutch examples, and here and there some few from France and Germany: of Spanish or Italian I remember not one. Even the foreign specimens are generally concerned with England, in whole or in part: the English ones that deal with continental matters hardly go beyond the relation of these to home-interests. Of course, this characteristic quality of the series depends partly on the haphazard nature of the collections in the British Museum, as well as partly on the actual spirit of satirical work in the periods under review.

A few points of detail—sometimes of objection—may now be added, with reference to the materials and arrangement of the Catalogue.

The several items are given according to an order of dates which is at first a little startling to the reader, *i. e.* the determining date is that of the earliest event illustrated by the print or drawing. Thus a print of the Spanish Armada and the Gunpowder Plot is assigned to 1588, the year of the Armada; although it is obvious that the work cannot have been executed earlier than 1605, the year of the Gunpowder Plot, and its earliest date of publication was 1621. Thus again a number of prints from *Hudibras* (they amount to no fewer than 196) are all assigned to "circa 1645," because that is about the period of the presumed action of the poem; whereas the poem itself was never published till 1663, and the prints are of all sorts of dates, some quite recent. This arrangement consults the convenience of the historical rather than the artistic student, and is so far conformable to the general scheme of the work; it has also a special adaptation to the requirement, frequently needing to be attended to, of tracing designs from their earliest to their latest form, and may perhaps, in the long run, be the most manageable plan. Yet sometimes (very rarely) this principle of dating is violated. The story of Dr. Faustus is dated 1650, and again 1675, and a portrait of Charles II. at an early period of his reign is dated circa 1685; years which can only indicate when the prints were produced.

In giving the titles of the respective designs, certain variations of typography have been adopted, so as to show whether the title does or does not come from the engraved margin of the work. There is no such distinction, however, marking the titles which the cataloguer has himself invented; only the reader's acumen can discriminate these. This might readily have been obviated. Awkward in like manner is the designation of "No. 2, No. 6," which (with other similar instances) we find applied to an engraving. It means, "item No. 6, being example No. 2 of a particular design;" but might be more distinctively expressed. Mr. Stephens also makes it a point of conscience or of system to repeat dates, in his cross-references, in a manner which appears to be mere surplusage of a vexatious kind. Thus we find, "see 'No Plot, No Powder, 1623,' Nov. 5, 1623, No. 95, 1623," the reference being all to one and the same item; or, "see 'November the 5th, 1605,' Nov. 5, 1605, No. 64, 1605." The practice with regard to expurgation is not always consistent. In the quotation to design No. 5, certain words (which one may guess to be rather downright than strictly indecent) are omitted; whereas a truly nasty quotation to No. 843 is left as it stands, and a decided obscenity (the *double entendre* of which may possibly, however, have escaped the compiler's observation) is reproduced to No. 158. A point of much greater importance than all these is the fact that a large number of designs are included which cannot with any accuracy be termed "Political and Personal Satires" at all. There is nothing satirical in a medal of James I., with the English Church represented under the form of the ark (at any rate, it was not a *conscious* satire); nor in a historical print of the execution of the Gunpowder Conspirators; nor in the portraits of the same offenders, with their punishments; nor in a likeness of Sir Thomas Overbury, or of John Lilburne. Certainly, it may be urged that the reader loses nothing, but the contrary, by the insertion of these works, and many others of similar character; the objection resolves itself into saying either that the title of the book has not been made sufficiently comprehensive or elastic, or else (if other volumes are to be issued, wherein designs of this sort would find their true place) that some deviousness of classification has occurred. It may be noted as remarkable, in passing, that there is not a single design—whether satirical in fact, or satirical by courtesy—directly consequent on the death of Cromwell; four or five subjects have been catalogued in which his ghost is introduced, but of these the earliest dates about eight months later than his decease.

Casual errors are inevitable in an attempt so extensive as this catalogue, and concerned with so many minutiæ. "Hugh Lopez, Earl of Tyrone" (p. 9), must be a mere inadvertent repetition of the name Lopez, correctly occurring just before. Under No. 42, "Invincible Armada and Powder Plot," the verses and some other particulars are repeated from No. 41, if not through oversight, at any rate without apparent advantage. No. 43, a similar subject, appears to be the same as No. 1223, though there is a slight difference in the note of dimensions, and the two are separated by almost the whole bulk of the volume; even if not the same, the dating of No. 1223, "1689," is contrary to the professed system of the Catalogue. Again, No. 40, "A Dutch Medal on the Convention of the Catholic Princes," seems to be the same as No. 48, "Destruction of the Spanish Armada," only taken from a different book, and the re-describing of the subject was needless. In the first instance, the motto is given as "Veni, vidi, vive;" in the second, we find "vide." No. 82 is catalogued as "A Representation of Quackeries, such as those which were alleged to have been practised against Robert Devereux, third Earl of Essex, by 'Doctor Panurgus' (Simon Forman?)." In analysing this engraving at some considerable length, Mr. Stephens shows (I think, conclusively) that it has none of that direct relevancy to the affairs of the Earl of Essex which some previous enquirers have ascribed to it; but Mr. Stephens himself does not appear to go far enough in the contrary direction. There is in reality nothing to suggest that the engraving refers to a medical quack, or actual medical quackeries, in any way. What it shows is "Dr. Panurgus" curing certain mental or moral (not physical) disorders by immaterial remedies: for instance, he cures "proud humours, sly deceits," with "religion, truth, plain-dealing honesty," and his canisters are labelled "modesty, industry, experience," &c. Thus we have before us a moral allegory, and nothing else. Dr. Panurgus ("All-worker") may be understood to symbolize active life, the energetic performance of duties, or indeed moral rectitude and mental discipline of whatsoever kind; and the cures which he works are genuine reforms in the spiritual condition of the patients. In the elaborate exposition which Mr. Stephens gives of Vanderpill's (or R. Stoop's) print, "Magna Britannia Divisa," he refers to the figure described on the print itself as "the English-Italionated lady [saying], 'dimittite nobis debita nostra,' pardon our debts." Mr. Stephens explains that this personage is "Alathea Talbot, Countess of Arundel, whose

speech, 'pardon our debts,' may refer to what Clarendon said of her husband, that his estate, great as it was, did not suffice for the expenses of his æsthetic and other tastes." It is conceivable that some such secondary allusion may be implied in this phrase, as assigned to the Countess of Arundel—at any rate, the suggestion shows Mr. Stephens's ingenuity; but the possible secondary allusion seems to have blinded him to the manifest primary allusion. The phrase is simply the same which we are continually repeating in the Lord's Prayer, "forgive us our trespasses," or, as given in Matthew's Gospel, "forgive us our debts." Further on, in the description of this same print, occur the words, "the French King Louis XIV." which should be "Louis XIII.;" the designer's name, "Cook," to No. 625 (one of the sets from *Hudibras*), ought, no doubt, to be "Clark." The name of Sir Edmundbury Godfrey is always written "Edmund Berry," when the cataloguer acts on his own option; why so is not apparent, for "Edmundbury" is plainly the same name as that of the town in Suffolk otherwise called "Bury St. Edmund's."

It is easy to spy out oversights of this sort, but to avoid them entirely, in such an undertaking, is (as already intimated) not given to man. The inadvertences that I have observed in the book are in fact few, and of no grave importance, and, even were they far more numerous, they would not alter the estimate of the work to which its acute and industrious author is entitled—namely, that it is most useful for study, excellent for reference, and often capital reading, if merely for amusement's sake.

W. M. Rossetti.

A Low-German Æsop. [*Ein Niederdeutscher Aesopus.* Herausgegeben von Hoffmann von Fallersleben.] Berlin: 1870.

A fifteenth century MS. in the Wolfenbüttel library contains a collection of 125 rhymed fables and tales belonging to the 14th century. Out of these the learned veteran of Low-German philology has selected and published twenty of the most attractive in manner, some of which are also new in substance, though not always to the degree which their publisher seems to assume. Thus No. 2, "Der Axtstielsucher," is as old as Esop, ed. Kor. No. 179; see also Heinrich Kurz on Burkhard Waldis, i. 39. For No. 7, "Hahn und Fuchs," cf. Aesop, Kor. 94; Waldis, iv. 87; Benfey's *Pantschatantra*, i. 310, and for a Hottentot equivalent, Bleek's *Reynard the Fox*, No. 12. On No. 9, "Wolf und Rabe," see Marie de France, "Le Corbeau et le Renard," and Waldis, i. 65. For No. 13, "Der Wolf als A-B-C-Schütz," see *Thousand and One Nights*, "The Wise Heykar" (Night 563, xiii. 108, Breslau). For No. 16, "Der kranke Löwe," see Aesop, Kor. 72; Bleek, No. 10. With No. 17, "Der Maulesel auf Freiersfüssen," compare *Pantschatantra*, iii. 12, and also Benfey, vol. i. § 158. No. 19, "Frauenlist," belongs to a widely spread cycle of tales, for which see Bocc. *Decam.* vii. 9, Dunlop on the same subject, and my note 319 on the latter. Finally, No. 20, "Der Hofbauer als Hofarzt," is Molière's "Médecin malgré lui," the substance of which is borrowed from the Fabliau, "Le Médecin de Brai;" cf. Benfey, *Pantschat.* i. § 212.

Amongst the most remarkable of the fables containing new matter is No. 4, "Die Käfer- und Wolfsfehde," which may very possibly owe its invention to the Middle Ages. The language of the collection is originally Low-German, but mixed with other German dialects by transcribers, as the editor points out in the instructive linguistic explanations with which he has accompanied the text. In addition to these, I should notice one or two words. In No. 2, v. 4, *helve* (Axtstiel) is the English "helve" or "haft;" No. 3, v. 22, *lêr*, Old-Dutch *lier*, "cheek," is found, not indeed in Old-German, but in Old-Norse *hlŷr;* and, finally, No. 4, v. 77, *grevink*, "badger," Danish *greving*, is also connected with the English "gray," which is synonymous of "badger."

Felix Liebrecht.

History of a Town. Edited by M. E. Saltykoff. [*Istoriya odnogo-goroda.*] St. Petersburg: 1870.

This is a book which in spite of its eccentricity, an eccentricity even running somewhat into caricature, will not only be read with pleasure by lovers of humour and of satirical *verve*, but will doubtless be taken into consideration by the future historian of the changes through which the face of Russian society has passed during the last hundred years. Its author, who usually writes under the name of Stchedrine, but whose real name is Saltykoff (a descendant, by the way, of the ancient family of Moscow Boyars of that name), after having, like many other writers suspected of propagating liberal opinions, undergone his time of persecution and of exile under the Emperor Nicholas, acquired a great deal of popularity by the publication, some fifteen years ago, of a series of sketches called *Scenes of Provincial Life* (*Gubernskie Ocherki*), in which he lashed with indomitable vigour the numerous abuses then current under the name of Government and Justice.

Saltykoff's manner as a satirist somewhat resembles that of Juvenal. His laughter is bitter and strident, his raillery not unfrequently insulting. But, as we have already said, his violence often assumes the form of caricature. Now there are two kinds of caricature: that which exaggerates the truth, as with a magnifying glass, but which never entirely alters its nature, and that which more or less consciously deviates from the natural truth and proportion of fact. Saltykoff indulges in the first kind only, the only admissible one. It is the natural consequence of his character: kind and sensitive at bottom, but superficially rude. At the same time he is very delicate in his perceptions, which have something of instinct and divination about them. He has read much, and above all he has seen much. In fact he knows his own country better than any man living. The *History of a Town*—which is in reality a sort of satirical history of Russian society during the second half of the past and the beginning of the present century, under the form of a burlesque description of the town of Glupoff, and of the governors who successively ruled over it from 1762 to 1826—could not well be translated in its entirety, nor do I think that it could be understood or appreciated by a Western public. The "taste of the soil" is too perceptible, and the language too often runs into slang. Frequently too the author allows his fancy to run away with him in a manner quite preposterous. In the series of typical Governors of Glupoff (Dullborough), for instance, there is one who has for his head a *pâté de foie gras*, which is eventually devoured by the "Marshal of the Nobility," a great *gourmand* and lover of truffles. Such absurdities as these, very possibly, have been introduced on purpose, in order to discomfit the over-attentive or official reader.

There is something of Swift in Saltykoff; that serious and grim comedy, that realism—prosaic in its lucidity amidst the wildest play of fancy—and, above all, that constant good sense—I may even say that moderation—kept up in spite of so much violence and exaggeration of form. I have seen audiences thrown into convulsions of laughter by the recital of some of Saltykoff's sketches. There was something almost terrible in that laughter, the public, even while laughing, feeling itself under the lash. I repeat that the *History of a Town* could not be translated as it stands,

but I think that a selection might be made out of the different forms of its Governors which pass before the reader's eyes, sufficient to give an idea to foreigners of the interest excited in Russia by a strange and striking book—one which, under a form necessarily allegorical, offers a picture of Russian history which is, alas! too true. More particularly I would call attention to the sketch of the Governor Ugrium-Burcheeff, in whose face every one has recognised the sinister and repulsive features of Arakcheeff, the all-powerful favourite of Alexander I. during the last years of his reign.

Ivan Tourguèneff.

LITERARY NOTES.

Professor Wilson, in his *Life of Chatterton*, contrary to all other writers, makes bold to assert that Horace Walpole *never received* the letters on painters and painting which Chatterton, in his letter to Mr. Stephens, declares that he *sent*. All the proof he can show is Walpole's own assertion, which may be set against Chatterton's assertion, and so allow further evidence to prevail. Now Chatterton's first letter is very remarkable, because it alone, of all his productions, contains a great many Anglo-Saxon words, all of which he supposes Rowley to use, and all of which he carefully explains. The question as to whether Walpole received this is settled by his *own words*, in the first letter which he wrote to Chatterton. He says:—"I have not the happiness of understanding the Saxon language, and without your learned notes should not have been able to comprehend Rowley's text." When Walpole afterwards ventured on a denial, he quite forgot how much he had already admitted. There is absolutely *no* other writing of Chatterton's to which the expressions he then used can apply. This settles the question as far as the *first* letter is concerned. It may be added that it is duly addressed, has evidently been sealed, and bears what I suppose to be post-marks.

That Walpole received the *second* letter is extremely probable from his objecting to the word *glum*, which occurs in the poem on "Warre" in the second letter. Professor Wilson assumes that Chatterton merely sent the piece called "Nigelle" *instead* of the second letter. But it may have been sent *after* it, along with "Elinoure and Juga," which was certainly enclosed in the *third* letter. Walpole convicts himself as regards the first letter, and therefore there is no reason to believe him as to the second, especially as, by remarking upon *glum*, he partly admits it. The mutilation of the second letter (never yet accounted for) I attribute to Walpole. It was done in order to cut out the last eight lines of the first stanza. These lines are now found scribbled on the back of the *first* letter. It would be interesting to know if they are in Walpole's writing. They are certainly not in Chatterton's.

Walter W. Skeat.

Miss Rossetti (Maria F.) has recently completed a work entitled *A Shadow of Dante; being an Essay towards studying himself, his World, and Pilgrimage.* The title indicates the general character of the book, which might be described as an account of the *Divina Commedia*, according to the author's constructive plan of thought and of cosmology, and with a special aim to qualify readers, as yet unacquainted with the poem, to enter upon the perusal and study of it. Many translated extracts from the *Commedia* are introduced.

Mr. J. Payne has a little book called *Intaglios* almost ready. It is a collection of about eighty sonnets, all (with a very few exceptions) contemporary with the poems in *The Masque of Shadows, &c.* (see *Academy*, No. 17), *i.e.* written mainly in 1868 and 1869. He purposes, in the autumn of this year, to publish a volume of Ballads and Lyrics, completing *The House of Dreams*, and has also in progress a volume of Romances in verse.

A project is entertained in Dublin, of starting a middle-class magazine, to meet the requirements of the ordinary reading public there. It is proposed to be a shilling magazine, published monthly. The prospectus has not yet been issued, nor has the title transpired; but an announcement on the subject will probably appear in the course of a few days. The name of Mr. Martin Haverty is mentioned in connection with the editorship of the magazine. Notwithstanding the influence of his name in Irish literary circles, however, the success of a magazine of the character contemplated is more than doubtful at present.

The island of Sicily seems to be very fairly supplied with newspapers. Not fewer than a hundred journals, daily, weekly, fortnightly, and monthly, are published in Sicily, thirty-eight in Palermo itself, thirteen in Messina, seven or eight in Catania, five in Syracuse, a large portion of them more or less scientific or literary. In Palermo alone, omitting the commercial periodicals, there are five journals for medicine, two for literature, one for architecture, two for art, and one for jurisprudence.

The *Augsburg Gazette* for Feb. 11 contains a review of *Les prétendues Maîtresses de Dante*, by M. Bergmann of Strasburg, in which the writer strives to dissipate the imputations which have rested on Dante's character since Boccaccio's time, who in his gossiping and untrustworthy life of the great poet describes him as throughout his life inclined to sexual indulgence. M. Bergmann lays great stress on the improbability of one so profoundly versed in metaphysical and theological speculations being given up to a passion so destructive to abstract thought, and then proceeds to examine the stories relating to his amours, and shows that they are legendary, and that in some instances the names of his supposed mistresses are fictitious, and derived from misunderstandings of passages in his works. He considers the *donna gentile* of the *Vita Nuova* to have been none other than his wife Gemma Donati, and discredits the stories of the unhappiness of his married life. In this last point, we may observe, he is supported by Dante's latest biographer, M. Scartazzini (*Dante Alighieri, seine Zeit, sein Leben und seine Werke*, Biel. 1869), who, however, considers that the poet passed through a period of moral aberration subsequently to Beatrice's death. The reviewer regards M. Bergmann as having proved his point, and thereby rendered a service to literature by clearing the character of one who in his writings is one of the chastest of men.

A new magazine has always to find an excuse for existing besides the reason that it contains good articles. The *Dark Blue* finds this excuse in its connection with Oxford, which otherwise can hardly be said to affect its character, though it is conspicuously proclaimed by the cover, which is prettily drawn but not pleasantly coloured. It starts with three serials, of which the Frithiof Saga, translated by Mr. Morris, is decidedly the most inviting. The story is interesting both in itself and for its curious parallelisms with other mythical legends. The scene of Mr. Freund's romance is laid in Torgau, and its subject, the conflict between militarism and liberalism, has the merit of *àpropos*. Mr. Lang's paper on Théophile Gautier is delightfully lucid and adequate. Mr. Hughes' recollections of Harvard are fresh and picturesque. The rest of the number is up to the magazine average, and Mr. Gilbert's quaint little story is rather above it.

Mr. Browning's poem, "Hervé Riel," in the March number of the *Cornhill* is perhaps less striking than its subject. The story how a common Breton sailor saved Damfreville's squadron after La Hogue is told with picturesque and breathless energy, and the paradoxical modesty which was taken at its word receives its full effect. But as the character was too simple for analysis, Mr. Browning's special power hardly finds a field. Perhaps the most curious thing about the poem is the reflection it suggests, that the picturesque of Mr. Longfellow when he lays aside his sentiment approximates to the picturesque of Mr. Browning when he lays aside his subtlety.

Art and Archæology.

REMAINS OF CHRISTIAN ART AT NAPLES.

The history of the Neapolitan kingdom is so intimately blended with that of the Popes that we can scarcely separate one from the other, at least during several centuries. The Anjou princes, invited by Urban IV. and Clement IV. to assume the crown of the "Two Sicilies," crushed out and succeeded to the Hohen-

staufen dynasty, 1266-8. Till the time of King Robert, styled "The Wise" (1309-43), those foreign rulers won little affection or loyalty from their Italian subjects. King Robert, the grandson of Charles I., was pious, munificent, and, for his time, learned, being the friend and enthusiastic admirer of Petrarch. To those Anjou princes, between the latter years of the 13th and middle of the next century, is due the introduction of the French Gothic architecture, and of much that tended to refine taste and promote artistic movement at Naples. The churches which still rank conspicuous were mostly founded by them; and their monuments are still the most interesting objects within those sacred buildings. We may particularise the cathedral, commenced from the designs of Masuccio I., under Charles I., in 1272; S. Lorenzo, founded by the same king to commemorate his victory over Manfred at Benevento, 1266; S. Domenico, founded by Charles II., 1285, and designed by the same Masuccio; also S. Chiara, the church of royal sepulture, founded by King Robert, 1310, with the architecture of the second Masuccio. The long reign of the beautiful and unfortunate Joanna I., grand-daughter of Robert (1343-82), and the short one of her successor, who caused her to be assassinated, Charles of Durazzo—himself cut off by violent death, 1386—left little in the artistic or monumental range except the Gothic church of S. Giovanni Carbonaro, the "Incoronata," or *capella regis*, of King Robert, amplified into a church to commemorate the second marriage of Joanna, celebrated within its walls; and also several sculptured tombs of royal personages in different churches. The stormy period of King Ladislaus (1386-1414), son of the Durazzo Charles, is brought to mind only by the anomalous and complex, but magnificent, monument raised to him in the above-named S. Giovanni (a church which he restored or rebuilt in 1400), by his sister and successor, Joanna II. Besides this masterpiece of its artist, Andrea Ciccione, there is little else to remind us of that licentious queen except some examples of the florid Gothic carried to its richest development at Naples in the 15th century: for instance, the portal of a small church adjoining a larger one, both dedicated to S. John, the work of the architect Antonio Baboccio, 1415; the same who designed the superb portal of the "Duomo" for the façade renewed in 1407. Also—a tragic record of Joanna's reign—the monument at S. Giovanni Carbonaro of her long-potent favourite, the Grand Seneschal Sergianni Caracciolo, who was assassinated 1432; this tomb being also by Ciccione, who represents the murdered man in a statue standing erect with a dagger in his hand.

Alfonso of Aragon, the successor of Joanna II., completed the sternly picturesque Castel Nuovo, begun by Charles I. in 1283. After his death (1458) was raised to his memory (1470) the triumphal arch unsuitably wedged in between two huge towers of that fortress; and, though as ill-placed as possible, a striking example of the Renaissance architecture and sculpture of this century. Vasari ascribes it to Guiliano da Majano; others, to Pietro di Martino, a Milanese; but the elaborate reliefs are by four other artists—one of them, Andrea Fiorentino, a pupil of Donatello. After the overthrow of the Aragonese dynasty in the person of the ill-used Frederick II. (1501) came the period of the Spanish Viceroys, marked, in the monumental sphere, by the worst possible taste and almost every outrage against just principles of art. The Aragonese period had been illustrated by the brightest stars of the Neapolitan school: in sculpture, Andrea Ciccione and Giovanni Morliano da Nola (1478-1559); in painting, Agnolo Franco (ob. 1445), Nicola del Fiore (1444), and Antonio Solario, called *lo Zingaro* (1455). Even the Spanish government, otherwise so prejudicial and discredited, saw contemporaneous energies in this local school, attested by the finest works of that sculptor known as "Giovanni da Nola," also by the paintings of Andrea Sabbatini, a pupil of Raffaello, and only to be appreciated at Naples; and in the 17th century by those of Corenzio, Ribera, Stanzione (called the Guido of this city), and Salvator Rosa. The vandalism of Spanish officials, dealing with mediæval art-monuments, was on a par with the frightful vulgarity of the works they ordered. One of them caused the frescoes by Giotto in S. Chiara—Scriptural subjects, and several from the Apocalypse treated, it is said, according to suggestions of Dante—to be covered with whitewash, because they made that church-interior look gloomy! A faded group of the Pietà, and a Madonna head, over an altar, alone remain visible on these walls; and it would be well if means were taken to rescue the other paintings, still probably extant, however damaged, of the same valuable series. In the same church the splendid monument of King Robert, designed, while he yet lived, by Masuccio II., but not finished till 1350, is almost concealed behind the barocco ornaments of a high altar set up in the last century; and it is only by ascending a scaffold that one can obtain any idea of the character or elaboration of this extraordinary work. In a hall once belonging to the S. Chiara Convent, but now used as a furniture-shop, is the admirable fresco, ascribed to Giotto, of the Saviour in glory amidst saints, with another saintly group below, and baskets of loaves in the foreground—probably a mystic representation of the almsgiving of the Franciscan Order (to whom this convent still belongs), as pre-figured by the miracle of loaves and fishes. Messrs. Crowe and Cavalcaselle were, I believe, the first writers to make known the existence of this long-forgotten picture. In order to see it, I had to climb up a ladder to a rickety scaffold, and beg the good man of the shop to sweep away ever so much piled-up furniture for my benefit. S. Lorenzo, built from the Gothic designs of Maglione, a pupil of Nicola Pisano, has been wretchedly modernised. Its finest feature still preserved, one rarely seen in Italian church-architecture, is a *chevet* consisting of seven chapels concentrically disposed beyond the tribunes, five of which chapels are cut off by partition-walls, left almost ruinous, and so dark that their contents can scarcely be seen, while one is encumbered with the mutilated statues of warriors, thrown on the floor from their outraged monuments! I cannot say much for another modernisation, intended to be in harmony with the original Gothic, at S. Domenico, a church of imposing aspect, and most rich in monumental sculptures of the 14th and 15th centuries. It was redecorated, in almost every part, 1850-3, and with a profusion of colour and gilding detrimental, I thought, to the severe majesty of the prevailing style of this church.

There are a few remains of primitive Christian art at Naples; none at present in satisfactory conditions. The circular baptistery adjoining S. Restituta (itself a separate basilica, now entered from the cathedral, but much more ancient than that Anjou edifice) has a dome covered with mosaics, feebly restored in painting; some figures of saints in white robes, offering crowns, reminding of the Roman and Ravenna's mosaic works; others apparently much later—perhaps 12th century. All are faded; the building, no longer used, being left in woeful disorder and squalor. An inscription under its dome informs us that this baptistery was founded by Constantine, A.D. 343, and consecrated by S. Sylvester. That emperor died A.D. 337! It is possible that the origin may have been coeval with that of the ancient Neapolitan "Duomo," called from its founder *Stephania*, which was rebuilt on a larger scale in 790, after it had been burnt down on the night of Easter.

The catacombs of San Gennaro have not been explored to their full extent, nor for many years worked with a view to discovery. They are said to have been re-opened in the 11th century (?), after being long forgotten, being entered from an oratory in which the body of S. Januarius was laid in the 3rd century. That primitive chapel, excavated in the volcanic tufa, is still accessible, and retains its ancient altar (hidden within a modern one), besides the saint's episcopal chair, also cut out of the solid tufa. There are three stories of corridors; the lowest being filled with soil and bones, those of victims of the plague which visited Naples 1656. On the highest story we enter a spacious church, with square pilasters and flattened roof, all alike excavated. Few paintings are seen in any part of these hypogees to which the visitor is guided: the most remarkable being a figure of the Saviour blessing (of youthful aspect, but not like the earliest type), the Madonna, a veiled matron, on the archivolt above, and the heads alone of SS. Peter and Paul, whose figures are lost. After reading the report by the Cav. di Rossi of these catacombs, one is disappointed with their realitiess; and I could recognise no indication of antiquity higher than the 7th or 8th century. The inscriptions, which are all Christian, have been placed in the epigraphic collection at the National Museum.

The suppression of monasteries has led to the closing or secularising of several churches at Naples, and to the transfer of art-works from their walls to that great Museum, where they can be seen to more advantage. S. Martino, the gorgeous

Carthusian church, on the high terrace immediately overlooked by the S. Elmo fortress, is placed on the footing of a public gallery, open eight hours daily, but no longer appropriated to any religious uses. A soldier conducts us through its mosaic-inlaid chapels and stately cloisters; and the seven monks, residue of the Carthusian community, who still reside here, are banished to a wing on the premises; their worship being held in a private oratory. The immense monastery of S. Severino, suppressed by the French in 1797, and during some years anterior to 1860 inhabited only by eight or nine Benedictine monks—the chief part of the premises converted into a marine college—is now assigned to other uses, and contains the entire "Archivio" of the State (Neapolitan), a well classified collection, open to students three hours daily. In one of the spacious cloisters is the admirable fresco series by Lo Zingaro, eighteen pictures illustrating the life of S. Benedict—somewhat injured by retouching, but still a noble evidence of the imaginative power and technical skill attained by art in the 15th century. The various architectural details, in the background of these frescoes, &c., exhibit the Renaissance free from all Gothic traditions. Not one, however, of the 340 churches and chapels in Naples has recently suffered any alteration to be regretted from the æsthetic point of view—if from the devotional. The change has been in the right direction so far as affects artistic interests, and attended with less violent dislocation than might have been expected from a government which went so far as to banish all the Madonna shrines from the streets of a city whose populace are pre-eminently addicted to the cultus of images. We see in much better light, where it now hangs in the Museum, the picture formerly at S. Antonio Abbate (a small old church now closed), by Lo Zingaro, one of his masterpieces, containing, beside a sacred group, his own portrait and that of the fair wife, Antonio del Fiore's daughter, to win whom he abandoned the trade of a tinker. In the same gallery hangs the finely truthful picture by Van Eyck, painted for, and removed hither from, S. Lorenzo—"S. Jerome in his study extracting a thorn from the lion's foot." From the cloisters of that suppressed convent has been removed, to be elsewhere set up within public view (I believe in the Museum), a monument executed, in 1414, by Baboccio, one of the best examples of his imaginative power and elaborate finish. In the mediæval compartment of that Museum is seen an altar-piece presented by Joanna II. to S. Giovanni Carbonaro—in seven compartments, representing the story of the Passion and Resurrection, with numerous figures, in alabaster alto-relievo, profusely gilt, almost grotesque, and of clumsy design, but curiously displaying the phase reached by local art at the time of Ladislaus' reign.

Neapolitan art has had comparatively little influence or repute in modern ages. The different phases through which we have followed its development convey, it is true, a most noticeable moral meaning—a proof of the deteriorating influence which absolute government exercises on the general character of art. Noble simplicity and dignity vanish before the sumptuous, the elaborately splendid. Even the solemnity of Death is disturbed by the glare of courts. The effigy of the Ruler is seated at the apex, as protagonist, still surrounded with obsequious courtiers and palace pomps. In one instance the relief on the monument of Charles "the Illustrious," Duke of Calabria, and son of King Robert) even a prince who never reigned is attended by satellites who all kneel to him. The tendencies manifest in Neapolitan art increase its value from an historical point of view, and make the careful preservation and, if necessary, restoration of its remaining monuments the more desirable. A catalogue of the National Museum, in five parts, is now published; and among other recent publications of this city I may notice the new series of the *Giornale degli Scavi di Pompei;* also the *Scovorte archeologiche fatte in Italia dal '46 al '66.*

C. I. Hemans.

ADDITIONS TO THE SOUTH KENSINGTON MUSEUM.

This vast collection, now so much visited by the public, continues to grow, and during last year made a considerable number of additions, some by gift or bequest, as, for instance, the pictures left by Mr. Parsons just lately exhibited, and others by purchase. Many of these additions were necessary to fill up the continuity of specimens in certain classes of objects and kinds of decorated manufactures. Others are important in themselves as rare and excellent art. We may direct attention to the principal of these.

1. A Limoges Enamel of Christ mocked, and crowned with thorns. This is one of the most elaborate and perfect examples of French enamel. It is not large, 9½ inches by 7⅝, but of extraordinary splendour of colour, heightened with gold. The design is mainly taken from Albert Dürer, the original composition being reversed. This fact ought to be mentioned on the descriptive label attached. The original is one of the set of designs known as the "Little Passion on Copper."

2. Twenty-nine pieces of Spanish Jewellery. These are filagrees enamelled and set with precious stones, and are of various character, but principally ornaments for the ears, neck, and breast, pendants, aigrettes, and bouquets; among the rest is a bauble for a Bambino, the whole collection having belonged to the treasury of the Virgen del Pilar, Saragossa. They all belong to the same style and nearly to the same period, the 17th century and beginning of the 18th, and have been votive, presented by ladies for the most part, Doña Juana Ravasa and others, and by Louis XIII. of France. The workmanship of these objects is of the finest and most elaborate description, but the art is gaudy and vulgar to an extraordinary degree.

3. Large collection of French Faience, filling three cases in the Keramic Gallery. These are described as the "Aigoin collection," and were bought from that family in Spain. One case is filled with the manufacture of Nevers; an imitative fabrique, some specimens resembling Dutch, others Chinese, and many having a great similarity to Limoges enamels, being white or yellow flowers and ornaments painted on a dark blue, *Bleu-de-Perse*, ground. The other cases contain principally Rouen ware, a ware of a cold white ground, and rich but not very good ornamentation, mostly in blue, but also in other colours. The clay is of a light brown, but the cold white glaze very thick. They belong to the time of Louis XIV. and XV. Among these Rouen examples there are, however, a number in very good style and of fine execution.

In the neighbourhood of these cases is also one containing (with other things) about twenty Spanish (Rambla) terracotta light clay vessels; biberons, pilgrim's bottles, jugs, &c., sent and presented by Mr. Layard since his residence in Spain. These are very correct in shape, but remarkably bad in the ornament, which is stuck on like the decorations on confectioners' bride-cakes.

4. A collection of fifty-one pieces of Italo-Greek terracottas, consisting of vases, &c. This is perhaps the most interesting of all the additions, and fills two cases in the Keramic Gallery. Certainly as art these are utterly beyond all the others. Among them two series (at least they are now arranged in two circles) of hunting figures, mounted and running on foot, with dogs pursuing deer and other animals, lovely and full of life, giving a wonderful impression of the powers of design so widely spread among the Greek colonists, that casual provincial decorations should be found so perfect. These figures came from a tomb near Canosa, South Italy, and are presumably about B.C. 200. The nude portions of these models have been painted flesh colour, and the deer have been painted brown, but the draperies, horses, and other parts seem to have been left white. The hair of the men has not been painted except by flesh-colour. There is also a fine vase of the Ascos kind, of great beauty, found in the same tomb.

5. Italian chimney-piece of inlaid marble. The ornament consists of thin bright scrolls and grotesques on a white Carrara ground. The chimney-piece rises in a pedimental shape to a termination fitted for a statue or group.

6. A priest's vestments, viz. chasuble, stole, maniple, and corporal, made of scarlet silk covered with lace. The excellence of the design of the lace makes this set of vestments worthy of notice. It is probably Spanish, and, if so, is the best of Spanish work we have noticed.

7. A Dutch clock of the late 17th century. This is a very ornate and at the same time noble specimen of the jeweller's art. It is made of gilt metal, decorated with silver repoussé, pierced and filagree work, and is inscribed "Brechtel fecit, Hagae." The entire object is not large, the extreme height being 3 ft. 1 in. Round the base are twelve plaques representing the Seasons, excellent small relievos, and above them a splayed moulding covered with festoons. The body of the clock is recessed by four arches supported by Corinthian filagree columns. Within these arches are the dials. On the top are eight statuettes of

Olympian gods, and a cupola, which these surround, rises considerably higher, decorated with the signs of the Zodiac very worthily done. The termination of all is a figure of time. This superb specimen of Dutch silversmith's art cost 1200*l.*

We shall record other additions from time to time.

W. B. Scott.

ART NOTES.

A correspondent reminds us that the death of Cornelius (see *Academy*, No. 18) took place on March 7, 1867. He was born at Düsseldorf in 1784, and was consequently at the time of his death in his 84th year.

A recent discovery of coins at Priene is of peculiar archæological importance. The site of the temple of Athene Polias in that city yielded to the explorations of the Dilettanti Society two years ago many valuable fragments, which are now in the British Museum. Among these is a valuable collection of inscriptions, one of which proves the temple to have been originally dedicated by Alexander the Great; and some fragments of architecture and sculpture, the style of which, following closely that of the mausoleum sculptures, appears to tally well with the date thus indicated. The pedestal of the colossal statue of the goddess had also been found intact, with a fragment of a hand, and two feet of smaller scale and peculiarly exquisite workmanship, showing that the temple had contained two colossi, one of about twenty-four and the other of about twelve feet high, either of which might have been that for which the pedestal was designed. In the course of last spring the exposed pavement and pedestal were broken to pieces; and under the lowest course of the pedestal were found five silver tetradrachm coins, bearing the stamp and effigy of Orophernes, and on the reverse a Victory. This can be no other than Orophernes II. (Nitrephoros), the supposititious son of Antiochis, and elder brother of Ariarethes, who with the help of Demetrius supplanted the latter as king of Cappadocia, B.C. 157, and who is recorded to have deposited with the citizens of Priene a sum of four hundred talents. It would seem that the coins found under the pedestal must have been placed there when it was constructed, and thus point to a date, for it and its statue, some hundred and seventy years later than that of the first dedication of the temple.* One of these coins was presented to the British Museum, and another to the Dilettanti Society, by their discoverer, Mr. Clark, a gentleman who resides in Asia Minor, near Priene.

Previous to the outbreak of the war between France and Germany the Prussian and Bavarian governments were involved in litigation on the subject of the ownership of certain pictures; the former claiming to have restored to them certain portions of the Munich Gallery which they affirmed had been unrighteously acquired from the old Düsseldorf Collection; the latter disputing the validity of the Prussian demands. The settlement of this dispute is due to the withdrawal of Prussia from the contest, the authorities at Berlin, no doubt, considering it unseemly to proceed any further in the matter after Bavaria had joined its fortunes to those of the rest of the German Federation.

It has been stated on semi-official authority that a claim will be made on the part of Prussia to some of the pictures belonging to the old electorate of Cassel, and still preserved in the national collections of France.

The gallery of Prince Esterhazy, which for many years was on view at Vienna, and more recently had been transferred to the Hungarian capital, has been bought for the Hungarian nation for 1,300,000 florins, and will remain at Pesth. It comprises pictures, prints, and original drawings, and would, but for the war, have been brought to the hammer in Paris.

Moritz von Schwind, a favourite painter of the Munich school, died at Munich on the 9th of February. He was born at Vienna in 1804, and had just entered on his 68th year. The Germans, who have a natural fondness for the display of legends of the knightly times, were very fond of Moritz von Schwind's works. The poetical combination of heroic and fairy lore in the "Seven Ravens" at Weimar were much to the taste of the public which the painter had to consult. Other noteworthy frescoes by the same hand are those illustrating the history of Elisabeth of Thuringia, and the local traditions of the old castle of the Wartburg, near Eisenach.

A portrait of Mr. Clabburn of Norwich, painted by Mr. Sandys, has been on view at Messrs. Graves's, Pall Mall East. It is life-sized three-quarters length, and presents the subject standing bareheaded in the open air, with a rich background of foliage and distance. The work is remarkably fine, both in point of view and in technical attainment, and presents in some respects an interesting analogy to the quality of old portrait-painting, as it was practised in the sixteenth century, combined with the style in which Mr. Sandys is individually eminent.

The *Pall Mall Gazette* gives the following list of pictures bought by the National Gallery during last year, from the report of the director:—A picture by David Teniers of "An Old Woman peeling a Pear;" "Saint Peter Martyr," the portrait of a Dominican monk, by Giovanni Bellini, imported from Milan; "The Procession to Calvary," by Boccaccio Boccaccino, imported from Milan; "The Madonna and Infant Christ, the Youthful Baptist, and Angels," an unfinished picture, ascribed to Michelangelo; an altar-piece by Giambattista Cima da Conegliano, representing "The Incredulity of St. Thomas."

A French correspondent of the *Pall Mall Gazette* gives a list of the statues inside the Cathedral of St. Denis which have been injured by carelessness, bombardment, or pillage. The most curious accident is certainly that which happened to St. Denis. The statue of the good saint, who is popularly supposed to have crossed a river with his head under his arm, was decapitated by a shell. The statue of Catherine de Medicis has two fingers cut off and stolen, and a gash from a sabre on her hands. Henry II. has lost not only two fingers, but the big toe of his right foot; Charles VI. his right hand; Duguesclin the hilt of his dagger; Charles V. both hands and his sceptre; Charles Martel a finger; Pepin le Bref has had his sceptre broken; and Louis XVI., besides receiving a cut across the nose, has been deprived of both his thumbs.

The *Preussische Jahrbücher* for February contains a very interesting article by Conze on "ancient sepulchral monuments." Its chief point is to describe critically the rows of monuments existing at Athens in a nearly intact state, on either side of a street of the ancient city first discovered in 1861, and since gradually excavated. This street is situated south of the church of the Agia Triada, near the ancient Dipylon or gate upon the road to the Academian olive-groves. The author speaks of the monuments as belonging to various periods, some to the very finest, and as affording in their decorations a further proof of the universality of the practice of combining relief-sculpture with painting.

An article in the *Augsburg Gazette* of February 13 gives some valuable but still insufficient particulars in reference to the famous Madonna del Popolo (otherwise called di Loreto) of Raphael. Of this picture there exist something like twenty repetitions, among which the sole original is now conclusively declared to be the panel in the possession of Oberstlieutenant Pfau, at the castle of Kyburg, near Winterthur, in the Swiss Tyrol. This appears to have passed, in a manner leaving ample scope for conjecture, out of the possession of the Cardinal Sfondrato (ob. 1618) into that of the Ferrari family which settled at Innspruck in the suite of Claudia dei Medici, the wife of Leopold, Count of Tyrol, about 1626. It had suffered various ill-usage; and after a careful restoration by Herr Eigner, was exhibited publicly at Augsburg, and authoritatively pronounced original by Dr. Waagen in 1867.

In the *Kölnische Zeitung* for February 10, and again in the supplement to the *Zeitschrift für bildende Kunst* for

* It is worthy of note that the name of this king, as it appears on these coins, is Orophernes, not Olophernes, as it is written in the received texts of ancient authors.

February 17, is published a protest or explanation on the part of the Berlin Society of Artists, in reference to the second part of an instruction addressed to that body by the notorious von Mühler, Minister of Education in Prussia. Shocked at observing sacred and profane subjects hung side by side in last year's exhibition — a picture of Venus next a picture of the Virgin, and a Christ next a Callisto — the minister solemnly warns the society to avoid such improprieties in future; speaks at length about the paramount importance of the "moral purport" of a picture, its "admissibility before the forum of public morality;" and enacts that "paintings which, without deeper spiritual import, have their value essentially in nothing but the treatment of naked flesh, so far as they find acceptance at all, shall certainly not be placed just in a position of marked prominence, and shall least of all be brought in immediate contact with pictures which inspire to serious and sacred contemplation." The protest of the society against this absurdity is made with spirit and dignity. They maintain that the exhibition is precisely the place where no other interests but those of art are to be considered, adding that "whoever visits the rooms for any other purpose, be it sacred or profane, has no one but himself to blame if he finds himself dissatisfied." They point out the peculiar view of art according to which the chance juxtaposition of pictures would imply artistic liberty, and appeal to the traditions of Frederick William IV., "a prince who was both religious and artistic, but yet knew how to keep the interests of art and religion separate to the benefit of both."

The series of papers by F. W. Unger on "the German cathedral-architects of Prague and Milan" is concluded in the last number of the *Zeitschrift für bildende Kunst*. The supplement to the same periodical has a long obituary notice of Professor Feodor Diez, court painter in the Grand Duchy of Baden, who died (in his 58th year) of heart disease on his way home from Gray. He had accompanied the army as a volunteer in the ambulance service.

The arduous and most important charge of purchasing for the national collection of pictures is vacant through the resignation of Mr. Boxall, who, it is understood, is about to be knighted.

The *Corriere dell' Umbria* of the 9th announces the recovery of the small picture by Raphael which had been stolen from the sacristy of S. Pietro at Perugia.

The bronze lions cast for the sarcophagus of Manin the Venetian patriot have been completed under the direction of the artist De Micheli.

A Spanish periodical, *Revista de Archivos, Bibliotecas y Museos*, the first number of which appeared on the 31st of last January, is to be published monthly at Madrid, with the object of supplying information respecting subjects connected with Spanish archæology and history. It is to discuss all questions relating to the administration of the archives, libraries, and museums of Spain, to announce publications, to report on the organization of these institutions, and on their acquisitions, and to insert notices and questions from correspondents. The editorial staff consists of officials connected with the national libraries and museums, so that the information thus supplied will be authentic and valuable.

The following interesting pieces of information are given :—

The work of classifying and cataloguing the national archæological museum is reported to be making good progress; and the collection will be very rich, for, in spite of the numerous robberies of works of art that have taken place in Spain, her monumental and artistic wealth is still great.

The splendid collection of ancient Peruvian pottery in the archæological museum at Madrid is now arranged and open to public inspection.

The Spanish government are in treaty for the purchase of the Greek and Roman antiquities belonging to the Marquis of Salamanca, a very fine collection of bronzes and marbles, which will be placed in the national archæological museum.

Music.

Dido and Æneas, a Dramatic Cantata, written by Nahum Tate, composed by Henry Purcell. Edited from a Collation of several MS. Scores, with Preface, and an Accompaniment for the Pianoforte, by Edward F. Rimbault. London: Metzler and Co.

This work, the earliest essay in its kind of the most celebrated of English musicians, and altogether one of the most interesting of musical monuments, had remained in manuscript from the year of its production, 1680, to 1841, when it was printed in full score by the Musical Antiquarian Society. In the last decade of its second century it is for the first time rendered generally accessible to the countryman of the composer by the present publication—one of the most valuable of the many valuable contributions to our stock of materials for a history of English music which have been made by the editor, Dr. Rimbault. Lovers, and even closer students, of music are little accustomed to qualify their judgments of musical works by considerations of the times and circumstances at and under which they have been produced. Indeed, for the most part, they know nothing about either. The epithets "ancient" and "modern," fairly well understood as applied to the other arts, convey no definite impression when they are applied to music. If Palestrina is an ancient so is Haydn—who flourished two centuries after him. But the least instructed or the least considerate amateur cannot fail to be struck by such a phenomenon—when it is fairly set before him—as an opera, not merely abounding in individual passages and even entire movements of extraordinary beauty, but constructed on principles accepted by the most recent masters—the dialogue conveyed in recitative or *aria parlante*, sustained individual emotion expressed in *aria*, and simultaneous action in concerted pieces—composed a hundred and ninety years ago, by a youth scarcely out of his teens, who by no possibility could ever have assisted at the performance of any similar work. No doubt some of the scores of Lully, in manuscript or even in print, had ere this found their way across the Channel; and it is certain that, through his pupil Pelham Humphrys, a considerable acquaintance with the then prevailing French—and therefore Italian—manner had been spread in this country. The fact nevertheless remains that no earlier or contemporary musical work by an English composer worthy for a moment to be put in comparison with *Dido and Æneas* has come down to us; and that whether for its wealth of musical idea or the judgment with which this is turned to account in the production of dramatic effect, the work remains among English operas unsurpassed, if not unequalled, except by its own author.

The libretto is by Nahum Tate, the fellow-labourer of Nicholas Brady in the "new version" of the Psalms of David—a work which, in spite of many shortcomings, has enjoyed a term of use and favour only now coming to an end. The verse of *Dido and Æneas*—after the manner of Tate—is flat, prosaic, and unsuggestive enough, with here and there a good line.

The lyric dramas of Quinault have outlived the music of Lully; some of those of Metastasio are among the masterpieces of Italian literature. Tate, as a dramatist, owes any life there may still be in him to Purcell, who, like every successful dramatic musician, has addressed himself rather to the emotion or the situation with which he has had to deal than to the form of words in which either may happen to be conveyed. As a canvass for a painter in sound, *Dido and Æneas* is not below average. On the contrary, so much of the story as is dramatically presentable is presented in an orderly and intelligible way; and the

supernatural element, if a little more Gothic than beseems the rest of the drama, is certainly none the less fitted for musical effect. Strange to say, no copy of the libretto has yet been found which indicates its division into scenes or acts. Mr. Macfarren, who edited the Musical Antiquarian Society's publication of the opera, suggested its division into three acts, and each of these again into scenes, the completeness of each of which is indicated by the construction both of the verse and the music. Of these there are seven, the first of which is preceded by an overture, begun by one of those stately *adagios*, models for which Purcell no doubt had made acquaintance with in the works of his elder contemporary Corelli as well as in the "prologues" of Lully, and completed by a short *allegro*, the contrapuntal commencement of which promises more than is performed in it. The curtain rises on "the royal palace of Carthage," and the voice of Anna, "sister of Dido," is heard in a short solo followed by a chorus, addressed to the Carthaginian queen, the character of which will be sufficiently indicated by the first line of the words, "Shake the cloud from off your brow." To this Dido replies, in a song of which the plan indicates the period of its composition, and the execution the taste and skill of its composer. It is built on a "ground bass"; that is, a certain number of bars (in this case, four) are repeated in the lowest instrumental part without intermission, from the beginning to the end of the movement—the only break in the monotony being its transposition into the key of the dominant—in all seventeen times! In spite of this restriction, apparently as incompatible with expression in the melody as with variety in the harmony, so independently does the former move, and so ingeniously is the latter varied, that the song might be, and probably has been, heard by thousands who have remained unconscious that the composer was bound by any laws more stringent than those prescribed by his own fancy. Purcell would seem to have rejoiced in these self-imposed fetters. Another song, not however of equal interest (No. 21), is constructed in the same manner; but in a third, the death song of the heroine (No. 33), he has superimposed on another "ground bass" a melody of unspeakable pathos, and a succession of harmonies richer and rarer than it might have seemed possible to compress into so short a movement, under any or no conditions. This first scene, which includes the well known duet and chorus, "Fear no danger to ensue," brought to an end, the second opens with the entry of "the Trojan guest," between whom and the heroine a colloquy ensues—only rendered supportable by the music in which it is carried on—which is happily interrupted by the animated aria, "Pursue thy conquest, Love," immediately followed by the chorus, "To the hills and the vales," one of the most popular of Purcell's concerted pieces. With the introduction of the supernatural element, the character of the music changes suddenly and entirely. The third scene takes place in "the island of Platea," where "a sorceress is discovered performing her spells." Like the witches of Shakespeare, "who should be women" but for their beards, the sorceress of Purcell is a "bass" singer. This contrivance for inspiring antipathy or terror in the auditory had been resorted to before. The "Medusa" of Lully's *Theseus* is a "tenor," whose utterance, however acute in reference to his real sex, would sound unaccountably grave in reference to the character whose mask he wore. Purcell, however, has not relied wholly or even chiefly on a contrivance which of itself would as soon cease to excite terror as surprise. He relies on the breadth and dignity of the musical phrases to which his sexless creation gives utterance, and on the recondite harmonies by which they are supported—in a word, on his invention and his learning. J. S. Bach and his more recent successors have no doubt familiarised us with many of or all the combinations and progressions which Purcell has employed as well in *Dido and Æneas* as in subsequent compositions, dramatic and other. But *Dido and Æneas* was written and performed five years before J. S. Bach first saw the light; and the career of its inventive and learned composer was brought to an end ere the great German could have mastered the first principles of harmony. Those, however, who have any acquaintance with the works of the best masters (Carissimi above all) of the seventeenth century, will know how few effects of harmony they left to the discovery of those who were to come after them; and of these Purcell, born when Carissimi was probably at least in his seventieth year, was confessedly one. His claim to be regarded as the representative of a musical epoch rests on his invention—on the originality as well as the beauty of his melody, the vigour of his harmony and the justness of his expression. Of these excellencies the work we have been considering—the analysis of even a portion of which has led me further than I had for a moment anticipated—abounds in examples. I must content myself with briefly indicating where a few of the most remarkable of these are to be found. Let the musical reader turn to the introduction to the incantation music (No. 12), of which I have already said so much; to the burst of "distant hunting music"—so cheering by its freshness of key and character—by which it is interrupted; to the song (No. 21), "Oft she visits this loved mountain" (the third of those on a "ground bass"); to the song and the chorus of hunters (No. 23) dispersed by the storm "conjured" by the witches; to the sailors' song and chorus (No. 24); to the chorus (No. 28), "Destruction our delight"; and, once again, to the wail of the dying queen (No. 33), in which pathos and majesty strive for pre-eminence, with the chorus, sweeter in its sadness, "With drooping wings" (No. 34), which ends the work.

In the edition which has suggested these observations, the orchestral parts are, for the first time, in their entirety, arranged for the pianoforte. Both notes and words are neatly and intelligibly printed; and the complete work is issued at something less than half the price of an average shop ballad.

John Hullah.

NOTES.

The Rev. H. R. Haweis has in the press a two-volume work of musical theory and criticism, being in the main a re-publication of essays which have appeared in the *Contemporary Review* and other periodicals. The work will be divided into four books —Vol. I., Book I., Philosophical; music, emotion, and morals: Book II., Biographical; Introductory, Handel, Gluck, Haydn, Schubert, Chopin, letters of Mozart and Beethoven: Vol. II., Book I., Instrumental; Violins, Pianofortes, Bells, Carillons: Book II., Critical; Professional, Amateur, and Street Music in England.

The success which has attended the revival of Cimarosa's opera *Il Matrimonio Segreto* is pleasantly significant of at least a partial reaction in favour of clearness, simplicity, and refinement in music—none the less so from the fact that its execution by the Italian Opera Buffa Company is far from being a perfect execution, musically or dramatically. Its attractiveness is due, of course, mainly to the reputation of the work itself, as a neatly constructed drama the success of which is carried on by means of tuneful and well constructed music; but the obvious delight manifested by each succeeding audience in its presentation (it has been already four times performed) is due not more to its positive than to its negative qualities; not more to the same neatness of construction than to the fact that the *libretto* does not present a single "sensational" effect; not more to the unintermittent melody, pure and vigorous harmony, and varied

character of the music than because its presentation demands only six singers, and that it is instrumented so that they can be heard; in a word, to the fact that there is *no* chorus on the stage, and that there are *no* trombones, *no cornets-à-pistons*, nor ophicleid, nor *grosse-caisse*, nor any similar instrument of torture in the orchestra. And this, at a moment when the "Albert Hall" is on the point of completion, and an enterprising Bandmaster is said to be engaged in a series of experiments with a view to the systematic reinforcement of basses by means of cannon, the pitch of whose reports, it is believed, may be regulated by the amount of charge put into them.

A good deal of misconception seems to prevail respecting the place of *Il Matrimonio Segreto* in musical history. The popular estimate of it as an "old" work is, though partially correct as to its character, quite the reverse as to its date. The opera is an anachronism, at least from a European point of view. It is a purely Italian opera, the most perfect perhaps of its class, possibly designed, and certainly *coloured*, without reference to or recognition of the prodigious changes which had been wrought in the musical drama during the very last year of his life, by Mozart. At the beginning of the year 1787 Cimarosa, already the composer of nearly seventy operas, "once immortal deemed," but which now, alas! "sleep without a name," left Italy for the court of Catherine II., where he remained till the end of 1792. During this period, of nearly six years, Mozart produced *Don Giovanni*, *Cosi fan Tutte*, *Die Zauberflöte*, and *La Clemenza di Tito*. True, *Idomeneo*, the work in which the revolution of the orchestra was initiated and all but completed by Mozart, was of much earlier date; but few contemporary composers seem to have appreciated its special importance, to the effect at least of following up the route which Mozart had opened up. Whatever effect the acquaintance which Cimarosa must have made with the last works of Mozart on his visit to Vienna in 1792, where and when *Il Matrimonio* was written and produced, may have had on his inventive and constructive powers, they had none whatever on his material. His orchestration betrays not a trace of their influence. *Il Matrimonio Segreto* could not perhaps have been *designed*, but it certainly might have been *scored*, before 1780, the year of the production of *Idomeneo*. The work of the Italian *Maestro* thus presents a curious and indeed unique example of a work of art achieved at the end of a period of unprecedented progress, which, from internal evidence, might be antedated some twelve years, and which yet still keeps the stage, at the end of seventy-eight! Long may it continue to do so; if possible with, and if not without, artists capable of doing justice to its beauties.

As has already been said, the family of Geronimo, *in esse* and *in posse*, is by no means adequately represented on the Lyceum stage. Signor Borella as the fussy, bargaining, yet still kind-hearted head of the house, is admirable, always giving spirit to the dramatic action, and accuracy as well as spirit to the music in which he takes part. Nor could a Carolina more likely to bring about the *imbroglio* of the drama than Madlle. Colombo be found among living artists. In one respect at least she stands almost alone among recent Italian importations, as being not only in possession of a beautiful instrument, but as knowing how to play upon it; as not only having musical intentions, but as being able to make them intelligible; in fact, as being a candidate for vocal fame who has really been taught to sing. To the rest of the company, whom it is needless to mention by name, the credit of the most thorough goodwill must be allotted unsparingly. They have studied their music thoroughly, and play into one another's hands with an amount of confidence and animal spirits which might make amends for more shortcomings than can be fairly attributed to them. The success of *Il Matrimonio Segreto*, like all great theatrical successes, has, it is said, astounded all the people concerned in it to such a degree indeed that Mozart's *Cosi fan Tutte* has been put into active rehearsal, and will be ready for production forthwith.

Mr. Barnett's new cantata of *Paradise and the Peri* was performed very satisfactorily for the first time in London, on February 12. The musical qualities of this charming episode from *Lalla Rookh* have already found a perfectly adequate interpreter in Schumann; and it was perhaps something more than a bold step on the part of a young English composer to attempt the feat over again. The first difficulty of the text arises from the great length of the narrative, which Schumann has overcome, sometimes by substituting for the classical recitative a sort of arioso of continued but not distinctly phrased melody, sometimes by putting the narrative in the mouth of the chorus, as in the battle-piece in the first part; and in this Mr. Barnett has followed him with but moderate success. Mr. Barnett's melodious capacities appear to advantage in the ensembles of the solo voices; but here again the hearer is perpetually reminded of Mendelssohn's part songs. The Oriental colouring again, which Schumann achieves by his rhythm, and instrumentation, and harmony, is entirely absent from the sober and tame orchestration of Mr. Barnett, which is astonishing in one who might look back upon such models as Berlioz and Liszt. Another difficulty of the text is the anticlimax by which the action proceeds from the wild turbulence of contending hosts down to the prayer of a little child. This, Schumann has dealt with by a masterly heightening of the spiritual import of the music in proportion as the action decreases; but here Mr. Barnett has signally failed. He puts the single pieces of verse to single pieces of music without much attention to the general dramatic economy and unity of the effect. Hence he does not prevent his music from flagging with the text: and a sense not altogether alien to relief comes over one when the Peri at last with a melodramatic fortissimo enters the long closed doors of heaven.

Bach's *Passionsmusik* has been again given under the direction of Mr. Barnby. Every performance of this great work is a valuable lesson both to those who play and to those who hear.

The Saturday Concerts at the Crystal Palace maintain their interest, in respect both to the music chosen for performance and the manner in which it is performed. Since the last notice of them in these columns, Haydn's Symphony in B flat, Schubert's Entr'acte music to *Rosamunde*, Schumann's Pianoforte Concerto in A minor, Spohr's Symphony, "The Consecration of Sound," and two movements from a Symphony by a young Englishman, Mr. Henry Gadsby, with other pieces of less scale though hardly of less interest, have been performed. The vocal part of these concerts too, hitherto generally so inferior to the instrumental, has of late been brought much nearer to its proper level. The singers have been Madame Lemmens-Sherrington, Mr. Sims Reeves and Santley, and a débutante, Madame Cora de Wilhorst, who seems likely to prove a valuable addition to our not too crowded list of well prepared concert-room artistes.

Dr. Helm writes in No. 9 of the *Musikalische Wochenblatt* about the Concerto for the Pianoforte in D minor by Johannes Brahms, which had just been performed in Vienna. He calls the Concerto the most original production of the composer (except his *Requiem*), and also the most genial (*geistig grösste*) work of its kind since Beethoven. Brahms himself played the pianoforte part.

New Publications.

Campori, Giuseppe. Notizie per la vita di Lodovico Ariosto tratte da documenti inediti. Modena: Vincenzi.

Chants populaires du Pays Basque. Paroles et Musique originales recueillies et publiées avec traductions françaises par J. D. J. Sallaberry (de Mauleon), Avocat. Bayonne: Imprimerie de Veuve Lamaignère, 1870.

Hanslick, Eduard. Aus dem Concertsaal. Theil 2 der Geschichte des Concertwesens in Wien. Vienna: Braumüller.

Kekulé, Reinhard. Die Gruppe des Künstlers Menelaos in Villa Ludovisi. Leipzig: Engelmann.

Miller, Joaquin. Pacific Poems. Whittingham and Wilkins.

Müller, Jos. Die musikalischen Schätze der königlichen und Universitätsbibliothek zu Königsberg in Pr. Aus dem Nachlasse Friedrich August Gottholds. Nebst Mittheilungen aus dessen musikalischen Tagebüchern. Ein Beitrag zur Geschichte und Theorie der Tonkunst. Bonn: Markus.

Wood, H. T. W. Changes in the English Language between the Publication of Wiclif's Bible and that of the Authorised Version, A.D. 1400 to A.D. 1600. Macmillan.

Science and Philosophy.

Contributions to the Theory of Natural Selection. A Series of Essays, by Alfred Russel Wallace. London: Macmillan and Co., 1870.

[Second Notice.]

The first problem to which Mr. Wallace addresses himself in the last two essays is whether the human race is to be considered as one or as several species. The question is one of those which is usually discussed rather in a dogmatic than a critical spirit, and with more passion than knowledge. Mr. Wallace succeeds in steering clear of these dangers, and in furnishing a line of argument which concedes the point to those who recognise a single origin for mankind, and which will at the same time satisfy those who, on various historical grounds, adduce the physical invariability of the existing races of man, as an argument in favour of the conviction that men were originally constituted in as many varieties or species as we now find them. The argument is shortly this:—The races of men now living, even the most savage, live in a social manner, and have more or fewer sympathetic affections. The weak, deformed, and sick, are not killed, but supported; such services for the general good are assigned them as they are competent to perform, while the strong and healthy undertake the more important duties of the protection and food-supply of the community. Thus, by one member of the community—whether tribe, nation, or race—helping the others instead of destroying them whenever opportunity offers, not only the community, but every member of it, prospers. The endless *struggle* for existence gradually ceases amongst the members of such a community; even the weaker and more imperfect of them succeed in propagating like the rest, and thus the progress towards greater perfection in mere bodily organization is either entirely checked or at least considerably retarded. On the other hand the possession of greater intelligence, by the bodily weaker, may exercise an important influence on the survival of the fittest. The physically stronger is not always distinguished by the keener mind, but frequently obtains the means for the better husbanding of his strength through the inventive capacity of a weaker but cleverer individual; the latter contrives and prepares his weapons, and provides himself also with means of protection against attack. By imitation and instruction the art of more secure aggression and of better defence quickly spreads even among the members of the community of smaller intellectual endowment: the thing learned exercises their intellectual powers, and they transmit these by inheritance to their children. It is in this manner that all progress passes over gradually from the physical to the intellectual; the body remains unchanged in outward form, whilst the mind, and those organs like the brain which are essentially concerned with its activity, alone develop.

This is, as near as may be, Wallace's argument. And if it be urged against him that the physical differences between various races of men at the present time are not inconsiderable, especially in the colour of the skin and the texture and quantity of the hair, our author refers the origin of these differences to the time when the effects of intellectual training had not so exclusively asserted themselves, and physical peculiarities were more easy of acquisition.

With this line of argument those who are disposed to dogmatise on the unity or plurality of the human species may content themselves as best they may.

We now come to the last essay, "On the Limits of Natural Selection as applied to Man." This essay has already given much occasion for criticism and rejoinder; and in a certain sense the greatest interest is concentrated on it, since it touches directly and immediately the highest problems of existence. It is divided into two sections, the first of which adduces certain facts, which, according to the author's view, exclude natural selection as the mode of explanation; while the second attempts to introduce another principle to supply its place. In a more recent reply to an attack by M. Claparède, Mr. Wallace has expressly affirmed that he rests on these facts the whole burden of proving the insufficiency of the explanation afforded by the principle of natural selection. What are these facts?

Mr. Wallace believes he has established that primeval man, at the time of his first appearance, must have possessed characters which were hurtful, or at least useless, to him, and which therefore can never have arisen according to the laws of natural selection, or at all events can never have been transmitted by descent. These characters are expressed as follows:—"The brain of the savage is larger than he needs it to be;" "Man's naked skin could not have been produced by natural selection;" "The feet and hands of man considered as difficulties on the theory of natural selection;" "The origin of some of man's mental faculties, by the preservation of useful variations, not possible." Let us examine some of these a little more closely.

Supported by the opinion "of all the most eminent modern writers" that there exists "an intimate connection" between the small size of the brain of the savage and his diminutive intellectual development, Wallace thinks it necessary to suppose that the brain of the savage has always been found too large for its intellectual functions. The apes, for instance, whose intellectual condition is not so very far behind that of the Hottentots or Papuans, have nevertheless a very much smaller volume of brain; the sudden advance is explicable merely on the supposition that man had from the beginning a large quantity of brain in order to enjoy the later requirements of civilisation. Even if we admit, however, that that proposition of "the eminent modern writers" is anything more than an unproved conjecture, Wallace's view distinctly conflicts with a proposition well known to every physiologist, and employed in a masterly manner by Darwin, on the use and disuse of organs. If the brain of the savage is not used in fact to its full capacity; *i. e.* if essential and considerable portions of it exist really without function, these portions must without doubt, according to all the laws of physiology, degenerate, and gradually disappear. This then must have been the case with the brain of prehistoric man.

Of what substance can we suppose this superfluous brain to consist? Of ganglionic cells? If so, these cannot have been different in character from modern ganglionic cells. They must have received excitations and have combined them in various ways: then have transformed them into excitations in us, as reflex actions, as volitions (how, we are for the present entirely ignorant), or have incorporated them in the form of ideas in the infinitely complex machinery which we call consciousness. Are we then to suppose these superfluous portions to belong to the cerebral connective tissues? Even that would not make them brain: indeed there is no conceivable ground explaining their presence and persistence or indeed for supposing them possible. Whichever way we turn, if we are not to fly in the face of plain physiological fact, we are compelled to regard these mainstays of Wallace's objections as untenable—not to mention the fact that elephants and whales have larger brain volume (and therefore on this theory ought to have superior capacities) than Cuvier or Napoleon.

The second point is more difficult to meet. Not that we are driven to admit that natural selection is insufficient to

account for the hairlessness of the human skin simply because such hairlessness might have been injurious, but because it is almost impossible for us to have any knowledge of the time when the gradual change took place from the hairy state of the ancestors of the present race of men to a hairless condition. But if we understand Mr. Wallace rightly, he lays great stress upon the circumstance that the back has become bare, and that it is this portion of the body which savages protect against rain. Even if it were true that "the naked and sensitive skin, by necessitating clothing and houses, would lead to the more rapid development of man's inventive and constructive faculties," how does it come to pass that that portion of the body which, according to Mr. Wallace's statement, is the best protected, the back, is the very one which, according to the most exact measurements of physiologists, is the least sensitive? And does not rain also fall as much on the breast, the legs, and the arms? Again, how does Mr. Wallace know that the *hairy* ancestors of the men now existing did not possess clothing and houses? Further, why may we not simply suppose that they gradually lost their hair because they did not any longer need it? Why, lastly, may not this be the reason which prevents the Esquimaux from again acquiring a thick coat of their own? We thus get question for question; dilemma for dilemma.

We may pass over any details respecting the hands and the feet, since Mr. Wallace himself says, "he did not attach the same importance to them as to those he had already dwelt on." But as to the human voice, Mr. Wallace will not deny that there are certain sounds of many savage languages which a singer who can render Mozart and Rossini to perfection and with the greatest ease, is nevertheless quite incapable of producing; that thus the accurate cultivation of the throat and windpipe (and the latter is of the greatest importance for the beauty of the voice) is necessary, not merely for those highest requirements of art, but also for the commonest sounds and cries of savages little elevated above the beasts. The supposition of a predisposition therefore, also becomes superfluous.

If we hold that none of the facts hitherto mentioned are sufficiently established to justify so important a step as the introduction of a new principle of explanation, we must equally object to any attempt to adduce reasons from the so-called psychical regions of human nature. Psychology is itself in far too incomplete a state to throw much light on the matter. The question how the motion of material particles can pass over into thought seems to be as far from a solution as it ever was. We must therefore concede to Mr. Wallace, and to those who think with him, the right to account for psychical and organic phenomena on other than mechanical principles, especially as he does not blink the attempt to get rid of these principles even in the explanation of the inorganic world. Criticism has merely to control the method and the cogency of the arguments: not to reject principles of explanation as such. We confess that Mr. Wallace's principles, as they are expounded in the last of his essays, admit of being methodically and consistently carried out: and shall welcome any attempt which he may make in a future edition to perfect them in these particulars. If such principles do not directly help us onwards, they at least preserve us from onesidedness.

Anton Dohrn.

The Theory of Practice. An Ethical Enquiry, in Two Books. By Shadworth H. Hodgson. 2 vols. Longmans, 1870.

This is a remarkable but unsatisfactory book: remarkable because the author shows an unusual interest in and command over metaphysical and logical forms; unsatisfactory because he attempts to compromise where compromise is impossible. In a former work, *Time and Space*, Mr. Hodgson laid down the basis upon which the *Theory of Practice* is constructed, and hence his present conclusions are limited and conditioned by the validity and sufficiency of the positions there assumed. As the writer conceives ethical theory, nay the theory of practice generally, to presuppose metaphysic, we must enquire how far his notion of metaphysic is an adequate one. Now we find that Mr. Hodgson has nothing to offer by way of a metaphysic except a theory of individual consciousness. This consciousness does not even originally include a knowledge of self, which is gained by later experience, and throughout is merely of phenomena. Each phenomenon has two elements—a formal, which is time and space; a material, which is feeling. Accordingly, all through his investigations, Mr. Hodgson has no eyes for anything except time, space, and emotions. The possibility of an ontology is expressly denied by him.

Now of course it is open to a writer to give any signification he likes to the ill-coined and ill-used word metaphysic: but if we use the word in its ordinary acceptation, as the representative in modern parlance of the ancient πρώτη φιλοσοφία, a metaphysic without an ontology is a contradiction in terms. Realism may be an impossible scheme, but an ontology in some form—idealistic or otherwise—we must have. To what branch of philosophy would Mr. Shadworth Hodgson hand over speculations as to the nature of the first cause, of God? or would he be inclined to surrender such investigations entirely to mystic theology, as we gather from his contemptuous mention of "natural religion"? (vol. i. p. 546). If so, Mr. Hodgson's system is entirely *en l'air*. It no more attains to an ἄρχη ἀνυπόθετος than Positivism itself. Its theory ultimately depends upon a consciousness of everything in general, and nothing in particular; its practice upon casual emotion. It is not in the words of its author a "metaphysical positivism," but merely a pseudo-metaphysical positivism—a positivism urged beyond the bounds of its narrow consistency into a dream-land where there is neither goal to aim at, nor fixed resting-place, nor chart of guidance.

As we might expect from the general nature of his theory, when the writer comes into the region of practice, we hear of nothing but emotions. Conscience is an emotion, justice is an emotion, and credit is actually taken for the presentation of a *definite* end for morality, in the fulfilment of the emotion of justice by the emotion of love. The criterion by which we are to regulate our action towards this end is the emotion of conscience or moral sense, and the distinctness and immediacy of this criterion is contrasted with the vaguenes of the Aristotelian maxim for conduct, ὥς ὁ ἀγαθὸς ὁρίσειε (*sic*). It is needless to remark that Aristotle's words (*Eth. Nic.* ii. 6, 15) are ὡς ἂν ὁ φρόνιμος ὁρίσειεν, and that φρόνησις—the meeting-point of the reason and the will—is Aristotle's subjective criterion of morality, a fact apparently missed by Mr. Hodgson (vol. i. p. 22). We think that to most readers, as to ourselves, "practical wisdom" will seem a better guide to and standard of action than the "emotion of moral sense."

As he has now provided us with an end and criterion, Mr. Hodgson next turns to the consideration of the "motive" of action. This is an unfortunate word to admit into a philosophical system, owing to the vagueness of its use in ordinary language, so we will see how the writer defines it. Accordingly we find it stated (vol. ii. p. 16) "that the motive is the efficient or dynamical cause, tending to the production or modification of the ultimate ideal end." Here it seems that motive is used in its mechanical sense as the efficient cause, but elsewhere we find pleasure to be the

motive; surely pleasure cannot be called the *efficient* cause of action. The fact is, neither in his use of the word "end" nor in his use of the word "motive" is Mr. Hodgson consistent, and, moreover, he never analyzes the contents of his end—the sense of moral right.

It will be evident from what we have said that we cannot accept the system set forth in the *Theory of Practice* as an adequate solution of the ethical problem, or even as a well-directed attempt towards the solution of that problem. Still the work before us is not without great merits, and the necessities of destructive criticism ought not to blind us to these. When filling up his framework by the delineation of the special emotions, Mr. Hodgson is always acute, and sometimes profound. Particularly interesting is his description of the emotion which he designates "eeriness" (vol. i. p. 160). Again, there are many passages which are almost models of neat, crisp, and terse philosophical statement, especially on the relation of logic to science (vol. ii. pp. 5, 6).

But to sum up our opinion of the merits of the book as a whole, we cannot but think that Mr. Hodgson has shown himself in it rather a fit student than a fit exponent of philosophy.

R. C. L. Dear.

Scientific Notes.

THE PARIS BALLOONS.

Forty-four authenticated balloon voyages from Paris took the directions given beneath:—

	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
In September	..	..	..	..	..	..	2	..
,, October	6	3	2	..	..	..	..	..
,, November	2	4	2	..	1	5	1	..
,, December	..	2	2	2	2	2	2	..
,, January	1	2	1	..	..	..	..	..

The whole of the October balloons seem to have moved with the south and westerly winds which prevail over Paris for 17 days in that month (the average given by 30 years' observation).

In November the same winds blow over Paris for an average of 18 days, but in this month only half of the recorded number of balloons took the direction of these winds; five moved in a completely opposite direction to south-westward. But north-east winds prevail for only two days in this month, so that either there has been an unusual amount of north-easterly wind during last November or these balloons were caught into the upper returning polar current, which may have descended lower in that month.

In December the south-west winds have still an average of 17 days, but an equal number of balloons took each direction between N.E. (round by south) to W.

From the few recorded observations of the elevation of flight the balloons appear to have risen and travelled at from 2000 to 7000 feet above the ground; their speed varied from 13 to as much as 80 miles an hour. The furthest flights were those to Norway, 840 miles at the rate of 55 miles an hour, and to the range of St. Baume, between Marseille and Brignolles, 420 miles at 28 miles an hour. This latter balloon was evidently caught by the cold current of air which falls on the Gulf of Lyons as the chilly "Mistral."

By means of the balloons besieged Paris was able to send messengers to the outer world on an average once in every two days, and the whole space within which they alighted was not less than France itself. Whether any of the attempts to convey intelligence by their means into the city were successful remains to be told.

There is no certain information of any loss of life during these months of air-navigation, and the risk attending this mode of transit is certainly not greater than that of the early days of sea-voyaging.

Botany.

Parasitic Ear-Fungi.—The *Bulletin de la Société impériale des Naturalistes de Moscou*, No. 1, for 1870 (just published), contains a paper, by Dr. Karsten, on the parasitic fungi found in the human ear, with copious illustrations. The writer confirms the statements made by Hallier and other previous observers, that when the spores of these fungi are sown elsewhere, they assume very different forms, according as the matrix on which they are sown is rich or poor in material for nutrition; and that fungi described by earlier writers as distinct species, or even as belonging to different genera, are frequently merely different forms in the genetic cycle of the same plant.

Fertilisation of Fumariaceæ.—Professor Hildebrand, of Bonn, has been continuing his important researches on the mode of fertilisation of different tribes of plants; and contributes to *Pringsheim's Jahrbuch für wissenschaftliche Botanik* for 1870 some observations on the phenomena observed in different plants belonging to the order Fumariaceæ. He finds that, except in *Hypecoum* (where the stamens are free instead of diadelphous), the pollen from the ripe anthers falls immediately on to the stigma, with which they are in close proximity; so that self-pollenizing (*Selbstbestäubung*) is inevitable, the anthers and stigma being developed at precisely the same time. This does not, however, necessarily imply self-fertilisation, as insects visiting the flowers carry off some of the pollen to other individuals. *Hypecoum* is somewhat protandrous (stamens ripening before stigma).

Bud Varieties.—Mr. Thomas Meehan read a paper before the Philadelphia Academy of Natural Sciences, on November 29, 1870, having for its object to show that varieties in plants often originate from buds, and not almost exclusively, as is generally supposed, from seeds. The instance adduced by Mr. Meehan in illustration is a new form of *Rubus*, a genus which he believes is scarcely ever produced from seed in the wild state. He also brought forward evidence of bud variation, in which there was no possibility of hybridism, in the case of the sweet potato (*Convolvulus batatas*), which never flowers in that part of the country, precluding the possibility of seminal power having had any influence on the phenomenon. The points which he specially insists upon are:—1. That identical varieties sometimes appear in localities unfavourable to the idea of a common centre of origin. 2. Varieties have originated in which probably no hybridism or any seminal agency operated. 3. Varieties have certainly originated in the sweet potato by evolution, without seminal agency; and the same variety has, in this way, appeared in widely separated districts. 4. As the discoveries of Darwin have shown varieties to be, in many cases, the parents of species, species may originate in widely separated localities by bud variation.

The countries of Southern Europe have suffered so severely from the improvident destruction of forests, the climate has so materially deteriorated from the baneful effects thereof, that any effort to supply a remedy, and to recover lost ground, must be hailed with unmixed satisfaction and approval. The publication of the *Estudios Forestales*, by D. H. Ruiz Amado (Tarragona), is a welcome sign that the Spaniards are alive to the vital importance of forest conservancy, and that the subject is likely to receive due attention in a country which has suffered as much as, if not more than, any other in Europe, from reckless felling of timber. The once forest-covered hills which bordered the rich garden of Murcia in Moorish times are now a mass of arid rocks.

Physics.

Is Electricity produced by the Living Human Body?—In the *Spiritualist* of February 15, a periodical in which one would hardly expect to find original scientific matter, are some valuable remarks by Mr. Cromwell F. Varley, the well-known electrician, on the supposed production of electricity by the living human body. He first remarks that the sparks produced, in certain cases, by combing the hair, by drawing off silk stockings, or by rubbing the feet on a carpet, are illustrations of frictional electricity, which in no way depend on vitality, but are due solely to proper conditions in the substances rubbed together and in the atmosphere. He then comments on another form of supposed bodily electrification, which has led many people to suppose that the brain was an electrical battery sending electricity through the nerves to contract the muscles, and which is produced as follows. The two terminals of a very sensitive galvanometer are connected each with a separate basin of water. If the hands be then placed one in each basin, on squeezing one hand violently a positive current is almost always found to flow from that hand, through the galvanometer, to the other hand which is not compressed. While experimenting night after night on this subject in 1854, Mr. Varley found that, after squeezing the hand, opening the clenched fist produced a momentary increase of power instead of a decrease; and when the wind was from the south-west, the power was less than one-fourth as strong as when it was from the north-east. The former wind was found to be slightly negative to the earth; the latter was invariably powerfully electro-positive. On trying to exhibit these currents on one occasion and finding them to be very

weak, Mr. Varley washed his hands thoroughly in water containing a little liquid ammonia, in order to decompose the grease in the pores of the skin. The result was a diminution instead of an increase of the power. On washing his hands, however, with very weak nitric acid, and afterwards with water, he obtained more power on squeezing his hands than he had ever done during the most persistent east wind. This led to an explanation of the phenomenon as one due to chemical action alone, the act of squeezing the hand violently forcing some perspiration out of the pores. By dipping one hand in a solution of ammonia and the other in one of nitric acid, and then washing both in water, squeezing either hand produced a current in the *same* direction; and when both hands were placed in the water and a little acid dropped on one of them, a current was instantly generated without any muscular exertion. Mr. Varley finds no evidence that electricity exists in or about the human body, either as a source of motive power or otherwise; and would explain all the feeble electricity which has been obtained from the muscles as due to different chemical conditions of the parts of the muscle itself. The nerves are bad conductors, and are not insulated. The force which is transmitted by them cannot therefore be electricity; and the fact that this force is transmitted at a rate about 200,000 times slower than an electric current, is additional proof of their non-identity. It is to be hoped that a detailed account of Mr. Varley's experiments on this interesting subject will soon be given to the scientific world.

On some Phenomena observed with the Water-hammer.—*Poggendorff's Annalen* for December contains the following communication from Professor Lommel:—By means of tinfoil coatings applied to the two ends of a water-hammer, he connects the latter with the conductors of a Holtz's electric machine; on working the machine, at every discharge, a sort of sheet lightning is seen to flash through the vacuous space above the water in the tube; the light was of a magnificent purple red colour, and, when viewed with the spectroscope, gave the three hydrogen and the sodium line. The discharge caused, however, the decomposition both of the water and of the glass, for, after a time, the vacuum in the tube was found to be destroyed, and the water to have an alkaline reaction. In tubes filled with a mixture of alcohol and water the discharge was of a light green colour, and its spectrum exhibited two red, one yellow green, one very light green, a blue, and a violet line, and is remarkably similar to that yielded by the green portion of the flame of a Bunsen's burner. Here also gas, probably a hydrocarbon, was liberated by the discharge, but the liquid was found to have a decided acid reaction, and also to contain traces of peroxyde of hydrogen. The spectrum observed in the second case presents many points of resemblance to that of lightning as observed by Kundt. The tube of a thermometer connected by means of tinfoil coatings with an induction coil or electric machine, is seen to be filled with the green light of mercury vapour when the discharge is allowed to take place if it is absolutely vacuous, but if it still contains a trace of air the light is of a reddish colour, and this is accordingly a most delicate method of testing a thermometer.

Chemistry.

The Stewart County Meteorite.—This aërolite fell at 11.30 A.M., on the 6th October, 1869, about 12 miles south of west from Lumpkin, in Stewart County, Georgia. An account of its descent is given by Prof. J. E. Willet, of Mercer University (*American Journal of Science*, November, 1870, 335). The sky was clear at the time when a series of explosions, together with a rushing sound, were heard over a region about 30 miles N.E. and S.W. and 50 or 60 miles N.W. and S.E. The stone struck the ground in sight of two negroes, and some twenty steps from them, at an angle of about 30 degrees with the horizon, and penetrated about ten inches into the soil. It weighed nearly 13 ounces, and was covered with a black crust. Prof. J. Lawrence Smith has contributed to the same number of the journal the results of his examination of the stone. The fractured surface exhibits numerous greenish globules set in a whitish granular material, and throughout its mass particles of nickeliferous iron, some pyrites, and a few specks of chrome iron were visible. The green nodules were found to be bronzite, though the presence of 8 per cent. of alumina in them is an unusual feature. The nickeliferous iron contained 12 per cent. of nickel and 0·75 per cent. of cobalt. With the exception of the bronzite, the minerals constituting the earthy portion of the meteorite could not be separated for examination, and their presence is assumed from the results of an analysis of the mass, which indicated the following composition:—

Nickeliferous iron	7·00
Magnetic pyrites	6·10
Bronzite, or hornblende	86·90
Olivine	
Albite, or oligoclase	
Chrome iron	
	100·00

Amorphous Sulphur.—Weber finds (*Poggendorff's Annalen*, No. 11, 1870, 432) the soft amorphous sulphur, set free on passing a current of sulphuretted hydrogen through fuming nitric acid, better adapted for the investigation of the physical characters of this element than the so-called γ sulphur. When collected and dried, it is ropy and elastic like caoutchouc, and remains so for many days. After treatment with carbon disulphide 74 per cent. remained undissolved. Placed in a steam-bath, it became quite liquid, but afterwards solidified; whilst a thermometer immersed in the sulphur showed a temperature 9° above that of the bath during the change, and then fell. During some chemical changes, as is known, soluble sulphur is liberated. That set free by the spontaneous decomposition of hydrogen persulphide and the variety known as milk of sulphur are in the soluble modification. Potassium monosulphide, when decomposed by hydrogen nitrite, liberates insoluble sulphur; if, however, the potassium compound be converted by digestion with sulphur into polysulphide, the latter body, on treatment with hydrogen chloride, gives up its sulphur in the soluble modification. The author concludes that from compounds in which the constituents are held together by comparatively strong chemical affinity, such as hydrogen sulphide and alkaline monosulphides, sulphur separates in the amorphous condition; from compounds of less stable constitution, however, like persulphides, we obtain it in the other form.

A New Class of Alcohols.—In the oxydation series of the hydrocarbons, there fails that member which can be regarded at one and the same time as alcohol and as aldehyde or acetone. Graebe (*Berichte der deutschen chem. Gesellschaft zu Berlin*, No. 1, 1871, 34) was led to search for a body of this kind, with the hope of ascertaining whether substances containing the atomic group $COCH_2(OH)$ class themselves more with the alcohols or the acids. Their study was, moreover, of importance, in tending to throw light on the constitution of the sugar group, since the acetyl compounds formed by Schützenberger indicate that grape sugar contains one carbonyl group, and cane sugar two. From acetylbenzol (acetophenone), $C_6H_5COCH_3$, Graebe has succeeded in producing the desired acetylbenzol alcohol, $C_6H_5COCH_2(OH)$. By passing chlorine at the boiling temperature through acetylbenzol, and subsequent fractional distillation, chlormethylbenzol, $C_6H_5COCH_2Cl$, is formed. It readily parts with its chlorine in the presence of oxidizing agents, and is converted into benzoic acid. In the facility with which chloracetylbenzol gives up its atom of chlorine, it resembles chloride of benzyl rather than the chloride of benzoic acid. In boiling water it undergoes no change; if, however, these two substances be heated together to a higher temperature in closed tubes, hydrogen chloride and a solid body with a very high boiling point are formed. Boiled for some time with an alcoholic solution of potassium acetate, the acetic ether is produced. Sodium carbonate or lead oxide and water also remove the chlorine, and among other products the new alcohol is found. The acetic ether melts at 44°, boils at 270°, and separates from ordinary alcohol in rhombic plates. The alcohol is easily prepared from the acetate by the action of alcoholic potash.

On the Occurrence of Amorphous Mercury Sulphide in Nature.—This mineral is found in considerable quantity in the Bedington Quicksilver Mine, Lake County, California, and is described by Dr. Gideon Moore, in the *Journal für praktische Chemie*, No. 17, 1870. It is found in association with iron and copper pyrites and crystals of cinnabar. It is without structure or cleavage, and has a brilliant fracture; when pounded it takes a high polish and metallic lustre resembling graphite. Its streak on porcelain is pure black. Its hardness is about 3 of Moh's scale, and consequently somewhat greater than that of cinnabar. Its specific gravity is 7·70 to 7·74, being greater than that of artificially prepared black mercury sulphide, which is 7·55, and less than that of cinnabar, which is 8·0 to 8·2. Analysis showed it to differ in no way as regards chemical composition from cinnabar. The author proposes the name metacinnabar for the new mineral. The region where it occurs bears the most striking evidences of volcanic activity.

Dr. Wilhelm Kühne, Professor of Physiology at Amsterdam, author of the *Lehrbuch der physiologischen Chemie*, has been called by the University of Heidelberg to the chair of physiology, rendered vacant by Professor Helmholtz's translation to the University of Berlin.

New Publications.

Darwin, C. On the Descent of Man. 2 vols. London: Murray.

Jones, T. Rymer. General Outline of the Organization of the Animal Kingdom, and Manual of Comparative Anatomy. 4th ed. improved. London: Van Voorst.

Jowett, B. Translation of the Dialogues of Plato, with Analyses and Introduction. Clarendon Press.

Wagner, D. A. Handbuch der chemischen Technologie. 8. Aufl. Leipzig: Wigand. 8s.

Zittel, K. A. Palaeontologische Mittheilungen aus dem Museum des k. bayerischen Staates. 2. Bd. 2. Abth. Die Fauna der aeltern Cephalopoden. 15 Steintaf. Cassel: Fischer. 44s.

History.

Select Charters and other Illustrations of English Constitutional History, from the Earliest Times to the Reign of Edward I. Arranged and edited by William Stubbs, M.A., Regius Professor of Modern History. Oxford: at the Clarendon Press, 1870. (Clarendon Press Series.)

The learned editor of the principal chronicles of the reigns of Henry II., Richard I., and John, in new and excellent texts, has supplied another want by a selection of constitutional documents. As a knowledge of the growth of the English constitution, its causes and consequences in a continuous development, is beginning to form a part of a regular English education, the Origines of English constitutional history, in the handy shape of a manual, are presented both to teachers and scholars alike. The collection is justly not continued further than the reign of Edward I., because after the era of this great law-giver "politics begin to replace polity." Similar documents of other nations, though highly valuable with regard to a comparative constitutional history of Europe, have not been admitted, lest the book might become too bulky.

A sketch so concise as only a master-hand is able to pen it serves as a running commentary to the documents arranged in chronological order. It opens with the ancient German polity as introduced by the Low-German tribes, but developed distinctly during their migration into and conquest of an island. There is the township, the hundred (*pagus*), the shire (*civitas*), and the kingdom of the old English period, growing slowly into a union after the introduction of Christianity, the organisms of Church and State henceforth advancing side by side. But the king and the witenagemot, since the end of the 10th century, suffer both from the first appearance of feudal centralisation in the hands of a few great earls. William the Conqueror, in his single person national sovereign and supreme landowner, introduces his own feudal system, in which Norman vassalage and the nation with its ancient institutions co-exist, but held together by an administrative machinery, represented by the Justiciar, the Curia Regis, and the Exchequer. The system is preserved during another generation, in spite of the tyranny of William Rufus, chiefly by the able statesmanship of Henry I., but breaks down in Stephen's reign, when "each baron was king in his own castle." With Henry of Anjou begins the rule of law, the barons and the clergy, like all other men, having equally to submit to it. The national council and judicial courts, the offshoots of the Curia Regis, still traceable in the Privy Council of the present day, as well as the first trial by jury, owe their origin to this important reign, to which that of Richard I., in the matter of constitutional development, is a mere supplement. Afterwards, John, the tyrant, without restraint, has to be forced to observe the same rule towards all free men by the Great Charter, which, both in its political and constitutional bearing, resembles in substance a treaty of peace. In the politics of the 13th century the national and the feudal parties alternately combine and separate again more than once, till the perfidy of Henry III. is overmatched by the strength, wisdom, and sincerity of Simon de Montfort. But the organization of the great reformer is proved to be premature by his own catastrophe, and the long constitutional struggle is only terminated by the eminent statesmanship of Edward I. By this time the chief component parts of the State machinery are completed in national and county representation, in the growth and the representation of boroughs, in the great councils, in counsel and consent, in taxation.

A few extracts from Cæsar and from the *Germania* of Tacitus, arranged in part ii., contain nearly everything which in the early Germanic polity touches on matters of law and government. They are far from being complete, nor are the numerous notices admitted which, occurring in the *Annals*, the *Histories*, and the *Agricola*, have long ago been carefully collected by Jacob Grimm, as an appendix to his edition of the *Germania* (1835). The extracts from the Anglo-Saxon laws, chiefly from Thorpe's translation, are likewise very comprehensive; but the most important passages concerning public assemblies, courts of law, people's rank, territorial division, taxation, and the principles of old English self-government in the hundred, the shire, and the borough, will be found grouped together.

With part iii., the Norman period, commences the consistent arrangement of this excellent book. To each reign is prefixed a list of the Archbishops of Canterbury, of the Chief Justices and the Chancellors, and a lucid sketch of its constitutional history. Extracts from the chronicles are regularly succeeded by statutes, charters, writs, and other legislative documents. The financial government of towns and counties in the days of the Conqueror is naturally explained from Domesday. The memory of Henry I., who adhered to his father's routine, and led the way for the great reforms of his grandson, lives chiefly in the sole legislative act of his reign known to us, the charter of liberties issued at his coronation.

Part iv. is devoted to Henry II., "who governed England as an English king by asserting his royal rights and those of his people." Here we have the Constitutions of Clarendon from MS. Cotton. Claudius, B. 2, and the Assize of Clarendon from MS. Bodl. Rawlinson, C. 641, both of which MSS. Stubbs, in his edition of Hoveden, has pointed out as the safest texts. The Assize of Northampton, an expansion of that of Clarendon, is almost a forerunner of the Great Charter of John. The Assize of Arms shows the revival of the ancient *fyrd* or national militia, the Saladin Tithe of 1188 is the first attempt to tax personal property by employing local jurors to determine the liability of individuals. The extracts from Glanvill's law-book refer to the system of recognition by jury in connection with the principles of representation and election. Every scholar—and not merely from an antiquarian point of view—will be pleased to find the *Dialogus de Scaccario*, the work of Bishop Richard Nigel of London, undoubtedly the greatest in a succession of great administrators, copied in extenso from Madox's invaluable *History of the Exchequer*.

Part v. comprises the reigns of Richard and John. Of the four justiciars who acted in Richard's absence as his substitutes and almost as independent sovereigns, Hubert and Geoffrey distinguished themselves by their administrative skill in advancing the progress of the country towards self-government. The charters granted by Richard to the towns involve a remarkable step in the consolidation and the growth of the corporation. John's misgovernment, on the other hand, his concession of the kingdom to the Pope, brought the interest of the people into the closest harmony with that of the baronage. The celebrated Articles of the Barons of the 15th June, 1215, and their fruit—the Great Charter on which "the whole of the Constitutional History of England is a commentary"—would have been impossible without the rapid decay of feudalism. The new order of things is ushered in by a number of very significant public acts. There is a writ proceeding from a Commune Consilium dated 1205, according to which the ancient *fyrd* and the feudal levy begin to be consolidated into a general army of the nation. An order for enquiring into evil customs, a few days later than Magna Charta, throws considerable light on the method of election in the county court. Amongst

other cities and boroughs London obtains a charter of privileges and the special right to elect its mayor annually.

Part vi. treats of Henry III., opening with an admirable introduction on the brilliant, fertile, but precocious character of the 13th century in general, as well as on the struggles and shortcomings of this reign in particular. The Great Charter, as is well known, was re-issued by this king three times, but under influences very different from those to which John had to submit, and with the most significant omissions and additions. Each time they are most carefully noted and explained by collation with the original draft. Nevertheless, in spite of the king's perversity and further reaction in a feudal direction, a number of documents exist, showing the strong under-current towards a final settlement in constitutional affairs. By a writ for the collection of a carucage, taken from the Close Rolls of 1220, two knights of the shire are summoned, and the representation based on election has to assist in financial matters. In 1226, again, four knights of the shire are to take part even in political deliberation. In 1254 two knights are to be sent by each county for the granting of a national aid, no distinction being made between tenants-in-chief or knights, as such. According to a most interesting document of 1231, illustrating the composition of the county court, its original elements since the days of Henry I. and Henry II., have been reinforced by representatives of the ancient townships and the new municipalities, a combination of all the shires being the only step wanting now for a true representative parliament. We miss, however, in Mr. Stubbs's highly instructive selection a certain royal writ, in which the word parliament seems to have been used officially for the first time in a general sense and with a most remarkable reference, viz. Close Rolls, 28 Henry III. membr. 13 (1244), *Parliamentum Runimede* quod fuit inter Dom. Johannem Regem patrem nostrum et barones suos Angliæ. The documents relating to the celebrated provisions of Oxford—the movement of 1258—which aimed at an elective council, but undoubtedly would have superseded the king entirely, had it succeeded, are very conveniently grouped together; the famous Early English Proclamation of the 18th October being printed from the revised text of Mr. A. J. Ellis, the French articles never without a translation. Another set contains all documents connected with the administration of Simon de Montfort, in which the great struggle seemed for a moment to arrive at its ultimate conclusion. Mr. Stubbs adheres with due regard to the conservative view of the framers of the *Report on the Dignity of a Peer*. According to it, the parliament summoned for the 20th January, 1265, is not to be considered as the origin of popular representation, the novelty consisting rather in the participation of the representatives of the towns for the purpose of the national council. It had long been usual for local self-government, where the representation of the shires was decidedly more popular than that of the boroughs. The reasons are well known why the national council, though rapidly tending that way, did not merge into a complete concentration of the local machinery as yet for another generation.

This came to pass at length in the grand reign of Edward I., the constitutional evidences of which are most ably arranged and reviewed in part vii. In an age of lawyers, to whose captiousness the principal errors of the great king himself must be mainly attributed, every branch of the administration of England takes definite form. By active legislation in Church and State all the principles that were in motion since Henry II.'s time were at last consolidated, so that the later struggles do not concern so much the framework of the constitution as its management. Perfectly independent forces, however, are still at work. To ordain in council without referring to parliament remains the privilege of the crown by the First Statute of Westminster. In the Second, summing up the former Assizes of Arms and Watch and Ward, the persistence of primitive institutions and the victory of state policy over feudalism are exhibited. Whereas in the Writs for parliaments in 1290 the presence of the representatives of the shire is not yet regarded as necessary, those of 1294 mark the final transition from the system of local to that of central assent, until by the great council and parliament of 1295 a perfect representation of the three estates is actually secured. The great crisis of 1297, turning on the bull *Clericis laicos* and the refusal of the Earls to go to Gascony, terminates in the confirmation of the Charters, in which the constitutional articles of John's Magna Charta, which had been expunged in the re-issue of 1216, because they would have proved for ever an obstacle to a firm central power, are now omitted for a better reason. No link in the chain will be missed, and each public act receives its due consideration in connection with the constitutional development as a whole. After the Statute *de tallagio non concedendo*, which is only preserved by Hemingburgh and not in any authoritative record, and by which the king never regarded himself bound, after the Summons to the parliament of Lincoln and the Writ for the collection of talliage, the chapter is wound up by an old favourite of antiquarians, the *Modus tenendi parliamentum*. In spite of its preamble nobody will date it in the days of the Conqueror, since Sir Thomas Duffus Hardy, from whose text it is reprinted here, has assigned the oldest manuscript to the time of Richard II. Mr. Stubbs is, however, inclined to accept it as a fairly credible account of the state of parliament under Edward II.

In the appendix the Petition of Right (1628) and the Bill of Rights (1689), the means of reference from a much later period of constitutional expansion, are offered to the political enquirer. A glossary of archaic legal and other terms in medieval Latin, or derived from Anglo-Saxon and old French, will stand any test applied to the multifarious and otherwise not easily accessible subjects of the collection. Here is a book of instruction, a synoptical introduction not only to the statutes at large, but the backbone of all study of national history, and a better specimen of such a work can hardly be furnished. R. Pauli.

Historic and Municipal Documents of Ireland, A.D. 1172-1320; from the Archives of the City of Dublin, &c. Edited by J. T. Gilbert, F.S.A., &c., Secretary of the Public Record Office of Ireland. London: Longmans, Green, & Co., 1870.

The contents of this volume, which is one of the Rolls Series of national publications, are of a very varied nature, and throw considerable light on the condition of Ireland during the space of a century and a half after the Anglo-Norman invasion—a period but little noticed by ordinary writers on the history of that country. Although relating chiefly to the affairs of Dublin, Drogheda, and the principal towns of North Leinster, the documents present a comprehensive picture of the policy which governed the early English monarchs in their dealings with the native and foreign inhabitants of those portions of Ireland which acknowledged their sway. That this policy was of a selfish nature, it is hardly necessary to assert. Even the inhabitants of their "good city of Dublin" had to purchase, with hard cash, the privileges conceded to them from time to time.

The regulations on the subject of traffic and merchandise, tolls and customs, are of great interest in connection with

the history of trade in Ireland during the Middle Ages, a subject of which very little was hitherto known. Of more importance, however, are the inquisitions respecting the enormous secular power of the Dublin archbishops, which Mr. Gilbert correctly observes (xxix) are, "as a series, unique in their age and class in Ireland." For the preservation of these inquisitions we are indebted to John Alan, Archbishop of Dublin, who was slain in the outbreak of "Silken Thomas," in 1534, and whose invaluable collections of Irish historical documents, industriously made in the short space of six years, remain still in manuscript.

The genealogist will find much to interest him in the rolls of names, which occupy 70 pages of the work, and contain some 2500 names of persons, the descendants of many of whom are still recognisable.

Almost one-half of the articles comprised in the work are taken from the Memorandum Rolls of Ireland, a most important class of documents still unpublished. The student of Irish history owes thanks to Mr. Gilbert for making him thus far acquainted with them.

The text is printed with great care and accuracy; but a good glossary, and a translation of the Norman-French portions, would enhance the value of the work.

W. M. HENNESSY.

Intelligence.

The *Annals of Lough-Key*, edited by Mr. W. M. Hennessy for the Rolls Series of ancient chronicles, will be issued in a short time. The contents of this chronicle are of great importance to the history of Ireland from the year 1014 to 1580. It contains also several interesting entries of events in English and foreign history, not noticed in any other authority.

Selected Articles.

F. Ferrara continues his account of "The Ancient Banks of Venice" into the 16th century. We have now some lists of the partners in the chief of them, and also of the creditors in cases of bankruptcy. The State-control over them and the strict enquiry into the causes of failure are characteristic. No new bank could be founded without full securities (fidejussores), *e.g.* the bank "Vittorio Correr" has fifty, bound in two thousand ducats a-piece. The banks had very little capital of their own, but traded on their deposits, and hence so many ruinous failures in those times. Ferrara gives full particulars of the mode of legal proceedings as to them, and a description of the archives where the documents now exist. He shows that Lattes, our previous authority on the subject, has supposed much more commercial liberty to have existed at Venice than was really the case. A freer age can hardly understand the existence of restrictions which long experience has shown to be useless. (*Nuova Anthologia.*)

Gött. Gel. Anz.—Jan. 11. [Böcking's edition of Ulrich Hutten's works ends naturally with the famous *Epistolae obscurorum virorum.* In his review of it, Geiger tries to determine the authorship of these famous letters more accurately than has been hitherto attempted.]—Feb. 1. [Waitz answers Lorenz' defence of the Chronicum thuringicum as being an original work. On the contrary, it is an extract from previous chronicles.]

New Books.

BRIEFE u. ACTEN zur Geschichte d. dreissigjährigen Krieges in den Zeiten d. vorwaltenden Einflusses der Wittelsbacher. 1 Bd. München: Rieger.

CORPUS SCRIPTORUM ECCLESIASTICORUM LATINORUM: ed. consilio et impensis Acad. Vindob. Vol. III. Pars 2 and 3. Cypriani opp. omnia ex rec. Hartelii.

DROYSEN, T. G. Geschichte der Preussischen Politik. Vol. 3: Der Staat des grossen Kurfürsten. 2te Abtheilung. 2nd ed. Leipzig: Veit and Co. (Will be out immediately.)

HÖFLER, C. Abhandlungen aus dem Gebiete der alten Geschichte. IV. (Academy reprint.) Ueber die richtige Abgrenzung der alten Geschichte gegen das Mittelalter. Wien: Gerold.

ISAACSOHN, S. Der deutsch-französische Krieg im Jahre 1674 u. das Verhältniss d. Wiener Hofes zu demselben. Nach bisher unedirtem urkundl. Material dargestellt. Berlin: Putkammer u. Mühlbrecht.

NOORDEN, Carl von. Europäische Geschichte im achtzehnten Jahrhundert. 1. Abtheilung: Der spanische Erbfolgekrieg. Düsseldorf: Buddeus.

PETONG, Rich. Ueber publicistische Literatur beim Beginn der Nymweger Friedensverhandlungen. Nebst einem Verzeichniss gleichzeitiger Quellenschriften für die Geschichte derselben Zeit bis zum Frieden von St. Germain. Berlin: Kortkampf.

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Philology.

The Sikandar-námah-i Baḥrí of Nizámí, edited by Dr. A. Sprenger and Ágha Aḥmad 'Alí. (*Bibliotheca Indica.*) Calcutta, 1869.

THE Asiatic Society of Calcutta have just published in their *Bibliotheca Indica* the second and concluding fasciculus of the *Khirad-Námah-i Iskandarí* of Nizámí. Dr. Sprenger published the first fasciculus in 1852, but, as he soon afterwards left India, the work has remained unfinished till now, when it has been completed by Ágha Aḥmad 'Alí.

Nizámí is one of the most famous Persian poets; he died A.H. 606 (A.D. 1209). His *Khamsah*, or πεμπάς of romantic poems, has been lithographed in Bombay, and one of them, the *Sikandar-námah*,* has been several times printed in Calcutta; but in all these editions the *Sikandar-námah* has only its first part (the "Iḳbál-námah," or "Sikandar-námah-i Barrí"), and the second part has never been printed before. As MS. copies of it are rare, its publication is a boon to all interested in Persian literature. All Nizámí's works are thus now rendered accessible by the press, with the exception of his *Díwán*, which is very rare even in Persia.

The two parts of the *Sikandar-námah* (the first written A.H. 597, the second 599) contain the Oriental traditions of the history of Alexander. They appear to be more or less founded on the well-known narrative of the Pseudo-Callisthenes, which furnished the groundwork for so many popular romances in Europe during the Middle Ages; and the Eastern and Western versions alike supply an instructive lesson how little tradition can be relied on, apart from contemporary written history. The real achievements of the Macedonian conqueror are lost in a cloud of fables, just as in Archbishop Turpin's pretended chronicle all the historical glories of Charlemagne's reign are ignored in the anachronism of his fictitious crusade against the Moors.

These legends appear in their oldest Oriental form in the *Sháhnámah* of Firdausí, who died A.D. 1020, but Nizámí is the next oldest authority (cf. Spiegel's *Die Alexandersage bei den Orientalen*). In the first part of the *Sikandar-námah* we have Sikandar's birth; but he is not represented, as in Firdausí, as the son of the daughter of Fílikús (Philip), who had been given in marriage to the victorious Dárá, and then repudiated by him; but he is found by the Greek king, while on a hunting excursion, lying as an infant beside his dead mother. Fílikús adopts the outcast child as his heir, just as in the Pseudo-Callisthenes Philip adopts Alexander, who is really the son of the Egyptian King Nektenabo.

Nizámí narrates Sikandar's various conquests after his accession to the throne; he first goes to Egypt and conquers the Æthiopians, then he seizes Persia from Dárá, and conquers two Hindu kings, Fúr and Kaid. He then passes on to Tibet and China, but is recalled by an invasion of the Russians, who had attacked Barda' in Azarbaiján. (This episode has been edited and amply illustrated by Erdmann in his dissertation *De Expeditione Russorum Berdaam versus*, Casan, 1826, 1828.) After repelling the invaders, he goes on a vain search for the fountain of life in the land of darkness. The first part of Nizámí's *Sikandar-námah*, called "Barrí." or "Alexandreis terrestris," ends with his return to Rúm.

* Another, the *Makhzan ul Asrár*, was edited by Mr. Bland, for the Oriental Text Society, in 1844.

The second part—called "Baḥrí," or "Alexandreis maritima," and also the "Khirad-námah," or "Wisdom-book"—is chiefly occupied with Sikandar's government in his kingdom, his intercourse with the Greek philosophers, and his career as a prophet; but there are several episodes in it of considerable literary interest. The poet begins with a description of the king in his court, administering the affairs of state, and studying all kinds of wisdom with his teachers, and he then gives a chapter to the different explanations of the appellation "Zú'l ḳarnain," or "two-horned," by which Sikandar is known in the East from a passage in the Ḳurán, ch. xviii. The explanations are curious, and one of them is worth notice as an Eastern version of the story of Midas, which, by the way, is also found in the *Ssidikür*, or Mongolian recension of the Sanskrit *Vetálapanchavinçati;* it does not, however, occur in the Hindu original. According to this explanation, the king had two long ears, which he carefully concealed under his crown, and of all his subjects only his barber was aware of it. His old barber at length died, and the king threatens death to his successor in office if he should betray the secret. At last the poor man, unable to repress himself, went into a desert and whispers the secret to the reeds in a pit. A shepherd cuts a pipe from the reeds, and it utters the words, "King Sikandar has two long ears." The king hears it while riding one day through the desert, and on his return forces the barber to confess what he had done.

In the next chapter, pp. 28-30, we have a story that bears a curious likeness to Boccaccio's fourth Novella of the tenth day, which has been lately naturalised in English by Tennyson's *Golden Supper*. Some episodes of inferior interest follow, and we then come to the account of the seven philosophers who are the king's chief advisers in his court. With the usual Oriental disdain of place and time, their names are given as Aristo, Suḳrát, Falátún, Válís (Thales), Balínús (Apollonius of Tyana), Furfúriyús (Porphyry), and Hurmus (Hermes Trismegistus); and, amidst the vague commonplaces generally put into their mouths, we occasionally find a few traits which are historically correct. Thus Válís, in his discourse on creation, p. 77, maintains that water is the origin of all things; and some of Aristotle's sayings on the same subject dimly remind the reader of the *De Cœlo*. Socrates is unaccountably confused with Diogenes, and there is an interview described between him and the king, who finds him lying outside his hermit-cell and basking in the sun. The most curious episode, however, is one which relates to a contention between Aristotle and Plato. Aristotle claims the pre-eminent seat in the assembly of the sages, and Plato in disgust retires into solitude to listen to the music of the seven spheres. He there invents a musical instrument with seven strings and a gourd, something like the Hindu *víṇá*, which he calls an *arghanún* (cf. ὄργανον, as used in Sept. Ps. cl. 4); with this he plays and, like Orpheus, enchants the wild beasts of the desert, who at one tune fall insensible round him, and at another fly away in panic. Aristotle goes to see the reported wonder, but himself succumbs to the magic influence of the notes, and acknowledges Plato's superiority. Plato now returns to the court, and the king asks him concerning his wonderful invention; and Plato, to illustrate the secrets hidden in nature, relates a story (pp. 55-58) which is a very close version of the well-known legend of Gyges' ring as told in the second book of the *Republic*. A hot vapour, he says, once rent the ground and brought to light in the chasm a hollow horse of tin and copper, with a large fissure in its side. A shepherd saw it and discovered in the body an old man asleep, with a gold ring on his finger. He took it off, and went next morning to his master to learn the value of his booty; but during his visit he discovered to his astonishment that, when he turned the seal towards his palm, he became invisible. He determined to make use of this power, and he proceeded to the palace and secretly entered the council-chamber, where he remained unseen. When the nobles had left it, he revealed himself to the king by this miracle as a prophet. The king at once took him as his minister, and eventually the shepherd succeeded him on the throne. The story can only have come to Nizámí from the *Republic*, probably through some Arabic translation. Wenrich, in his book *De Auctorum Græcorum versionibus et commentariis Syriacis Arabicis Armeniacis Persicisque*, mentions an Arabic translation of the *Republic* (*Kitáb-us-siyásat*) by Honain ben Isḥáḳ; and there is a commentary on it by Averroes. We have next Sikandar's answers to the eight questions propounded by an Indian ambassador (who is however, with the usual error of Persian poets, described as a fire-worshipper), and the different opinions of the seven philosophers on the origin of the world.

One night an angel visits Sikandar and announces that God has chosen him as a prophet, and he is to go through the world with his army, putting down idolatry and vice, and establishing monotheism and virtue. Light is to precede him and bless those who submit to him, while darkness is to follow him and overwhelm his enemies. He is told that he shall understand all foreign languages, and whatever he says in the Rúmí language his various hearers shall at once understand without an interpreter. Falátún, Aristo, and Suḳrát each make a short treatise of morals and politics, which the king is to consult in all cases of difficulty. Sikandar then commits his kingdom to his son Iskandarús, under his mother's regency, and sets forth from Macedonia on his new expedition. He first goes to Alexandria, and delivers Mecca from a tyrant; then he proceeds westward, and after a long land journey makes a three months' voyage by sea. He at last reaches a land inhabited by barbarians, who fled from him, and, after a month's toilsome journey through a desert of scorching sand, he finds himself on the shores of the ocean—"he remained lost in wonder at that deep sea which the Greek called *Auḳiyánús*." * He sees the sun sink into its waters, which are thick like quicksilver and swarm with unknown monsters. He then returns and discovers the sources of the Nile, and also, among other adventures, comes upon the golden gardens and jewelled trees of Shaddád, the famous mythical king of Iram, but leaves its treasures untouched. We have similarly his travels in the South, and the East, and his adventures in their seas, whence the book gets its name; and he also visits the North, where he builds the wall against Yájúj and Májúj, and finds a virtuous race like the Hyperboreans. He then returns to Rúm through Persia, and dies at Shahr-zur, near Babylon, and is buried in Alexandria. Iskandarús resigns the throne, and becomes a darwísh; and the seven sages soon follow the king to the grave, Socrates dying by poison. The poem concludes, as it opened, with a panegyric on Sultán Nuṣrat-ud-dín, probably the second king of the dynasty of Hazárasp Atábeks which reigned in Laristán.

Ághá Aḥmad 'Alí has edited the text with great care, and has given the variants from several MSS. Some of these are very useful; thus he notices that a MS. from Persia does not contain the absurd lines found in most Indian copies after the account of the deaths of the seven sages, which describe Nizámí's own death, and which were evidently added by some enthusiastic admirer (in India?), although the poem has a proper conclusion by the author, in which he expressly gives the day of the month and the year when

* Ághá Aḥmad 'Alí reads "*ki Yúnánt orá Ḳiyánús khánd;*" my MS. reads "*ki Yúnánt-ash Auḳiyánús khánd.*"

the work was finished. I may add that I knew Ághá Aḥmad 'Alí well in Calcutta; he is one of the few Maulavís who have a cultivated taste in poetry, and a genuine literary enthusiasm. He promises his readers at some future time an essay on the history of the Masnaví of the Persians and the life and writings of Nizámí. E. B. Cowell.

German Names of Affinity. [*Die deutschen Verwandtschaftsnamen;* eine sprachwissenschaftliche Untersuchung, nebst vergleichenden Anmerkungen, von Dr. Wilhelm Deecke.] Weimar: Hermann Böhlau, 1870.

In studying the development and the genius of a language it is always useful to devote especial attention to those groups of words which signify a natural system or cycle of related ideas. In cases where we have the means of sifting the exact etymological character of such words to the bottom, we are able to see what sort of connection, if any, exists between these words as words. From this point of view we welcome the treatise named above, although the author has not succeeded in establishing all the results which might have been expected from researches and collections of this kind. This, however, was less the fault of Dr. Deecke than the consequence of the obscurity in which a great part of Indo-Germanic, and especially German, names of affinity is still shrouded.

The work examines about forty words of expressing family relations: *Verwandtschaft*, *Freundschaft*, *Sippe* (gossip), *Magschaft*, *Geschlecht*, *Ehe*, *Freite*, *Heirath*, *Verlobung*, *Braut*, *Vermählung*, *Gatte*, *Mann*, *Frau*, *Weib*, *Kind*, *Knabe*, *Mädchen*, *Erbe*, *Eltern*, *Vater*, *Mutter*, *Sohn*, *Tochter*, *Bruder*, *Schwester*, *Ahn*, *Enkel*, *Vetter*, *Oheim*, *Base*, *Muhme*, *Neffe* and *Nichte*, *Eidam*, *Schnur*, *Schwäher*, *Schwieger*, *Schwager*, *Wittwer* and *Wittwe*, *Waise*, *Stief-* (*step-*, as in *step*-brother). These are treated in two divisions. The first (pp. 13-138) is of less importance philologically, although the scholar will find in it a number of things both interesting and useful. It is chiefly addressed and conveys a generally correct notion about subjects familiar to the general reader, and may serve to awaken or confirm a wider interest in philology. For this purpose an etymology of the words expressive of family relations is given, and an attempt made to determine the root idea out of which the name has arisen. The history of the word is then given as far as possible, and also its ramifications traced in composition, in derivatives, and in secondary applications of it. Not unfrequently too the author digresses more or less fully into social, legal, and moral questions connected with this class of words.

The second part (pp. 141-222) contains notes to the first, and it is to these we wish to call the attention of the student. They consist chiefly of combinations more or less full, and sometimes of great etymological value. Among these are some statements with which we cannot agree; but also a good deal which is at once valuable, novel, and undoubtedly correct, mainly in reference not so much to the names of affinity themselves as to words related to them—*inter alia*, we think the right etymology of the Gothic and Anglo-Saxon *gôd*, Greek *ἀ-γαθ-ός*, and other words of the same family, has here been correctly given for the first time (pp. 170-1); indeed the whole section (pp. 169-71) in which this occurs is a valuable contribution to Indo-Germanic etymology. Other sections are perhaps less successful, and of these, one of the least felicitous is that on the etymology of the word *Braut* (pp. 162 foll.). Th. Benfey.

Erophile; a Tragedy. [*Erophile, vulgärgriechische Tragödie von Georgios Chortatzes aus Kreta.* Ein Beitrag zur Geschichte der neugriechischen und der italiänischen Literatur, von Conrad Bursian.] Leipzig: S. Hirzel. Pp. 90; 8vo.

It is well known how greatly the dramatic literature of Italy in the 16th and 17th centuries influenced the dramatic writers of the other European countries, nor need we remind the students of the Elizabethan drama of the fact that in England more than in any other country the study of the Italian literature gave the first impulse to, and promoted the growth of, the great dramatic masterpieces of that age. It is interesting to trace the influence exercised by the Italian dramatists upon other nations to the field of the Greek literature of the period, whose productions appear to be wholly dependent on foreign sources. The two most important works, which may be quoted here, are Vincenzo Cornaro's epic poem Ἐρωτόκριτος, which is commonly attributed to the middle of the 17th century, while Sathas (Νεοελλ. Φιλ. p. 603) places it in the 18th—the earliest edition he mentions being indeed of 1756—but there is no doubt that this work belongs to the 17th century, as a MS. of it in the Harleian Collection at the British Museum apparently belongs to the beginning of the 18th. We will here, by the way, recommend a future editor of this work not to neglect the MS. in question. The second work of this period, and which is in fact anterior to the Erotocritos, is Georgios Chortatzes' tragedy Ἐρωφίλη, first printed at Venice, 1675. It seems to be exceedingly scarce at present, though it was frequently reprinted, and seems in its time to have enjoyed considerable popularity—a fact fully attested by some of its lines becoming proverbial and reappearing among the popular songs of the Greeks. Dr. Bursian, a gentleman well known in Germany for his intimate acquaintance with the modern Greek language, has thought it deserving of a somewhat lengthy treatise containing complete analyses of the Greek play and of the Italian tragedy on which it is based, viz. Giovanbattista Giraldi Cinthio's *Orbecche*. It seems to have been Cinthio's habit to use the same subject both for a novel and a drama, so that this practice does not appear to have originated with some modern writers who even go so far as to "secure the right of dramatic adaptation"—we find, at least, that he has again the subject of his tragedy of *Orbecche* in a novel in his *Ecatommiti*, just as the novel on which Shakespeare's *Measure for Measure* is founded was also dramatised by Cinthio himself under the title of *Epitia*. (See Simrock, *Die Quellen Shakespeare's*, 2nd edit. vol. i. p. 152.) His *Orbecche* was originally exhibited in 1541, and published 1547 and again 1561; it must have been one of the favourite plays of the period, and was repeatedly imitated, *e.g.* by Francesco Mondella in his *Isifile* (of which Dr. Bursian also likewise adds a very interesting analysis). It may be admitted to contain many fine passages and beautiful sentiments, but in the manner of the time is crowded with murders and apparitions—forcibly reminding us of Kyd's Spanish tragedy.

Georgios Chortatzes (or, as his name is also written Χορτάκης), ἐκ Ῥεθύμνου, in Crete, is mentioned as one of the Greek students at Padua in the 17th century, and though Sathas, p. 418, does not identify the student of Padua with the author of *Erophile*, of whom he speaks p. 339, we have not the slightest hesitation in considering them as one and the same person. It was no doubt in Italy that Chortatzes became acquainted with Cinthio's *Orbecche*, and there also we may suppose him to have contracted that familiarity with Tasso's *Gerusalemme liberata* which appears in the intermezzos of his play. It is, however, extremely creditable to him that, though imitating an Italian play, he was to all intents independent of it in his choruses, which are in fact

manifestly modelled upon those of Sophocles in his *Antigone*. It must, indeed, be high praise to allow that Chortatzes' choruses are spirited and elegant imitations of the immortal and celebrated songs in *Antigone*. It is, moreover, admitted by Dr. Bursian that the alterations made by Chortatzes in the plot and arrangement of the tragedy itself are decided improvements on his original. The point where he errs is the common weakness of the whole modern Greek dramatic and epic literature—we mean the predominance of the lyric and sentimental elements by which the action of the drama is frequently retarded.

Dr. Bursian, being unable to discover a printed edition of the *Erophile* in any German library, was obliged to form his analysis upon a MS. copy now in the Munich Library (Cod. Gr. 590), but originally belonging to Pater Fischer, the confessor of the unfortunate Emperor Maximilian of Mexico. Even in the Italian libraries the work was found to exist only at Venice, and there in a somewhat late edition of 1772. Dr. Bursian was not aware that an earlier edition is in the British Museum (k 868. c. 41): Τραγῳδία ὀνομαζομένη Ἐρωφίλη, ποίημα τοῦ λογιωτάτου ἐν σπουδαίοις κυροῦ Γεωργίου Χορτάτζη Κρητός. Ἐνετίησιν, παρὰ Ἀντωνίῳ τῷ Ἰουλιανῷ, αχλζ' (1735). Sathas (p. 339) attests that even in Greece this tragedy is "completely unknown" (πάντῃ ἄγνωστον), in spite of its many beauties. It is, therefore, to be regretted that we have no recent reprint of it, and the sooner we get it, the better. If, after the end of this unfortunate war, M. Legrand finds time and spirits to continue his *Monuments pour servir à l'Histoire de la Langue néohellénique*, we hope that he will soon give us an edition of this play—without, however, forgetting to collate the Munich MS. with the printed copies.

Dr. Bursian's treatise can be fairly recommended as an interesting contribution to the literary history of the 16th and 17th centuries, and well repays perusal.

W. Wagner.

Intelligence.

Signor Gherardo Nerucci of Pistoja has published his Italian translation of Professor Max Müller's *Lectures on the Science of Language*. The two volumes of the English edition have been divided into three. The same plan was adopted in the French translation by M. G. Harris and G. Perrot. They divided the second series of lectures into two parts, the first called "*Phonétique et Étymologie*," the second, "*Influence du Langage sur la Pensée, Mythologie ancienne et moderne*." A second edition of the German translation by Dr. K. Böttger appeared in 1870. There is also a Russian translation published at St. Petersburg in 1865. A new and cheaper edition of the English edition is advertised by Messrs. Longmans.

A large collection of Biblical and Rabbinical Hebrew Literature has been offered for sale *en bloc* by Mr. F. Müller, of 130 Heerenkracht, Amsterdam. It consists of about 2800 works, 1600 of which fall under the head of Hebrew, and 1200 of miscellaneous Jewish literature, and includes 60 MSS., most of them unpublished. One of the Hebrew MSS., written on vellum, dates from the 12th or the first half of the 13th century. We are not surprised to hear that several American libraries are competing for the possession of this varied collection. The price asked is 10,000 florins.

Señor Pascual has undertaken an interesting investigation into the number of words of Teutonic origin which occur in the Spanish language; and he furnishes some of the results of his researches in the last number of the *Revista de España*. It has been calculated that about six-tenths of the Spanish words are of Latin origin, one-tenth Arabic, one-tenth Teutonic, and the rest miscellaneous. But there has been an immense influx of English words into common use, since the introduction of railways, banks, improved engineering, and constitutional forms.

The *Kölnische Zeitung*, Feb. 4, contains a paragraph calculated to throw theologians as well as Egyptologists into some excitement. A Cairo letter, dated Jan. 15, is the authority. Professor Breugsch (? Brugsch), it appears, has discovered the ruins of a town "very likely built by the Jews," situated near the little town Dell-el-Jahud (hill of the Jews), two hours by rail from Cairo. Up to the present time the remains of a temple and a fountain of the most beautiful ground alabaster have been brought to light, together with inscriptions in good condition, and several rows of houses.

Selected Articles.

Perles' Etymological Studies, rev. by Nöldeke, in Gött. gel. Anzeigen. Jan. 25. [Contains important contributions to etymology, but might have been improved by more attention to phonetic laws, and a larger acquaintance with Syriac literature.]

Marquis d'Hervey's Lù Sao, rev. in Lit. Centralblatt, Feb. 4. [Favourable.]

The Literature and Religion of the Buddhists, by B. H. Hodgson, in the Phœnix, Nos. 5, 6, and 7.

Beiträge zur vergleichenden Sprachforschung, vi^ter Bd. 4tes Heft.—Zum deutsch-preussischen Vocabular, von Nesselmann, rev. by W. Burda. [Suggests that N. has sometimes printed *l* when the MS. has a long *s*. Offers a solution of the obscure word *rikisnan*, a ridge.]—Visuccius Mercurius, ein Beitrag zur Geschichte der lateinischen Assibilation auf gallischem Boden, von K. Christ.—Studies on old Prussian, by C. Pauli. [On the vocabulary mentioned above. Contains a careful comparison of Pomeranian and Lithuanian vowels and consonants: concludes, as against Schleicher, that the former is not a mere dialect of Lithuanian.]—The Old Irish Verb, by Whitley Stokes. [Adds to the known examples a large collection drawn from the *Félire of Oengus*, the *Amra* Cholium-chille and other monuments in Ireland not generally accessible. The theory of agglutination is pushed to its utmost limits in connection with the later forms of verbs.]—Lithauische Dichtungen, von Christian Donalitius, rev. by J. Schmidt. [Edition only useful when compared with Schleicher's: Nesselmann's notes contain some singular mistakes.]

New Publications.

Cornelius Nepos, erkl. H. Ebeling. (2nd revision of Dahne's edition, Helmstedt, 1830.) Berlin: Ebeling u. Plahn.

Dietze, L. De sermone Catoniano. Anklam: Dietze.

Facciolati, J. Æg., Forcellini, et J. Furlanetti. Lexicon totius latinitatis. Cur. F. Conradini. Tom. II. Fasc. 12. (Pp. 881–975.) Patavii.

Forcellini, Ægid. Totius latinitatis lexicon cur. Vinc. De-Vit. Tom. 4, p. 673–752. Prati. Leipzig: Brockhaus.

Hitzig, F. Die Inschrift des Mesha, Königs von Moab. Heidelberg: Mohr.

Kuhn, E. W. A. Kaccâyanappakaranæ specimen alterum. Halle: Buchh. d. Waisenhauses.

Leabhar na he-Uidhri, a Collection of Pieces in Prose and Verse in the Irish Language, compiled and transcribed about A.D. 1100 by Moelmuiri Mac Ceileachaie: now first published. Dublin: Royal Irish Academy. Williams and Norgate.

Palmer, E. H. A Descriptive Catalogue of the Arabic, Persian, and Turkish MSS. in the Library of Trinity Coll. Cambridge. Cambridge: Deighton.

Payne Smith, R. Thesaurus Syriacus: Collegerunt Quatremère, Bernstein, &c. Edid. R. P. S. Vol. I. Fasc. ii. Oxford: Clarendon Press.

Perles, J. Etymologische Studien zur Kunde der rabbinischen Sprache u. Alterthümer. Breslau: Schletter.

Sachau, Ed. Syriaca Inedita. Halle: Buchh. des Waisenhauses.

Schröer, K. J. Wörterbuch d. Mundart v. Gottschee. II. (Academy reprint.) Vienna: Gerold's Sohn.

Wood. Changes in English from Wicklif to 1600. (Le Bas Prize.) Macmillan.

ERRATA IN No. 18.

Page 129 (b)	6	lines from top,			omit "he now lives to see."
,, ,,	7	,,	,,		after "countrymen" insert "is."
,, ,,	7	,,	,,		for "to see himself" read "he is."
,, ,,	8	,,	,,		for "and to see the story of his own" read "whilst the story of his."
,, ,,	9	,,	,,		after "labours" insert "is."
,, 134 (a)	12	,,	bottom,		for "four hundred" read "fourteen hundred."
,, ,,	9	,,	,,		for "seventy" read "one hundred and seventy."
,, 140 (b)	13	,,	top,		for "Leucoselearia" read "Leucoselenia."
,, ,,	18	,,	,,		for "Sanzerote" read "Lanzerote."
,, 141 (b)	19	,,	bottom,		for "his" read "Bischoff's."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, April 1, *and advertisements should be sent in by March* 27.

NOTICE.

THE ACADEMY *will in future appear regularly on the* 1*st and* 15*th of every month.*

General Literature.

The Poems of Catullus. R. Ellis. London: John Murray.

PROFESSOR ELLIS concludes his interesting preface by saying that he will be contented to "please the, even in this classically trained country, too limited number of readers who can really hear with their ears." His beautiful and elaborate translation is before everything else a metrical experiment, on the same principles as but on a larger scale than those bound up with *Enoch Arden and other Poems*, and so is appropriately dedicated to Mr. Tennyson. The prettiest of Mr. Tennyson's experiments is devoted to quizzing its own futility; but Mr. Ellis' experiment is made quite seriously and hopefully. He believes that classical metres may be naturalised if the classical rules of quantity and position are observed in addition to the English accent. He has certainly proved to those "who can really hear with their ears" that in these principles it is possible to obtain very beautiful metrical effects, and to produce at least by snatches very fresh and dainty poetry. At the same time it hardly seems that even he has fully realised the difficulties of the problem. The difference between Catullus read and Catullus scanned shows how much easier it is to write Latin metres in Latin than in English, for it shows how often Catullus set aside the Latin accent. Again, there are many words, as the Elizabethan metrists had already observed, in which accent and quantity are hopelessly at variance. Professor Ellis' rule excludes all these words, and so narrows the vocabulary available. Then a reference to Juvencus suggests the great difficulty of all. Juvencus was a very sorry poet; he entirely neglected position, he scarcely attended to quantity, yet his hexameters are certainly much better than Mr. Kingsley's, because the average length of Latin words offers an abundant choice of easy cæsuras. Though he has preferred not to discuss this difficulty in theory, Mr. Ellis has obviously felt it in practice, and made strenuous and not unsuccessful efforts to overcome it. His hexameters have almost always one satisfactory cæsura at any rate; his lyrical metres are not much looser in structure than the original: it is only in the pentameters that he is ignominiously vanquished by the irrepressible monosyllable. In the *Attis*, certainly the greatest metrical achievement of Catullus, perhaps of Latin poetry, the translator may be said to have achieved an almost unqualified metrical success. In pursuit of this the translator has not wholly escaped the peril he foresaw of a possible loss in freedom of expression. For instance—

"Ego mulier, ego adolescens, ego ephebus, ego puer,
Ego gymnasî fui flos, ego decus olei.
Mihi januæ frequentes, mihi limina tepida,
Mihi floridis corollis redimita domus erat,
Linquendum ubi esset orto mihi sole cubiculum.
Ego nunc deum ministra, et Cybeles famula ferar?
Ego Mænas, ego mei pars, ego vir sterilis ero?
Ego viridis algida Idæ nive amicta loca colam?
Ego vitam agam sub altis Phrygiæ columinibus,
Ubi cerva silvicultrix, ubi aper nemorivagus?"

is much more emphatic because freer than the following, which is plainly overlaboured, though still very rapid and very passionate:—

"Who a woman here, in order was a man, a youth, a boy
To the sinewy ring a famed flower, the gymnasium's applause.
With a throng about the portal, with a populace in the gate,
With a flowery coronal hanging upon every column of home,
When anew my chamber opened, as awoke the sunny morn.
O am I to live the gods' slave? feodary be to Cybele?
Or a Mænad I, an eunuch? or a part of a body slain?
Or am I to range the green tracts upon Ida's snowy chill?
Be beneath the stately caverns colonnaded of Asia?
Be with hind that haunts the covert, or in hursts that house the boar."

This is a favourable specimen, but even here the second line contrasts very unfavourably with the simplicity of the original, and "the high columns of Phrygia" are ill replaced by "the stately caverns colonnaded of Asia." In general it must be admitted that metrical exigencies have Latinised both the constructions and the vocabulary much further than is desirable, and we notice also that the hexameters of the second epithalamium end with a verb or a participle far oftener than those of the original. The pure iambic trimeter seems to have been more troublesome than any other metre: harsh inversions abound, and the immeasurable length of line drags heavily. The scazons are better, but too often the first syllable of the final spondee is only long by position, a defect the more to be regretted because it might have been completely remedied. For instance—

"O thou my Sabine farmstead or my Tiburtine"

is in a quite different metre to—

"O thou of islands jewel and of half-islands,"

and only the last is really in the metre of Catullus.

The translation of course possesses all the value of a commentary, but we can scarcely believe that vv. 21-23 in c. x. were intended to be taken as part of Catullus' speech to Varus' mistress; Catullus could not have boasted of having bearers and such a shabby litter that he could not use them. In general we are inclined to think that the translator has not taken sufficient account of the simplicity of Catullus; he is dainty as Catullus is dainty, but he is not natural as Catullus is natural. Something may be due to the fact that he is obliged to lengthen the original and therefore to ornament it; but a pair of lines like this—

"Widely from each fair limb that footward-fallen apparel
Drifts its lady before, in billowy salt loose-playing"

is too plain an instance of the refracted influence of Mr. Tennyson. Here we have "each fair limb" for her "whole body," "footward-fallen" for "before her very feet," "billowy salt" for "salt sea waves," and "loose-playing" for "playing," all prettinesses which should have been superfluous. We close with an extract which is almost unexceptionable as well as really beautiful:—

"Him for very delight when a virgin fondly desiring
Gazed on, a royal virgin, in odours silkily nestled,
Pure from a maiden's couch, from a mother's pillowy bosom,
Like some myrtle, anear Eurota's waters arising,
Like earth's myriad hues, spring's progeny, raised to the breezes,
Drooped not her eyes their gaze unquenchable, ever-burning,
Save when in each charm'd limb to the depths enfolded, a sudden
Flame blazed hotly within her, in all her marrow abiding."

G. A. SIMCOX.

LITERARY NOTES.

We understand that Mr. J. A. Symonds, late Fellow of Magdalen College, Oxford, is editing the miscellaneous works of the late Professor Conington. An introductory memoir written by Professor H. J. S. Smith will be prefixed to the collection, which will contain besides various essays on Latin and English literature a complete prose translation of the works of Virgil.

The cartoons reprinted in *Vanity Fair Album* have the merit of depending only on character and expression for their comic effect. Some of the portraits are really excellent examples of the difficult art of making a fair likeness amusing without the help of a laughable situation. MM. de Lesseps and Henri Rochefort look almost too imaginative to be English; but in others the familiar expression is scarcely exaggerated, only just a little heightened, as in the case of the Bishop of Winchester, to give point to the legend "Not a Brawler." Some of the "Sovereigns" are so good that it is a pity the series is not more complete. The constitutional King of the Belgians, with an expression of dancing a hornpipe between crossed swords, with his arms full of valuable property, is particularly happy. The artists should be on their guard against the temptation of making people who have really no distinguishing feature look funny by attenuated legs and crooked necks, and as the turn of the literary world must come after the list of statesmen, eminent or otherwise, is exhausted, it is to be hoped that its members will be treated generally with more appreciation than Carlyle. "The Diogenes of the Modern Corinthians" might have been represented as blear-eyed and decrepit, but there should have been something to indicate that he was dazzled by the light of his own lantern, and bowed down by the magnitude of his aspirations. The letterpress is of course unequal, as it is not easy to find a good epigram for every week in the year, and the last volume contains, perhaps, nothing as good as the mottoes for the Marquis of Hartington and Mr. Chichester Fortescue in 1869. At its best, the series is really valuable.

Mr. Charles Reade's new serial in *Cassell's Magazine* settles a difficult question which had troubled his readers in the *Cornhill* and elsewhere. His melodramatic situations are *not* meant for burlesque. It remains to be seen whether his undoubted literary dexterity will enable him to supplant the novelists of the *London Journal* in the favour of the peculiar public which he is stooping to conquer.

Art and Archæology.

Primitive Greek Art. [*Zur Geschichte der Anfänge Griechischer Kunst.* Von A. Conze.] 30 pp. 11 pl. Vienna, 1870.

The learning and acuteness of the author of *Contributions to the History of Greek Sculpture* have been shown in more than one valuable constructive speculation in the field of archæology. From English students in especial he may claim recognition, in right of his account of the Fitzwilliam Museum (ap. Gerhard's *Anzeiger*), his paper on an important Cameirus plate of the British Museum, and most of all perhaps the essay (*Archaeol. Zeit.* 1865) in which he has argued that in a fragmentary marble shield with miniature reliefs, in the British Museum, we have a reduced variation of that portion of the shield of the Phidian Athene Parthenos which we know to have contained the portrait of the master himself.

Dr. Conze has given rather too comprehensive a title to his present treatise; which is in fact a monograph, reprinted from the Transactions of the Vienna Academy of Sciences, on a particular division of the most ancient class of Greek fictile works. This class, known generally in arrangements of the vases as "archaic" or "Phœnician," and comprised in one by Mr. Oldfield (*Trans. Roy. Soc. Lit.*, N. S., vi. 141), by Mr. Bunbury (*Edinb. Rev.* 1858), and some other authorities, had been divided by Dr. Birch into "earliest style" and "archaic Greek" (*Hist. Anct. Pott.*, i. 252, 257),—Mr. Burgon having already in 1844 led the way, and maintained that the very earliest vases of the class belonged to the Cyclopean or heroic period of Greek history. Certain specimens figured by Mr. Burgon may, as he conceives, "be referred to a period ranging from B.C. 1200 to B.C. 1000, and probably earlier" (p. 291); whereas the animals (of which more hereafter) that appear on certain others of the same general style indicate in his judgment a somewhat later age, B.C. 1000 to 800 (p. 283). Here is his description, quoted by Dr. Conze, of the style (*Trans. Royal. Soc. Lit.*, N. S., ii. 259):—

> "This pottery is of the natural colour of the clay, varying from a whitish yellow or pale ochreous colour to a light brown. These various tints of the ground are generally more or less ornamented with zigzag or numerous parallel lines, bands, concentric circles, mæanders, and various other forms, of a tawny red or brownish colour, sometimes merging into dusky black."

The vase from Melos figured by Mr. Burgon is nearly identical with other examples found in Cyprus. Dr. Conze in his dissertation directs especial reference to a quantity recently discovered in Cyprus, both by others and by General de Cesnola. It is a characteristic of the entire class that human figures are excluded from their ornamentation; although there are exceptions to this rule in the Dodwell vase and also in the Cameirus plate described and figured by our author himself some years ago, and it may be presumed that another exception occurs in the example from Idalium with two men in a biga, described as lot 36 in Messrs. Sotheby's sale catalogue of a portion of Cesnola's collection (Feb. 9, 1871).

Dr. Conze insists on the necessity, as already indicated, of subdividing this primitive ware into an earlier style and a later style. The earlier archaic style, then, is destitute of conventionalised plant or flower-forms, and has its ground decorated exclusively with straight bands, zigzags, single or concentric circles detached or connected by tangents, frets, oblique lines, and the like; besides comparatively rare representations of animals, roughly drawn according to a peculiarly lanky pattern, and consisting mainly of horses, rams, deer, and long-legged water-fowl, to the almost entire exclusion of the lion and tiger, and also of composite forms such as sphinxes and the like. The later archaic style (not to insist on some minor differences in the clay, the manner of execution, as well as the forms of the vessels) has animals very frequently occurring and quite differently treated, with shorter and more natural limbs, more attention to anatomy, and a preference for curved outlines, the animals themselves being moreover in great part different, with a predominance of the lion and tiger, as well as a variety of imaginary composites. Here, moreover, the ground is covered not only with linear decorations, but with rude patches clearly representing conventionalised plant forms.

Of this latter style the Dodwell vase, from Corinth, is a well-known example; and the whole subdivision to which it belongs has been sometimes called Corinthian. In like manner, for the other or oldest subdivision of all the general name Phœnician has been sometimes usurped. Dr. Conze demurs altogether to both of these names; and contends that the later archaic style, in its abstract plant ornament and in the spirited conventionalism of its animal design, shows unmistakably the importation of "Oriental" (*i. e.* Semitic, or at all events non-Aryan) decorative elements; he therefore calls this the "Orientalising" style. Those remains of the still more ancient kind found in Cyprus, and identical remains from other islands of the Archipelago, he on the other hand maintains to be precisely exempt from all these tokens of Oriental influence; and would therefore

call them by the much-abused name of Pelasgian, or, better, Aryan. That is to say, he would have the style to be a relic of the so-called Pelasgic period, in which the first pioneers of the Hellenic stock, having in their migration peopled the coasts and islands of the Archipelago, retained their primitive civilisation unfertilised by Oriental or "Asiatic" influences. Independent evidences point to the pre-historical occurrence of such fertilisation through the medium of Phœnician commerce; and from the earliest wave of this commerce would date the gradual introduction of the later archaic or Orientalising style. As far back at least as the period of the epic poets, the art of the Assyrians in reliefs and bronzes had become the beau ideal of Greece; and of it the miscalled "Corinthian" system of vase decoration is in great part an echo. And as this style was anterior to the development of a Hellenic style proper, so the Aryan style miscalled "Phœnician," according to Dr. Conze, was anterior to this, and in its origin therefore of a far higher antiquity than has yet been claimed for it.

This speculation our author extends and confirms by comparing the ornament on the earliest vases of Cyprus with that found on the bronze remains of Central and Northern Europe. He declares that the two orders of ornament are identical, and that both bear the signs of having been originally appropriated to textile fabrics, and from this use transferred to the decoration of implements. Finding identical styles thus in use by two separated branches of the Aryan stock, he concludes that this is the primitive mode of ornamentation invented by the stock (and probably for textile purposes) before their migration and dispersal.

In all this it is impossible not to admire a certain breadth of view, accompanied as it is with scholarly and ingenious treatment; but whether the speculation is available for serious purposes is a different and withal difficult question. Of its correctness the vases themselves here and there raise a suspicion, as our author candidly admits. On pl. xi. he figures two which in general form and character, and especially in the mode of representation of their animals (lions) would seem to lie midway between the two subdivisions of the class to which they belong. He meets the difficulty by supposing them made at a time when the old style had not quite died out, nor the new (if we may so call it) become firmly established. And this, it cannot be denied, is a very plausible solution, especially if considered in connection with the contemporary occurrence of black figures and red figures on later vases of the Æginetan and Strong styles.

We wish, however, that Dr. Conze had refrained from bringing the lion into his argument, as evidence of a specifically Oriental character in those vases where it is depicted. This animal actually existed in Northern Greece as late as the time of Pausanias, and occurs in early Greek mythology (witness the lion of Nemea), in early sculpture at Mycenæ, and in early coinage, as the money of Macedonia and Magna Græcia, particularly that of Velia.

The vases themselves suggest further and still stronger doubts. The mæander ornament or key fret, which enters in various forms into Greek vase decoration from the very earliest to the very latest times, occurs also in early (we know not how early) Japanese ornaments, and on the tombs of the early Peruvians (Birch, i. 263). Dr. Conze, in pl. ii., gives a representation of a matted pattern enclosed in acute-angled triangles, forming part of the ornamentation of one of the earliest vases: fragments of pottery very similarly ornamented were found at a considerable depth below ground in Jerusalem (exhibited Museum of the Palestine Exploration Fund, 1869), and can scarcely be regarded as anything but Semitic or Oriental. Once more, the close resemblance between the connected circles of his Aryan subdivision, and the guilloche pattern or intersecting circles of his Orientalised subdivision, has been pointed out by Dr. Conze himself.

The evidence of inscriptions, so far as we know, is wholly wanting in the case of these vases. Pending more complete proofs, we must hold it doubtful to which millennium before our era either the one subdivision or the other by origin belongs; and must consider the attempt to trace in them ethnic individualities of decorative style as at any rate premature. Possibly just as good a case might be made out on the other hand, to show that in their very earliest forms of ornament the most unconnected families of nations nearly resemble one another. In the mean time Dr. Conze's pamphlet has to be acknowledged as quite a little model of terse and suggestive exposition by a master of his subject.

Churchill Babington and Sidney Colvin.

ARCHÆOLOGICAL PROCEEDINGS IN ROME.

Rome, Feb. 21.

Not many new discoveries have been made, but many undertakings of promise have been continued, since I wrote last, under direction of the Commission appointed by the present *régime*. The two principal sections of the Palatine, in one of which the Napoleonic, in the other the Pontifical government, had been carrying on works for several years, are now thrown into one estate, where the excavations at this moment progressing, are alike under the direction of Signor Rosa. The labours in the Forum continue, but have not advanced farther than the Julian basilica and the vicinity of the column of Phocas. The total demolition of the Salarian gate, the *débris* of whose massive stonework now lies on the wayside, has been regretted and protested against. Why, it is asked, destroy that interesting monument of the Honorian period, which spoke of the tragic vicissitudes of a declining empire, of the last struggles against barbarian invasion, and the first dread shock by which the spell of inviolability was broken, when, on the night of the 24th August, A.D. 409, Alaric entered Rome at the head of his Gothic army through this towered gateway? It has been urged that it was necessary to destroy it, owing to the injuries suffered in the siege on the 20th September; but this cannot be believed by any one who saw (as I did) the condition in which that "Porta Salaria" stood during the first days and several weeks after that memorable attack. Nor does it seem of importance that a gateway, built according to modern systems of defence, should be substituted for the ancient one on this side of the city, opening upon a road (the Salarian, still known by its classic name) one of the least frequented, and which leads to no great city. The proposed restoration is to be from the designs of the architect Vespasiani, whose work is ready, and has been praised; and the new gateway is to be called after Victor Emmanuel. For the loss of the *old*, archæology has been compensated by a discovery of special interest, which has been attracting numbers to that site. Within one of the round towers flanking this ancient "Porta," on the right as one leaves the city, and completely embedded in the Honorian structure, has been found a large quadrangular monument, the basement and lower storey alone preserved, together with a cippus of considerable elevation rising at the south-western angle. The ample basement is adorned with plain mouldings and flat pilasters of travertine, the wall between which is of peperino. In the upper and more ruinous part it is evident that more than one sepulchral chamber must have been opened. On the front of the cippus is a high relief in an arched recess of a youth wearing the toga, and holding a scroll in one hand; the lateral surfaces and the ample space below being covered with an inscription in Greek and Latin. The cippus is crowned by an entablature of good style, and also adorned, at the narrow sides, by bas-reliefs of an urn or sacrificial vase, and a patera. The epitaph is especially interesting, for it informs us that the deceased, a boy in his twelfth year, was a poet, who wrote and extemporised in the Greek language. On a lintel under the relief-statue are the words *Deis Manibus Sacrum*, and below the following lines:—

"*Q. Sulpicio Q. F. Cl. N. Maximo Domo Roma. Vix. Ann. XI. M. V. D. X. Hic Tertio Certaminis Lustro Inter Graecos*

Poetas Duos Et L. Professus Favorem Quem Ob Teneram Aetatem Excitaverat In Admirationem Ingenio Suo Perduxit Et Cum Honore Discessit Versus Extemporales Po. Subiecti Sunt Ita Parent. Adfectib. Suis In Dulciss. F. Vid. Q. Sulpicius Eugromus Et Licinia Januaria Parent. Infelicissim. F. Piissim. F. F. C. Et Sibi P.

ΕΠΙΓΡΑΜΜΑΤΑ.

Below this are twenty metrical lines in Greek, divided into two columns—the composition, no doubt, of this gifted boy. Having only a photograph of the tomb to avail myself of—the promised engravings, with explanatory text, not being yet supplied—I regret that I cannot transcribe the Greek, much of which is to me illegible, though in well-formed letters. Some words in the same language are seen on the scroll held in the statue's right hand. The left hand and part of the face are mutilated; but what is preserved gives the idea of a countenance and expression proper to riper years than those of the youth represented. Other remnants of tombs, one circular, another quadrangular, and built in travertine, have been found, alike concealed for centuries within the brick towers of the gateway; also a few other inscriptions, one being the brief epitaph of Licinia Januaria, mother to the poetic Sulpicius Maximus. It may be inferred that different patrician families owned a group of mausoleums on this spot. Amidst similar conditions was found, in 1838, the very curious sculptured tomb of the baker Eurysaces in the Via Labicana, alike sacrificed to the Honorian fortifications, outside the Porta Maggiore.

Christian antiquities and all excavations in the catacombs are still left under the experienced care of the Cav. di Rossi, and the nominal superintendence of the Cardinal Vicar, to whom alone that gentleman is responsible. The most important of such works now in progress are those in the Catacombs of Prætextatus; and di Rossi's *Bulletino* (No. 1 of second series) gives a full account of these—at least of all that has been recently done—the most interesting details having reference to an arcosolium, shown by the remnants of marble and porphyry ornamentation to have been of much magnificence; and a singularly formed apse opposite to that splendid tomb, with a spacious semicircular area, and in this place, where might have stood an episcopal chair, an entrance to a long corridor; this arrangement being evidently intended for accommodating the many worshippers who used to visit and pray before that arcosolium. Other works in the Callixtan Catacombs, and in that of Priscilla on the Salarian Way, have been continued, and will be the subject of other reports promised by di Rossi. Another interesting discovery in this range is a corridor of the S. Agnese Catacombs, entered below that ancient basilica on the Nomentan Way, and therefore at some distance from the public entrance, long known and open to all visitors, into the same hypogee. This entrance from the church is the original one, long supposed to have been destroyed, and has been found through the enterprise of the monks, Lateran canons, who reside at the monastery restored by Pius IX. at the S. Agnese basilica. Those monks have had the good sense to leave all undisturbed, exactly as found; the tombs still unopened, the original inscriptions in their places. Contiguous to some of those Christian graves are remnants of the lamps by which visitors were guided to the spot, and also of the phials, bearing marks of red fluid, which have long been regarded as certain signs of martyrdom, their contents being supposed no other than the blood shed by the deceased for faith or conscience's sake. I need not here attempt to weigh the arguments of the antiquarians who assert that this theory is erroneous, and that the liquid found in such vessels is nothing else than wine, probably sacramental.

The last number of di Rossi's *Bulletino* is dedicated exclusively to the subject of the S. Clemente basilica, the subterranean church opened beneath the more modern edifice, and the temple of Mithras, recently discovered at a still lower level than that church, now reduced to the state of a crypt. Referring to this subject, I feel the necessity of paying tribute of gratitude to the estimable Prior of the Dominican convent, Father Mullooly, to whom these discoveries are due. Of the Mithraic temples, remains of which have been found in or near Rome, this is the only one that presents the form of the *spelaeum*, or sacred cavern; as also did another opened at Ostia in 1797, but since then destroyed. The learned writer's theory, sustained with much force, is that the vaulted hall of that Mithraeum was not originally destined for that Oriental worship, but was no other than the oratory formed for Christian rites in the mansion of Pope S. Clement, taken away from the Christians during one of the pagan persecutions, and restored to them by Constantine. The "memoriam Clementis," which the "exstructa ecclesia" preserved in the time of S. Jerome, on the Cœlian hill, may consequently be recognised in this cavernous hall, now seen by torchlight so far below the level of the church actually in use. A singular detail here observed, the podium of some height, carried round the interior, corresponds to what we see in the other Mithraic temple, opened a few years ago at Ostia; but differs in that its summit, instead of being level, as in the Ostian example, is for the whole extent oblique, sloping downwards to the wall, so that worshippers could neither have stood nor knelt upon it without inconvenience. This di Rossi accounts for by assuming that the sacred banquets were held here, the guests reclining along this podium, the viands and tazze, &c., being placed along a flat ledge, with semicircular recesses at intervals, which projects from the inclined platform towards the central area. A bas-relief found in the Tyrol, and cited in support of this view, represents precisely the banquet, with guests reclining on couches, as the last scene among Mithraic initiations, or rather the crowning festivity after the trial of the neophyte by various ordeals, and the symbol of his celestial reward. This Mithraeum at S. Clemente was also made the subject of an ably written paper by the Cav. Carlo Visconti, read, in an English version, at the last meeting but one of the British Archæological Society. The last lecture at the weekly meeting of the British Society was translated from a carefully compiled account of the public works and monuments of Trajan by Signor Lanciani, a young Roman architect; and one of the interesting papers lately read before that audience was on the Leonine City and the S. Angelo Castle, by Mr. Parker.

Among noteworthy subjects recently brought forward by the German Archæologic Institute here was the recently discovered ruins of a temple of Diana in the lake of Nemi, below the picturesque village which bears the same name. That temple seems to have been a sanctuary of important character. A long inscription, among its extant contents, gives a list of the objects there deposited or used—tripods, tazze, female ornaments, &c.; the inferior style indicating a date not earlier than the second century of our era. Two papers on these remains were read by Dr. Henzen at the Friday meetings of the Institute. Archæology is still, as under the Pontifical government, almost the only theme illustrated or attempted by such literature as appears—apart from political journalism—in Rome. C. I. Hemans.

ART NOTES.

Marquis Campori of Modena, whose contributions to the literature of the fine arts have been of late both numerous and important, recently read some interesting papers before the deputation for national history at Modena. These papers comprise original correspondence found in the Mantuan archives relative to the connections of Giovanni Santi and Raphael, with the family of Gonzaga. We thus learn for the first time that in 1494, Santi was employed to paint two portraits, that of Elizabeth Gonzaga Duchess of Urbino, which was to be sent to Mantua, and that of a Monsignore, which was to be taken to Urbino. Campori supposes the Monsignore to have been Lodovico Gonzaga, Bishop of Mantua. He was sick when Santi came to Mantua, and gave the painter no sittings. On Santi's return to Urbino, it was his turn to be sick, so that he made no use of the sittings offered by the duchess. Santi died in August 1494, without painting the likenesses. The connection which began with the father continued with the son, and Raphael had frequent interviews at Rome with the Gonzagas. In 1513 he painted the likeness of Foderigo Gonzaga, then detained as a hostage by the Pope; and the documents on the subject of this likeness prove the date of its execution as well as its subsequent existence in the Mantuan Gallery. A proof is thus afforded to us that the following item in the catalogue of Charles I.'s collection refers to a genuine Raphael: "Done by Raphael Urbin, a young man's head without a beard, in a red cap whereon a medal, and some part of his white shirt, without a ruff, in his long hair, being the Marquis of Mantua. The picture being only a head so being as the life."

Other documents read on the same occasion add a link to the chain of proof enabling us to determine that the Madonna della Perla in Madrid is the picture known to old writers as the Madonna of the house of Canossa at Verona.

Amongst new collections recently made accessible to the public, we have to notice that of the Fürstenberg family at Donaueschingen. The works of art belonging to this family have been put together in an appropriate building and catalogued by Alfred Woltmann, the clever and well-known author of the life of Holbein, now professor at Carlsruhe. Amongst the treasures most worthy of notice we should register twelve scenes from the Passion by the elder Hans Holbein, and works by Zeitblom and B. Beham.

Few visitors to Aix-la-Chapelle will have left the town without seeing Rethel's frescoes in the townhall illustrating the history of Charlemagne. The whole series has just been engraved for the Art Union of Rhineland and Westphalia.

The *Portfolio* for the 1st of March contains a very interesting photograph from Mr. Holman Hunt's first drawing for the central figures of his "Christ in the Temple." Mr. Hamerton's paper on kids is written with a great deal of grace and insight, but the little designs which accompany it are not only slight but inadequate and even unpleasing.

In the *Italian Official Gazette* for Feb. 14, we find mention of the discovery in the parish church of Corbetta, a village in the district of Abbiategrasso, of a fresco signed *Anno* 1475, *die x Octubr. Gregorius de Zavatarijs pinsit.* This puts us in possession of an unquestionable work of the painter Gregorio Zavattaro, in addition to those of the chapel della Regina in the cathedral at Monza, which are authenticated by an inscription as having been executed at any rate by members of his family.

A moot question of attribution has always been that of the famous Italian engraving styled "Stregozzo" or "Carcasse"—a witch with a pot of fire riding on the skeleton of a whale, with an attendant train of men and fiends, and a background of sedge and bulrushes. The ordinary copies bear the monogram of Agostino Veneziano, sometimes in two places; and the plate is certainly of his cutting, either alone or in conjunction with Marc Antonio. The design has been set down by some to Michel Angelo, and by others to Raphael, or might not impossibly be by Giulio Romano. But a little picture on copper contributed by the Duke of Wellington to the Exhibition now open for the Distressed Peasantry of France, gives strong testimony in favour of the second of these attributions. It is a copy after the engraving in question made by Spagnoletto, and signed "R. V. inventor. Josephf de Ribera pinxit." R. V. is Raphael Urbinas, and the signature thus shows to whom the design was considered due within about a century of its publication, by those from whom Spagnoletto got his information.

Music.

Beethoven. Von Richard Wagner. Leipzig: Fritzsch.

It is always interesting to read what a man of high creative genius has to say of the work of others. Such criticism, besides its direct value as criticism, reveals much of the principles and motives which guided the author in developing his own creations. For instance, Schiller's essay on Goethe's *Egmont* furnishes us with a deep insight into the poet's own workshop; and in the same way the critical writings of Robert Schumann might almost be called the programme and keynote to his music. The same and even a greater interest attaches for a similar reason to Wagner's pamphlet written for the centenary of Beethoven, because the "music of the future," according to its founder's words, is only the development of Beethoven's gigantic ideas as represented by the works of his last period. As might be expected, Wagner's essay is not a mere panegyric, like those which appeared in Germany by dozens on this occasion; he himself desires that this work should rather be considered as a contribution to the philosophy of music. Indeed it contains almost the whole idea of this art and its development in a nutshell, with the main object of determining the place of Beethoven's compositions as a stage in this development.

It is remarkable that in the most musical and most philosophical country of the world the philosophy of music has been inadequately handled by its deepest thinkers. Even Leibnitz saw in it only an "exercitium arithmeticae occultum nescientis se numerare animi," while in our own times a man like Friedrich Vischer left the musical department of his *Aesthetik* to be worked out entirely by a friend, confessing his own ignorance of the subject. The first German philosopher who was not frightened by the dark clouds hanging around the theory of this art is Arthur Schopenhauer. And as the ideas of the chapter on music in the *Welt als Wille und Vorstellung* form the foundation of Wagner's speculations on the same problem, it may be worth while to enter into some of the details of this interesting but complicated subject, "the philosophy of music."

The aim of all arts, save one, is—Schopenhauer says—to express the archetypal ideas which, following Plato, he conceives to be the forms that fashion the Cosmos. Arts like painting and sculpture, the drama and the ballet, embody those ideas as conceived by the artist through the medium of these phenomena, and even lyrical and epic poetry avail themselves of the actual facts of life and the visible wonders of the world. It is otherwise with music. The harmonies and melodies of the composer are "as immediate and direct an objectification or copy of the will of the world as the world itself is, as the ideas are, of which the universe of things is the phenomenon. Music is thus not the 'copy' of the ideas, like the other arts, but a representation of the cosmical will co-ordinate with the ideas themselves" (*Welt als Wille und Vorstellung*, vol. i. p. 304). In this respect the musical composer is the only *creative* artist. While the painter or sculptor must borrow the raiment for his idea from the visible beauty of the human form or the landscape, the musician is alone with his inspiration; he has only to listen to the voice of the spirit of the world, or, which is the same, of his own spirit, speaking to him as in a dream. For it is only in dreams when the senses leave the soul undisturbed, that this state of self-absorption is attainable.

Building on this foundation, Wagner proceeds to reason as follows. Since music borrows nothing from the outer world, it must be free from the limits of space and time, which are only the conditions under which the outer world is apprehended by the human mind. Indeed, that which is the most purely musical in music, harmony, and the pieces which are framed chiefly upon harmony, so far from being dependent upon time, can scarcely be measured by it. Thus, in Palestrina's works the change from one chord into another is hardly perceptible, and rhythm as an independent principle can scarcely be said to exist. It is rhythm which connects the purely spiritual art of transcendental music with time, for rhythm is, according to Aristoxenus, only a regular return of shorter and longer portions of time as manifested by a movement performed in this time, and in music this movement is the μέλος or tune. Rhythm is therefore a foreign element in music proper, and compositions which, like dances, are entirely founded on it are of a much lower order than those where the melody grows organically out of harmonious relations.

The limits of music as an independent art are the same as its powers. It must and can express the motions and

vibrations of will and passion, but it fails as soon as it tries to invade the domain of poetry. Its mission is to interpret the impulse of passion, not to describe persons or explain situations. This music, pure and simple, was brought by Beethoven to the highest pitch of perfection of which it was capable. He took the sonata and symphony as they had grown out of the small beginnings of dance music and filled them anew with ideal passion. The dramatic power with which Wagner describes the great composer, cut off by his deafness from all the world, and even from his own creations as embodied by sound, and yet rejoicing like a god in the midst of his works—a Tiresias who, blind himself, saw farther than all the world with their seeing eyes—is worthy of the author of *Tristan* and the *Valkyre*. And yet, as our author shows, Beethoven, in all the bliss of musical creation, betrays a longing for something of which he himself was scarcely aware, but which he descried with the unconscious divination of genius, and the marks of which are distinctly traceable in the works of his last and grandest period—a result which we know now to be something quite out of the reach of music proper, and attainable only by the union of its power with that of all the sister arts.

The possibility of this union Wagner explains thus. Music is connected with dancing by rhythm, which is common to both, and rhythm is also the foundation of the art of acting, which is only the highest and noblest kind of pantomime. Even in painting, sculpture, and architecture, the Greek philosophers discovered analogous principles. Antique poetry, both of the north and south, was entirely founded upon rhythm, and modern poetry retains traces of its origin. This connection, moreover, between music and poetry is the closer because poetry is intended to be pronounced by the human voice, which is at the same time one of the most perfect musical instruments. This view of the human voice, as merely or mainly an instrument of music, explains the subordinate position to which poetry was confined where it appeared as text to artistic music. In the Italian aria for instance which maintained an unlimited sway over the operatic stage and the concert-room of the last century, it is almost true to say that words were only put into the mouth of the singer as more convenient for him to pronounce and to remember than meaningless vowels. At most their meaning served to give the composer some slight indication whether to write a brilliant *allegro* or a sentimental *adagio*. Almost the same might be said of the whole libretto of an opera which had to be adapted entirely to musical purposes. Of course dramatic absurdities could not always be avoided where the words were to be written for the music rather than the music for the words. Even musicians, with a high dramatic faculty like Mozart, though they were led sometimes by the dramatic situation to effects of the greatest beauty, were too much accustomed to consider the opera from a merely musical point of view to restore the necessary equality between music and poetry, so as to give to the combination of them the harmony of a real work of art.

With the estimate which our author gives, in this connection, of the modern Italian and French opera, we are bound to say that we cannot entirely agree. Surely works of men like Verdi, Auber, and Meyerbeer, if compared with those of Bellini and Donizetti, exhibit an immense progress in the development of the deeper dramatic capabilities of music. Wagner himself, as a musician, has learned much from these writers, and seems to us to permit himself too severe, however natural, a judgment upon what to him now are the errors of his youth.

On the other hand it is of course true that so long as the opera is merely considered as an acted piece of music it can never fulfil the conditions of the drama.

To continue with Wagner: Beethoven himself felt this drawback in the musical stage of his time, and *Fidelio* remained the only opera he ever wrote. Even that with all its high dramatic qualities is after all scarcely anything but a grand symphony of instruments and human voices. For a reorganization of the drama from the poetical point of view Beethoven's musical powers were too predominant. But in another sense he was destined to originate "the poetry of music." He was the first who attempted to condense the vague feelings which were all that music had hitherto expressed into more distinctly intelligible ideas; he even brings the song of birds, the thunder, and the murmuring of the brook before the ear, less as a portrait of the face of nature, than as at once a suggestion and embodiment of the feelings which would be called up by them: "mehr Ausdruck der Empfindung als Malerei"—as he wrote himself at the head of his Pastoral Symphony. If we recall the simile between the composer's state in production and a dream, we might compare this phase of Beethoven's artistic career to the transition between waking and sleeping, where the senses as they revive supply the mind with images from the outer world, to clothe its dream which was naked and shapeless. Indeed there are passages in his later instrumental works such as long distinct *recitativi* which can only be explained by the presence of some occult idea striving for self-consciousness, or, if it may be, expression. None of the great opera composers before him had brought this dramatic quality of music to such a degree as Beethoven, not in his *Fidelio*, but in his orchestral works like the overture to *Coriolanus*, the conception of whose character is scarcely equalled by Shakespeare himself, or in the Ninth Symphony, which seems to be the sublime accompaniment to some immense drama, of which mankind itself, with all its doubts, pains, and joys, is the hero.

Wagner calls this symphony the last that has ever been written, and seems to deny a *raison d'être* to the symphonies by which Schubert, Mendelssohn, and Schumann have really enriched the literature of music. We are quite prepared to admit that any further development beyond and *in the same direction as* the Ninth Symphony, can be nothing else than the Music-Drama: still the emergence of a higher and more complex type does not render impossible or irrational the perpetuation and perfection of a lower and simpler species as such. This step to the Music-Drama Beethoven could not make, partly because his nature was too thoroughly musical to begin a reconstruction of his art on a poetical basis, partly because he never succeeded in finding a dramatic poem at once congenial and adapted to his own inspiration.

By a rare gift of nature Beethoven's great follower, Richard Wagner, is endowed in an eminent degree with both qualities, and in him at last we must recognise the reformer who reunites the two arts of drama and music, which seemed to be separated by a profound chasm, and in reality are one. For though music starts from a region quite aloof from the world of existence, whilst the drama grows out of the most real reality of life, yet they are necessary to each other as co-ordinate and complementary expressions of the infinite depth of human passion. Fr. Hüffer.

New Publications.

Diayo, Vincenzo. Una passegiata alle tombe. Pensieri e descrizioni sui monumenti ed epitaffi dei cimiteri di Trieste. Trieste: Schubart.

Graduale de tempore et de sanctis juxta ritum Romanae ecclesiae cum cant u Pauli V pont. max. jussu reformato cui addita sunt officia

postea approbata sub auspiciis sanctissimi domini nostri Pii IX curante sacr. rituum congregatione. Regensburg: Pustet.

Lowell, T. R. My Study Windows. Boston: J. R. Osgood and Co.

Solomon, Simeon. A Vision of Love revealed in Sleep. Ellis.

Stephen, Leslie. The Playground of Europe. Longmans, Green, and Co.

Wyclif, J., Select Works of. Ed. by Thomas Arnold. 3 vols. Clarendon Press.

Theology.

The Book of Isaiah Chronologically Arranged. An amended version, with historical and critical Introductions and Explanatory Notes. By T. K. Cheyne, M.A., Fellow of Balliol College, Oxford. London: Macmillan.

Most of the prophecies in the Book of Isaiah owe their origin to the stimulus of warlike events, and can only be thoroughly understood in close connection with these. This fact alone is sufficient to show the importance of a chronological arrangement, such as our Masoretic text does not supply. Ewald long ago showed with great probability that the first part of our book was composed of smaller collections put together under the superintendence of the prophet Isaiah himself; and a similar proceeding on the part of Jeremiah is well known to be historically certain. But there are many other prophecies of Isaiah which were first collected by his companions and disciples, it may be long after his death; and the uncertain compass of the book procured acceptance for other oracles still, which were either held to be Isaiah's or at least sufficiently important to be worth preserving. But such an extension of the book into a kind of prophetic anthology was incompatible with the preservation of the kind of unity which we find in the Book of Jeremiah, or in Ezekiel's collection. It is probable also that later generations were influenced by the assumption that the greatest prophet must necessarily have left the greatest number of predictions, just as the pre-eminence of Moses was based upon the number (74) of his miracles. In addition to this, the connection of passages is often broken by the present division of the chapters, while utterances of different dates are joined together, so as to render the comprehension of the whole almost impossible; while the division into verses contributes largely to obscure the original grouping of the thoughts. Mr. Cheyne therefore deserves our gratitude for having furnished a correct chronological arrangement, as well as a translation corresponding to the real connection of the sense. He is moreover thoroughly acquainted with the latest researches upon Isaiah; a precise brevity characterises his way of stating a case, and his explanations of difficult passages are often original and convincing. Altogether the work is one which will enable English readers, for the first time, to form a correct idea not only of the works of the greatest of the prophets, but of all the best prophetic activity in the eighth century B.C., and at the end of the Babylonian captivity.

The introduction discusses Isaiah's prophetic career, his writings, and, at greater length, the question of the authorship of chaps. xl.-lxvi. Although these topics have all been debated times without number, we have here brought to light two or three essential points which have been nearly overlooked hitherto, in spite of their great importance. It is shown, *e.g.* that both in his style and his matter Isaiah was a trained, if not exactly a learned, prophet. Whatever influence oral instruction may have attained, it cannot have been of the same importance in Isaiah's time as it was in the later schools (or amongst the Brahmins); it must have rested for support upon the study of written prophecies, and upon the existence of a body of prophetic literature of which probably we have only scanty fragments remaining. Even as early as in Isaiah we can discern (as our author, following Ewald, rightly points out) traces of an endeavour to record, and, so to say, to publish, collections and summaries of the existing oracles. What we possess is only a series of "reproductions of the main outlines of his public teaching," often rearranged with a view to literary publication. This was not indeed denied by previous writers; but in determining the chronology of single prophecies the importance of the consideration had been insufficiently appreciated. Only in the case of the introductory vision (chap. vi.) had it been admitted that the date of the vision itself was much earlier than the publication, whether oral or written, of the prophecy, and that this last date was approximately fixed by circumstantial indications, the closer investigation of which has yet to be made. In the same way the real chronology of many other oracles has been obscured by the modifications attendant on their publication; and it is precisely this which makes it so difficult to determine *when* a given prophecy was first delivered. But as the first step towards overcoming a difficulty is to recognise its existence, the author has rendered a real service in calling attention to this side of the chronological problem. In section 3 seqq. the question whether chaps. xl.–lxvi. are Isaiah's is treated in a more definite and trenchant manner. The author states the grounds for a negative conclusion so clearly and forcibly that we can scarcely imagine an unprejudiced reader remaining unconvinced by them. In Germany, of course, adherence to the affirmative view has long ceased to be the Shibboleth of orthodoxy. The account of the characteristics of the five prophets of the Captivity whose fragments are contained in our book is also acute and penetrating, and in section 8 the value of the received text is estimated with learning and judgment.

On p. 32 the author gives a chronological table of events after Jules Oppert, according to which the expedition of Tiglath-pileser took place in 733, that of Sennacherib against Judah in 700, Shalmaneser's accession in 727, and his succession by Sargon in 722. In the work itself, however, Mr. Cheyne identifies Sargon and Shalmaneser, and places Sennacherib's campaign in 714, according to the common calculation. The fact is that the list seems either to offer too much or too little. It is well known that the common (Biblical) chronology of this period has been seriously called in question by both Assyriologists and Egyptologists. The introduction to a chronological arrangement of the prophecies of Isaiah ought surely to offer some solution of the difficulties of the case, and we should have thought that the clear and concise pen of the author was fully equal to the arduous undertaking. Mr. Sayce's valuable remarks in the supplementary notes at the end are not sufficient. It makes a difference whether Sennacherib's invasion is placed in the year 714 (or 713), or in 703 (or 700): if the last, it is evident that Isaiah did not collect the prophecies referring to this expedition himself (especially xxviii.-xxxiii.), and this explains their present position. The question of the identity of Sargon and Shalmaneser depends partly upon the proofs of Mr. Sayce's remarkable theory that the strokes in the Assyrian Fasti indicate chronological periods, instead of denoting, as most Assyriologists maintain, the accession of a new king—a problem which is certainly not yet ripe for decision. But though such an extension of the introduction would have been most welcome, the want of it does not materially affect the value of the results attained; the succession of the principal events is firmly established, and though, by the acceptance of the Assyrian chronology, single dates are displaced, and the

distance in time between the principal groups of Isaiah's prophecies enlarged, their *relative* date remains the same. It would have been well if in his list of the prophecies (p. 30) Mr. Cheyne had also marked the corresponding chapters in the Book of Isaiah.

As far as the chronology of single groups is concerned, we agree with almost all the author's conclusions. In spite of their brevity, his arguments have great cogency, and his analysis of the contents, though of less independent value, reproduces the sense and connection of the pieces with a force and beauty such as we seldom find in works of this kind, which are apt to make very little account of mere merits of style. It has been pointed out by Ewald, and no doubt rightly, that chap. v. 26–30 is a continuation of the passage ix. 8–x. 4. But whether this falls towards the latter part of Jotham's reign, or after the defeat of Rezin by Tiglath-pileser (that is 739 or 732), depends upon whether we translate *tzarê* (ix. 10) *oppressors*, or (with Mr. Cheyne) *warriors*, which seems to us rather bold. It would be preferable to suppose (with Ewald) an early and easily intelligible alteration from *ssarê* (princes), for there is no doubt that v. 11 refers to previous attacks of the Syrians and Philistines upon Israel. A division of chap. vi., making verses 1–8 to belong to an earlier and the conclusion to a later period, is rather hazardous: according to this the oracle in its first form would not have contained the substance of the message, only the prophetic commission itself. The author takes a safer view, p. 22, when he says, "Isaiah interpreted the doubts, which may even then have sobered his confidence, in the light of his subsequent experience." We agree with him entirely that the section vii. 1–ix. 7 was first written down under Hezekiah, since the words, "in the days of Ahaz," could not possibly have been written during the reign of that king. Chap. i. is considered, with great plausibility, as the prologue to a new edition, so to speak, of two collections. The desolation there depicted is supposed to have been due, not to Syria and Ephraim, but, according to 2 Chron. xxviii. 17, 18, to the Philistines and the Edomites. It seems doubtful, however, whether the first invasion and the last can be so distinctly opposed to each other, since the last only affected the south-west and south-east, not the north, of Judæa; besides which they were really contemporaneous. Mr. Cheyne says that the Syrian invasion was only directed against the dynasty; but this could only be dethroned after the people had been completely subdued and the land occupied. *Delirant reges, plectuntur Achivi.* After the loss of two great battles, it was only natural that the country should be overrun. Its total devastation was thus the work of four enemies, according to the very credible account given in Chronicles. The prophecy referring to Philistia (xiv. 28–32) is rightly placed earlier than the last year of Ahaz's life, and may well belong to a disciple of Isaiah. It is perfectly clear that chaps. xv. xvi. are the work of an older prophet than Isaiah, and are only repeated by him; whilst the refutation of Ewald's view, referring xvi. 1–6 to a third author, is quite satisfactory. But whether the oracle pronounced against Arabia, xxi. 13–17, went forth against Sargon or against Sennacherib, in either case it belongs to Hezekiah's time. Ewald's conjecture, *Kenaanim* for *Kasdim*, in xxiii. 13, is adopted by the author; it is true that the historical arguments against the latter are not absolutely decisive, but, on the other hand, the context seems to demand the change. To this must be added that the Masoretic lection undoubtedly mistook the word, and referred it to the ancient Canaanites instead of to the contemporary Phœnicians. We are not inclined to accept in such an unqualified manner the latter date of the conclusion.

While chap. xxviii. belongs to the first year of the siege of Samaria, chaps. xxix.–xxxii., as well as xxxiii., which the author discusses separately, refer to the march of Sennacherib. The passage x. 5–xii. 6 we should, with the author, prefer to place in 721 rather than 715, and it is not apparent why he does not treat it immediately after chap. xxviii. Chap. xx. belongs to the period when Egypt and Æthiopia were seeking the alliance of Judæa against Sennacherib. But the fall of Assur is certain (chap. xvii. 12, 14), and xxxiii. as well as xxxviii. 22–35, are the last words of the prophet in which he expresses this certainty. When, to conclude, the author assigns chap. xix., the prophecy upon Egypt, to the year 680, we feel the want of more detailed proof; and the case is one which calls for more exact researches into the confused field of Egyptian chronology.

Mr. Cheyne devotes five appendices to those prophecies which are not Isaiah's. They all belong to the Exile. Chaps. xxxiv. xxxv. were written at an early period while the bitterness against the Edomites still prevailed, but xxiv.–xxvii. begin to look forward to the fall of Babylon, and in both xxi. 1–10 and xiii. 1–xiv., 23, the Persians appear already in the neighbourhood of the capital. The last twenty-seven chapters are the work of the same prophet, divided into three books, all of which, however, were written during the Exile, though Bleek and others place the later ones only a short time after Cyrus's edict for the deliverance of the Jews. The author also opposes the view of Ewald and Bleek that lvi. 9–lvii. 11 is "a quotation from an earlier prophet who lived probably in the reign of Manasseh" (p. 201). His arguments are worthy of consideration, though the impression made by the passage itself has always inclined us to the view that former prophecies had, at least, been extensively used. Like all unprejudiced interpreters, Mr. Cheyne denies that in the phrase "servant of Jahveh" the prophet alluded to any single historical personage. His own theory is a modification of the view that the term is a collective one; it represents to him, as it were, "the Genius of Israel," *i. e.* that sublime religious ideal, which even the righteous part of the nation confessed (lxiv. 6 &c.) their inability to realise. In fact the question depends on this primary rule of interpretation, that an author in the same book, in the same strain of ideas, and using the same words, cannot be supposed suddenly to mean something quite different from what he meant by them before. This negative must be distinctly maintained so long as we believe in the possibility of exegesis; and it is just in the chapters (lii. liii.) where the personification is carried to the highest point that the epithets of the "servant of Jahveh" become the same as the most important of those which had been previously applied to the people of Israel.

The translation adheres as closely as possible in style and diction to the English authorised version; and as this is well known to be one of the best of popular translations, there are comparatively few alterations of serious importance. On the other hand, there are many trifling corrections, which are often very happy in bringing the real sense into clearer relief. The short explanatory notes which follow every section are also very valuable. The author is evidently a master of scientific exegesis, and though, especially in what concerns conjectural emendation, he follows Ewald by preference, he preserves his own independence of judgment throughout. Thus the notes satisfy the demand for "accurate information on the most important books of the Old Testament," whilst they are entirely free from a striving after cheap originality. Many of his explanations are so acute and exhaustive that we should recommend them strongly to the attention of professional scholars even when their substance is already familiar. To this number belongs the very satis-

factory explanation of El Gibbor, in ix. 6, which has been obscured by dogmatic prejudices, together with the sound remark: "The length of his name (viz. in two pairs of compound names) is to express, in Oriental manner, the dignity of its bearer." The same may be said of the explanation offered of the difficult phrase *b'rîth 'am* (covenant of the people," xlii. 6). The designation of Æthiopia as the "land of resounding wings" (xviii. 1) is also neatly explained in the note: "The prophet compares the tumult of the Æthiopian hosts to the buzz of swarms of insects" (p. 95; cf. *Notes and Criticisms*, p. 20), which supersedes all the "wild guesses" of ancient and modern interpreters. To these must naturally be added all the more important interpretations which the author had already discussed in his *Notes and Criticisms*. One word in conclusion on a "supplementary note," p. 237. We have always held that in i. 12, *leraoth panai* should be read *lir'ôth*, "to behold my face;" and the author's proofs are irresistible. In general all the forms, in which the punctators have assumed a contraction of the infinitive Hifil and especially of the Nifal, require thorough revision. We can thoroughly recommend Mr. Cheyne's translation and explanation of the Book of Isaiah, as a successful attempt to extend a right understanding of this important Old Testament writing. L. DIESTEL.

Selected Articles.

On Pascal's Provincial Letters, by Rev. H. J. Coleridge, in The Month, March.—[Exposes Pascal's misrepresentations of the Jesuits. It should have been noticed that the latest Protestant biographer of Pascal admits the influence of unfair motives upon his hero. See Dreydorff's Pascal, sein Leben u. seine Kämpfe, Leipz. 1870.]

On the late Professor Van Hengel, in Protestantische Kirchenzeitung, March 4.—[Prof. Van H. died last month at the age of 91. Surpassed by no German scholar in knowledge of Greek Testament idioms, he held the balance in his own University (Leyden) between the "orthodox" and the "liberal" parties.]

On the new edition of Tuch's Genesis, by H. E., in Gött. gel. Anz., Feb. 15.—[Chiefly against an essay by Merx on the progress of criticism. H. E. betrays some irritation at the rude shocks given by Graf and others to the comparative unanimity which till lately prevailed among critics. H. E.'s arguments are the well known ones of Prof. Ewald.]

On Schrader's edition of De Wette's Introd. to the Old Test., by Kamphausen, in Studien u. Kritiken, 1871, No. 2.—[Very thorough critique; admits the superiority of Schrader to the new edition of Bleek.]

On Hitzig's History of Israel, by Diestel, in Jahrb. für deutsche Theologie, 1871, No. 4.—[Discriminates wisely between the various degrees of probability in Hitzig's conjectures.]

On Hitzig's Zur Kritik Paulin. Briefe, in Lit. Centralblatt, Feb. 11.—[Considers Hitzig's conjecture on the relation of Colossians to Ephesians as worthy of attention.]

New Publications.

FRITZSCHE, O. F. Libri Apocryphi Vet. Test. græce. Accedunt libri pseudepigraphi Vet. Test. Leipzig: Brockhaus.

GODET, F. Commentaire sur l'évangile de saint Luc. 2 vols. Neufchatel.

GRÄTZ, H. Koheleth, oder der Salomonische Prediger, übersetzt u. kritisch erklärt. Nebst Anhang üb. K.'s Stellung im Kanon, üb. die griech. Uebersetz. desselben u. üb. Gräcismen darin, u. einem Glossar. Leipzig: Winter.

PALMER, E. H. The Desert of the Tíh and the Country of Moab. (Quarterly Statement of Palestine Fund.) London: Bentley.

SCHOLTEN, J. H. Het Paulinisch Evangelie. Critisch onderzoek van het evangelie naar Lucas en zijne verhouding tot Marcus, Mattheus, en de Handelingen. Leiden: Engels.

Physical Science and Philosophy.

The Descent of Man and Selection in relation to Sex. By Charles Darwin, M.A., F.R.S., &c. In two volumes, with Illustrations. John Murray, 1871.

MR. DARWIN'S reputation already stands so high that it may seem difficult to add to it. Yet this work will undoubtedly do so, and will prove almost equally attractive to the naturalist and the general reader. The two large volumes on *Domesticated Animals and Plants* caused some little disappointment to those who looked for easy scientific reading; but the present work will have no such drawback. It is throughout written in the author's clearest style, it is not overloaded with detail, it abounds in curious facts and acute reasoning, and it treats of two great subjects of the very highest interest—the nature and origin of man, and the overwhelming importance of sexual influences in moulding and beautifying the animal world.

The few passages devoted to sexual selection in the *Origin of Species*, led many persons to suppose that it was but a vague hypothesis almost unsupported by direct evidence; and most of its opponents have shown an utter ignorance of, or disbelief in, the whole matter. It will now be seen on what a solid foundation of fact the theory of sexual selection is founded, and how true, as regards this part of his subject at all events, was Mr. Darwin's assertion, that his first volume contained but a mere abstract of the evidence before him, and that he could not be properly judged till the whole mass of facts he had collected were made public. From the reticence with which the sexual relations of animals have been treated in popular works, most of the readers of this book will be astonished to find that a new and inner world of animal life exists, of which they had hitherto had no conception; and that a considerable portion of the form and structure, the weapons, the ornaments, and the colouring of animals, owes its very existence to the separation of the sexes. This new branch of natural history is one of the most striking creations of Mr. Darwin's genius, and it is all his own; and although we believe he imputes far too much to its operation, it must be admitted to have exerted a most powerful influence over the higher forms of life. In the first part of this article we propose to sketch in outline the main facts and arguments adduced, and shall afterwards discuss certain points which seem open to criticism.

Mr. Darwin tells us that he has for many years collected the materials on which this work is mainly founded, without any intention of publishing them, as he did not wish to prejudice the reception of the general doctrine of natural selection. That doctrine has, however, made such rapid and unexpected progress that no danger of this kind any longer exists; and he has therefore put together his materials relating to the origin of man from a lower animal form. Believing that sexual selection has played an important part in differentiating the races of man, he has found it necessary to treat this subject in great detail, which has much increased the bulk of the work.

The first chapter discusses the evidence for the descent of man from some lower form. Not only is man's whole structure comparable, bone by bone and muscle by muscle, with that of other vertebrata, but his close relation to them is shown in a variety of unexpected ways. He is able to receive some animal diseases, as glanders, hydrophobia, &c., showing a close similarity to other animals in blood and tissues. The internal and external parasites of man are of the same families and genera as those of the lower animals. The embryonic development of man is exactly similar to that of other vertebrates, so that at an early period his embryo can hardly be distinguished from theirs; and arteries running in arch-like branches as if to carry blood to branchiæ which are not present in the higher animals, show his affinity to the lower aquatic forms. A little later, the great toe is found standing out from the side of the foot, as it does in the quadrumana. Numerous rudiments occur in man of structures characteristic of lower forms. Many muscles

regularly present in apes and other quadrupeds occasionally appear in man. The upper part of the infolded lobe of the ear often presents a pointed projection, the rudiment of the pointed and erectile ears of most mammals. The supra-condyloid foramen, through which the great nerve of the fore limb passes in quadrumana and carnivora, is absent in man; but it occasionally reappears, with the nerve passing through it; and a careful examination of the remains of prehistoric races shows, that this form was more frequent in ancient times than now.

The mental powers of man are then compared with those of the lower animals, and it is shown that the latter possess the rudiments of them all. The origin of the moral sense is next treated of; and although such eminent writers as Mill, Bain, Herbert Spencer, and Sir John Lubbock, have all given their independent theories on this subject, Mr. Darwin has hit upon a perfectly original view, which is perhaps more satisfactory than any which have preceded it. He maintains that the moral sense arises from the social instincts combined with an active intellect. As soon as the mental faculties became well developed, images of past actions and motives would be incessantly passing through the mind of each individual, and a feeling of dissatisfaction would arise whenever it was perceived that the ever present social instinct had yielded to some other instinct stronger at the time but less enduring. For example, such instincts as hunger, lust, or the desire of vengeance, are immensely strong but are not enduring, and do not leave vivid and easily recalled impressions at all proportionate to their intensity at the time. The feeling of sympathy, the need of companionship, the desire for the approbation of our fellows are, on the other hand, ever present with us, and anything which interfered with these would be a constant source of dissatisfaction. If then a being with a sufficiently active mind to recall past actions and see the effects they have produced were, under the impulse of any of the stronger instincts, to rob, starve, kill or injure those who were necessary to the satisfaction of his social instincts, he would inevitably feel dissatisfied with himself at having allowed his passion for a temporary enjoyment, the force of which he could not realise afterwards, to interfere with the satisfaction of his less intense but more permanent desires and instincts. A repetition of such experiences would lead to the feeling that the one kind of instincts was less important to his welfare than the other. He would class them as passions to be regulated and controlled; and when in spite of his determination to control them he had not done so, he would almost despise himself — would feel remorse — would be rebuked by his conscience. Mr. Darwin shows at some length, that the rudiments of all these instincts and emotions exist in animals; and he argues that the acquisition of speech would greatly increase their power; for when each member of the community could express his feelings and wishes, the opinion of his fellows would go to increase the regret felt at having allowed the temporary to overcome the permanent instinct. The effect of this at first, would be to limit "virtue" to that which was for the benefit of the tribe exclusively. Murder, robbery, and treachery within the limits of the tribe would be infamous, but beyond these limits might be even praiseworthy. Thus infanticide is so often not looked upon as a crime, because it is supposed to be beneficial to the tribe; and no pity has been felt for the sufferings of enemies, of slaves, or even of women. Owing to its great utility to the tribe, courage is always looked upon as the highest virtue; and for the same reason fidelity and self-sacrifice are always highly esteemed. But intemperance and licentiousness are never counted as vices, because they do not immediately concern any one but the individual and his family. Mr. Darwin concludes, that the moral sense is fundamentally identical with the social instincts, and has been developed for the general good of the community, rather than for its greatest happiness. "General good" is defined as "the means by which the greatest possible number of individuals can be reared in full vigour and health, with all their faculties perfect under the conditions to which they are exposed;" and it is quite conceivable that this may not be always identical with "greatest happiness." If so, the present theory will be a step in advance in the history of the utilitarian philosophy.

The manner of development of man from some lower form is next very fully discussed. The extreme variability of every part of man's bodily structure and mental faculties is shown; the effect of changed conditions whether of locality or of habits is proved to be considerable; and arrested developments, reversions, and correlated variations are all shown to obtain in man exactly as they do in the lower animals. Natural selection must have acted on man, because he multiplies rapidly beyond the means of subsistence, because he varies, and because he is exposed to varying external conditions; but Mr. Darwin adopts the views of the present writer, that as soon as man's mind had become moderately developed, the action of natural selection would have been checked, as regards his general structure, and transferred to his mental faculties. It is argued that the advance from animal to man must have taken place before the dispersal of the race over the world; and that in some warm country as large as Australia, New Guinea, or Borneo, "the competition between tribe and tribe would have been sufficient under favourable conditions to have raised man through survival of the fittest, combined with the inherited effects of habit, to his present high position in the organic scale." A separate chapter is devoted to the development of man's intellect, and to the effects of natural selection on civilised nations; and though many of the arguments used are open to criticism, the subject is most interesting, and is discussed with Mr. Darwin's usual clearness and candour.

The next two chapters discuss,—the special affinities of man to certain lower animals, by means of which the line of his genealogy can be traced, and the place and time of his origin approximately determined,—and the nature and probable origin of the several races of man. This last he believes cannot be fully explained without the agency of sexual selection, and this leads to the second part of the work, which treats of sexual differences, their causes and effects, throughout the animal kingdom, in order that the principles deduced from this extensive survey may be applied to explain certain residual phenomena in man.

The subject of sexual selection, occupying nearly five hundred pages, is treated in great detail, and abounds in matter of interest; but only a very brief sketch can here be given of it. The main theory depends upon the fact that there is almost invariably a struggle among the males for the females; a struggle carried on either by actual fighting or by rivalry in voice or in beauty. This struggle is moreover ensured by the circumstance that in most cases the males are ready to breed before the females, male insects emerging sooner from the pupa, and male migratory birds arriving earlier than those of the other sex. From this it results that some males gain the victory over others, and succeed in pairing earlier and with the earliest and most vigorous females. The males are always the most eager, the females generally coy; and Mr. Darwin believes that in almost all cases the female exerts a choice, and rejects those males who please her least. Hence have arisen two sets of modi-

fications in male animals: 1. Weapons of various kinds have been developed, owing to those best able to fight having most frequently left progeny to inherit their superiority; 2. Musical organs, bright colours, or ornamental appendages, have been developed, through the females preferring those so gifted or adorned. The laws of inheritance are first discussed; the transmission of characters to the male alone through the female, and the transmission of variations at certain ages to the offspring at the same age, and to one or both sexes. A large portion of the animal kingdom is then passed in review, as respects the differentiation of the sexes and the means by which such differentiation has been produced. This part of the work is illustrated by numerous woodcuts, showing the extraordinary differences of form and structure between the sexes. Many parts of the body have been modified to enable the male to seize and hold the female; and this is adduced as an argument that the female exerts a choice, and has the power of rejecting any particular male. But this hardly seems to follow, for it may well be maintained that when the more active male seizes a female, she cannot escape, and that she has no means of rejecting him and practically never does so.

The males of a considerable number of homopterous and orthopterous insects emit musical sounds by means of very curious and varied apparatus, and there is no doubt that these sounds serve to attract or charm the female. Among most insects the males fight, but neither spiders nor dragonflies have been observed to do so. Among all other insects than lepidoptera, the sexes are as a rule coloured alike or nearly alike, the exceptions being comparatively few; but among butterflies especially, diversity of colour is the rule, the males being almost always most brilliantly or most intensely coloured; and the difference is often so great that the two sexes look like widely different species. Beetles differ more in form than in colour, the males often possessing wonderful horns, spines, or protuberances, immensely long legs or antennæ, or enormous jaws, while in colour they hardly differ at all or are only somewhat brighter. Passing on to the vertebrates, we find that male fishes often fight, and exhibit as much ardour as terrestrial animals; some of them undergo strange changes of form at the breeding season, and some few differ conspicuously from the females in colour, or by the possession of elongated fins, spines, or other appendages. In other cases, although the sexes are usually alike, yet in the breeding season the males acquire new or more vivid colours.

Passing by amphibians and reptiles, among which many curious sexual characters occur, we come to birds, a class which exhibits them in their highest perfection, and which has furnished Mr. Darwin with the most powerful arguments for the complete development of his theory of sexual selection. Almost every imaginable kind of sexual ornament is here to be found. In an immense number of cases male birds are far more beautifully coloured than the females; and besides this, they often possess the most gorgeous developments of ornamental plumage, as in the train of the peacock, the wings of the African night-jar, the tail of the lyre-bird and of the resplendent trogon, the crest of the umbrella-bird, and the breast plumes of the bird-of-paradise. Spurs are also developed upon the legs or the wings, and the male is generally larger, and has a louder or more melodious voice. Among birds is found the first direct proof that the female notices and admires increased brilliancy or beauty of colour, or any novel ornament; and, what is more important, that she exercises choice, rejecting one suitor and choosing another. There is abundant evidence too that the male fully displays all his charms before the females, and some of the facts adduced on this head are most curious and interesting. Mr. Darwin also devotes himself to showing how some of the most marvellous developments of beauty in plumage may have been produced by the constant selection of slight modifications; and he explains in this manner the origin of the eyed train of the peacock, and the wonderfully decorated wings of the Argus pheasant, with an acuteness and success hardly inferior to that which he exhibited when investigating the structure of coral reefs or of orchids. The four chapters on birds would alone demand a lengthy article to do them justice, but as we shall have to return to this subject when we come to criticise some portion of the theory, it will be as well now to pass over the two chapters on the sexual differences and weapons of the mammalia, and devote some little space to a sketch of the concluding chapters, which again treat of man.

The sexual differences of man are stated to be greater than in most species of quadrumana, while in their general features and mode of development man agrees remarkably with those animals, as an example of which we may quote, that whenever the beard differs in colour from the hair on the head, it is always lighter, both in man and monkeys. The law of battle for wives still prevails among some savages, and to this circumstance Mr. Darwin thinks may be traced the undoubted inferiority of woman, not only in bodily strength but also in courage and perseverance, qualities equally necessary to ensure victory. He thinks also that but for the fortunate circumstance that the law of equal transmission of characters to both sexes has commonly prevailed among mammalia, man might have become as much superior to woman in mind as the peacock surpasses the peahen in plumage. Considerable space is devoted to prove that savages think much of personal appearance, admire certain types of form and complexion, and that probably selection of wives and husbands has been an important agent in determining both the racial and the sexual differences of mankind. The evidence adduced, however, seems only to show that the men as a rule ornament themselves more than the women, and that they do so to be admired by their fellow-men quite as much as by the women; and also that men of each race admire all the characteristic features of their own race, and abhor any wide departure from it; the natural effect of which would be to keep the race true, not to favour the production of new races. It is admitted that promiscuous intercourse and infanticide would to a great extent prevent the action of sexual selection; but it would also be rendered nugatory by the fact that among savages no woman remains unmarried, youth and health being amply sufficient charms to procure her a husband. It also seems very uncertain whether any effect would be produced by the more powerful men possessing themselves of a number of the most beautiful women, and rearing on an average a greater number of children, as Mr. Darwin thinks they would do. Where polygamy prevails the number of children to one father may be very large, but will the number to each mother be as large as with the remainder of the tribe who are forced to practise monogamy? This important point is not alluded to. The absence of hair on the body is admitted to be a character that cannot be accounted for by "natural selection," because it cannot be conceived to have been a beneficial variation; but "sexual selection" is supposed to account for it. At an exceedingly early period in our history our semi-human ancestors were hairy, and it is thought that one or both sexes preferred less hair; and any partial nudity that appeared led to a more early or a more constant wedlock, and thus gave an advantage to such individuals and

their more numerous progeny. The example of monkeys and apes is adduced, many of which have bare skin on the face or on other parts of the body; and the New Zealand proverb, "There is no woman for a hairy man," is thought to bear upon the question. This explanation is by no means satisfactory. The analogy of the quadrumana and of other animals would have some force if there were still hairy and hairless or partially hairless men,—with bare faces and breasts, but hairy backs, for example; but we have to deal with a complete nudity, which has no parallel in the animal kingdom except in cases where "natural selection" has evidently come into play. That a smooth-skinned race like the New Zealanders should object to hairiness is natural; for, as Mr. Darwin says, each race admires its own characteristics carried to a moderate extreme. Hairy races would therefore admire abundant hairiness, just as bearded races now admire fine beards; and any admiration of deficient hairiness would probably be as rare and abnormal as the admiration for partial baldness or scanty hair in women, would be among ourselves. Any individual fancy for such an abnormal peculiarity as deficient hair in a hair-covered animal could produce no effect; and that any such fancy should become general with our semi-human ancestors, and so produce universal nakedness, does not seem at all probable, when we have no evidence of such a result of sexual selection elsewhere in the whole animal kingdom. It is true, that in that early state the struggle for existence would have been severe, and only the best endowed would have survived; but unless we suppose a universal and simultaneous fancy among all the most vigorous and therefore probably the most hairy men for what would be then an unnatural character—deficiency of hair in women—and that this fancy should have persisted in all its force for a long series of generations, it is not easy to see how this severe struggle for existence and survival of the fittest would in any way aid sexual selection in abolishing the hairy covering. On the contrary it seems more likely that it would entirely prevent it. We can hardly therefore impute much influence to sexual selection in the case of man, even as regards less important characters than the loss of hair, because it requires the very same tastes to persist in the majority of the race during a period of long and unknown duration. All analogy teaches us that there would be no such identity of taste in successive generations; and this seems a fatal objection to the belief that any fixed and definite characters could have been produced in man by sexual selection alone.

In his last chapter, Mr. Darwin gives an able summary of the whole argument; and, while regretting that the result he has arrived at will be highly distasteful to many persons, maintains, that the whole evidence leads to the conclusion that man, notwithstanding his noble qualities and his godlike intellect, still bears in his bodily frame the indelible stamp of his lowly origin.

Having thus sketched in outline the theories advanced by our author, and given a summary of the facts by which he supports them, we have now to notice in more detail certain portions of the argument which appear to rest upon an insecure foundation either of logic or of fact.

The first and most obvious objection that will be made to this great work is, that it consists of two books mixed together. The whole of the matter relating to sexual selection among animals, would have formed a fitting third volume in the series of works treating in detail of the origin of species; while the part which treats of man, is an application of those principles to the human race which had hitherto only been discussed as regards other animals and plants, and would have formed a fitting companion volume to the *Origin of Species*. This rearrangement could easily be effected in a future edition, and would have many advantages; and should a similar suggestion come from other quarters we hope Mr. Darwin will adopt it.

In entering upon a criticism of some portions of these volumes, I am compelled to touch upon certain topics on which I hold, and have published, views differing considerably from those maintained by Mr. Darwin; and I am glad to have this opportunity of showing to what extent a study of his facts and arguments have modified my opinions. Before plunging into the intricate subject of "sexual selection," I must, however, make a few remarks on Mr. Darwin's use of the same term "instinct" for what seem to me very distinct things. He classes as instincts, hunger, self-preservation, the mother's love of her offspring, and the infant's power of sucking. The first is a sensation, the second acquired habit, the third an emotion, the fourth a pleasurable exercise of certain muscles—none of them instinct in the same sense as the cause of the migration of birds, of the building of platforms by apes, of the avoidance of poisonous fruits or the dread of snakes—all of which are specially mentioned as instincts. To go into the question of which of these latter are acquired habits or acquired knowledge, and which are truly instinctive, would lead us too far; but it is certainly not in accordance with our author's usual precision of language on other topics, to use the same term for a simple sensation like hunger—for a faculty which may be experience or may be simple dislike acquired by natural selection, like the avoidance of poisonous fruits—and for all the mental processes involved in a highly complex operation like that of the construction of a bird's nest. It is no doubt mainly due to the poverty of our language that one word has been used for so many distinct things; but as long as this is the case it is hardly possible to avoid confusion of ideas about instinct.

In discussing the subject of sexual selection it would perhaps have been a more convenient, even if a less scientific arrangement, to have treated first of those groups in which the evidence is clearest and most decisive; for Mr. Darwin is often obliged to refer to these in advance to strengthen his argument in the case of those inferior groups in which it is much more difficult to obtain evidence. I shall therefore first consider what is proved in the case of birds.

In birds sexual differences are both more generally the rule and more wonderfully varied in character than in any other class of animals. The males sometimes possess special weapons for fighting together; more frequently they charm the female by vocal or instrumental music; more frequently still they are ornamented with all sorts of crests, wattles, horns, air-sacs, plumes, and lengthened feathers springing from all parts of the body. They are extremely pugnacious; they sing in rivalry, and they perform the most extraordinary antics and dances during the breeding season, exhibiting in the most curious and often unexpected manner all their peculiar adornments before the female. It is proved that in many cases they have a taste for colour and for novelty; and some female domestic birds are shown to have had such a fondness for a peculiarly coloured male as to refuse to pair with any other. When in addition to this we consider that many birds are polygamous, and that in these the sexual differences are almost always greatest, we must admit that sexual selection would necessarily produce an effect in developing weapons, musical organs, or ornaments in one or both sexes. But while sexual selection has thus been doing its work, the still more powerful agency of natural selection has not been in abeyance, but has also modified one or both sexes in accordance with their conditions of life; and these in the case of birds are somewhat different in the two sexes. Whole groups of birds are evidently coloured for protection, resembling the desert sands, or the green leaves, or the

arctic snows, among which they live; and as we may be sure that variations tending to other colours have appeared in these birds, and as we have no reason to believe that in these groups only the females have been indifferent to such adornment, we must admit that natural selection has here checked the action of sexual selection. There are, however, an immense number of birds in which the female only is of dull brown or green tints, while the male is adorned with the most splendid colours; and there are also a very large number in which both sexes are equally or almost equally brilliant; and, with very rare exceptions, the rule is found to hold that the former class all build open nests, the latter all covered or hidden nests. The bright-coloured female birds are thus concealed while incubating, the dull-coloured are exposed. This very curious relation appeared to me to indicate that natural selection had been more powerful than the laws, whatever they are, which primarily determine the colours of birds; that the females had in one case been prevented from acquiring any considerable portion of the gay colouring of the males because it was hurtful to them, and in the other case had acquired it because, being concealed during incubation, it was no more hurtful to them than to the males. Mr. Darwin objects to this explanation of the facts. He maintains that the "laws of inheritance" determine whether colour or any other ornament appearing in one sex shall be transmitted to that sex only or to both. So far there is nothing to object to. But he goes further, and maintains that this tendency cannot be affected by natural selection, and that if a particular colour-variation begins to be transmitted to both sexes, the mode of transmission cannot, by natural selection, be changed, so that the colour may continue to be transmitted to the male to whom it is useful, but cease to be transmitted to the female to whom it is hurtful. Mr. Darwin admits that the law itself varies very frequently; for he gives numerous instances in which the different species of a genus exhibit all the possible modes of transmission, and as these have all descended from a common ancestor, the law has varied somewhat rapidly. He also says, "The equal transmission of characters to both sexes is the commonest form of inheritance," and we may therefore fairly assume that before diversity arose between the sexes it was the rule for both sexes to vary together. But he believes that, under these circumstances, it would be exceedingly difficult for natural selection to change the male alone, and he gives an imaginary illustration to exhibit this difficulty. He supposes a fancier to wish to make a breed of pigeons in which the males should be pale blue, the females remaining the usual slaty colour; and he says, "All that he could do would be to persevere in selecting every male pigeon which was in the least degree of a paler blue," and to match these with slaty females, the result being, of course, "either a mongrel piebald lot, or more probably the speedy and complete loss of the pale blue colour." But the supposed fancier has here gone quite the wrong way to work. His primary want is, not "blue males," but a breed in which there is a tendency to *differentiation of sex*. His proper plan, therefore, would be to look over as many sets as possible of the progeny of single pairs of pigeons till he found one in which a *differentiation of sex appeared in the right direction*, the males being lighter, the females darker, in however slight a degree. Breeding from these again, he would probably in a few generations find a greater differentiation occur, for we know that such changes in the mode of transmission have often occurred in nature; and only when he had obtained a breed in which the sexes were strongly differentiated, variations of colour occurring frequently in the male sex, rarely or not at all in the female, would it be advisable for him to begin selecting for the exact tint of colour he desired in his males. Now, though nature may often do more in the way of selection than man, we can hardly believe that anything can be done by man's selection which may not be done as effectually by natural selection; and as it is admitted that the dull colours of the females sitting on open nests are a protection to them, and also that variations in the mode of transmission frequently occur, what is to prevent the females being modified in the way most advantageous to them for protection, while the males are being modified in the way most advantageous to them, by sexual selection? When the males of a species began to gain bright colours by sexual selection, and these colours were transmitted to the females till they became injurious, it may be fairly assumed that they would be transmitted in somewhat varying degrees, for Mr. Darwin states (p. 177, vol. ii.), that the degree of limitation differs in species of the same group; and as from mere association in the same locality individuals of the same family have a good chance of breeding together, the less brilliant females and more brilliant males of such families would often produce offspring in which the sexual differences were still greater, and these would have the best chance of surviving again to leave offspring. It is true that brilliant males of the same stock with brilliant females would have an equal chance of leaving descendants, but as the females of their families would be at a great disadvantage and would less frequently rear offspring, while the females of the differentiated families would be protected, the latter would soon be in a majority of two to one, and must inevitably supplant the former. This view enables us to understand many facts given by Mr. Darwin which seem difficulties on his own hypothesis. Thus the sexes of Culicidæ and Tabanidæ among flies, differ in the structure of the mouth in accordance with difference of habits; some male Cirrhipedes have lost almost all their external organs, while the female has retained hers; and female glow-worms, as well as many female moths, have lost their wings. Such varied adaptations of one sex alone could only occur if the rule were almost universal, that variations were limited to the sex in which they originally appeared; but we have seen that the contrary is nearer to the truth, and it seems more probable that the phenomenon of strictly limited sexual transmission was actually produced by natural selection as soon as the need arose for a differentiation of the sexes in organization, habits, or economy, than that it is an independent law. It evidently could have been so produced as well as the primary separation of the sexes which Mr. Darwin does not seem to doubt was effected by means of natural selection; and he appears to be unnecessarily depreciating the efficacy of his own first principle when he places limited sexual transmission beyond the range of its power.

Passing now to the lower animals—fishes, and especially insects—the evidence for sexual selection becomes comparatively very weak; and it seems doubtful if we are justified in applying the laws which prevail among the highly organized and emotional birds, to interpret somewhat analogous results in their case. The rivalry between males, either by fighting together or by emitting attractive sounds or odours, undoubtedly acts in the case of insects as well as in the higher animals; but it is quite different with the other form of sexual selection. This depends upon the appreciation of slight differences of colour by the female, and also by her having the power as well as the will to reject such males as are slightly inferior in attractions; and on both these points there is no direct evidence but what tells against Mr. Darwin's view. Thus, he informs us that "fresh females are often found paired with battered, faded, or dingy males," and breeders agree that in the case of the various silk-moths the female exerts no choice whatever, Dr. Wallace of Col-

chester stating that he frequently finds the most vigorous females of *Bombyx Cynthia* paired with stunted males. But the Bombyces are among the most elegantly coloured of all moths.

From the fact that many male butterflies may be seen pursuing or crowding round the same female, Mr. Darwin concludes that the females prefer one male to another, because, if this were not the case, the pairing must be left to mere chance, and this does not seem to him a probable event. But surely the male who finally obtains the female will be either the most vigorous, or the strongest-winged, or the most patient of the two or three suitors—the one who tires out or beats off the rest. The pairing therefore will not be left to chance, and it is probably by such struggles that the males of almost all butterflies have been rendered much stronger-winged than the females. Throughout the whole of the other orders of insects there is no direct evidence whatever of sexual selection as regards colour; for the colours are generally similar in both sexes, and the particular colours that occur seem to be often determined by the greater or less need of protection. Thus the stinging Hymenoptera are, as a rule, conspicuously coloured; as are large numbers of the Hemiptera, which are protected by their disgusting odour. Coleoptera are almost all palpably protected, either by resembling inanimate objects, by obscurity, by hard coats of mail, or by being distasteful to birds; and those of the two latter categories are almost all conspicuously coloured. It seems to me therefore, much more probable that the colours of insects are due to the same unknown laws which have produced the colours of caterpillars, than that they are due to sexual selection. In caterpillars we have almost all the classes of coloration found in perfect insects. We have protective and conspicuous tints; and among the latter we have spots, streaks, bands, and patterns, perfectly definite in character and of the most brilliantly contrasted hues. We have also many ornamental appendages; beautiful fleshy tubercles or tentacles, hard spines, beautifully coloured hairs arranged in tufts, brushes, starry clusters, or long pencils,—and horns on the head and tail, either single or double, pointed or clubbed. Now if all these beautiful and varied ornaments can be produced and rendered constant in each species, by some unknown cause quite independent of sexual selection, why cannot the same cause produce the colours and many of the ornaments of perfect insects, subjected as they are to so much greater variety of conditions than their larvæ? In the case of butterflies it is a curious fact that the females are often much more variable than the males. The females of *Papilio memnon* and *Diadema auge* are perhaps the most variable of all butterflies, consisting of scores of such different insects that they have over and over again been described as distinct species, while in both cases the males are very constant. Had the males been differentiated by sexual selection we should have expected them to be more variable, as they always are among insects as regards largely developed jaws, horns, or other weapons undoubtedly used for sexual purposes. In many groups of butterflies too, the males of the different species of a genus closely resemble each other, while the females differ considerably, so that it often happens that forms considered to be mere varieties as long as the males only are known, become recognised as good species when the females are discovered. This is the case generally in *Ornithoptera*, several groups of *Papilio*, *Adolias*, *Diadema*; and it is so exactly the reverse of what obtains in birds that we must hesitate to apply the same explanation to the two sets of phenomena.

There are two other difficulties in the way of accepting Mr. Darwin's wide generalization as to the agency of sexual selection in producing the greater part of the colour that adorns the animal world. How are we to believe that the action of an ever varying fancy for any slight change of colour could produce and fix the definite colours and markings which actually characterize species. Successive generations of female birds choosing any little variety of colour that occurred among their suitors would necessarily lead to a speckled or piebald and unstable result, not to the beautifully definite colours and markings we see. To the agency of natural selection there is no such bar. Each variation is unerringly selected or rejected according as it is useful or the reverse; and as conditions change but slowly, modifications will necessarily be carried on and accumulated till they reach their highest point of efficiency. But how can the individual tastes of hundreds of successive generations of female birds produce any such definite or constant effect? Some law of necessary development of colour in certain parts of the body and in certain hues is first required, and then perhaps, in the case of birds, the females might choose the successive improvements as they occurred; though, unless other variations were altogether prevented, it seems just as likely that they would mar the effect the law of development of colour was tending to produce.

The other objection is, that there are signs of such a tendency, which, taken in connection with the cases of caterpillars, of shells, and other very low organisms, may cover the whole ground in the case of insects, and render sexual selection of colour as unnecessary as it is unsupported by direct evidence. In many islands of the Malay Archipelago, species of widely different genera of butterflies differ, in precisely the same way as to colour or form, from allied species in other islands. The same thing occurs to a less degree in other parts of the world. Here we have indications of some local modifying influence which is certainly not sexual selection. So, the production in the males only of certain butterflies, of a peculiar neuration of the wings, of differently formed legs, and especially of groups of peculiarly formed scales only to be detected by microscopical examination, indicate the existence of some laws of development capable of differentiating the sexes other than sexual selection.

On the whole then it seems to me, that the kind of sexual selection which depends on the female preferring certain colours or ornaments in the male, has not been proved to exist in insects. Their colours are probably due to some as yet unknown causes; the differences of the sexes consisting, partly of a greater intensity of colouring in the male, due perhaps to his smaller size and greater vigour, and partly of more or less protective tints acquired by the female alone on account of her slower flight and greater need for protection while depositing her eggs. Many other points of great interest must be passed over, but sufficient has been said to enable the reader fairly to compare the facts and arguments previously adduced by myself with those now set forth by Mr. Darwin, and to form a judgment as to the comparative importance to be attached to sexual selection and the need of protection, in determining the sexual differences of colour in animals.

Having in the first part of this article made some objections to the theory of sexual selection in its application to man, I will now briefly notice Mr. Darwin's account of the probable mode in which man became developed from his brute ancestor. All the evidence goes to show, that the change from brute to man took place in some limited area, probably tropical. Here he lost his hairy covering, acquired his erect form and his wonderful brain, and became so far advanced in the arts and in morals that natural selection ceased to act upon his mere bodily organization. It is also probable that he learnt to speak language, discovered the use of fire,

and perhaps even of canoes, before he spread over the earth, and before the several races of man were differentiated. The agency through which this vast transformation occurred was the struggle for existence and natural selection—a struggle first with other animals, and when they were surpassed between tribe and tribe; and this alone Mr. Darwin thinks would, under favourable conditions, raise man to his present high position in the organic scale.

In this view there are many difficulties. How is it possible to conceive, that during the enormous interval required to change a quadrumanous, hairy, speechless animal, into erect, smooth-skinned, large-brained, fire-using man, while the struggle for existence was most severe (for by the severity of the struggle alone he was raised), he yet never spread over the earth but remained concentrated in a limited area. Had he spread widely during the process of modification, divergence of character would inevitably have occurred, and we should have had several distinct species of man. Mr. Darwin argues that the fact of man, even at his lowest stage of civilisation and intellect, being able to maintain himself, surrounded by the most powerful and ferocious animals, is due to his large brain, which is thus of the most essential use to him. But almost all herbivorous animals also maintain themselves under similar conditions, with no special endowment of brains; and in South America the apparently helpless and almost idiotic sloth is not exterminated, though exposed to the attacks of pumas, tiger-cats, and harpy-eagles. Man could have acquired very little of his superiority to animals by a struggle with animals. "Natural selection does not produce absolute perfection but only relative perfection." We have to fall back therefore on the struggle with his fellows—family with family, tribe with tribe. But for this to be at all effectual, one of the most essential conditions is a large population inhabiting an extensive area, and this the conditions of the problem deny to us. The vast amount of the superiority of man to his nearest allies is what is so difficult to account for. His absolute erectness of posture, the completeness of his nudity, the harmonious perfection of his hands, the almost infinite capacities of his brain, constitute a series of correlated advances too great to be accounted for by the struggle for existence of an isolated group of apes in a limited area. And Mr. Darwin himself gives hints of unknown causes which may have aided in the work. He says: "An unexplained residuum of change, perhaps a large one, must be left to the assumed uniform action of those unknown agencies which occasionally induce strongly marked and abrupt deviations of structure in our domestic productions." And again: "If these causes, whatever they may be, were to act more uniformly and energetically during a lengthened period (and no reason can be assigned why this should not sometimes occur), the result would probably be, not mere slight differences, but well marked, constant modifications."

In concluding this very imperfect account of one of the most remarkable works in the English language, it may be affirmed, that Mr. Darwin has all but demonstrated the origin of man by descent from some inferior animal form—that he has proved the vast importance of sexual influences in modifying the colours and the structure of the more highly organized animals—and that he has thrown fresh light upon the intricate question of the mode of development of the moral and intellectual nature of man. Yet it must be admitted that there are many difficulties in the detailed application of his views; and it seems probable that these can only be overcome by giving more weight to those unknown laws whose existence he admits, but to which he assigns an altogether subordinate part in determining the development of organic forms. Alfred R. Wallace.

Scientific Notes.

Philosophy.

The Nature and Origin of Moral Ideas.—Sir A. Grant's paper in the last number of the *Fortnightly* on this subject has the radical defect that—if we may use the peculiar dialect of Sir W. Hamilton—"it evacuates the phenomenon explained of all in it which desiderates explanation." In the first place, Sir A. Grant does not attempt to explain the origin of particular moral notions or principles, but only of the "blank formula of conscience," the general sense of duty, which he regards as the only eternal and immutable element in morality. We do not quarrel with this limitation of the enquiry in itself: but it has led him to ignore an essential element in the "form of duty," viz. the universality of application which the moral faculty at any rate *claims* for its decisions. No moral imperative is felt to be addressed to the individual only who is conscious of it, but to all persons in similar circumstances: however little others may recognise its validity. The sense of duty thus completely individualised in its import is explained to be really self-love or "the desire of self-preservation transformed into the desire of self-approval." It seems confusing to apply the same term to two desires so distinct, even granting that the latter is a metamorphosis of the former: however, the important point is to learn how this notion of *approval*, implying, as it does, conformity to rule or standard, is introduced. How is it that "self-regard takes the form of self-respect?" Strange to say this is just what Sir A. Grant does not see the need of explaining. He assumes man to possess free choice of actions, and tells us that repetition of the act of choice generates the feeling of admiration or approval towards the action chosen: not seeing that the whole difficulty lies in accounting for the peculiar characteristics which distinguish each of these feelings from simple preference and from each other. Whether self-consciousness is, or is not, as prominent as Sir A. Grant takes it to be in all stages of the evolution of moral sentiments, seems a matter of very subordinate importance. It may be added that the views of two well-known moralists, Butler and Kant, are strangely misrepresented in this paper.

Physiology.

Aphasia.—An interesting summary of what is known on this subject and some important observations on cases which have come under his own cognisance are given by Dr. Alex. Robertson, in the *Glasgow Medical Journal*, February 1871. Though much has been written on this subject the results are not very satisfactory, since aphasia proper has often been confounded with defective articulation and amnesia. Dr. Robertson carefully defines aphasia. Patients suffering from aphasia are unable to communicate their thoughts by words and possibly by any form of language whatever, although their intelligence is not greatly impaired. Prof. Trousseau believed that in aphasia there was not only a loss of speech, but an impairing of the understanding, "The patient does not speak because he does not remember the words which express ideas." This conclusion Dr. Robertson shows, from observations on two cases under him in 1866, to be incorrect. He was told by a patient, who had recovered from aphasia, that during her illness she knew quite well what to say, the words were in her mind, but she could not utter them. In amnesia words do not occur to a patient spontaneously, but he can repeat them immediately after hearing them or seeing them in print. This morbid condition is associated with great enfeeblement of mind, which in some cases is so severe that a single sentence forms the whole stock of a patient's language, and is given as an answer to all questions. Two rare forms of this disease are known: Agraphia, in which the patient speaks but blunders sadly in writing, and aphemia, in which he writes but cannot speak. There are curious cases on record in which a person could remember only the initial letter of words, and others in which all the words were ended alike. Mr. Darwin, in his new work, *The Descent of Man*, p. 58, speaks of cases in which the power to remember substantives is lost, whilst other words can be correctly used. It will be remembered that in 1865 M. Broca made the startling communication to the French Academy of Medicine that there existed a distinct faculty of language, which was localized in one small portion of the brain, viz. the posterior half of the lower left frontal convolution. To this conclusion he was led by observing that in several cases of aphasia which came under his notice this particular spot in the brain was atrophied or injured by disease. Subsequent observation has left it very doubtful whether the atrophy of a particular spot of the brain is, as a rule, the concomitant of aphasia. The result of Dr. Robertson's examination of four cases which he records is in favour of the conclusion that aphasia is accompanied by an atrophy of the fore part of the left hemisphere of the brain; he considers, however, that further observations on the subject are still necessary to determine this point. He believes not that any faculty of language exists in this spot, but that it simply contains the conductors by means of which the expression of language is accomplished. He

suggests that the apparent difference between the functions of the two hemispheres may be due to differences in the distribution of the minute blood-vessels in them.

The Nature of the Spleen.—Dr. Silvester of Clapham has published a little brochure, in which he endeavours to show, from various considerations, that the spleen is not the undeveloped liver of the left side of the body, nor the parenclyma of the liver disunited from the pancreas, nor a blood gland in the mesial line of the body, having no homologous relationship with the liver. It is, on the other hand, to be regarded as a sanguiferous gland, situated on the left side of the abdominal cavity, and as being the left-lateral homologue of a portion of the liver—the liver being a combination of a sanguiferous gland and a biliary apparatus. Dr. Silvester considers that the intestinal canal is mesial and symmetrical as far as to the stomach; but that this organ, together with the whole of the small intestine, is only developed on the right side of the body. The large intestine, again, like the commencement of the alimentary canal, is mesial and symmetrical. The only indication of a left small intestine is afforded by the vermiform appendix of the cæcum; if this were continuous, by means of a convoluted canal, with the cardiac extremity of the stomach, the whole alimentary canal would be symmetrical. He shows, ingeniously, how the absence of the left small intestine explains the existence of numerous anomalous arrangements, that cannot otherwise be accounted for—as the circumstance of the small intestine receiving only one artery from the aorta, the singleness of the umbilical vein, the asymmetry of Peyer's patches, &c. The liver he holds to be a compound gland, formed of a bile-secreting and a blood-making portion, of which the biliary portion being required for digestion is developed on the right side only: on the left, as the intestinal tract is undeveloped, there is no bile-secreting organ, but the blood-making portion appears in the form of the spleen.

Lymph-spaces of the Cornea.—In Stricker's *Medizinische Jahrbücher*, Heft 1, is an interesting paper by Dr. Genersich, of Pesth, on the above subject. When the cornea is treated with nitrate of silver there are seen in it, when viewed under the microscope, certain irregularly stellate bodies with long anastomosing processes which appear light on a dark ground. These are called by Recklinghausen Saftkanälchen, and are considered by him to be spaces from which the lymphatic canals of the cornea take origin. This interpretation of the phenomenon has been doubted by many observers, and especially more recently by Schweigger Seidel, who considers these silver images to be entirely post mortem products due to the action of the reagents employed in preparation. Dr. Genersich's observations tend to confirm Recklinghausen's views. He first inflamed the cornea and found that the Saftkanälchen shortened their processes and became rounder, behaved in fact very much like the connective tissue corpuscles in Stricker's well known observations. The fact that they thus alter their form under the influence of inflammation he holds to be an argument against the silver images being artificial products. He next took corneæ intensely stained with silver and placed them in the lymph sacs of living frogs. After five or six days they were taken out and examined with a Hartnack's No. 10 immersion lense. The tissue was as usual full of leucocytes or wander cells which had made their way into it. In some places the silver staining still remained perfect, the boundaries of the Saftkanälchen being well defined. Dr. Genersich observed leucocytes moving within these Saftkanälchen, and saw them pass from one stellate space to another along the narrow channels of intercommunication. In no case did he see a leucocyte pass the boundary of a Saftkanal. He moreover observed in one case the entrance of a second leucocyte into an already occupied stellate space. The two leucocytes fused together, forming one large mass. This mass subsequently divided again into two, and one part made its way out of the space. If there be no flaw in these observations, they leave no doubt as to the correctness of Recklinghausen's views.

On the Excitation of Nerve and Muscle with Discontinuous Electric Currents.—Dr. Engelmann contributes an elaborate paper to *Pflüger's Archiv* (Band. iv. p. 3), showing that if a constant current be transmitted through a nerve or muscle so as to cause it to contract, and if the current be interrupted for a short period no new wave is transmitted through the nerve, nor any new contraction excited in the muscle, provided the interruption do not exceed a certain period. He finds that the interval between two shocks must be shortened if the strength of the current be considerable, in order that no convulsion shall occur at the closing and opening of the current; whilst it may be prolonged with diminishing excitability of nerve and muscle and in animals that have been poisoned with Woorara.

On Peristaltic Movements.—M. Engelmann and G. v. Brakel (*Pflüger's Archiv*, Band iv. p. 33) show that in opposition to the statement sometimes made that anti-peristaltic movements do not occur, they may easily be rendered visible in the intestines and ureters of animals recently dead. Engelmann opened the abdominal cavity of a cat that had just been killed, and found the intestines absolutely quiescent, but on seizing and pinching a fold of intestine a wave of contraction was observed to be propagated peristaltically to the ilio-cæcal valve, and antiperistaltically to the pylorus from the point irritated. Both waves travelled at the rate of about one inch and a half per second. Numerous other experiments undertaken by M. Brakel on the ureters and uterus, as well as upon various parts of the intestinal canal of many animals, as upon those of rats, mice, pigeons (especially well), frogs, rabbits, &c., conclusively demonstrated that in all membranes composed of smooth muscular tissue wherever peristaltic contractions can be induced antiperistaltic contractions may also occur.

Physics and Chemistry.

On the Spectrum of the Aurora.—On viewing the spectrum of the aurora with a Browning's miniature spectroscope, F. Zöllner observed, besides the line in the green, which is in all probability that first noticed by Angström, and those usually seen,—a red line more refrangible than the red hydrogen line C, and which on direct comparison was not found to coincide with any line in the spectra of either hydrogen, nitrogen, oxygen, or carbonic acid. Only in those portions of the heavens which appeared strongly reddened was it of any intensity, and it was there always accompanied by the green line. F. Zöllner believes it may be asserted that the spectrum of the aurora does not coincide in its principal lines with the spectra of any of the elements as yet observed, and that the exceedingly probable and simple explanation of this is that it does not coincide with the known spectra of the gases present in the atmosphere because it is of a different order to any which it has hitherto been possible to obtain artificially; and he concludes that if the aurora is due to the incandescence of gas particles of our atmosphere, the temperature at which this incandescence takes place must be very much lower than that at which the same gases, confined in a Geissler's tube, can be rendered incandescent by electricity. The gas spectra obtained artificially must in general be the result of high temperatures, since the relatively very considerable brightness, where but few of the incandescent particles are present, necessitates a very great emission of light by each particle, and this can only be effected by a high temperature. (*Poggendorff's Ann.* cxli. 574.)

Composition of Iron-Rust.—At a meeting of the Manchester Literary and Philosophical Society, held January 24, Dr. E. Crace Calvert stated that some experiments by Sir Charles Fox led him to suppose that the composition of iron-rust was much more complicated than is generally taught in our text-books. An investigation of the subject led him to the conclusion that pure and dry oxygen does not determine the oxidation of iron, that moist oxygen has only feeble action: dry or moist pure carbonic acid has no action; but that moist oxygen containing traces of carbonic acid acts most rapidly on iron, giving rise to protoxide of iron, then to carbonate of the same oxide, and lastly to a mixture of saline oxide and hydrate of the sesquioxide of iron. Carbonic acid is thus the agent which determines the oxidation of iron; and hence rusting is due to the small quantity of this gas in the atmosphere, and not to its oxygen or its aqueous vapour.

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Philology.

THE PRONUNCIATION OF LATIN.

II.

The article by Mr. Max Müller, "on the pronunciation of *c* before *e*, *i*, *y*, *ae*, *eu*, *oe*," which appeared in the *Academy* of Feb. 15, and is argued out with his usual power, will help no doubt to make innovation on these points more difficult. His chief objection to change would seem to be the same as that urged in the Oxford circular, that it could not "be attempted without intolerable offence to the ears of all the Latin-reading nations." He speaks of "fear of ridicule," "a dislike of the harsh and disagreeable sound of such words

as *Kikero, fakit.*" This difficulty has never struck me as of such very great weight; and my ear has already accustomed itself to look on *Kikero*, *skelus*, *skio* and the like as even more euphonious than their former sounds. Of course I assume that *Sisero*, *Sesar*, *Sephalus*, *sinic* and the like are still to be English for the new *Kikero*, *Kaesar*, *kynicus*, just as much as for Κικέρων, Καῖσαρ, Κέφαλος, κυνικός. Our present English pronunciation of Latin appears to afford some arguments to the point. Some centuries ago we pronounced with the rest of Europe (I assume now the new and corrected sound of the vowels) *cana*, *cara* and the like as *kana*, *kara:* when the revolution took place in our vowel sounds, we said *kena*, *kera*, not *sena*, *sera*. Now that we propose to reform our vowel sounds in *cena*, *cera*, why should we find *kena*, *kera* more offensive than *sena*, *sera?* Our English *k* is common before all vowels alike and such consonants as it can precede in Latin, and is at least as euphonious as *s* or *tch: kettle* and *kin* are not less mellifluous than *settle* and *sin: Kikero* I prefer to *Tchitchero;* and I doubt whether *Kikero* is to an Italian more offensive or strange than *Sisero*, as they too have abundant *k* (*ch*) sounds before *e* and *i*. Assuredly the many Greek words like *Cilicia*, *Cibyra*, *scena*, *cithara*, *Cithaeron* I would rather have with their Greek than their Latin sounds.

Quite the same is my experience with the very numerous cases of *-ci*, *-si*, *-ti* before another vowel: *vicies*, *visio*, *vitium; species*, *spatium*, *ratio*, *gratia*, *solacium*. Habit here too is all-powerful, whichever direction it takes. The common English pronunciation of Greek words like Λυσίας is I believe Λυshίας, Πελοποννηshιοι, Μιληshιοι and the like, though custom seems to permit a more correct sounding of the σ. The pronunciation of the oldest Greek scholars within my recollection, such as the late Bishop Butler and Mr. George Burgess, proved that some generations ago Greek was in many points sounded more like Latin than it is now. Bishop Blomfield was fond of telling an anecdote about a Freshman examined by Porson. The Freshman talked of βέλshĭον: Porson intimated a preference for βέλ-τῖον. The Freshman politely allowed the Professor to please himself; but had all his life been accustomed to *belshion* and intended to stick to it. I think it not very unlikely that before his degree he became reconciled to βέλτιον, and that if the will were present, it would take us less time to exchange *rayshio* for *ratio*, *speeshiees* for *spekies*.

Nay if we keep within the limits of the Oxford paper, we shall be forced to many awkward inconsistencies. Suppose we are comparing the successive forms of words which we see collected in the first volume of the new *Corpus Inscript.* such as *coira*, *coera*, *cura; Cailius* and *Caelius; Coilius* and *Coelius*, *Caicilius* and *Caecilius*, we must pronounce *Koira*, *sera*, *kura; Kailius* and *Selius; Koilius* and *Selius; Kaisilius* and *Sesilius*. The more ancient *pulcer* and *Gracci* will be *pulser* and *Graksi*, the more recent *pulcher* and *Gracchi* will be *pulker* and *Grakki: coëpi* and *coepi* will be *koëpi* and *sepi*. And so with an indefinite number of terminations: *baca* and *bacae* will be *baka* and *basae*, *siccus* and *sicci* will be *sikkus* and *siksi*. Long-suffering as we are on such points with our present system, a partially improved method would perhaps render them intolerable. The Italian shuns such inconsistencies by substituting *ch* (=*k*) for *c: secco*, *secchi*, and *lungo*, *lunghe*.

It is doubtful whether our improved *y* sound of *j* will not by contrast make such inconsistencies appear even more flagrant. Habit makes us acquiesce in our English way of pronouncing such words as *ioci*, *iugi*, *coniugibus* and the like: but will not *yosi*, *yuji*, *conyujibus* be somewhat uncouth? The Italians practically reverse this process, and give our *j* sound to the consonantal *i*, and our *k* and hard *g* sound to the *c* and *g*, by writing *giuochi*, *gioghi*. This *gi* in fact is the almost universal substitute for the Latin *j*, *aiutare* (*adiutare*) being quite exceptional.

But though to my present feeling to reform the pronunciation of *j* for instance and leave that of *c* unchanged would almost be worse than to do nothing, the important point is to know what is right or probably right. However firmly one may have held the common belief that the sound of the Latin *c* was in all cases the same as κ or our *k*, the fact of such an authority as Mr. Max Müller calling it in question must make one hesitate. Still a variety of considerations compels me to retain my former belief.

He points out with much force that it does not follow, because Greeks and others in transferring Latin words into their own language always represented *c* by *k*, that therefore the sound of the two letters was always identical. And yet the fact that Greek and barbarian, Goth and German alike, do reproduce the Latin *c* by *k* is such a *primâ facie* argument of identity or near resemblance that strong counter-evidence is needed to rebut it. Hahn's Grammar and Dictionary show that the Albanian has sounds representing most of the modern corruptions of the Latin *c*, such as various σ and ζ sounds. The *cicer*, which must have been imported into those countries in early times, perhaps by Atticus on his farm at Buthrotum, is represented by κυικυερε: this *y* (or German *j*) sound being exceedingly common in Albanian before all vowels, α and ο as well as ε and ι. Now when I think of the Greek Κικέρων and then of his own eponymous *cicer* reproduced on one side by the Albanian κυικυερε and on the other by the German *kicher*, each of these languages showing only the first and to them most natural deviation from the pure *k* sound, the concentrated force of the three impresses me strongly.*

For the Greeks, though indeed they did represent *f* by φ, took much pains to reproduce the most peculiar Latin sounds. How trying must it have been to the eyes and ears of a Greek—unless he wished to laugh at the barbarians—to find in his Polybius Ποστούμιος Ῥήγουλος (Postŭmius Regŭlus), in his D. Cassius Οὐουλτούρνου (Vulturni), in his Dionysius Οὐολούσκιος (Volscius), in his Ptolemy Οὐιρονεδρούμ, and the like. If the Latin *-ce* and *-ci* had anything of an *s*-sound, why should not the Greeks represent them by some combination of ξ or ζ or σ, such as were used in Byzantine times? The Greeks would probably have given to these sounds some conventional meaning, as to those odd accumulations of ου: nor do I think they would have cared for the quantity of such barbarous words; or, if they had cared for it, would have hesitated to change it. Indeed any consideration of quantity seems to me to apply with tenfold force to the supposition of an *s* added to the *k* sound in Latin, so long as quantity was regarded, or to the Italian *tch*, which surely must have been anterior to the English or French *s*-sound.

Yet more weighty to my mind is the fact that the Romans in all cases expressed κ by *c*. In old times they could only reproduce Greek words in the rudest way; but for several generations this nation of philologers expended vast energy in overcoming this difficulty. For this purpose they introduced no less than five "diacritical" letters or combinations

* It strikes me as improbable that Ulfilas, after years of intercourse with Roman dignitaries in Constantinople during its early days, and living with his flock in the midst of Latin-speaking nations, should have got his Latin words through any "Greek transliteration;" and, as to the form *aivaggeli*, surely although in modern Greek γγ and in Italian *ng* are alike sounded as *ng*, the very fact that the Greeks put γ for ν and that some of the best Roman grammarians wished to write in Latin *aggulus*, *aggens*, *iggerunt*, and the like, prove that it was different in ancient times.

of letters, *y*, *z*, *ch*, *ph*, *th*, in order to reproduce with the nicest accuracy every Greek sound; and schooled their tongue to utter words which once were most strange to them. At first content with *Téses*, they finally brought themselves to adopt *Theseús*, a sound and intonation most alien to a Roman ear. Long satisfied with *Saguntum*, with *sepurus* or *sepirus*, *lucinus* or *licinus*, they came at last to *Zacynthus*, *zephyrus*, *lychnus*, containing each of them three letters or combinations of letters utterly foreign to them. So that at length they learnt to revel in such sweet sounds as *Antheús*, and *Mnestheús*, and *Actiàs Oreíthyia*.

Why then, when they had got to *Cepheús*, *Cephalus*, *Chalcis*, *cithara* and the like, if *c* was not exactly equivalent to *k*, did they not adopt here too a "diacritical" letter? One was at hand, more ready foi use than any of the five adopted, their own *k*, now lying idle, with only an antiquarian value before *a* in a few words or symbols of words. And on this point the *dekembres* of No. 844 of the *Corpus Inscr.* vol. i. seems to have some bearing. This is one of nearly 200 short, plebeian, often half-barbarous very old inscriptions on a collection of ollae. The *k* before *e* or any letter except *a* is solecistic, just as in No. 831 is the *c.* instead of *k.* for *calendas*. From this I would infer that, as in the latter the writer saw no difference between *c* and *k*, so to the writer of the former *k* was the same as *c* before *e*. Perhaps *keri* tells the same tale, if, as Mommsen assumes, it be the genitive of *cerus* (*creator*).

The following too appears to me to have no small significance. In Cicero's time from an abuse of Greek fashions the aspirate was permanently attached to a few Latin words. Cicero tells us (*Orator*, § 160) that till late in life he had persisted in saying *pulcros*, *Cetegos*, *triumpos*, *Cartaginem;* but after a hard struggle evil habit and public opinion forced him to insert the *h* in these words. It appears now from inscriptions and Quintilian (1, 5, 20) that this *h*, which in some words was permanent, in others not, was attached to *c* alike before *a*, *o*, *u* and *e*, *i:* in the first vol. of the *Corpus Inscr.* we find *Volchacia* and *Achilio* (*Acilio*); often *Pulcher*, but also *Pulcer*. We have *Gracchus* and *Graccus*, *Gracchis* and *Graccis:* Quintilian refers to what he calls Catullus' "nobile epigramma" *Chommoda dicebat*, and says that some inscriptions still extant have *choronae chenturiones praechones*. It is I believe generally allowed that the ancient sound of *θ*, *φ*, *χ* was that of the tenuis with a distinct *h* sound attached to it. But even conceding that *ch* was like the modern Greek or Scotch or German guttural, in either case I do not well see how the aspirate could have been attached to the *c*, if *c* had not a *k* sound, or how in this case *c* before *e* or *i* could have differed from *c* before *a*, *o*, *u*.

And finally, what is to me most convincing of all, I do not well understand how in a people of grammarians, where for 700 years from Ennius to Priscian the most distinguished writers were also the most minute philologers, not one, so far as we know, should have hinted at any difference, if such existed: neither Ennius, Accius, or Lucilius, the three greatest of the early poets; nor Cicero, Varro, or Cæsar; nor Pliny or Quintilian, nor Gellius, Charisius, Donatus, Servius, or Priscian. Lucilius devoted whole books to such slight matters as the use of *fervit* or *fervet; i* or *ei* in terminations. Cicero, in his *Orator* and elsewhere, dwells on what seem to us very trivial minutiæ. Varro asserted that *lact* was right, *lac* wrong; Cæsar, in his *de Analogia*, addressed to Cicero, maintained that Varro and *lact* were both wrong, *lac* alone right. He told Cicero that the genitive of their common friend Pompeiius's name ought to have three *i*'s, and explained how they were to be pronounced; but seems to have said nothing of the *c*'s in *Cicero*. Quintilian tells us how to pronounce the *i* of *optimus*, the final *e* of *here*, and much else of an equally important nature. And all know that Gellius, Servius, Priscian, and the rest, are brimful from first to last of the most insignificant details: but of a soft *c* not one syllable.

Nay, what is even more to the point, Priscian relates at length how Pliny heard three different sounds of *l:* an "exilis sonus," as in *ille:* a "plenus," as in *sol:* a "medius," as in *lectus*. So Priscian himself finds the *n* of *nomen* to be "plenior," that of *annis* to be "exilior;" and not only is there a difference in final *m*, but the *m* of *magnus* "apertum sonat," the *m* of *umbra* "mediocre." Of *c* οὐδὲ γρῦ, singular indeed if its sound differed perceptibly before different letters; for surely the distinctions in the letters just enumerated cannot have been so very great.

Quite as little classical authority can I find for our strange confusion of sounds in many classes of words, important from their great number, as they happen to occur in so many common inflexions: I speak of *ce*, *ci*, *se*, *si*, *ti*, coming before another vowel, to all of which we give the same Hebraic *βέλshιον* sound: *iaceam*, *placeo*, *iacies*, *faciunt*, *condicio; nausea*, *caesius*, *divisio; ratio*, *gratia*, *retia*, *otium*, *indutiae*, &c. &c. The modern confusion of sounds here comes I believe not from classical times, but from the "colluvies gentium" which met together on the breaking up of the old world. Mr. Müller says Corssen has "proved (p. 54) that from about 200 A.D. words with *ti* began to be spelt with *ci*. How was that possible? if *ci* was always pronounced *ki*, then assibilated *ti* could never have been written *ci*." The "never" is surely too much: Ribbeck in his *Prolegomena* to Virgil, p. 241, gives dozens of instances where one or other of his capital MSS. writes *c* for *t* or *t* for *c;* such as *ac* for *at*, *tetera* for *cetera*, *tumulos* for *cumulos*, *etquis* for *ecquis*, in none of which can the two letters have had the least similarity of sound. But he gives not a single instance of confusion in a capital MS. between the *ci* and *ti* in question: these MSS. write without fail *dicio*, *solacia*, *facies*, *proditio*, *seditio*, *ratio*, *spatium*. And yet almost every line of Latin offers opportunities for blundering on this point. When we consider this, the half-dozen instances in Corssen seem quite inadequate to prove confusion between *ci* and *ti*. For there are but six which have even a *primâ facie* look of sufficiency: the most promising of these is *renunciationem*, from a Roman inscription of A.D. 211. But, when we examine its pedigree, we find that Orelli copies it from Reinesius's collection, "quibus nihil imperfectius vitiosiusque extet," says Iac. Gronovius: "ipse lapides nullos viderat," says another scholar: "who exceeds all bounds in saxa violentius grassando," says a third. When we remember then that in Reinesius's time *renunciatio* was the recognised spelling, that one instance after another of *conditio* for example vanishes when it can be put to the test, surely the chances are a hundred to one that the *c* is due to Reinesius or some previous transcriber, not to the old Roman chiseller. Two more of unknown age are due to old copies taken when *ocio* at least was a received spelling: two more are published by Renier from a copy taken by a French officer at Medjana in Africa, Africa great mother of barbarisms and heresies. The sixth has an unquestionable voucher: Mommsen's *Inscr. Reg. Neap.* 109 has *disposicionem*. It was copied at Salerno; but it must be late, and is very barbarous, containing also *rivocaverit*, *distituta*, *populusquae*, an unmeaning *suetad*, the language being in part unintelligible. Nay Mommsen himself in his elaborate monograph on the Verona palimpsest of Livy, after pointing out the many signs it contains of decaying classicism, adds that it is remarkably free from pure barbarisms; that it never puts for instance Latin *f* for Greek *ph;* and of course never confuses *c* and *t*, "quod qui ante *septimum* saeculum obtinuisse sibi persuadent ne! ii *vehe-*

menter errant." And yet if Corssen had applied his vast industry to post-classical times, he might have collected without effort 100,000 clear instances of the confusion in question, the only reason with many apparently for writing *racio*, *spacium*, *faties*, *speties*, being that the spelling was wrong. We still see some relics of this barbarism of the middle ages in *conditio*, *solatium*, *nuncius*, and the like.

We have however late classical authority of the fifth century for a corruption of *ti* (not *ci*): Servius tells us that *medius* was pronounced *medsius*, something like the Italian *mezzo:* Pompeius, probably of the same age, informs us that it is a fault to say *Titius*, not *Titsius*. If therefore we prefer the fifth century to the age of Cicero and Quintilian, we should say, not *Tishius*, *Horashius*, but *Titzius*, *Horatzius:* but then to be consistent we should also say *medzius*, *commodzius*. From the strange emphasis with which Pompeius asserts that *Titsius* is right, *Titius* wrong, I should infer that this was a new fashion; and that *laiktio* represented to Ulfilas the sound of *lectio* in his day, while *kautsjo* gave the sound of *cautio* in the year 551. In Servius' time the natural feeling for quantity was utterly gone: it had to be learnt as artificially as it is learnt now. But in earlier classical times such pronunciations were out of the question. Indeed if we are to observe quantity, which many of us think a vital part of reform, I hardly know how with any of the modern fashions of pronouncing we are properly to enunciate *rătio* and *Horātius*, *făcies* and *solācium*. H. A. J. MUNRO.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—Having read Professor Max Müller's article in the *Academy* on the pronunciation of *c* in Latin, I take the liberty to draw your attention to a peculiarity in the pronunciation of modern Greek, which is of interest, as bearing on the subject of the article. In many of the Greek islands the κ is pronounced like the Italian *c* before the vowels ε, ι, υ; viz. they pronounce *Ciceron* for Κικέρων, *σεφαλή τοῦ Σύρου* for κεφαλή τοῦ Κύρου, *συριαση* for κυριακή, and so on in all similar cases; while the κ preserves its harsh sound before the other vowels.

You are also no doubt aware of the soft sound which the κ assumes before the same vowels ε, ι, υ, in modern Greek pronunciation generally, as contrasted with its sound before α, ο, ω, ου. D. BIKELAS.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—Prof. Munro has favoured me with a sight of his reply to Prof. Max Müller, which is to appear (as I understand) in your next issue. As this reply refers to "the Oxford circular," I think it convenient that the paper which he distinguishes by this name should be accessible to your readers. In sending you a copy of it for publication, I must ask your permission to state clearly its origin and purpose. At a meeting of the Oxford Philological Society in October, 1870, it was agreed that it was "expedient to attempt a reform of the pronunciation of Latin at Oxford;" and a Committee was appointed to frame a scheme of reform, and to make enquiries about the feasibility of introducing such a reform into the public schools. The Committee consisted of Prof. Max Müller, Mr. H. F. Tozer of Exeter, Mr. D. B. Monro of Oriel, Mr. J. Purves of Balliol, Mr. J. Wordsworth of Brasenose, and myself. By this Committee the paper which I now send you was drawn up. It was sent to the Latin Professors at the other British Universities, and to the Headmasters of many of the more important schools, with a view to elicit opinion upon the general subject. A very large majority of the Headmasters to whom it was sent declared themselves in favour of reform, but few comparatively entered into questions of detail. We were told, moreover, by some of them, that the pronunciation of Latin was one of the subjects fixed for discussion at a Conference of Headmasters to be held at Sherborne in December. I have since heard that they met accordingly, and resolved: (1) "That this meeting is of opinion that the system of Latin pronunciation prevalent in England is unsatisfactory;" and (2) "That the Latin Professors at the Universities of Oxford and Cambridge be invited to draw up and issue a joint paper to secure uniformity in any change contemplated."

Our paper was presented to the Oxford Philological Society at its meeting in January, together with an account of the correspondence to which it had given occasion, and of the Resolutions agreed upon by the Headmasters at Sherborne, but no vote followed. The paper, therefore, which I send you, and to which Prof. Munro refers as "the Oxford paper" or "the Oxford circular," cannot claim to be regarded as representing the Oxford Philological Society as a whole, and still less, of course, the University of Oxford. No one, indeed, is responsible for it but the six gentlemen who framed it. Let me observe, as I have a share in this responsibility, that our paper was intended to be practical and tentative, not final or scientific. It seemed to us that a proposal would be unpractical which should be likely to add largely to the labour of learning Latin. For this reason we imposed upon ourselves the rule of recommending no sound which could not be illustrated without reference to foreign languages or to provincial dialects of English. The effect of this rule will be seen in our treatment of the diphthongs. Perhaps you will allow me to add that a meeting of "Graduates favourable to a change in the pronunciation of Latin" was held in Oxford on the 2nd of this month, at which the proposals in our paper were considered. Twenty persons only attended. At this meeting there was a cordial agreement in the general principle of our paper, viz. that in any practical scheme of reform fine distinctions of sound, and sounds which do not occur at all in the speech of educated Englishmen, must not be insisted on. Our recommendations about the vowels, semi-vowels, and diphthongs, were also accepted, but on the subject of the diphthongs there was a good deal of division. And, further, it was the opinion of the majority that the proposed change should include the letters *c*, *g*, and *t*, which should be sounded hard before all vowels alike.

EDWIN PALMER, *Corpus Professor of Latin.*

Oxford, March 9, 1871.

THE OXFORD CIRCULAR.

THE time seems to have arrived for an attempt to reform the pronunciation of Latin in England. The pronunciation now in use among us gives to Latin a sound which it is impossible to believe that it ever had while it was a living language. It makes Latin in an English mouth unintelligible to all other Latin-reading nations. It is a fertile source of confusion in lectures which touch upon Comparative Philology.

The chief cause of these evils is to be found in the application to Latin of the modern English vowel system. In this most important part of the field the course which reform should take is obvious, as there is no controversy about the pronunciation of the vowels in ancient Rome, and, with insignificant exceptions, a uniform pronunciation of them prevails over the continent of Europe.

The diphthongs are of less importance, but of course a change in the pronunciation of the simple vowels will entail changes here also.

With regard to the semi-vowels, there is a difference between the cases of *j* and *v*. There is no reason to believe that the English sound of *j* belonged to the ancient Latin *i*, when it had the force of a consonant; but on the contrary, the Latin *i*, when consonantal, is generally acknowledged to have been equivalent to the English *y*. On the other hand although there are reasons for identifying the consonantal sound of the Latin *u* with the sound of the English *w*, there is no general consent in favour of such an identification. Scholars of the first rank dispute it, the sound of *w* is unknown to the modern languages of Latin origin, and the sound of the English *v* is employed by all European nations which read Latin to represent the consonantal sound of the Latin *u*.

In the mutes difficult questions arise. There is good reason to believe that *c* and *g* had, in ancient Rome, a hard sound only; but all the nations which now read Latin give them, more or less uniformly, soft sounds before the vowels *e* and *i*. Again, the proper method of treating *c* and *t* before *ia*, *ie*, *ii*, *io*, *iu*, is open to discussion; nor are other cases wanting in which it may be reasonably argued that the pronunciation of individual consonants by the ancient Romans was more or less different from that now current in England.

Under these circumstances, we venture to suggest that a few changes of a simple nature may suffice to produce an approximation to the ancient sound of the Latin language, which will be worth the labour involved in making them, while the inquiry into the minuter details of the ancient pronunciation is left to professional scholars.

The proposal which we would make is as follows :—
That in pronouncing Latin vowels—

ā should have the sound of *a* in *father*.
ă ,, ,, ,, the first *a* in *papa*.
ē ,, ,, ,, *a* in *cake*.
ĕ ,, ,, ,, the first *a* in *aërial*.
ī ,, ,, ,, *e* in *he*.
ĭ ,, ,, ,, *e* in *behalf*.
ō and *ŏ* should be sounded as at present.
ū should have the sound of *o* in *who*.
ŭ ,, ,, ,, *u* in *fruition*.

That in pronouncing Latin diphthongs—

ae should have the sound of *a* in *cake*.
au ,, ,, ,, *ow* in *owl*.
ei ,, ,, ,, *i* in *idle*.
eu should be sounded as at present.
oe should have the sound of *a* in *cake*.
ui ,, ,, ,, *we* in *we*.

That in pronouncing Latin semi-vowels—

j (*i*) should have the sound of *y* in *yard*.
v (*u*) should be sounded as at present.

With regard to the pronunciation of Latin consonants, the most important change, if it were thought that it could be attempted without intolerable offence to the ears of all the Latin-reading nations, would be that—

c should uniformly have the sound of *k*, or *c* in *cage*.
g ,, ,, ,, ,, ,, *g* in *gate*.

But without clearer evidence of willingness to support such a change than we at present possess, we do not wish to touch the question of the true consonants.

It will be observed (1) that we propose to abandon the current pronunciation of four vowels, five diphthongs, and one semi-vowel ; (2) that the vowel *e* and the diphthongs *ae* and *oe* will, on our plan, still have but one sound, just as now ; though it will be the sound of *a* as in *cake*, and not of *e* as in *lever ;* (3) that we do not propose the introduction of a single sound unknown to the English language, as it is now spoken. This last point has seemed to us of so much importance that it has deterred us from attempting to alter the pronunciation of the diphthong *eu*, or to discriminate between the sounds of *ae* and *oe*.

An important paper, entitled "A Few Remarks on the Pronunciation of Latin," has just been printed for private circulation by Professor Munro, of which we give the following summary :—

It is desirable and practicable to observe quantity systematically—to distinguish between long and short, and longer and shorter, syllables. But if we are to do this, we must break alike with all existing pronunciations. We should also endeavour to reproduce approximately the "quality" of the vowels. For this purpose Italian offers many aids which it would be most unwise to neglect. English is so utterly different in all its tones from old Latin that often we cannot find in it even single sounds to give as the representative of a Latin sound. Those who know Italian should in many points take Italian sounds for the model to be followed ; those who do not know it should try to learn from others the sound required, or such an approximation to them as may be possible in each case. In particular, *ā, ă, ī, ĭ, ū, ŭ, au, eu*, should be sounded as in Italian : *ē* should be the Italian "closed" *é*, *ae* the "open" *è* heard in *Cèsare, sècolo : ĕ* as *è*, but short : *ō, ŏ* the closed and open Italian *ó, ò :* but Latin *o* for *au* should be open, as *plòstrum, Còrus :* the rare *oe* as *ae*, or German *ö : ei*, the Italian or Latin *e* sound quickly followed by an Italian or Latin *i* sound : finally, the diphthongs in words like *eius, Graius, Troja*, should be sounded as *ē-yus, Grā-yus, Trō-ya*.

Of the consonants, *i* (or *j*) should be our *y*, *u* or *v* our *w* (see especially Gellius, x. 4, xix. 14, 5–8) : *c* and *g* should be *k* and hard *g : bs, bt* should always be sounded, if not written, as *ps, pt : d* and *t* should be real dentals, not linguals as we pronounce them : final *m* was (should be ?) sounded slightly and indistinctly : *quu* should be avoided (*cum* or *quŏm*) : *r* we should sound more strongly and distinctly. The pronunciation of *s* should vary : *musa*, &c. as in Italian (as if *mūza*) : but where it stands for original *ss*, it should be sharp (as in *sad*) : so *causa* as *cau-ssa*, Ital. *cosa* (with sharp *s*), *casus* written by Virgil and Cicero *cassus*, pronounced *cā-ssus :* so, of course, *sol, ni-si*, &c. The quantity of vowels should be attended to in many cases where it does not affect metre, *i.e.* where vowels are long both naturally and by position. Thus, *āctus*, but *făctus ; īnsanus, īnfelix*, but *ĭndoctus ; amāns, amāntis, legēns*, but *legĕntis ; mōnstrum horrēndum īnforme ingēns*, &c. So *ĕst* from *sum* but *ēst* from *edo*. When we scan *pātrem*, and the like, we should separate the two consonants, but keep the vowel short—*păt-rem*—the short sound being that of prose. The accent should be recalled to its right place before enclitics—*armáque, tantáne ;* similarly, *postéa, adéo, tantôn, intersê, apudmêst*, &c. Elided syllables should not be altogether passed over.

Intelligence.

Messrs. Henzen and Borman have printed the *Inscriptions of the Town of Rome* (vol. vi.) as far as page 112. During Mr. Borman's absence in the field, Mr. Henzen superintended the printing. After Mr. Borman had recovered from his wound received at Mars-la-Tour, he resumed his work, and Mr. Henzen returned to Rome. The *Inscriptiones Sacrae* are nearly printed, the *Imperial Inscriptions* are ready for press. Mr. Hübner has begun the printing of the *British Inscriptions* (vol. vii.). The *Wall Inscriptions* of Pompei, edited by Mr. Zangemeister, are finished, and will soon be sent out. Vol. iii., edited by Mr. Mommsen, has advanced from page 640 to page 800 ; important appendices and index will follow. Vol. v. is printed from pages 168 to 328, comprehending the eastern half of Upper Italy as far as Verona.

The Baron von Maltzan has contributed a series of Letters from Arabia to the *Augsburg Gazette*, from one of which we gather that a Himyaritic inscription reached Aden in January, about the Boustrophedon writing of which no doubt can be entertained ; also that M. Halevy has completed his long and difficult exploration of Yemen, and brought back copies of about 500 Himyaritic inscriptions. M. Halevy is a French Jew, and travelled in the character of a native Rabbi. He seems to have copied the inscriptions in Hebrew characters, and to be now engaged in reconverting these into Himyaritic.

Professor Madvig, who has long been eminent among scholars for the soundness as well as brilliancy of his emendations, has just published a collection of the fruits of many years' study of Greek and Latin authors. The first volume is to contain a dissertation "de arte conjecturali," and the "emendationes Græcæ," in number above three thousand. A second volume is promised for Latin. This department is at present pursued so assiduously, and on the whole with such indifferent results, that Madvig's *Adversaria Critica*—so the work is entitled—are likely to make an epoch in the history of Philology.

We understand that the volume of miscellaneous translations now in preparation for the Society of Hebrew Literature will contain :—1. Part of the Machbeuth Ithiel, Alcharizi's version of the Makámat of Hariri, from a MS. in the Bodleian Library. 2. The Biur (commentary) on the 2nd chapter of Genesis (to be continued in future volumes). 3. Zunz on the Sufferings of Israel during the Middle Ages. 4. Bertinoro's Travels. 5. Samuel the Prince, the Letter of Chisdai to the King of the Chozars. 6. Autobiographical letter of Maimonides. The Society will also publish a translation of Aben Ezra on Isaiah, with notes, indexes, and a copious introduction.

Amongst the libraries destroyed at Paris is that of M. Bréal, the well-known Philologist.

Egyptologists will be interested to learn the following particulars which we have just received from Paris. M. de Rougé is absent, being detained by his magisterial duties at the village of Pressigny (Sarthe). There is no news of M. Chabas. M. Mariette has been at Paris during the siege, and has read a memoir on the Age of Stone in Egypt before the Academy : he has just published two vols. in fol. of *Denderah*, and the first vol. of the Papyri of the Museum at Boulac, which will be on sale for a month. M. Maspero is at Paris, and has read before the Academy a memoir on Epistolary correspondence in Egypt and the Egyptian Pronoun. He is publishing a translation of the Abbott Papyrus, which was read before the Academy in July, 1869, and already printed in the *Mémoires* of the Institute ; together with his translation of the "Romance of the Two Brothers," printed in the *Revue des Cours Littéraires* in 1870, No. 47. M. Dévéria, the former colleague of M. Longperrier, died at Paris on Jan. 16.

New Publications.

Acta Societatis Philologae Lipsiensis, with pref. by F. Ritschl. Teubner.
Antiphon. Neue Ausgabe von F. Blass. Teubner.
Cebetis Tabula ed. F. Drosihn. Leipzig : Teubner.
Grimm, J. W. Deutsches Wörterbuch. Fortgesetzt von Dr. Rud. Hildebrand u. Dr. Karl Weigand. 4. Bd. 4. Lfg. Leipzig : Hirzel.
M. Tullii Ciceronis de legibus Libri. Ex recog. J. Vahleni. Berolini : ap. F. Vahlenum.

ERRATUM IN No. 19.

Page 115 (a), line 31, for "Nitrephoros" read "Nikephoros."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, April 15, and advertisements should be sent in by April 11.

NOTICE.

The Academy *will in future appear regularly on the 1st and 15th of every month.*

General Literature.

A Vision of Love Revealed in Sleep. By Simeon Solomon. F. S. Ellis, 1871.

We have every reason to congratulate ourselves when the genius of a distinguished artist finds a double channel for its self-expression—when a poet can furnish us with illustrations of his poems copied from the very visions which inspired them, or when a painter is able to tell us in words what he means to convey to our imaginations by the forms and colours of his pictures. Mr. Solomon's prose poem is a key to the meaning of his drawings. It lays bare the hidden purpose of the artist, and enables us to connect picture with picture in a perfectly intelligible series. Those who are familiar with his sketches or with the photographs which have been taken from them will recognise the perfect unity of style which marks the vision and the outlined forms. Those again who can appreciate the delicate and subtle key of colour used by the painter in his finished pictures will trace the same harmonies of hue in many of the descriptions of the vision, for instance in the vestments tinted "like the heart of an opal" and "like a flame seen through water" of the final scene.

As its name implies, this prose poem has for its subject Love. The mystery of Love is here displayed as in a pageant to the dreaming spirit of the poet by his soul conceived as an external and superior power. It is not therefore without good reason that the single illustration with which the book is adorned should represent the Soul and the Novice: in the same way, if a medieval artist had designed one woodcut for the *Divine Comedy*, he would probably have drawn Dante with Virgil or with Beatrice as his initiator in the mysteries of the spiritual world.

The Love of Mr. Solomon's *Vision* is quite distinct and unconventional. He is unlike "the bitter sweet impracticable wild beast" who bent Sappho's soul as "storms break oaks upon the mountains." He is unlike the blacksmith of Anacreon's Mythus, who forged the soul upon an anvil and then plunged it in a wintry stream. Nor again has he anything in common with the beautiful winged boy of Praxiteles, or with the runaway of Moschus. The parrot-winged fire-faced child of Arabian fancy belongs to another race and lineage. So does that champion of chivalrous love beheld in vision by Pierre Vidal, who rode a snow-white horse and had the face and limbs of a young knight, followed by the damsels Modesty and Mercy, and by Loyalty for squire. Nor, again, is the Love of this new Mythus to be found upon the pages of the *Vita Nuova*. The pilgrim who met Dante on the Way of Sighs, the grave-faced and inexorable youth who sat by his bed-side and wept, and communed with him, and was sweet and stern, has more perhaps in common with the Love of Mr. Solomon's *Vision* than any other. But he is not the same. In truth, the originality of any poetical or pictorial Mythus, such as is embodied in this vision and in the series of Mr. Solomon's drawings, consists in its creator having viewed an old problem with new eyes, and communicated to the object some of the qualities of his own soul and of the age in which he lives. This, in our opinion, Mr. Solomon has done with eminent and unmistakable distinctness. His Love is not classical, not medieval, not Oriental; but it has a touch of all these qualities—the pure perfection of the classic form, the allegorical mysticism and pensive grace of the middle age, and the indescribable perfume of Orientalism, which, by the way, finds a more than usually definite expression in the last scene of this vision. Added to these general qualities we trace in this spirit of love a vague yet intense yearning, a *Sehnsucht*, which belongs to music and is essentially modern. If, finally, we seek that characteristic which is most truly peculiar to the poet himself, we find it to be a certain Biblical solemnity of spiritual sense inbreathed, as Milton phrases it, into the forms of art.

It savours somewhat of Philistinism to question the details of a vision and to expect an exact meaning in all the figures of so pictorial a work of imagination as this of Mr. Solomon's. Yet we may call attention to the subtlety by which he has divided the soul of the seer from the man himself, and has made that soul with purged and disembodied vision act as the hierophant of a revelation which the man in his completeness would have been incapable of discerning. Other poets have chosen some guide, like the Sibyl of Virgil or the Beatrice of Dante or the Angel of the Apocalypse, for their illuminator. Mr. Solomon has proved the modern quality of his genius by the selection of no other power than that of the indwelling soul of man. The first words of the soul upon the pathway of initiation are:—

> "Thou hast looked upon me, and thou knowest me well, for in me thou but seest thyself, not hidden and obscured by the cruel veil of the flesh. I am come forth of thee for thy well-doing."

After this preface the soul leads forth the seer to a place where Memory abides; then showing him simple Pleasure in the figure of a woman:

> "Looking upon her, I saw that she was good, but I knew that there was that about her that left me not content; she was like as sweet notes heard once and lost for ever."

Then they come to the station of Love bruised and bound; where also Passion is revealed as "she who had wounded and had sought to slay Love, but who, in her turn, was grievously wounded and tormented in strange self-devised ways." Passing from this place, they reach "him who had done battle with Love, Death, who would love us did he dare, whom we would love did we dare." Parenthetically it may be said that one of the most beautiful and subtly finished portions of this *Vision* is that in which Death is described. Divine Charity bringing Sleep to earth, Time holding stricken Love within his arms, and Night and Dawn and Day, and the Spirit of Dreams in sleep, are all seen in the successions of the mystery. Till at length, after a space of time and after due lustrations and equipment in the robes of purity, insight is granted to the seer into the holiest of Holies, where Love himself, no longer afflicted and dethroned, but in his glory and his power, is displayed. Thus lightly and vaguely to indicate a few scenes of the *Vision* is all that a critic can attempt. To read the inner meaning of the mystery—to decide whether Love wounded by Passion upon earth, abandoned to oblivion, put out of sight and overgrown by weeds and briars of this mortal life, is revealed in his full splendour at the gates of Death, or Death's twin-brother Sleep—must be left to the judgment of the readers of the pages of this book.

It is enough once more to point out the subtle harmony which subsists between the poetic and the pictorial faculties of the artist's genius. Those who desire a comment on the figured allegories of Mr. Solomon will find it in his *Vision;* those who wish to see his vision as he saw it with their very eyes have only to turn to his drawings for full and ample illustration. The frontispiece of the book is itself a good example of the painter's style, at the same time that it sets forth the relation he desires to establish between the seer and the soul.

If any definite criticism should be added to this account of Mr. Solomon's *Vision*, it must be that there is a certain vagueness in the succession of the scenes, and that his literary style, while it shares the delicacy and peculiar flavour of his pictures, has somewhat also of their profuse perfume and languor. To lay stress on these points would be ungrateful. We should rather be thankful that such an artist as Mr. Solomon has found a voice so clear and sweet as that which may be listened to in this narration of his Apocalypse of Love. J. A. Symonds.

History of the Spanish Drama. [*Geschichte des Dramas.* Von J. L. Klein. VIII. *Das spanische Drama.* Erster Band.] Leipzig: 1871.

This volume of Klein's work only contains his views respecting the origin of the Spanish drama, and critical notices of those early pieces, in verse and prose, which preceded the first acted plays. He halts long by the way, to recount events in the lives of his authors, to rhapsodize on their works, and to draw fanciful parallels; so that we reach the end of one bulky volume without being introduced to a single dramatist whose plays were actually represented on a stage.

The Italian priesthood, unable to suppress the gross farces acted by popular buffoons, at length so far yielded as to adopt such representations as a part of the ceremonial of their Church; and these sacred plays passed from Italy into Spain, certainly before the time of Alfonso the Wise, who enacted laws respecting them in his code of the *Siete Partidas.* This is the view taken by most writers of the origin of the Spanish drama. But Klein seeks for more distant sources; and suggests that the germs of drama may be found in a poem written at Saragossa in 380 by Aurelius Clemens, in which six vices and six virtues contend for mastery in hexameters; and in a soliloquy of the soul on sin, written by St. Isidore in the 7th century. He fancies that rudimentary dramatic ideas may be detected in the life-like dialogues of Clemens, and in what he calls the dialogue-soliloquies of St. Isidore.

He finds another source of the Spanish drama among the Persian Arabs, but he fails to exhaust this interesting branch of his subject, by connecting the Persian representations with any analogous performances in Moorish Spain. He mentions that Alexander Chodzkos, the Russian Consul at Teheran, in his investigations into the origin of the *T'aziyah* (not *Téazié*, as Klein as it), or tragic plays to commemorate the martyrdom of Hosein and Hassan, traces them back to the time of the feud between the Beni Omeyyah and "the Persian Arab Ali-Bekenner." Klein says that these death lamentations then came into vogue, were introduced into Spain by the Western Khalifas, and thus formed another germ of the Spanish drama. I cannot conceive who can be intended by the "Persian Arab Ali-Bekenner." Ali the Khalifah was not a Persian in any sense, but it was the feud between him and Mo'âwiyah, involving the death of Hosein and Hassan, which unquestionably gave rise to the division of the Moslems into Sunnis and Shiahs, and to the traditional commemoration of the martyrdom of the sons of Ali. *T'aziyah* means condolence, and as Easterns never condole without making a noise, it signifies also lamentation, as Klein correctly observes. But it comes from the verbal root *'aziya*, "to take comfort," and not, as Klein states, from *'aza*, "grief." The fullest description of the Persian *T'aziyah* will be found in a letter written by Pietro della Valle (*Pinkerton*, ix. p. 38). The performance is certainly dramatic, and bears some resemblance to the miracle plays of the middle ages.

There can be no doubt that the public recitation of poems and romances was one of the amusements of the Arabs prior to Islam, and Fresnel tells us that the reciters on these occasions were masked, and were attended by what he calls "un rhapsode" or crier. Here we have some elements of a dramatic performance, and the usage has certainly obtained among the Arabs ever since. That the public recitation of poems passed into Spain with the Arabs cannot be doubted, and, as some of the Khalifahs of the West were Shiah, the commemoration of the martyrdom of Hosein may also have been celebrated in Spain. But there is no Arab dramatic literature. In the *Bibliotheca Arabia-Hispania Escurialensis* of Casiri, which is quite a treasury of Moorish literature, there is no notice either of the commemoration of Hosein, or of any other dramatic performance. We are also told by Moratin that Conde had never found a sign of any dramatic writing among the many Arabic manuscripts he examined.

All traces of the Roman theatre disappear from Spain with the Arab conquest, and the genius of the Mohammedans was opposed to dramatic representations. Even now a devout Sunni regards the Persian *T'aziyah* with horror, not only on account of the claim to the Khâlifate in favour of Ali's descendants which it involves, but also from religious scruples. The Provençals, with a poorer language than the Arabs, and less versed in science, were endowed with rich gifts of imagination, and were deeply moved by tales of heroism and love. Their Troubadours established colleges for singing and recitation in north-eastern Spain; but we find nothing in their songs which breathes the dramatic spirit. The origin of the Spanish drama will be sought for in vain among the Gothic saints, Moorish poets, and Provençal troubadours.

The first idea of secular dramatic representation was doubtless based on the mystery plays imported from Italy in the early part of the 13th century. At the same time the old ballads and chronicles, and even the literature of the Arabs, must have influenced the writers who led the way to the foundation of the secular drama of Spain. Among these, the warlike Infante Juan Manuel holds a distinguished place; and Conde is of opinion that the "Conde Lucanor" of that prince was compiled in imitation of Spanish tales. Indeed there is distinct evidence that Juan Manuel was conversant with Arabic. Juan Ruiz, generally called the Archpriest of Hita, wrote between 1330 and 1343. He never composed dramatic pieces, but his genial comic dialogues, and his humorous satire are akin to the spirit of a dramatist. The Archpriest tells us that his verses were written in prison, which gives occasion for Klein to break out in rhapsodies on the *Käfigpoeten*, and to call upon the thrush and the nightingale to lament that their songs perish, while those of the caged Archpriest survive. Klein compares him to Boccaccio, likening the poetry of the Spaniard to a Venus in nun's clothes, and that of the Italian to the same goddess in a state of nature. Ticknor had already drawn an interesting and more judicious paralled between the Archpriest of Hita and our own poet Chaucer, who wrote a little later in the same century.

Passing over the quaint and pleasant redondillas of the Jew of Carrion, and the more important and popular "Coplas de Mingo Revulgo," which Klein discusses in much detail; this author's first volume concludes with a discussion of the *Celestina*, the undoubted immediate forerunner of Spanish acted plays of a secular character. The first act of this famous tragi-comedy, as it is called, was written in 1480 by Rodrigo Cota of Toledo, and the other twenty by Rojas of Montalvan. Its length and structure make the *Celestina* incapable of representation; but Ticknor has pointed out that its dramatic spirit and movement have left traces of their influence on the national drama ever since. The leading character in the piece is the old witch Celestina, whom Klein well describes as the quintessence of all the evil and all the genius of her age and country; and he justly holds that the dramatic merit of the authors rests on this creation. He agrees with all previous critics in the opinion that the idea of Celestina is derived from the Trota Conventas, a somewhat similar character drawn by the Archpriest of Hita, and with the majority in believing that the first and the subsequent acts are by different hands. But while others have remarked upon the extraordinary similarity in style and finish which pervades the whole work, Klein maintains that there is no comparison between the first and subsequent acts, and that there is not so much life and movement in half a dozen of the later acts as in the first. Yet he allows that the ninth act is the work of a master in the art of describing empassioned love, and would alone suffice to give its author fame as a tragic poet. Klein makes much the same defence of the shameless libertinism of thought and language to be found in the *Celestina*, as appears to have been put forward at the time of its first publication. "Is not a doctor to cure an ulcer?" he exclaims. He holds that the great fault of the *Celestina* lies in the lameness of the catastrophe, caused by want of knowledge of the poetic atonement of sin. But he fully admits that the dramatic history of Spain has its true commencement in the *Celestina*, not because it was the first work of its kind, but because of its literary excellence and of its thoroughly national character. Its popularity was certainly remarkable: it was translated into many languages, Cervantes gave it the highest praise, and down to the time of Don Quixote no book was so much read in Spain.

Although the works of these forerunners of the Spanish secular drama are discussed by Klein with great fulness and with evident mastery of the subject, some disappointment will be caused, in perusing his volume, by the fanciful parallels and rhapsodies and by the long digressions in which the author occasionally indulges. Sometimes, too, an impression is left that he cannot fully appreciate the beauties of Castillian poetry; as when, speaking of that exquisitely plaintive elegy by Jorge Manrique, he coldly observes that the son might as well be celebrating the death of the stoic Zeno as that of his father. These remarks, however, are only intended to point out blemishes which seemed to detract from the undoubted merits of the work. In perspicacity it is not to be compared with the history of Spanish literature by Ticknor, and the works of Moratin and Ochoa will be more useful to the student from the length and completeness of their extracts. But Klein has certainly done good service by discussing, with great fulness of detail, and in a lively and imaginative style, although with an overflowing redundancy of adjectives, the creations of those early Spanish authors whose works are now little known to the general reader, but whose influence was felt and may be traced in the writings of the later and more famous poets and dramatists of Spain.

C. R. Markham.

Young Russian and Old Livonian. [*Jungrussisch und Altlivländisch.* Politische und culturgeschichtliche Aufsätze von Julius Eckardt.] Leipzig: Duncker and Humblot, 1871.

This book can hardly be considered an organic whole; it is true that its Young Russian and Old Livonian parts have one fundamental idea in common—that of representing the very complex and extensive influence of Germans and German ideas over the East of Europe, and the energetic national reaction at present setting in against it. But the several essays which form each part respectively have been chosen from apparently no other motive than that they had been left out of Dr. Eckardt's previous publications on these two subjects, of which the *Baltische und Russische Culturstudien* was reviewed, *Academy*, No. 2, p. 51.

The Young Russian portion consists of three essays—"The New Era in Russia," "Alexander Herzen," and "Pictures of Travel in Gallicia." The first of these has already appeared in English, forming the opening portion of Dr. Eckardt's *Modern Russia* (published by Smith, Elder, and Co., 1870), and was noticed *Academy*, No. 6, p. 163. The second essay is so far connected with the first as it contains the biography of the principal agent in bringing about the political and social changes therein described. The connection of the third is so little apparent at first sight as to require special explanation in the preface. The thought which suggested the juxtaposition also appeared in the first paragraph of one of his previous works, *Die baltischen Provinzen Russlands*, where a place is assigned to the Poles of Lithuania and Gallicia by the side of the Swedes of Finland and the Germans of the Baltic Provinces, as representatives of Western civilisation. Both in the biographical sketch of Herzen and in the "Pictures of Travel" Dr. Eckardt writes with a spirit and vivacity which cannot fail to interest the reader, and his knowledge of the Russian language enables him to draw on sources of information little accessible in Western Europe. His observations on the abortive attempts made to naturalise German literature in the Bukovina show that his patriotic feelings do not interfere with that scientific objectivity which is for the most part so favourable a feature in German writers on historical or quasi-historical subjects. The weak and wavering policy of the Austrian government, and the unpractical character of the Poles, with their contempt for details, are well brought out. So, too, is an additional source of political anarchy—the very recent origin of Gallicia as a united whole. Austria's share in the partition of Poland united into the one crown-land of Gallicia fragments of Little Poland and of Red Russia which had never been so closely united before.

The second and much smaller half consists of five sketches relating to the politics and society of the Baltic Provinces during the last century. They have much less living interest than those which describe the Russian movements of the present day; at the same time they have more of that value which depends upon access to unpublished documents. The first sketch describes the experiences of Herder's friend Hartknoch, as a bookseller in Livonia between 1763 and 1789. The second and third throw light on the career of two German adventurers in the service of Peter the Great—Heinrich Fick and the Admiral von Sievers. Still more light is thrown on the times in which they lived by the succeeding sketch entitled "*Aus dem Leben der Familie von Münnich.*" In it an attempt is made to illustrate the transition which marked the latter part of the eighteenth century—a transition from a formalism in which individuality was lost to a greater spontaneity both of feeling and its expression. The last essay describes the subjection of Courland to Russia, from an unpublished document by

one of the actors in the comedy, who is somewhat mysteriously described as Baron X.

Arthur J. Patterson.

The Life and Letters of the Rev. Richard Harris Barham, author of *The Ingoldsby Legends*, with a Selection from his Miscellaneous Poems. By his Son. Bentley, 1870.

The popularity of *The Ingoldsby Legends* has been so great that even those who do not admire them must turn with interest to any memoir of their author, and would welcome with pleasure a less "imperfect biography" than that before us.

Mr. Barham was apparently a prosperous man, with whom life, on the whole, passed easily. He had property of his own, as well as a minor canonry of St. Paul's and a small living in the City; and in the anxieties of his profession, if the petty squabbles of the Chapter-house are excepted, he had, if we may judge from these volumes, but little share. He was not one of those who write for bread, nor is he represented here as making others laugh while he wept himself; accordingly, there is not in his poems much of the irony of true humour; but he appears to have been always trying to be funny, and to live with funny people. The book is crammed with his funny letters and his funny rhymes, and the funny sayings of the men he met, and the stories which he had heard and those which his friends had heard, and even with stories which have a less valid claim than these to form part of his biography.

The Ingoldsby Legends have been well called "a protest against mediævalism," opposing, as they do, a healthy vulgarity to excess of refinement in thought and expression, and a sturdy Protestantism to the *dilettante* churchmanship of the day. If the spreading love of art and increasing fastidiousness make us prone to tolerate what is dull and feeble for the sake of what we call "the æsthetic," we may find an antidote in these poems, where extravagant rhymes and boisterous metre are the virtues of style, and where the thought is never so amusing as when it verges on the coarse, the indelicate, or the profane. Now nothing more interesting could be expected from a life of Mr. Barham than that it should tell us whether he raised this protest with any conscious or deliberate intention. On this point the work before us is not explicit. He was a staunch Protestant, and meant to support by his writings the cause which he professed; he was also a zealous Tory; but whether he understood the wider meaning of his work, we are not informed. It would seem that he did not. He was a coarse, kind man, with a genial love of laughter, and a curious fondness for tales of ghosts and murders; and what he liked he wrote.

But one is reluctant to judge the man from his *Life*, even though it is written by his son; for it is a mere piece of bookmaking. As a collection of anecdotes about Hook and Sydney Smith, it may be called amusing; and there are a few facts that are even valuable; such as those connected with the family of Mr. Hughes, whose wife, from her great knowledge of local histories, supplied the materials for many of the *Legends*, and whose son, then a boy at Rugby, contributed towards a proposed novel his experience of "School-days," the germ, it may be, of *Tom Brown*.

But this one-sided biography is an injustice. Mr. Barham was a loving and useful man, though not a great one; and it is cruel that so large a portion of his *Life* should be allotted to the funny sayings and doings of himself and his friends and other people.

R. S. Copleston.

Marlowe's Faustus. By A. v. d. Velde. Breslau: 1870.

Dr. v. d. Velde's metrical translation of *Marlowe's Faustus* may also be of interest to the English student, as in the introduction it is proved most conclusively that the English poet derived his subject-matter from the *German* history of Faustus printed 1587, with which (and not with the old English ballad) Marlowe agrees in most important points. An English translation of the German work was not, it is true, published until a later time, but the missing link seems to be supplied by the two actors, Thomas Pope and George Bryan, who appear to have performed in English plays both at Dresden and at Berlin from 1585 to 1587, and to have then returned home; from them Marlowe may be supposed to have learnt the tragical history of Faustus. Dr. v. d. Velde agrees with those critics who assign Marlowe's play to the year 1588 or 1589, in support of which opinion he quotes the lines in the first act where Faustus speaks of "chasing the prince of Parma from our land"—Alexander Farnese, prince of Parma, leaving the Netherlands soon after the defeat of the Spanish Armada (1588).

The author of the present publication was not aware of Goethe's high opinion of Marlowe's play, which has recently become known through Henry Crabb Robinson's Diary; had he been acquainted with it, he would no doubt have expressed himself differently on p. 30. Unfortunately, he could not avail himself of Dyce's excellent edition of Marlowe, which would perhaps have modified his statement, that the quarto of 1604 contains, to all intents and purposes, the genuine work free from interpolations and "additions:" see Dyce, p. xxi in the new edition, 1865.

W. Wagner.

LITERARY NOTES.

Mr. W. R. S. Ralston is engaged upon what seems likely to prove a very interesting book on the popular literature of Russia. An attempt will be made in it to convey to Western readers some idea of the rich stores of song and story which Russian collectors have within the last few years been gathering together, and also to place at their disposal some of the results at which the leading Russian critics have arrived with respect to their age, origin, and value. It will be divided into three parts, of which the first will be devoted to the songs of the people, the second to the epic poems, and the third to their prose stories.

In the first part some account will be given of the chief festivals of pagan origin still kept up in Russia, and of the relics of old songs which are consecrated to them.

The books from which it will be mainly taken are Orest Miller's excellent "Manual of Russian Literature" (*Opuit istoricheskago obozryeniya russkoi slovesnosti*), Sakharof's "Folk-lore of the Russian People" (*Skazaniya russkago naroda*), Tereshchenko's "Manners and Customs of the Russian People" (*Buit russkago naroda*), Snegiref's "Festivals and Superstitious Rites" (*Ruskie prostonarodnuie prazdniki i suevyernuie obryadui*), and, above all, Afanasief's three invaluable volumes on the "Poetical Views of the Slavonians about Nature" (*Poeticheskiya Vozzryeniya Slavyan na prirodu*). This part will include a sketch of the "Fairy Mythology of Russia," and a brief account of the marriage and funeral songs of the people, as well as of their charms, incantations, &c.

The second part will deal with the *Builinui* or popular epics of Russia—the poems in which are celebrated the deeds of the old Slavonian heroes, especially of those who were supposed to be gathered together in the Court of Vladimir at Kief. An attempt will be made in it to familiarise the English reader with the names and characters of the chief of these heroes—such as Svyatogor, of the mythical period; Ilya Muromets, Alësha Popovich, and Dobruinya Nikitich, of the Vladimirian cycle; and Sadkoi or Vasily Buslaevich, of Novgorod. And some account will be given of the discussion which has taken place in Russia relative to the origin of these poems. The authorities chiefly relied upon in this part will be the great collections of

popular poetry (*Pyesni*) made by Ruibnikof and the two Kiryeevskys, and that of poems on sacred subjects (*Stikhi*), edited by Bezsonov, under the title of *Kalyeki Perekhojie*, Maikof's essay "On the Builinui of the Vladimirian Cycle" (*O builinakh Vladimirova tsikla*), various treatises by Buslaef, the most erudite of all the writers on the subject; the articles in the *Vyestnik Evropui*, in which Stasof maintained that the Builinui were not of Slavonic origin, but were imported directly from the East, and the bulky reply published by Orest Miller under the title of *Ilya Muromets*.

The third part will be devoted to the prose stories (*Skazki* and *Legendui*), which will be taken for the most part from the rich collection (in eight parts) of Afanasief. A certain number of the most original tales will be translated, and an analysis of others will be given, so as to show in what points the Slavonic renderings of the old stories with which we are all so familiar resemble or differ from those which are peculiar to the various other branches of the Aryan race.

M. Louis Leger, one of our contributors for Slavonic literature and history, has just been called to Prague to undertake the direction of the *Correspondance slave*, a Bohemian journal published in French.

The *Revue des Cours littéraires* is to be transformed into a journal like the *Saturday Review*, under the name of *La Tribune politique et littéraire*.

In an article in the second January number of the *Revue des Deux Mondes* on the well known Finnish epic *Kalevala*, M. A. Geffroy is of opinion that its present form must be received with reservations. The poems collected by Dr. Lönnert, a more scrupulous Macpherson, are genuine, but the arrangement is only matter of conjecture. M. Geffroy gives a sketch of the highly mythological framework of the poem, on which legends of the common popular type are freely grafted.

George Sand's *Journal d'un Voyageur pendant la Guerre* will be read with interest as a companion to some passages in Goethe's works bearing on a time of similar national disaster. The writer, whose descriptive style is full and flowing as ever, believes that universal suffrage has actually done something for the political education of the peasantry, of whose future, as a class, she has always been inclined to take a more favourable view than other republicans. (*Ibid.* Feb. 15.)

M. E. Blanchard publishes from the papers of the Lazarist missionary, Armand David, an account of his explorations undertaken last summer in the little known region of the Ourato, north of Ortoos, or, as he writes it, country of the Ortous. A comparison of the flora and fauna of that district with those of other parts of China is promised. (*Ibid.* Feb. 15, Mar. 15.)

In the *Révue des Cours littéraires*, M. E. Despoir, following M. Fournel, treats the common version of the story of Gilbert as fabulous. The young satirist was, at worst, neglected by D'Alembert; Fréron extolled him, his poems found a publisher without difficulty, and he was in receipt of several pensions from the court, representing an income of more than two thousand livres. He died insane and at the Hôtel-Dieu; but the first fact is explained by an accident—a fall from his horse in riding, and for the second his patron, M. de Beaumont, only is answerable, as in health the poet had free quarters in his house. A contemporary notice speaks of the archbishop as sending to enquire after him twice a day, and knows nothing of the neglect and misery which have been supposed to assimilate his end to that of Chatterton.

At a recent sitting of the Academy Della Crusca in Florence the secretary read an obituary memoir in honour of the late Archduke Leopold of Tuscany, who at the time of his death (27th February last) had been the oldest member of that body. Among his services to literature and science are recited the editing of Lorenzo de' Medici's poems, the collection of the MSS. of Galileo, the association of Rosellini and Raddi with the mission of Champollion, the mission of the naturalist Parlatore into the extreme north of Europe, the preparation of the catalogues of the Palatine Library, the publication of the memoirs of the Accademia del Cimento, and the encouragement which he gave to the University of Pisa.

Eugenio Camerini devotes an article in the *Nuova Antologia* for March to the dramatic works of Giovan Battista Porta, considered as one of the precursors of Goldoni. They are chiefly of interest as showing, first, the versatility of the author, and then the intimate connection which subsisted, until Goldoni's time, between the written drama and the improvisation of the actors. A good actor not only knew by heart all the retorts of the dramatic *répertoire* of the age and could bring them into the point, but he could also arrange impromptu the regulative comedy of intrigue, made up of disguised, practical jokes and lovemaking at cross purposes, with a dexterity probably at least equal to that displayed in Porta's published works, which may therefore be taken as a fair specimen of the native Italian drama imitated in Molière's farces.

In reviewing Mr. Stephens's Catalogue of Prints at the British Museum, we demurred to his writing "Sir Edmund Berry Godfrey;" inferring that the name was correctly (as very generally) printed in contemporary documents "Edmundbury," and must be related to "Bury St. Edmund's." But Mr. Stephens was right, and our reviewer was wrong. A record written by the father of Sir E. B. Godfrey sets forth: "His godfathers were my cousin John Berrie, Esq., Captain of the Foot Company of the town of Lidd: his other godfather was my faithful loving friend, and my neighbour in Grubb St., Mr. Edmund Harrison, the king's embroider."

The following Anglo-Saxon texts are promised by the Early English Text Society:—The Blickling MS. of unique homilies, to be edited by Dr. Morris. Lives of Saints by Ælfric from Cotton MS. Jul. E 7. Homilies from a Trinity Coll. Cambridge MS. by Mr. Aldis Wright. Some homilies of Lupus by Mr. Lumby, who has also in the press a translation (into A.-S. verse) of a poem attributed to Bede, *De Judicio Mundi*.

Art and Archæology.

PEEL COLLECTION OF PICTURES.

For a few weeks past there has been a report of a change in the Directorship of the National Gallery. Perhaps indeed the wish was father to the thought, as several gentlemen were already in the field as candidates for the important position. Mr. Boxall, however, retains office, and has celebrated his renewal of the tenure of direction by the most important purchase of pictures ever made by the nation, at one time—the collection of the late Sir R. Peel; the most important in point of number and sum expended at least. The taste of Sir R. Peel was limited, hidebound, we may say. The Dutch school alone was the school he appreciated, and that distinctively from the Flemish properly so called. Nevertheless, we have gained by this purchase of Seventy works several Flemish and English pictures, and first and most important of all Rubens' "Chapeau de Paille," an Antwerp lady of the Lunden family in a great black Spanish hat, not of straw; and also another Rubens, "The Bacchanals," and two Rembrandts.

With these exceptions and a few English pictures, the whole of this large number of seventy are Dutch of the later time. By Hobbima (whose absence some would say was a merit in any gallery) there are four. By Ruysdael, another dark green artist, there are three; W. Van de Velde, eight; Teniers, three; J. Van de Velde, two; Adrien Van de Velde, two; Karl Dujardin, two; A. Cuyp, three; and by P. Wouvermans, the painter of cavalier parties assembling among classic ruins, and other "compositions," that can only be characterized as nonsense pictures, no less than six. Besides all these there are a good many by other Dutch artists of a higher class: Gerard Dow, Terburg, Jan Steen, Metsu. The price paid by the country, it appears, is 70,000*l.*, a thousand pounds each picture, if the

number is exactly seventy. This must be double the value of the one-half of this entire collection, but much below the value of perhaps a dozen specimens comprised in the list. We are glad to find that the National Gallery, not having expended all the annual grants for some years past, possesses a considerable portion of the funds necessary for this extensive purchase.

SOCIETY OF FEMALE ARTISTS.

The gallery in Conduit Street, Regent Street, is again open: the collection being both in oil and water colour of very various merit. The principal exhibitors are Madame Bodichon, Miss Southerden Thompson, Mrs. Backhouse, E. V. B., the Misses Claxton, and Misses Thornycroft. Perhaps we ought to add Miss Bouvier, and Mrs. Ward, were it not that the hot round face that lady paints has been seen so often that we are positively repelled by it. "A Girl at Crochet" (13), Mrs. Backhouse, is an able study, though the child does not look enough engaged in her work—a very bad fault; and "The Little Blonde" (122), by the same, is also distinguished by executive ability. But the best (99) figure picture in the room is perhaps "L'Espoir de la Famille," by Madame C. Bisschop, *née* Kate Swift. The picture is quite French in manner, and both the old lady and the bonne are unmistakable French women; the power of colour is very remarkable. "Goodrich Court, an Autumn Morning" (3), by Miss E. D. O'James, has a richness and fulness of tone that seems to promise good results on a larger scale. "Stonehenge" (129), by Madame Bodichon, is admirably felt. The warmth dying out of the sky and the sad grays spreading over it realise the sentiment of the place. "Souvenir d'Algérie" (111), and "Atlas Mountains, near Algiers" (118), are not elaborated works but rather sketches. No. 133 is a small sea-shore with the white surf of the tide tumbling in, admirably painted, by Miss Edith Wheeler. The artist has called her picture by Tennyson's lines,

> "Break, break, break, on thy cold gray stones, O sea!"

but as there are no gray stones nor shingle of any kind, nor even sand, the quotation seems rather inappropriate. The works exhibited by E. V. B. are fine pen-and-ink etchings, showing the invention of this accomplished designer. They are called "Dream No. 1," "Dream No. 2," and so on; but, although interesting to decypher, appear to us not so well drawn as many illustrations we have seen engraved with these initials to them.

Altogether, this exhibition does not seem to do the English lady painters justice, or rather we should say the English lady painters do not seem to unite in this Society. If all the female exhibitors in London concentrated their abilities on these walls, we should have a different tale to tell!

NEW BRITISH INSTITUTION, OLD BOND STREET.

The second Spring Exhibition of this body opened on the 27th February. The room is a small one, and comprises only 210 pictures in oil, a good number of which are Belgian, some of them sent over to the forthcoming International Exhibition, but not delivered there on the assurance that the space devoted to Belgium is long filled up. There is besides a stand in the centre of the room with Water Colour Drawings. As usual in all our smaller exhibitions the landscapes predominate, and among these, although Mr. J. G. Naish puts in an appearance in "Westward!" (162), and also Mr. A. Macallum, and other English landscape painters of standing, the best picture by a long way is by a Belgian, M. J. von Luppen, "Souvenir des Ardennes, Belgium" (79). The daylight so clear and unaffected is really refreshing, and very rare indeed, especially among our landscapists, who are very prone to compete with figure painters in amount of colour. Among the more important works the principal are, Mr. Lucy's "Burial of Charles I." (72); Mr. Archer's (205) "A Bit of Romance: the Host takes his Guest home for the Night"—the host being a hermit, and the guest a weary knight; and Mr. Selons' "Ariel" (173)—

> "On the bat's back do I fly
> After sunset merrily."

INTERNATIONAL EXHIBITION OF 1871.

(*To be opened in May.*)

We have already incidentally mentioned this first of a series of important future exhibitions, which will, very probably, make a great change in the fortunes of the whole of the others. Even the Academy will, it is said, be impoverished this year by the number of important works already destined for the International. With plenty of space, which negatives in some measure the importance of "self and friends," and let us hope, without coterie influence, this vast collection of all kinds of decorative and general productions of art and manufacture will attract thousands, while other exhibitions are limited to hundreds, and must become infinitely more desirable as a show room for the world in general, and so of higher importance to artists. There will always remain one exclusive Art exhibition, and this must be Burlington House, but every other will be second to the International if that is at all so successful as we presume it will be. The Committee appointed, however, to decide on the works to be received or rejected is of a very anomalous kind. Sir Dudley Coutts and Lord Elcho are unexceptionable, but the artistic portion of the Committee is different; it is composed of the following gentlemen:—Messrs. Elmore, Warren, Alfred Hunt, Frank Dillon, H. Marks, and Alfred Clint. William B. Scott.

ART NOTES.

The Italian *Official Gazette* for the 10th ult. publishes a condensed minute of the proceedings of the Commission for the preservation of ancient monuments in the Marches, at its general meeting held at Ancona on the 10th of December, 1870. The report of the Marquis Raffaelli, president for the section of Macerata, after reciting the steps taken for the preservation and restoration of paintings in that city, and calling the authorities to account for their delay in handing over to the local municipalities the works of art belonging to the suppressed religious foundations, proceeds to recommend excavations at Urbisaglia (the ancient Urbsalvia), where a colossal bronze foot of the Augustan period was found two months ago near the site of the amphitheatre. The report of the section of Pesaro mentions the discovery of a Roman inscription at Urbino, and near Pesaro itself of what must "be placed among the most precious memorials of Italic art and religion, before Rome was, of archaic Egypto-Italic style, and depicting the passage of some souls to the next world on board of three boats." From Fano an arrangement is reported for supplying the place of Guercino's "Guardian Angel" in the church of Sta. Lucia with a copy, and removing the original (the subject of Mr. Browning's well known poem) to a place of greater safety.

The director of the Royal Galleries at Florence has made arrangements for the immediate exhibition, in the corridor leading out of the Uffizj, of a selection from the unexampled collection of Italian engravings ordinarily packed in the portfolios of the museum. The selection will extend from the earliest wood engravers down to Calamatta, and among its specimens of the predecessors of Marc Antonio will comprise Pollaiuolo's "Fight of the Ten Naked Men," Botticelli's "Assumption," and Mantegna's series known as the Giuoco.

According to the *Zeitschrift für bildende Kunst*, there is a hitch in the negotiations set on foot for the purchase, by the St. Petersburg government, of the set of antiques of mixed Greco-Egypto-Asiatic style found with the remains of an important temple at Golgos in Cyprus, by General Cesnola.

M. A. Legros has completed a large and noble picture of a Spanish church-interior, with a group of priests and worshippers kneeling in the choir; also a full-length life-sized portrait of an English gentleman standing uncovered by a church-porch.

Mr. G. Mason's large picture of Reapers going home at sundown will not be finished in time for the Royal Academy this year.

The veteran and learned artist, Tommaso Minardi, born at Faenza in 1787 and appointed to a chair in the Academy of St. Luke so early as 1821, died a few weeks ago in Rome. Minardi was in his youth a friend of Canova, and was at Rome the founder and leader of a school opposed to that of Camuccini and the "academical" followers of David. Longhi's famous en-

graving of the Sistine "Last Judgment" was executed after a drawing by him. His finished works in painting are not numerous. He was the author of some highly reputed critical discourses.

The supplement to Lützow's *Zeitschrift* for March 17 contains a further chapter in the controversy between the Berlin Academy of Arts and the Minister Von Mühler. The minister had taken notice of the first remonstrance of the Academy only in a new minute addressed, not to that body itself, but to the Senate. The members of the Academy hereupon again appeal directly to the minister to withdraw his interference; insisting on the purely artistic nature of the question, and on the embarrassment in which they find themselves placed by proceedings of a nature to deter competent persons among their body from taking any part in exhibition arrangements. Artists, they contend, will rather not exhibit at all than under the restrictions henceforth to be imposed; and a solution can only be found on condition that "his excellency will graciously condescend to drop his proposed agreement with the Royal Academy upon principles which admit of no agreement, and will not refuse his assent upon purely artistic problems to the authority of the Academy, which that body believes it can justly claim to exercise: which assent once given, the last word in this matter would have been spoken." Meanwhile the *teterrima causa* of the strife, the picture of the "Birth of Venus" by Schlösser, is being exhibited with great applause in the Cologne Museum. It is described at length in the *Kölnische Zeitung* for March 14; together with a "Judith" by Clemens Bewer of Düsseldorf, which the writer strongly praises, and a "Stephen before the Judges" by Julius Hübner, the distinguished director of the Dresden Gallery, which he condemns almost as strongly.

The *Fortnightly Review* for April contains a contribution by Mr. Sidney Colvin to the already copious literature of the Mausoleum of Halikarnassos, taking occasion partly from the final arrangement of the remains of that monument in the British Museum, partly from the approaching completion of the Albert Memorial in Hyde Park. The aim of the writer has been to treat the subject from the point of view of general culture rather than from that of rigid antiquarianism. At the same time he attempts a detailed historical and æsthetical estimate of the place which these remains hold in Greek art, with peculiar reference to the relations subsisting between the Mausoleum frieze and the friezes from Phigaleia and from the temple of Athene Nike, and with notice of the most recent criticisms of German writers. It may be pointed out that with regard to the well known and exquisite fragment in relief styled unanimously hitherto a female charioteer, the writer passes over the sex of the figure with the ambiguous word "youthful." In point of fact this figure is certainly male. The beauty of the face and fashion of the hair, together with the flowing drapery, made upon its discoverers as well as upon subsequent students the impression of a type at first sight decisively feminine. The evidence by which a closer examination reverses this impression is as follows. The throat has the masculine characteristic of the "Adam's Apple" strongly marked: the breast is not so much concealed by the stumps of the outstretched arms but that its masculine character must be confessed: the arms preserved upon similar fragments of the same frieze, who are less defaced in this respect, though more in others, are men's and not women's arms: the hair is blown back by the wind in a way to heighten the feminine effect of its dressing, which for the rest is the same as in some extant male sculptures: and lastly, the talaric chiton, clinging to the figure in the shape of an elongated S-curve and flowing full about the heels, is no index of sex, but a costume almost universally characteristic of drivers in chariot-races; a good example for comparison being the bearded ἡνίοχος of the pseud-archaic amphora from the Cyrenaica (C. 116 in the British Museum Catalogue). These considerations have persuaded Mr. Newton, the distinguished discoverer of the slab, that his own and the received account of it must henceforward be altered in this particular.

Dr. Julius Meyer of Munich is about to republish, in a separate form, and with additional matter, the elaborate and exhaustive article on Correggio which has appeared in the fifth and sixth serial parts of his great new edition of Nagler's *Künstler-Lexicon*.

On the occasion of the Dürer anniversary in May a special exhibition of drawings and prints by the master will be held in the Museum of Vienna. It is also announced that a modernised version and commentary of Dürer's letters is to be executed by Dr. Moritz Thausing for the new series of *Literary Sources for the History and Technic of Middle Age Art*, projected under the care of Dr. von Eitelborger.

The Dresden exhibition of Holbeins, projected for last summer and postponed because of the war, will probably take place in October of this year, and in addition to the Darmstadt Madonna (which it is proposed to hang for the sake of comparison beside that of the Dresden Gallery) will include many examples from different parts of Germany, and also, it is believed, some that will be lent by Her Majesty from the English Royal collections.

A new edition of Messrs. Crowe and Cavalcaselle's *Early Flemish Painters*, enlarged and corrected, is shortly to appear.

M. Heilbuth sends for exhibition to the Royal Academy a landscape with figures, being a recollection from Bougival. M. Hébert's Roman picture of "Morning and Evening" we understand to be also in England.

Music.

Trio en Sol Majeur pour Piano, Violon et Violoncelle, Op. 45; composé et dédié à Lady Flower, par J. L. Ellerton. London: Augener and Co.

Compositions of the class to which this trio belongs, though not so infrequently produced by Englishmen as is commonly supposed, are very rarely printed and almost never performed. Music exists, for all practical ends, in time; and such time as the comparatively few English people who can play or who care to listen to instrumental chamber music can give to it, they would in general rather give to what has been already tried and found pleasing than to what, being as yet untried, may be found otherwise. The unenterprising management of our opera-houses and concert-rooms is but an expression of English popular taste—more properly, of English distaste for, or disinclination towards, the unknown. The result has been notoriously most discouraging to English musical composition, which, it is certain, could but a little of the sunshine of public favour be let in upon it, would reveal itself in proportions as noble as, to the mass of our countrymen, they would be surprising.

Mr. Ellerton's trio is a work which efficiently performed—by one of Mr. Chappell's, Mr. Ella's, or Mr. Holmes's parties of *virtuosi*, for instance—would give a cultivated audience very great pleasure. The subjects are for the most part elegant, and always sufficiently worked, the episodes are fanciful, and the passages thoroughly becoming the instruments to which they are assigned. In the first movement especially—always, from its form, the most difficult to conduct—the successive phrases grow out of one another in a manner which, while apparently spontaneous, and the result no doubt of a happy inventiveness, can only be attained to by those who have subjected that inventiveness to severe and long-continued discipline. This movement is followed by an elegant and coherent Adagio, in E; and this again by a Scherzo, remarkable for the purity of its part-writing, in E minor. The composition is brought to an end by an Allegro Vivace in the original key, G. The ingenious and effective treatment of a fragment the first subject immediately prior to its re-entry (at the *à tempo* in p. 36 of the score) will not fail to strike the intelligent hearer. From the words "second edition" on the title we suppose this

composition—altogether new to us—was first published on the Continent, and, like many others from the same accomplished hand, has there found both doers and hearers.

John Hullah.

NOTES ON MUSIC.

We have had amongst us for some weeks past a great musician, composer, executant, and conductor, a veritable *maestro*, a "vollkommener Kapellmeister." Few amateurs can know so little about continental music as for a moment to have confounded Dr. Ferdinand Hiller with the mob of makers of transcriptions and breakers of pianoforte strings, who at about this time of year are wont to descend upon London; but it is evident, from the scanty attendance at his first recital, and the perplexed admiration of those who have only recently made acquaintance with his music and his pianoforte playing, that rumour had done less than justice to his genius and accomplishment. During his too short stay among us—it will have come to an end before these lines are in type—Dr. Hiller has conducted a performance of his cantata "Nala and Damayanti" (composed for the last Birmingham Festival) at St. James's Hall; also one of his symphonies (that in E minor, entitled "Es muss doch Frühling werden"), and played Mozart's "Coronation Concerto" (No. 24, in D) at the Crystal Palace. He has, moreover, given three concerts, not only exclusively composed of his own music, but in which he himself was the principal performer. The impression left by the former is that it reveals varied invention, inexhaustible fertility of resource, and perfect knowledge of and command over the material in which the musical composer works. Of his pianoforte-playing it is hard to speak in terms that, to those who have not followed it up, will seem other than extravagant. In mechanism it is simply faultless; and, more than this, indicative at every turn of something altogether unattainable by the mere *virtuoso*. His cadenzas to Mozart's concerto, evidently thrown off at the moment, seemed like parentheses which a sympathetic commentator had interpolated for the further illustration of a text, and which were so thoroughly in keeping with it that they might easily have been the work of its author. Everybody who has made acquaintance with Dr. Hiller, as composer or as executant, must feel that his views of the capabilities of music have been enlarged thereby, and that a new source of instruction and pleasure in the art has been opened up to him.

The second concert of the Philharmonic Society (on Wednesday the 22nd ult.) had but one fault—excess. Who can pretend to take in—as it were, at a gulp—two symphonies of the highest class, a pianoforte concerto grand in every sense, two overtures, one as recondite as it is unfamiliar, and three or four vocal pieces, one of them not only new to everybody who heard it but in a style as remote from our sympathies as our experience? A large portion of the Philharmonic audience answers this question, concert after concert, by leaving at the close of the first part, or after the first piece in the second. Surely one symphony, of the class of the "Reformation" or the "Jupiter," is as much as the most enthusiastic and accustomed auditor can enjoy at a single sitting, and this should always close the first part of it—supposing, of course, the division into parts, long since abolished at the Crystal Palace, to be a necessity at St. James's Hall.

"I like your opera very much," said Beethoven to Paer, who had sent him a copy of his *Leonora*,—"so much indeed that I mean to set it to music." It is a pity that Signor Petrella did not send his *Le Precauzioni* to Rossini, who might have been roused from the musical inactivity of his later years by the perusal of a *libretto* so full of capital situations, occupied too by so many strongly marked characters. As scene after scene passed away on Tuesday night (the 21st) at the Lyceum, and with them opportunity after opportunity, always missed by the composer, it was impossible not to feel that if Signor Petrella be anything like a fair representative of musical Italy of to-day, musical Italy is in a less hopeful condition than political. Yet, it is certain, the *maestro* enjoys a great reputation among his countrymen, and is the composer of some dozen of operas of promising titles—e.g. *Marco Visconti*, and *I Promessi Sposi*—which have attained considerable transalpine popularity. In inverse proportion however to the ineptitude of the composer to turn situation to musical account was the power and the determination of the genial and experienced actors of the Opera Buffa troupe to turn it to dramatic. This and this alone could have carried the opera through even in the presence of the very indulgent audience who assisted at its first presentation. The music is wanting in melody, character, and constructive skill; its orchestration is that of the *casino*; but the personations of the always penurious and commonly angry Mugio by Signor Borella, and of the half-witted Cola by Signor Ristori, were efforts of histrionic skill not easily to be forgotten. Madlle. Colombo added another to her successes in the part of Albina, and in combination with Mesdlles. Monari and Veralli made a group which, like that in *Il Matriomonio Segreto*, relieved by its elegance the somewhat broad comedy, and occasionally farce, of which the drama is largely made up. Alas! that the application of all this power and sweetness should have been turned aside from *Cosi fan Tutte*—which it seems we are not to have—wasted on this feeble product of Signor Petrella.

The most distinguished musician our country has produced for a century and a half—the single Englishman who, since Purcell, has made a reputation among those who speak the universal language out of as well as in his own country—has been knighted. The musical compositions of Professor Sterndale Bennett are universal possessions, played, sung, and studied wherever singers, players, or musical students are to be found. They form, however, but a portion of the work by which he has entitled himself to the gratitude of his countrymen, and the signal favour of his Sovereign. Throughout his life he has been a preacher and a prophet in his art; giving freely his time and his talent wherever they seemed likely to be available for good—scattering with unsparing hand seed wherever there seemed a chance of its bearing fruit. Not to speak of the numerous rising musicians who owe their present condition and status to his influence, direct or indirect, the resuscitation of the Royal Academy of Music, which, by a long course of amateur management, had been brought to the verge of utter extinction, is a service which, while it could only have been rendered by a man of special position and genius, attainments and character, few so placed or endowed would have cared to undertake or could have carried into effect, in the face of difficulties and discouragements of which it will be useful and interesting some day to give an account.

The "acoustic properties" of the Royal Albert Hall, so many trials of which under various but always unfavourable conditions have been authorised by the directors, will have been fully and fairly tested before these lines are in print. Of the result of the last of these—the rehearsal on Tuesday of the music to be performed on Wednesday at the opening of the building by Her Majesty—it is as hard to speak confidently as it would have been of any of the foregoing ones; for, though on this occasion the orchestra was for the first time occupied by a large and efficient band of vocal and instrumental performers, the auditorium was empty; and that which, *damped* by the presence of a large audience, may prove only sufficient *resonance*, inevitably took the form, without it, of *reverberation*. Various movements of different characters were performed—a cantata by Sir Michael Costa, composed expressly for the occasion, another by Prince Albert, various solos, concerted pieces and choruses, with and without orchestral accompaniment, and an overture. Of these the movements or portions of movements of which the pace was the slowest and the intensity the least were heard, from whatever part of the building, to the best effect. Thus while every note and combination of notes in the prayer from Auber's *Masaniello*—in simple counterpoint almost throughout, and without orchestral accompaniment—came on the ear clearly and in its true proportions, the overture (to *La Gazza Ladra*), every note of which *must* have been played by so competent an orchestra with perfect accuracy, was from no part of the building intelligible, and from some parts simply a mass of confusion. How far the occupation of the auditorium will render loud and rapid passages practicable to any good effect in the Royal Albert Hall remains—at the moment of this present writing—to be proved. Possibly it may be found necessary to adopt new and special methods of orchestration for the music intended for performance here.

New Books.

Brunn, H. Probleme in der Geschichte der Vasenmalerei. (Academy reprint.) Munich : G. Frantz.

Buchner, Karl. Wieland und die Weidmann'sche Buchhandlung. Zur Geschichte deutscher Literatur und deutschen Buchhandels. Berlin : Weidmann.

Freiligrath, F., und Schücking, L. Das malerische und romantische Westphalen. Paderborn : Schöningh.

Gledstone, J. P. The Life and Travels of George Whitfield. Longmans.

Kemány, Sigismund. Studies. Ed. by Paul Gyulai. Pesth : Rath.

Marlowe, Christopher. Tragedy of Edward the Second. With an introduction and notes by Wilhelm Wagner. Hamburg : Borger and Geisler.

Mendel, Hermann. Musikalisches Conversationslexicon. Vol. I. Berlin : Oppenheim.

Morley, John. Critical Miscellanies. Chapman and Hall.

Science and Philosophy.

An Examination of the Utilitarian Philosophy, by the late John Grote, B.D. &c. &c. Edited by J. B. Mayor. Bell and Daldy.

This work, the first of a number of unpublished treatises left behind by the late Professor of Moral Philosophy at Cambridge, has been very carefully edited by his literary executor, Professor Mayor. The few alterations which he has permitted himself, without affecting the peculiar character of Mr. Grote's style, as a natural and intimate expression of very fresh and independent thought, have decidedly mitigated the perplexing prolixity in which it has always tended to luxuriate.

The style, indeed, in its good and bad qualities alike, is very well adapted to the substance of the treatise : and will lead the discerning reader to expect from the book exactly what it has to give. Mr. Grote has set himself to teach, by example and precept equally, the need and importance of being unsystematic : and that not merely as a temporary probation, but as a permanent condition of sound thinking on moral subjects. Not that we are tempted to this renunciation of system by any delusive promises. "No person," says Mr. Grote, "who has seriously thought about moral philosophy can expect from it a real solution of the difficulties and perplexities of human life." All we can hope to attain, by duly recognising the "largeness and variety of human life," is "right manner of thought upon the subject." Mankind in general, in so far as they act upon principle, act upon a rather random mixture and alternation of principles. The philosopher should aim at clearer apprehension and better application of these different principles : but should distrust any attempt to harmonize them, from fear of narrowing his view. We are not surprised to find that Cicero, the *bête noire* of exact reasoners, is a favourite moralist of Mr. Grote's.

Now criticism of systems and methods, at any rate in departments of thought where there is so much divergence as there is in Ethics, is continually required : and can perhaps be best performed by a thinker who has come to distrust all systems. And Mr. Grote's acuteness, subtlety, and impartiality, eager interest in human thought and life, and uniformly friendly and conciliatory temper, are qualities as rare as valuable in a critic. But to criticise methods properly, one must take an interest in them as methods, and continually try to view them in their most perfect form, carefully disconnecting their intrinsic excellencies and defects from any confusions or inaccuracies imported into them by individual expositors. Here Mr. Grote fails. He has a keen insight into the properly human element of a philosophy, into the "manner of thought" and habit of feeling of its adherents : but he has little insight into the abstract element. He can describe thinkers and discuss opinions : but is an impatient anatomist of systems, and a bad judge of their internal coherence.

Thus though many of his attacks on Mr. Mill's "neo-utilitarianism" are very effective, and indeed quite unanswerable, they rather lose their force from being mixed with much random hitting that often falls very wide : and the whole criticism, though very kindly in tone and abounding in expressions of sympathy, curiously fails to be sympathetic : because Mr. Grote has never managed to look at morals as a utilitarian looks at it. The strangest example of this is that in several places he forgets that the absolute end of utilitarianism is not happiness, but maximum happiness : naturally, in such places, his argument beats the air in the blindest fashion.

This randomness is increased by the loose colloquial manner in which he writes. Such a style has, as I have said, a certain charm, and is a natural one for an original and impartial thinker to adopt, in recoil from the sham preciseness got by taking vague notions for definite, and the illusory completeness attained by ignoring difficulties, which we often find in English ethical writers. Still, the effort to be precise and complete cannot be pretermitted without serious loss. A man who writes as he would talk, however deeply he may have reflected, inevitably writes much which is inconsiderate, and which, if he is criticising, will seem captious. And some of Mr. Grote's criticisms are of this kind : sudden small cavils, which the caviller himself elsewhere half answers.

One or two of the weightiest objections against Mr. Mill's form of utilitarianism have been already presented to the public, though with less force and closeness, by Mr. Lecky : who unfortunately weakened their effect by trying to argue against all modes of hedonism at once, thus confusing himself and his readers, and becoming an easy prey to the enemy. *E.g.* the criticism by either writer on Mr. Mill's "qualitative preferableness of pleasures" is essentially sound : but Mr. Grote puts the dilemma more clearly. Either the qualitative distinction resolves itself after all into a quantitative one, or pure utilitarianism is abandoned. If one pleasure is preferred to another *not* because it is more pleasurable, but because it is "higher," "better," more "dignified :" surely we have judgments indistinguishable from those of a "moral sense," overruling purely hedonistic comparison. It matters not that Mr. Mill makes the preference to lie between pleasures instead of actions. If the pleasures are not compared in respect of mere pleasantness, we have intuitivism in the garb of hedonism.

Another peculiarity of Mr. Mill's system is its Proof, or rather "considerations capable of determining the intellect in its favour," as their author modestly describes them. "The sole evidence," says Mr. Mill, "it is possible to produce that anything is desirable is that people do actually desire it :" and he has no trouble in proving that all men desire happiness as he defines happiness as the sum of objects desired : so, each man's happiness being the sole thing desirable to himself, the [greatest] happiness of the community is the sole thing desirable to all persons taken together, i.e. *per se*.

The prolonged guerilla warfare which Mr. Grote carries on against this ingenious edifice of paralogisms is a good illustration of his style. He is throughout subtle : he is much too long : he leaves nothing unsaid : he says some things twice over, makes too much of petty arguments, drops great ones too casually, and presents the whole in a bewildering spontaneity of semi-arrangement.

Still the reader is made to see very clearly that, as it

belongs to human nature to frame ideals of disposition as well as of action, what each man desires is usually different from what he thinks desirable. Again, Own Happiness and Others' Happiness, though both happinesses, are in relation to the individual's appetition much more dissimilar than similar, and the desirableness of the latter does not follow from the desiredness of the former. No doubt if humanity could perform collectively an act of appetition, it would desire its own collective happiness—that being, on Mr. Mill's definition, a tautological proposition: but as it is always the individual who desires, there appears so far no reason why the aggregate of happiness should be desired or thought desirable by any one. Further, happiness, as Mr. Mill defines it, is a notion to which Benthamic measurement cannot be applied: it may be doubted whether all pleasures are commensurable, but it is quite certain that all objects of desire are not. Grant that we can compare the gratifications of Conscience and Palate: a virtuous Epicurean claims to have done the sum and brought out a clear balance in favour of Conscience: still this does not help Mr. Mill, who vindicates for utilitarianism the dignity of self-sacrifice, and says that "virtue is to be desired for its own sake." Virtue and its attendant pleasure are as incommensurable as a loaf of bread and the pleasure of eating it: much more is a notion which includes all four one to which quantitative measurement is inapplicable.

It is curiously characteristic of Mr. Grote that, after showing the uselessness of "happiness," so interpreted, for calculative purposes, he declares a strong preference for it over the old Benthamic notion of "sum of pleasures." In its very vagueness it seems to him "truer to human nature." He might at least have noticed how perfectly free Bentham is from Mr. Mill's confusions. Both alike hold the psychological proposition that a man always does seek his own happiness, along with the ethical proposition that he ought to seek the happiness of other people: but Bentham did not base the latter on the former. Indeed he can scarcely be said to have formulated it expressly. The word "ought" was distasteful to him. He, Bentham, desired the general happiness: "selfishness in him had taken the form of benevolence;" but he never expected such a transformation to be general. So to attain his own benevolent ends, he calls on the legislator (whom we may call a professional philanthropist) to execute a delicate and complex readjustment of the consequences of actions, so that benefit to the community may always be artificially combined with a balance of pleasure to the individual. Mr. Mill too usually requires the legislator—aided by the educator—

> "to bid self-love and social be the same;"

however, in the 4th chapter of his *Utilitarianism*, he has made a solitary and unfortunate attempt to dispense with both.

In the chapter on Sanctions, Mr. Mill, while relying much on the educator to produce a utilitarian conscience, gives him a powerful auxiliary in the "social feelings of mankind," which are to "constitute the strength of the utilitarian morality." Mr. Grote sees here the great divergence from Bentham: but, confounding the man with the method, he fails to see that there is not necessarily any deviation from Benthamism. If the sympathetic pleasures and pains are really of great and growing influence, it is a mere oversight in Bentham not to have given them an important place among his sanctions (as he half acknowledges in a letter to Dumont, written in 1821). But when Mr. Mill describes these sympathetic sanctions as "disinterested," and gives a psychological account of self-sacrifice, we are conscious of an effort to combine the incompatible: for if sanctions are pleasures and pains, "disinterested sanction" is, as Bentham says, an inexact term, and self-sacrifice an abnormal tendency to fly in the face of sanctions.

Much of this and other confusion in Mr. Mill's treatise is well traced by Mr. Grote to his ethical "Positivism:" *i.e.* the attempt to blend views of what will be and what ought to be, while the logical relation of the two is never clearly worked out. In the common view it is the essence of morality to frame some ideal of action, varying indefinitely from the actual. "Positivism" embodies the reaction against such ideals, and claims in some way to do without them and put "fact" in their stead. It may take the form of a disposition to be content with things as they are, with human nature as it exists in oneself and others: such an "esprit positif" has for maxim

> "Faire ce qu'on a fait, être ce que nous sommes."

But we rather know ethical Positivism at present in the form of a "morality of progress." It is rather "faire ce qu'on fera" that our Positivist now desires: the world is moving and improving, and he will move and improve with it; if he be an enthusiast, just in front of it. In one of the most suggestive chapters in the book, Mr. Grote examines this notion of Progress, argues the necessity of an ideal standard in order to judge that movement in a given line is improvement, and criticises in detail prevalent views of the right lines of progress for speculation and society.

The non-critical part of Mr. Grote's book I can scarcely call constructive. It is not even a sketch of a system: it is a collection of sketches. He considers that utilitarians are right in the general assertion (carefully explained to be almost meaningless) that all action is aimed at happiness. But he would distinguish the study of the general effects of Conduct on happiness, from the enquiry into the principles of Duty, or right distribution of happiness, and from the investigation of the Virtues, or generous dispositions, which must be left freely to follow their special altruistic aims, and not made to depend on a utilitarian first principle. What the last two methods are to be, and how the three enquiries are to be harmonized, Mr. Grote does not clearly explain. In his desire to comprehend the diversity of human impulses, he has unfortunately neglected the one impulse (as human as any) which it is the special function of the philosopher to direct and satisfy: the effort after a complete and reasoned synthesis of practical principles. He has somewhere drawn a neat distinction between "moralisers" and "moralists." With a similar antithesis, one may say of the constructive part of his treatise that it contains much excellent philosophising, but very little philosophy. Henry Sidgwick.

The Intelligence and Perfectibility of Animals from a Philosophical Point of View. With a few Letters on Man. By Charles George Leroy. London: Chapman and Hall, 1870.

This volume consists of a number of letters written in the second half of last century, partly under the pseudonym of "The Naturalist of Nuremberg;" the remainder purporting to be replies to these earlier ones addressed by a friend of the "Naturalist's" to a lady of his acquaintance. They are, however, all from the same pen, that of M. C. G. Leroy, who, born in 1723, succeeded his father as ranger of Versailles and Marly, and are the results of his observations, while occupying this position, on the habits and intelligence of animals. Their object is to show that animals are capable of self-improvement and of perfectibility within certain limits, and that that faculty which is ordinarily called instinct is in reality a form of intelligence or reasoning. In order to appreciate the boldness and originality of M. Leroy's views, it is

necessary to endeavour to throw oneself back into the state of the development of thought in his day. It is curious to trace the demands on science made at different epochs by orthodox religious dogma. Just as now the evolutionist is told that the theory of a continuously acting creative power is opposed to the teaching of Scripture, so a century ago orthodoxy required of scientific men the belief that man was the only being possessed of even the least degree of mental power. Hence the doctrine, favoured by the French materialists, and derived from Descartes, that the apparently intellectual actions of animals are due to a mechanical automatic cause, was adopted by those who then attempted to combine science with religion, and received some sanction from the writings of even so profound a naturalist as de Buffon. It was the absurdity of this doctrine which Leroy set himself to demonstrate, his arguments being derived from the habits of the wild and domestic animals which came under his notice at Versailles and Marly. In so doing he anticipated views respecting the relationship between the mental faculties of man and those of the lower animals which have not been fully developed until our own day.

Even within the last thirty years the prevalent idea among naturalists with regard to instinct was that it was a faculty implanted directly in the animal, transmitted from generation to generation without change and without capability of improvement, and entirely different in nature from that reason which is the proud boast of man alone. When Mr. Darwin published his theory that instinct is nothing but the experience of former generations inherited and constantly improved, just as bodily peculiarities or mental tendencies are inherited, the idea was a novel one to the greater part of the educated public. Nearly a century ago, however, we find M. Leroy combating the notion of a "predetermined harmony," and maintaining that the faculty of animals which is ordinarily called instinct is as deserving of the name of intelligence as are our reasoning powers, differing from them only in degree. He argues that the mere fact of any one chastising a dog for a fault is a proof that he considers the dog to be gifted with memory; and the dog, in exercising its memory, and refraining in future from committing the same fault for fear of chastisement, reasons in a perfectly syllogistic way.

M. Leroy divides the actions of animals into two classes, those which proceed from instinct and those which result from sensibility; and here he does not seem to us so happy as in his more general theory. By instinct he means intelligence acquired either directly by the experience of the individual or hereditarily by the combined experiences of its ancestors; by sensibility he understands the necessities of the external organization of the animal. Under the latter head he would include the first seeking for its proper food by the young animal, whether carnivorous or herbivorous. But it would seem necessary to suppose some inherited intelligence even in the first attempt of an animal to seize its appropriate food, still more in the first effort of water-birds hatched on land to gain their proper element—unless, indeed, we adopt the theory which some writers are now again bringing forward, of an innate intelligence and power of adaptation independent of experience.

M. Leroy's Letters on Man are not so satisfactory, and appear to be fragmentary. Their main object is to maintain the position that the faculty which chiefly distinguishes man from the rest of the animal creation is the possession of the power of compassion or sympathy. Enough has however been said to show that in publishing an English edition of the work the translator has brought a useful contribution to the history of the development of scientific thought.

Alfred W. Bennett.

PROFESSOR DE MORGAN.

In Augustus De Morgan England has lost a really great mathematician, and one who was many things besides a mathematician, though here our limits will only allow us to speak of him in this capacity. His claim to a high place in science rests mainly upon what he did for the foundations of analysis, upon his having powerfully contributed to render its methods more profound and more rigorous. It is well known that much of the work of the analysts of the last century has had to be done over again by the analysts of this. Relying on the generality of the instrument they were using, the older enquirers often cared but little to examine into the assumed universal applicability of their methods, and seem to have regarded all symbolical results as true in some sense or other, notwithstanding the arithmetical untruth that might be apparent in them. The reform of the bases of the differential and integral calculus, which was inaugurated by Cauchy, was introduced into this country by De Morgan; and probably his *Differential Calculus* is, at this moment, one of the very best books on the subject in existence; it is certainly, considering its extent, one of those mathematical books in which the fewest errors of reasoning can be detected. Curiously enough though De Morgan was the founder in this country of what we may term the *rigorous* school of analysts, he was not orthodox on one of its cardinal points of doctrine—he did not reject the use of divergent sines with that perfect horror which Abel, Gauss, and Cauchy endeavour to infuse into the minds of their readers. But the scorn which De Morgan poured on what he termed the "*Soit* ϕ (x) *une fonction quelconque*" style of argument is all that is required to make the student reflect that the more general any reasoning in mathematics (or indeed in any other science) may appear to be, the more narrowly does it need to be scrutinized at every turn.

It is remarkable that a man of Augustus De Morgan's great original power should have produced so little of what are called original researches. He did not often, to use his own phrase, "lapse into a memoir." He seems to have delighted in digging deep on old ground rather than in wandering over the surface of new fields; and perhaps the intensity of mind required for the former kind of work is a higher and rarer gift than that fertile inventiveness of things not far to seek which has characterized some eminent mathematicians. Besides, De Morgan's other interests and occupations must to a great extent have called him away from mathematical researches. In addition to his duties as a professor, he took an ardent interest in logic and mental philosophy, and in the early history of mathematics. On the latter of these subjects he was certainly the greatest authority in the world; and either alone might have sufficed to occupy the whole attention of a less able man. His style has been reproached for its obscurity. The reproach is probably unfounded, and is one which is sure to fall on any writer who rejects that spurious and superficial clearness which is another name for inexactness. What his literary powers were is known to many readers from his delightful *Budget of Paradoxes;* to fewer, perhaps, from the inimitable introduction to *From Matter to Spirit.*

H. J. S. Smith.

THE KARA SEA.

One of the chief practical results of the recent German and Swedish Arctic explorations is that numbers of Norwegian vessels now annually resort to the seas north of Europe, and reap a good harvest in walrus and seal fishery. In 1868 these vessels numbered twenty-five; next year there were twenty-seven, and among them was that of Johannesen, whose voyage round the island of Novaia Zemlia completely overturned all former notions of the conditions of the ice in the Sea of Kara. In 1870 the number of vessels which sailed for the seas round Novaia Zemlia had increased to sixty; and foremost again was Johannesen, who boldly sailed into the icy sea eastward to the mouths of the Obi and Yenisei on the Asiatic coast, and northward to the 77th parallel.

In five of these vessels very careful observations were recorded of the depth and temperature of the sea, the currents, and the state of the ice. From these journals, previously examined and reduced by Professor Mohn, the director of the Meteorological Institute of Christiania, Dr. Petermann has been able to draw up a very complete account of the condition of the whole region

of Novaia Zemlia and the Kara Sea during the summer months.* The observations show that this Mediterranean averages only fifty fathoms in depth, and that it becomes rapidly shallower to northward; but by far the most important discovery, and one which opens up a new and profitable field of industry is this, that throughout the whole of the months of July and August the Kara Sea is perfectly navigable.

Thus the well-directed efforts of the masters of five fishing vessels have opened up a large part of the Arctic Sea. From Scotland there sail annually, and have sailed for perhaps a hundred years, a fleet of well equipped ships, now chiefly steam-vessels, to the seal and whale fishery on both sides of Greenland; but since the early part of this century, when the Scoresbys gained their fame in Arctic exploration, it does not appear that any single observation tending to advance our scanty knowledge of the geography or meteorology of these northern regions has been placed on record by any British whaler. Is it that there are no Scoresbys now, or that such men have nowhere to turn to for encouragement in such work, from which they themselves would reap the greatest benefit? Keith Johnston, Jun.

Scientific Notes.

Geology.

In *Das Ausland* for March 27, Dr. Moriz Wagner gives the first of what promises to be a very interesting and valuable series of papers, entitled *New Contributions to the Darwinian Controversy*. After pointing out that Darwin's theory consists essentially of two portions, Evolution and Natural Selection, he sketches the pre-Darwinian history of the former hypothesis, paying special tribute to the farsightedness of the views of Lamarck and Goethe. The main portion of this article is occupied by a statement of the evidence furnished by geology in favour of the theory of a gradual evolution of organic forms from earlier ones, in opposition to that of special creations. The sudden appearance in palæontology of organic forms strongly differentiated from any earlier ones is always in direct proportion to the amount of disturbance characteristic of the strata in which they are found; the more conformable to one another are two adjacent geological strata, the greater affinity is there in their organic remains. In the more recent formations such suddenly appearing new types do not amount to above 2 per cent of the whole number. Genera of marine animals, as Trilobites, Brachiopoda, and Orthoceras, are found distributed in palæozoic strata over the whole world; while the area of land animals is generally very restricted. Another argument in favour of the derivation-theory is furnished by the affinity of the land animals now existing in any part of the world with those which inhabited the same country at an earlier period, as evidenced by their fossil remains. In the diluvial and pliocene deposits of South America, for instance, are found the remains of Marsupials and Edentata, as armadilloes and sloths, intermediate between those forms which still exist and those which are found in the lower tertiary strata of the same region. The ape-remains again of the bone-caves of Brazil can be assigned to living New World genera, while those found fossil in Europe and Asia belong to existing genera of the Old World. The fossil remains of Mammalia hitherto found in Australia belong exclusively, like the living forms, to Marsupial orders. All these facts are what would be expected were the theory of evolution true, while they would be inexplicable by any doctrine of special creations.

Fossil Mammals from the Secondary Rocks.—There is a society in London, established now for twenty-five years, and doing most excellent work, yet whose very existence is to a great extent unknown. We refer to the Palæontographical Society, which owes its origin, in 1847, to a gathering of some half a dozen geologists, called the "London Clay Club." This society aims at accomplishing for palæozoology what the "Early English Text Society" and other kindred bodies have undertaken for palæohistory, namely, to illustrate and describe the ancient plants and animals whose remains are found in the various strata composing our islands. With this object in view, twenty-four large volumes have already appeared, containing 6769 pages of letterpress, and 1044 plates of fossil remains. The last of these volumes, just issued, deserves special attention, as it contains, besides plants, Echini, Lamp-shells, and Eocene Mollusca, a complete monograph, by Professor Owen, on Fossil Mammals, from the Secondary Rocks. The interest attaching to these remains is very great indeed, as they represent in past time, however humbly, that type of the animal kingdom in which man is placed. The earliest evidence of a mammal as yet met with was found by Plieninger in the Keuper or Rhætic of Würtemberg. Similar remains have also been discovered in Somersetshire by Mr. Charles Moore, F.G.S., of Bath, and Mr. W. Boyd Dawkins, F.R.S. These consist of detached teeth only of an exceedingly minute Marsupial animal called *Microlestes*, which was probably insectivorous in its diet. Following these, but vastly higher up geologically, we come to three other genera in the Stonesfield slate near Oxford, represented by lower jaws, also exhibiting the dentition of Marsupials. Lastly, at the top of the Oolites, we meet with eleven genera and twenty-seven species in the Purbeck Freshwater Limestone of Durdlestone Bay, Dorsetshire, all collected by Mr. S. H. Beckles, F.R.S., and represented by a series of jaws and teeth equally minute, and belonging also to Marsupial types. As to the interpretation put on certain of these remains by Professor Owen, much difference of opinion has been expressed, first by the late Dr. Falconer, and since by Professors Busk, Flower, and Mr. W. Boyd Dawkins, the author reasserting his conclusion that *Plagiaulax* was a carnivore, although so small in size, whilst the late Dr. Falconer and others argued against its carnivorous and in favour of its vegetarian diet. With the question of *Plagiaulax* has also been associated that of *Thylacoleo carnifex*, the extinct Marsupial tiger of the Wellington Caves, N. S. Wales, which Busk, Flower, Boyd Dawkins, and Gerard Krefft consider not a true carnivore, whilst Owen asserts it to be the fellest and most carnivorous of its order.

Ceratodus Forsteri.—The number of the *Annals of Natural History* for March contains two papers on this curious Australian fish, which has excited so much interest among naturalists from its apparent relationship to the extinct fishes of very remote geological periods. Messrs. Hancock and Atthey consider that the fish has probably nothing to do with the genus *Ceratodus*, which appears to belong to the Selachii. They regard the so-called *Ceratodus Forsteri* as most nearly allied to *Dipterus* and *Ctenodus*, genera of Cycloid Ganoids. They also recognise its near affinity to *Lepidosiren*, which is particularly pointed out by Dr. Günther, the author of the second paper, who describes the structure of the recent fish, and also recognises its resemblance in the microscopical character of the teeth to the extinct genera *Dipterus* and *Psammodus*. From his investigations he is led to the opinion that the Dipnoi (including the so-called *Ceratodus*, *Lepidosiren*, and *Protopterus*) cannot be separated as a sub-class from the ganoid fishes, but that they form a sub-order (order?) of Ganoids, which he characterises as follows:—"Ganoid fishes with the nostrils within the mouth, with paddles supported by an axial skeleton, with lungs and gills and notochordal skeleton, and without branchiostegals." He includes *Dipterus* (which he identifies with *Ctenodus*) in this group. He also proposes to unite the Ganoid and Chondropterygian fishes into one sub-class, Palæichthyes, which he characterizes as follows:—"Heart with a contractile bulbus arteriosus; intestine with a spiral valve; optic nerves non-decussating."

Chemistry.

The Breitenbach Meteorite.—This aërolite, which belongs to the siderolite class of meteorites, was found in 1861, at Breitenbach, in Bohemia. It bears a great resemblance to the meteorites of Steinbach and Rittersgün, and probably formed part of a great aërolitic shower which fell over the region extending from Meissen to Breitenbach. In a memoir of this meteorite (*Proc. Royal Society*, xix. 266), Professor N. Story-Maskelyne describes it as consisting of a mesh of nickeliferous iron, enclosing within its hollows two silicious minerals. The first of these is a bronzite of a bright green colour, with the formula $Mg^{\frac{3}{4}}Fe^{\frac{1}{4}}SiO_3$, and crystallized in the orthorhombic system. The other mineral is silica, having the specific gravity of quartz after fusion, and crystallized in the orthorhombic system. Such a result is of no small interest, since from the fact that the tridymite of Professor vom Rath has been shown to be hexagonal in its symmetry, this mineral of the Breitenbach meteorite is a trimorphic form of silica. The elements of the crystal are $a : b : c = 1{\cdot}7437 : 1 : 3{\cdot}3120$, and the angles $100 : 101 = 27^\circ\ 46'$, $100 : 110 = 60^\circ\ 10'$, $110 : 101 = 63^\circ\ 19'$. The optic axes lie in a plane parallel to plane 010, the first mean line being the normal to the plane 100; they are widely separated, presenting in air an apparent angle of about 107°. The specific gravity of the new form of silica is 2·245, that of vom Rath's tridymite being from 2·29 to 2·3, and that of quartz 2·65. The nickeliferous iron, the chief constituent of the siderolite, proved on analysis to be an alloy of the formula $Fe_{10}Ni$, with a trace of copper. In addition to these two minerals, the iron encloses occasional crystals of chromite in well developed octahedra, some troilite (iron monosulphide), and a small amount of schreibersite.

Solid Carbon Disulphide.—M. Ballo has endeavoured to solve the question (*Berichte der Deutschen Chem. Gesellschaft zu Berlin*, 1871, No. 2) whether the body arising from the rapid evaporation of the sulphide is due to the actual freezing of this body, or is a combination of it with water. By carefully removing all the moisture from the atmosphere in which the evaporation took place, he found the formation of the snow-like substance was reduced to a minimum, and the results of his analyses of the solid product, formed under ordinary conditions, led him to the view that it is in reality a hydrate of the formula $CS_2 + H_2O$, which contains 19·14 per cent. of water.

* *Mittheilungen*, iii. 1871.

New Blood Crystals.—According to Dr. Preyer (*Chemisches Centralblatt*, No. 7, 1871) the addition to an aqueous solution of blood, from which the chlorine has been removed by argentic nitrate and subsequent filtration, or to an aqueous solution of pure hæmoglobine, of an equal volume of ether and a little glacial acetic acid, causes the ethereal layer to turn dark brown and to exhibit four absorption bands, one between C and D (the acetic acid band), which lies close to C, a very weak one near D, a strongly marked broad one at E, and another strongly marked one between *b* and F. A similar spectrum, which was first observed by Stokes, is also given by the hæmatine, that contains no iron. Preyer has found that the colouring matter of the above solution can be crystallized, if the ethereal layer from the colourless hæmaglobine solution or the blood freed from chlorine be separated, very slowly evaporated, and finally dried over potash solution. The crystals are for the most part acicular, frequently contorted, sometimes in stellar aggregation, sometimes detached. The majority are finely pointed, many show jagged edges. They doubly refract light, surpass in size all other blood crystals, are insoluble in ether, alcohol, and water, but readily dissolve in potash solution of aqueous acetic acid, and can be recrystallized from the last-mentioned menstrum. They are not identical with hæmine or hæmatoidine, nor apparently with Lehmann's hæmatin crystals. They have received the name of hæmatoine.

Fluoride of Silver.—Mr. Gore has found (*Proc. Royal Soc.* xix. 235) that argentic fluoride is only superficially decomposed by chlorine at 60° F. in 38 days, and at 230° F. was but slightly acted on in 15 days; heated to a red heat in platinum vessels it is entirely decomposed in accordance with the following equation:—

$$4AgF + 4Ce + Pt = 4AgCe, PtF_4.$$

An aqueous solution of the fluoride, when treated with chlorine, evolved oxygen. At temperatures below 200° F. the action of bromine on the fluoride resembled that of chlorine; at a low red heat complete decomposition of the silver salt occurs, a portion of the fluorine being liberated and an insoluble fluoride of platinum and bromide of silver being formed. The reactions of iodine were in most respects like those of chlorine and bromine.

Guanidine.—Erlenmeyer some years since formed guanidine by the ultimate action of ammonia on chloride of cyanogen, the intermediate product being cyanamide. A. Bannow (*Berichte der Deutschen Chem. Gesellschaft zu Berlin*, No. 3, 1871) has investigated the action of iodide of cyanogen on ammonia, and finds that it is directly converted with the greatest ease into guanidine hydriodide. By digesting the iodide for three hours in the water-bath with three times its weight of alcoholic ammonia, of 10 per cent., the odour of the iodide completely disappears, and the colourless contents of the tube furnish on evaporation nearly the theoretical amount of almost pure guanidine salt.

Miscellaneous.

Kingfishers.—Mr. R. B. Sharpe, Librarian to the Zoological Society of London, has now completed his *Monograph of Kingfishers*, and it is seldom that we have to notice a work of this nature that leaves so little to be desired. It is of a handsome yet portable quarto size, and every known species of these beautiful birds is represented by well coloured figures, which have been drawn with great spirit by M. Keulemans, and which will not suffer by comparison with the very best of those in Mr. Gould's folios. Besides the plates, there are careful descriptions of the several species; and in a well studied introduction the classification, affinities, and geographical distribution of the family are fully discussed. Kingfishers have many points of special interest. They are exceedingly isolated, having no near allies whatever; as may be well understood when we find that the very different-looking Hornbills are supposed to be their nearest relations. They are also most curiously distributed over the earth; for, though found in every country, yet in the region which of all others abounds most in rivers and in fish (South America) they are least plentiful. Had the author not told us in his preface, no one would have suspected, that this was the first production of a young naturalist; for the book is so carefully done that it will take rank as a standard authority on the group of birds of which it treats, while it is at the same time so well got up as to form a most beautiful and attractive ornament for the drawing-room table.

Spanish Forests.—The question of Forest Conservancy has especial importance for Spain, and the work just published at Madrid, on this subject, by the eminent engineer Don Francisco Martino, furnishes very full information respecting the proceedings of his department in Spain during the last ten years. It appears that a corps of forest engineers has been at work since 1854, and a periodical called the *Forest Review* has reached the third year of its existence. The forest engineers, in spite of much discouragement and want of necessary support and aid from the government, have achieved good results in various parts of Spain, by checking abuses and introducing scientific methods of treating the woods and forests. They have also submitted many valuable reports on subjects connected with their department.

The publication is announced of the *American Archæological Review and Historical Register*, to be devoted to archæology, anthropology, and history, with especial reference to that country. The editor, Mr. Wills de Hass, offers as a guarantee of his ability for the task his "thorough and systematic researches in the vast mound-field of the Mississippi Valley," and promises "besides original contributions, a comprehensive *résumé* of the latest foreign enquiries and research, a condensed sketch of the progress of discovery in all parts of the globe," together with "critical reviews and bibliographical notices of new publications on archæology, ethnology," &c. There can be no doubt that such a publication is needed in the United States. The *Review* will appear quarterly or monthly, according to the support it receives.

The *Medical Annual* published by the Medical Society of Vienna has appeared this year under a new form. It is now edited by Professor Stricker, who intends it from henceforward to be devoted almost entirely to the recording of laboratory work, instead of clinical observation as heretofore. Clinical observations, however, which have a special scientific interest will still be admissible. From a note by the publisher, M. Braunmüller, we gather that the publication is to be regarded as a continuation of Professor Stricker's well known *Studien aus dem Institute für experimentale Pathologie*, which appeared in 1869. Four numbers will appear yearly. The present number contains an introductory paper by Professor Stricker entitled "Pathologie und Klinik," two interesting papers on the cornea, three on inflammation of tendons, lymphatic glands, and bone respectively, a paper on pyæmia, and several others.

A new series of the *Messenger of Mathematics* will be commenced on May 1st, under the editorship of W. Allen Whitworth. M.A., Fellow of St. John's College, Cambridge; C. Taylor, M.A., Fellow of St. John's College, Cambridge; W. J. Lewis, B.A., Fellow of Oriel College, Oxford; R. Pendlebury, B.A., Fellow of St. John's College, Cambridge; J. W. L. Glaisher, B.A., Scholar of Trinity College, Cambridge.

New Publications.

Martius-Matzdorff, J. Die Elemente der Krystallographie. Mit. 118 Fig. Braunschweig: Vieweg. 5*s*.

Radcliffe, Dr. Dynamics of Nerve and Muscle. Macmillan & Co.

Sharpe, R. B., and Dresser, H. P. A History of the Birds of Europe, including all Species inhabiting the Western Palæ-arctic Region. Part 1. London: The Authors.

History.

Rome and the Campagna. A Historical and Topographical Description of the Site, Buildings, and Neighbourhood of Ancient Rome. By Robert Burn, Fellow and Tutor of Trinity College, Cambridge. Deighton and Bell.

Rome has always had peculiar attractions for the people of Northern Europe, and some of the earliest guidebooks were composed for their use. Dante speaks (*Parad.* xxxi.) of the barbarians of the North as looking up at the mighty buildings with astonishment and awe. John Capgrave, a Norfolk man who compiled the *Legenda Angliae*, also wrote a description of Rome, of which a fragment has been preserved to our own times. A strange name and a stranger legend is usually attached to each building: it is needless to say that the age of scientific archæology had not begun. When William of Malmesbury comes to the First Crusade he cannot resist the temptation to give his readers a long description of the Great City, with an introductory poem by Hildebert of Le Mans. His idea is to take the circuit of the walls, and pausing at each gate to notice the most sacred shrines in the neighbourhood. The Romans themselves naturally followed the plan of describing the "Regions" into which Augustus had divided the city; a modern naturally somewhat modifies this idea, as the boundaries of the Regions are now by no means clear. It is easier, after describing the line of the walls, to sketch the public buildings in or around each of the Fora, and then to give a separate account of each hill, and of the Campus Martius which lies at their feet. Mr. Burn has adopted this arrangement, and prefixed to it a description of the site and geology and early history of the city, and added at the end some notices of the Campagna. A special feature in his work is the full account of the great villas of the imperial time, when the

early cities had perished, and Latium was divided among a few rich owners, when Pliny could say "latifundia perdiderunt Italiam." The Villa of Hadrian near Tibur occupied the space of an ordinary Italian town eight miles in circuit, and contained within itself a circus, three theatres, huge thermæ, an imitation of the vale of Tempe, of Tartarus, and of the Elysian fields. This part is admirably done, and it is most appropriately closed by an account of the period of devastation during the barbarian invasions. It is a subject of regret that Mr. Burn was not able to survey the Campagna as thoroughly as he has done Rome.

The earliest walls in Rome are built of the reddish-brown volcanic tufa which forms a large part of the hills. The earliest building is the old well-house of the Capitol, called the Tullianum, roofed by overlapping horizontal blocks which formerly met in a conical point, in a way very like the well-known gate of Mycenæ, or the Celtic beehive huts, some of which still survive in the West of England. Mr. Burn has not gone so far back as the Stone Age in his enquiry, though it has lately been made the subject of some interesting researches in Rome, of which an account is given by Mr. Chermside in *Macmillan* for September, 1867. Yet he has begun before the strictly historic ages. The round arch, the glory of Roman architecture, is of later, perhaps Eastern, origin — certainly not derived from the Greeks, who made little or no use of it. Hellenic architecture had no upper floors or stories, and therefore necessarily occupied a large area. The Roman population was closely crowded together, and the bearing power of the arch was of the highest importance. It seems to have been first used in the Cloaca Maxima, and it is no slight confirmation of Livy's statement which ascribes the Cloaca to the Etruscan dynasty of the Tarquinii that a precisely similar work occurs at the mouth of the Marta, the river on which the city of Tarquinii stood. The specus of the Aqua Appia lately discovered near the Porta Maggiore is not arched over, but has a gable-shaped covering formed by two flat stones inclined at an acute angle to each other. The aqueducts, however, are purposely varied in form that they may be the more easily recognised where they emerge from underground passages, an important point for engineers to know at once, when the aqueducts were so numerous and their course so complicated. It was not till a late period however that the arch was used to bridge over the spaces between columns so as to change colonnades into arcades (as in the palace of Diocletian at Spalatro); and the Romans never seem to have taken that step in advance, afterwards made by the inventors of Gothic architecture, the development of the *decorative* capabilities of the arch. From Etruria too came the use of brickwork, a mode of building facilitated at Rome by the abundant beds of excellent clay to be found on the western bank of the Tiber, and by the unrivalled mortar made from the granular tufa mixed with lime. A geological map of Rome is given by Mr. Burn, presenting a very clear view of the general relation of the strata; the two masses of hard tufa which form the two peaks of the Capitoline Hill (with the similar bosses on the Aventine and the Cælian) stand out distinctly from the granular tufa of the other hills, and the marine formations of the Vatican and Janiculan on the other side of the river—while up into every valley runs the freshwater alluvial soil (the Argiletum or "clay-bed") dating from the time when the Tiber formed a lake-like sea among the Seven Hills; the memory of which may be said to be recalled by its frequent floods, such as that which Horace commemorates, or that from which Rome has been lately suffering—the very legend of Romulus the founder describes a similar event. The use of concrete began under the later Republic, but the strange fragment called the Muro Torto at the corner of the Pincian Hill is probably later than Sulla's time. The visitor to Rome is at once struck by the fewness of the remains of the republican time, in which he naturally feels most interest; there is nothing that can rival the remains at Athens of a similarly early age. It is even difficult to recognise the Seven Hills, so covered are they with the wreck of buildings which has partially obliterated the hollows between, though perhaps hardly so much as has been the case at Jerusalem. Even lately the masses of earth taken by Rosa from the Palatine and thrown into the valley beneath have covered the old breathing holes or wells which descend into the specus or conduit of the Aqua Appia. In treating of the early history, Mr. Burn discusses Rosa's view that the Palatine once consisted of two heights with an Intermontium, exactly like the Capitoline Hill, and justly remarks that the excavations hitherto do not seem to bear out this view. In speaking of the Porta Capena no mention is made of Mr. Parker's theory as to its site, and in several places Mr. Burn seems to lean on the whole against the results which the former believes to have been obtained by his recent excavations. In p. 219, the idea that *Spem* in four passages of Frontinus is a manuscript abbreviation of *Specum* is not accepted by our author. In fact, Mr. Parker's enthusiasm for his favourite aqueducts, to whose history he has contributed so much good service, has in this instance carried him too far. A temple of Spes (Vetus) is mentioned as early as Livy, 2, 51, in a battle fought some little way out from the Porta Esquilina. It occurs also in the *Historia Augusta*, in the Life of Heliogabalus, ch. xiii. This was a district of gardens, and Spes was a sort of garden goddess, *i. e.* Hope of the autumn fruit, &c. There was a shrine of Quies on this same road (Livy, 4, 41), which led to Lavici, and along which much fighting took place, this being the natural road by which the Æqui would advance. In the account of the imperial Fora we are much struck with the utter want of correspondence between modern and ancient Rome. For instance, in the map to chapter vii. the modern streets are shown running across the ancient buildings in all directions. The popular thermæ and amphitheatres partially survive, but the temples of the gods and the Fora of the emperors have nearly disappeared. The ruins of two fragments only of the Forum of Julius Cæsar have been discovered; hardly a stone is left of that of Vespasian, though the Templum Pacis, in which the golden table of shewbread and the golden candlestick were deposited, was esteemed one of the finest and greatest buildings in the world. Trajan has been more fortunate in the preservation of his famous column. Mr. Burn rejects the view that the ground cut away was of the same height as the column, since this would make it out to have been a ridge higher than the Capitol. For the accurate photographs recently taken of the column we may refer to a late number of the *Academy*.

In the description of the separate hills, the Palatine and Capitol naturally take the foremost place. As to the leading question, viz. which of the two peaks of the Capitoline was the fortress (arx), and which the Temple of Jupiter Optimus Maximus, Mr. Burn takes the German view, which places the temple on the S.W. height, nearest the river. Mr. Dyer, in his well-known article (since reprinted) in Smith's *Dictionary*, had taken the other or Italian view. This internecine struggle (it has almost become of national importance) will never be finally ended until excavations are allowed on a sufficient scale, when the foundations of the great temple will be found. At present the evidence seems to favour the German view. Unfortunately all the words used for the separate peaks, *e. g.* Mons Tarpeius, Arx, Capitolium, are also used vaguely for the whole hill. Yet the

incidental notices in Livy seem to show that the temple was on the river side. The Gauls climbing up by the Tarpeian rock waken the sacred geese of Juno—this must refer to the shrine of Juno, which was next to that of Jupiter in the Triple Temple. And so such expressions as 6, ch. xvii.—*ipso paene Jove erepto ex hostium manibus.* There were probably no houses on this sacred ground. The house of Manlius was on the Arx, *i. e.* the northern hill, and on its site after his condemnation a temple was built to Juno Moneta—"Juno the Warner" (Moneta is one of the participles once active). In treating of the Quirinal, p. 250, Mr. Burn seems to speak of the treaty between Tarquin and Gabii as still in existence in Augustus' time. It can have been no more than a restoration; and Mr. Burn can hardly believe in the relics of Tanaquil preserved in the same temple of Sancus, her sandals, spindle, distaff, and bust. In another place he notices the Regia as having escaped the burning of the city by the Gauls, but one does not see why: the preservation of the houses on the Capitoline will account for some early records being saved. In p. 314 he refers to the *Apollinare* which Livy mentions 3, 63; possibly the correction "Apollinis aream" may be accepted (like Area Vulcani, &c.). In p. 359 there is no notice of Mr. Parker's solution of the question as to the double course of the Almo. In p. 441, the mention of the Fratres Arvales is very slight, considering the importance of the inscriptions concerning them lately discovered. In p. 387, Niebuhr's conjecture as to the passage of Livy 2, 39, which describes Coriolanus' conquests is not given, viz. that "in Latinam transgressus," has slipped out of its place between "deinceps" and "Corbionem," which would make Coriolanus first conquer the towns south of the Appian, and then those north of the Latin road, *i. e.* really representing the Volscian and Æquian conquests respectively. Perhaps there is hardly account enough given of the aqueducts and of the catacombs, but we may hope that Mr. Burn will be able some day to perfect his account of the Campagna. It has been difficult of late to explore the country beyond Rome, and we are grateful for the scholarly thoroughness with which Mr. Burn has done his work within the city. The maps and plans are excellent, and a good map is often the best commentary. Such a work has in part the interest of a discovery, and Roman history has no slight charm added to it by being studied at Rome. C. W. Boase.

Savonarola, Erasmus, and other Essays. By Henry Hart Milman, D.D. Murray.

These essays on ecclesiastical subjects not falling within the scope of his "Histories," have been selected from the *Quarterly Review* as a just tribute to the deservedly high reputation of the historian of Latin Christianity. Five are biographical and historical sketches; those on "Newman's Theory of Development," and the "Relation of the Clergy to the People," are of a controversial character. The closing article of the series, "Pagan and Christian Sepulchres," which is also Dr. Milman's last contribution to the *Review*, is founded on the Cav. di Rossi's great work. But the Dean treats this interesting subject with the added authority of an eye-witness, as, during a visit to Rome, he had himself explored many of the principal catacombs under Di Rossi's own guidance. The opening essay may, we think, rank as the masterpiece of the volume. With consummate skill all the details of Savonarola's career are set before the reader; the slow dawn of his intellectual powers and moral influence, the growth of his political ascendancy, the gathering hatred of his civil and ecclesiastical foes, their final triumph over him, and the pathetic and terrible history of his death. And, coming from Dean Milman's pen, it is almost needless to add that the narrative is enhanced by vivid and picturesque description and the charm of a brilliant and vigorous style. The sketch presents a few inaccuracies which would probably have been avoided had Villari's *Life* appeared prior to its publication. Fra Girolamo's career is perhaps treated too much as an isolated phenomenon; the religious history of Italy furnishes two examples of church reformers, Arnold of Brescia, and John of Vicenza, whose actions and fate closely resemble those of their Florentine successor. One point in the treatment of the subject deserves notice. As the religious reformer, as the bold denunciator of the infamous Alexander VI., Savonarola calls out the Dean's loftiest sympathies. But he has no sympathy whatever with the friar as champion of the liberties of Florence. Under this bias, instead of attributing his hostile attitude towards Lorenzo to its obvious cause—the fact that he looked upon him as usurper over the city's freedom—Dr. Milman sets it entirely down to "the rigour and intolerance of monkhood," which could brook no alliance between Christianity and classical culture. This view also leads him to refuse belief to the received account of the Dominican's final interview with Lorenzo. That scene, as recorded by Villari, once read, is not easily forgotten; Lorenzo's troubled confession of his political crimes, his reluctant vow to restore all ill-gotten gains, his agony of desire for Fra Girolamo's absolution; the stern patriot keeping back the spiritual boon save at one price—"freedom for Florence," the dying prince's gesture of refusal, and Savonarola's silent withdrawal. This highly characteristic narrative rests on the evidence of three contemporaries, one of whom, Pico, was Lorenzo's personal and intimate friend, yet the Dean rejects it for the colourless and unsupported version of Politian, a thoroughgoing partisan of the Medici family. The sketch of Erasmus is full, genial, and appreciative; the witty satirist of folly and superstition, the unwearied promoter of classical learning, the lover of peace in an age of internecine conflict, is described with affectionate sympathy. The examination of the motives and conduct of Clement XIV. in his suppression of the Jesuits is undertaken for the purpose of justifying that pontiff. Dean Milman inclines to the opinion that Clement was not carried off by poison, but avoids a decisive verdict upon the question.

One spirit pervades this volume, that of moderate ecclesiastical conservatism, which specially expresses itself in fear and dislike of thorough-going emphasis in thought and opinion. The writer's polemical attitude seems due in part to his dread of those sympathies with the teaching and practice of Rome which, at the time the essays appeared, the Tractarian movement was developing in the Church of England. This feeling, which underlies the whole book, strongly characterizes the critical handling of Dr. Newman's treatise on Development. Dean Milman's weakness as a controversial writer arises, we think, from precisely the same defect which Shelley points out in Wordsworth. He wholly lacks the power of putting himself into an intellectual or moral position other than his own. The article on Newman's book and that next following exhibit this mental condition as much interfering with a thorough perception of the state of the argument, and also as fatal to the power of psychological analysis—an essential element in religious criticism. In the "Relation of the Clergy to the People" a comparison is instituted between the sacerdotal theory of Rome and that of the Anglican Church. The Dean's ideal upon this subject will appear to a large and zealous section of the Church of England somewhat secular; all spiritual distinctions marking off the priesthood from the laity are denied; nothing is left to the clergy beyond a purely moral

influence and those social advantages for doing good which they enjoy as a body of carefully educated teachers, on whom State recognition and State support confer dignity, independence, and leisure for their allotted work. The tone of both essays is always calm and moderate, and taken for manifestoes of opinion put forth by a finished representative of his party, they have sterling value as contributions to the history of religious thought in this country. A future student of that history may note with some curiosity that so thoughtful a theologian could in 1846 have regarded Rationalism as a passing and superficial phase of opinion against which a "triumphant reaction" had already set in (p. 302). Perhaps the serene and equable atmosphere of belief which necessarily surrounds a Church dignitary is disadvantageous to the theological critic. It must be difficult for him to give their just proportions to the two antagonistic forces—religious doubt and religious enthusiasm—which distract or hurry away the minds of ordinary men. In the "Popes of the Sixteenth and Seventeenth Centuries," with great mastery of his subject and equal mastery of language, Dr. Milman has given an analysis of Ranke's work. He follows that author through the long procession of popes, bestowing on each his due share of notice, determined by the significance of personal character or of public action. Among them all Sixtus V. especially attracts the writer, whose admirable delineation of the strong upholder of the temporal power raises our regret that the later investigations of Baron Hübner were not open to him in place of Leti's fictitious and Ranke's imperfect sketch. A passage from the examination of the causes which brought on the Romish reaction of the sixteenth century may serve as a specimen of Dr. Milman's views and of his style.

"But the strength of the papacy was in its own reviving energy and activity. It had armies at its command, more powerful than the men-at-arms of Alva, or the chivalry of the Guises. For home or foreign service it had its appropriate and effective forces. It had its stern and remorseless police in the Dominicans, who administered the inquisition in Italy and Spain; men of iron hearts, whose awful and single-minded fanaticism bordered on the terrible sublime—for they had wrought themselves to the full conviction that humanity was a crime when it endangered immortal souls: the votaries of the hair-cloth and the scourge, the chilling midnight vigil, the austere and withering fast; those who illustrate the great truth that men who proscribe happiness in themselves are least scrupulous in inflicting misery; whom one dark engrossing thought made equally ready to lay down their own lives, or to take away those of others."

We do not forget that Ranke's volumes have also served Macaulay as a text-book. It is curious to observe the very opposite way in which the two representative writers of the *Quarterly* and of the *Edinburgh Reviews* look at the same subject. One point of difference will sufficiently illustrate the striking contrast. The popes, as individuals, have not arrested the attention of the great Whig essayist, but he gives us one grand masterly portrait—that of the man who was at once the keystone and the type of Catholic reaction. Lord Macaulay's imagination was fascinated by Ignatius Loyola; in Dean Milman's eyes he is simply "the half insane founder of Jesuitism" (p. 227). George Waring.

THE HISTORICAL MSS. COMMISSION.—II.

There is every reason to believe that the great public interest created by the First Report of the Royal Historical Commission will be even more stimulated by the publication of their Second Report. During the year 1870, 101 collections belonging to individuals and public bodies have been examined and reported upon, and most valuable results have been obtained. Owing to the operations of the Commission some important sets of papers have passed or will shortly pass from private into public hands, while others have been placed in the Record Office for public use.

The Earl of Dalhousie has resolved to print the "Registrum de Panmure"; the Early English Text Society will print the Marquis of Lothian's Anglo-Saxon Homilies of the tenth century, and has printed from an edition, supposed to be unique, of Lyndesay's Minor Poems in Lord Mostyn's collection; the Camden Society has issued a selection of letters and papers from Mr. Fortescue's collection. At the instance of the Commission the papers belonging to the House of Lords are now being calendared and arranged; among these, the documents dated between 1629 and 1640 are especially interesting and important. It is thought that the Shelburne papers now at Lansdowne House may include important documents relating to the political history of the latter half of the eighteenth century, and may illustrate the causes of the fall of the Shelburne Ministry, and the Fox-North Ministry in 1783, and those of the composition of Pitt's first cabinet. Among the Earl of Bradford's papers is the valuable correspondence of Lord Torrington while he was ambassador at Brussels from 1782 to 1792. Countess Cowper's collection at Wrest Park includes a fine copy (about 1400) of Higden's *Polychronicon*, an English Brut Chronicle, fifteenth century, and a French version, two cartularies—that of Croyland Abbey, important because the compiler ignores the early charters cited by Ingulphus; four volumes of original works by Wyclif, &c.; and also interesting political memoranda by Lords Grenville and Grantham, from 1761 to 1769. Earl Spencer's MSS. contain most important historical materials; among them are autograph notes by the Marquis of Halifax, of his conversations with William III., the journal of the voyage of Robert, first Lord Spencer, who carried the Garter to Frederic, Duke of Würtemberg, in 1603, and a large body of letters illustrative of politics and society during the sixteenth, seventeenth, and eighteenth centuries, chiefly written by the most distinguished men and women of those times; among them is an original letter by the Prince of Orange (17th December, 1688) to the Marquis of Halifax and two other peers, to advise King James to go to Ham, where he shall be safe. English history from the reign of Charles I. to the Revolution will have much light thrown upon it by papers belonging to the Earls of Mount Edgcumbe and Dartmouth; in the latter collection the political correspondence during 1688 is very extensive, and includes original letters by James II. and William of Orange. Lord Wrottesley possesses among many interesting documents an original deed of composition under the dictum of Kenilworth; no other of the kind is known to exist. The collections of Lord Lyttelton, Sir H. Dryden, and Mr. W. R. Baker are rich in letters by celebrated authors of the eighteenth century, Voltaire, Pope, Addison, Johnson, and others. Among the MSS. of the Puleston family are "A Bouche of Court," presenting minute details concerning the officers and household of Henry VIII., an elementary Latin grammar, by John Leylonde, fifteenth century, and other documents, legal and historical, some relating to the Civil War. Colonel M. Biddulph possesses a MS. Chronicle of Wales, sixteenth century; and Mr. R. Corbet, of Market Drayton, documents of local interest. Mr. W. B. Davenport has many pieces of literary interest; among these are a document possibly referring to Shakespeare, an unpublished letter and poem of Ben Johnson, and a poem by Marten the regicide. In the collection of C. C. Dormer, Esq., of Ronshan, are letters of Sir P. Sidney, and Catherine, Countess of Suffolk, to Leicester, as well as of the Royal Family during their exile, under the Commonwealth, and the journals of Mr. C. C. D.'s ancestors, masters of the ceremonies in the English Court during the seventeenth and eighteenth centuries. Mr. J. R. Ormsby Gore has the letter-book of Rich. de Bury, Bishop of Durham, *temp.* Edward III., a fifteenth-century volume of English poems, English tracts on ecclesiastical and social subjects, *temp.* Henry VIII., Higden's *Polychronicon*, and numerous original letters from Charles I. and several of his principal adherents during the Civil War. Mr. H. B. Mackeson has many documents relating to the town of Hythe. To the Nevilles of Holt belong a letter of Walter, Archbishop of Rouen, twelfth century, an original letter describing the ravages France underwent through Henry V.'s invasion, a deed giving a new fact for the life of William of Wykeham, and other papers of interest. Mrs. Prescott has letters, partly original, by Oliver Cromwell and members of his family, with Morland's original account, submitted to him, of the expenditure of money raised for the Vaudois; Mr. Rogers, of Penrose, papers connected with the Civil War and Monmouth's rebellion. The Peniarth collection

belonging to Mr. Wynne, about 600 vols., contains early copies of the histories of Beda and Henry of Huntingdon, later copies of Alfred of Beverley and Nennius; large collections for Early English and Welsh history; the original duplicate signed by Francis I. of France, of a treaty between him and Henry VIII. against the Turks; copies of State Papers, *temp.* Elizabeth; a transcript of Leland's Commentaries, which will supply the blanks in Hearne's edition; thirteenth-century copies of thirty-five charters by Anglo-Saxon kings, from A.D. 800 to 1048; a Cornish mystery play (1508); English and Welsh copies of the Brut Chronicle; very early transcripts of the Welsh laws; and an unpublished letter by the Earl of Mar (1717) on a projected Jacobite invasion. A volume in the Chetham Library presents valuable material for the civil and ecclesiastical history and topography of Ireland. Lord Camoys possesses among his MSS. "The Ladder of Perfection;" Hilton's translation of S. Bonaventura's "*Stimulus Amoris; Amor Dei*, or the Love of God;" and Richard Hampole's "Prick of Conscience." In Lord Wardour's remarkable collection of MSS. a series of household rolls exists, illustrating the history of prices in England from the reign of Edward III. to Elizabeth, and supplying particulars connected with the progress of art, commerce, architecture, &c. Miss Ainslie's MS. volume contains articles valuable for the early history of the City of London; Mr. Berington's collection includes a mass of correspondence connected with private family history from the beginning of Elizabeth's reign up to the present century. His papers concerning the council of Prince Arthur are especially noteworthy. Mrs. Collis's MSS. include a supposed unique, "The Order of Common Prayer," used in the English congregation at Frankfort. Two MSS. relating to the English Benedictines at Ampleforth College are worth attention. Among the important MSS. at Stoneyhurst College are a short Anglo-Saxon poem, a poem on the Passion, Hilton's treatise on Contemplation, pieces in prose and verse by Chaucer, Bishop Alcock, and others, a curious Latin-English dictionary, copies hitherto uncollated of Froissart (first volume), Henry of Huntingdon, of the taxation of England by Pope Nicholas IV., also a sixteenth-century act book of the commissary of Whalley Abbey, exhibiting the moral and social condition of the district, and volumes illustrative of art and church ritual. Colonel Carew possesses a tenth-century copy of the Gospels with lectionary; after which comes a copy contemporary, or nearly so, of Archbishop Fulco's letter to King Alfred; Dr. Hoskins has a set of MSS. relating to Jersey. The collection in the Cathedral Library, Carlisle, chiefly concerns ecclesiastical matters and border history. The ancient Minute Book (Register) of Clare College, Cambridge, claims notice; it has also a valuable collection of letters, among others from Tillotson, Pearson, and Saunderson. Caius College has its MS. history written by Dr. Caius, and an interesting Computus beginning in 1423; Jesus College possesses, *inter alia*, the Computi of the Nunnery of St. Radegund, and Trinity Hall letters from Queen Elizabeth, Bacon, and others, and memoranda respecting Herrick. The Computi of Exeter College, Oxford, are probably some of the earliest in that University; its ancient deeds and charters throw light on early collegiate and civic history; the Registers of Lincoln College present curious details as to college life in the first half of the seventeenth century; the Computi of Oriel and Queen's matters of antiquarian interest—the latter has the Chartulary of the Hospital of St. Julian, Southampton. The early household books of New College throw light on social customs at the close of the fourteenth century; it possesses an autograph letter by William de Wykeham, the only specimen of his writing beyond his signature which has come down to our times. Worcester College has, besides the registers, containing interesting entries, of its predecessor on the site, Gloucester Hall, a MS. register of the town of Leslie, in Fife, A.D. 1606–45, and a folio MS. giving an account of Archbishop Laud's trial, which may disclose fresh facts. The inventory of effects of Viscount Lisle—John Dudley, Duke of Northumberland, beheaded 1553—throws light on the internal economy of a peer's London house in the middle of the sixteenth century, and includes a list of the library. The Petyt MSS. in the library of the Inner Temple, owing to their bulk, have not been thoroughly examined. They appear illustrative of English political and religious history in the reigns of Edward VI. and Elizabeth. The corporation of Abingdon possesses documents relating to its domestic history in the latter half of the sixteenth century.

Lord Edmund Fitzmaurice has reported on MS. volumes of Irish parliamentary debates between the years 1776 and 1789, belonging to Mr. W. M. Torrens, M.P., which supply new materials for Irish parliamentary history, no debates hitherto published dating earlier than 1782; he has also described a collection of MSS. belonging to Mr. Harvey, of Ickwell Bury, and called attention to another in the possession of Sir Charles Dilke. Mr. Fraser reports on the highly important muniments belonging to the Duke of Montrose. They include charters from King William the Lion, and subsequent Scottish sovereigns to successive representatives of the family of Graham. The papers relating to the first Marquis of Montrose embrace the correspondence with him of Charles I. and II., Queen Henrietta Maria, Elizabeth Queen of Bohemia, James Duke of York, Prince Rupert, Prince William of Orange, and others. The letters of Charles I., which are nearly all holograph, were written from various places during the Civil War, and show the great difficulties in which the king often found himself. The correspondence of his sister, Elizabeth of Bohemia, is marked by her characteristic wit and vivacity. The papers connected with the trial of Montrose and his companions, the depositions of witnesses concerning his invasion of Scotland, and the battle of Tippermuir in Perthshire; the petitions of the Ecclesiastical Courts for the execution of his imprisoned adherents; the acts and proceedings of the Privy Council and the Committee of Estates to enforce subscription to the Covenant, all throw strong light on the condition of Scotland in those stormy times. There is also an extensive correspondence of the first Duke of Montrose, who was greatly instrumental in accomplishing the Union between Scotland and England. In addition to the Montrose Papers proper, the present duke possesses the Lennox and the Menteith collections, which are scarcely of less historical importance. The Duke of Sutherland's collection at Dunrobin Castle includes a series of title deeds, and, among important miscellaneous documents, some relating to the cathedral establishment of Bishop Gilbert de Moravia, at Dornach, in the beginning of the thirteenth century, and others illustrative of the working of the law of sanctuary. One of the papers clears up an historical difficulty. It proves to be the long lost dispensation for the marriage of Earl Bothwell to his first wife, Lady Jean Gordon, in 1565. There is a mass of important correspondence with the leading public men of the seventeenth and early part of the eighteenth centuries. Among the MSS. are the account books of Sir Robert Gordon, who managed the earldom from 1616 to 1622. These illustrate the condition of agriculture, and the sports and dress of the period. There is also the original Kalendar, of Fearn Abbey, in Ross, containing obits and historical memoranda, ranging from 1322 to 1650. The collection of the Earl of Dalhousie at Brechin Castle contains (besides the MSS. formerly reported on) the registers of most of the Scotch bishoprics and religious houses, and selections from many of the more important charter-rooms of Scotland. It has a copy of Wintown's chronicle.

For purposes of local history and genealogy, the papers of the Marquis of Huntly at Aboyne Castle, beginning in the thirteenth century, and the numerous documents of the Earl of Airlie at Cortachy are especially valuable. Among the latter is one which marks the importance of the bell of St. Medon (a relic of Celtic times), down to the year 1447, a charter by William the Lion to Cupar Abbey, a document by the vicar of Lintrathrim (May 27, 1560), stating that the English Prayer-book is used in his church, and many other noteworthy papers. The first portion of the charters of the Earl of Cawdor at Cawdor Castle throws light on the early thanes and thanages of Scotland, and the whole illustrates the condition of that country at various periods from the fourteenth century downwards. Some documents connected with lands in Argyllshire, which had belonged to the monks of Iona, are especially interesting. Among the documents in the Dunecht collection, belonging to the Earl of Crawford, is a manuscript detailing the proceedings under a commission issued by James I., in 1605, for the settlement of the borders. It contains lists of all the Grahams, and affords abundant details of the state of society then prevalent in the debateable land.

The Earl of Morton's collection of miscellaneous documents dates from 1474 to 1656. Some of these relate to important public events, others illustrate the social and domestic arrangements of the time. The Earl of Rosslyn possesses among other

valuable MSS. a large number of letters of modern date, comprising a series from Lord Clive, Edmund Burke, Lord Carlisle, the Duke of Portland, Fox, Pitt, and Lord Thurlow. The later portion of the letters, addressed to the second Earl of Rosslyn, dates from 1806 to 1830, including despatches and many private letters from Lord Brougham, unreserved political letters from Earl Grey and the Duke of Wellington. Another series, dated 1799, are from Lords Nelson, St. Vincent, and Keith. The most interesting portion of Lord Stair's collection is the "Stair Papers," the despatches, instructions, and correspondence of the second Earl, the general and diplomatist. They comprise a correspondence between the Earl as "Captain John Brown" and the Earl of Mar as "John Murray," between the years 1716 and 1720; his letters, partly in cipher, while ambassador at Paris, and many other documents which throw light on foreign and domestic politics during the last century.

The family records of the Earl of Strathmore, beginning with the year 1372, are especially notable for household and personal inventories and the detailed account of the rebuilding of Castle Glamis in the seventeenth century; those of Lord Forbes for ancient documents illustrating local history and topography with many papers of legal and historical interest; of Lord Torpichen for a series of papers belonging to the thirteenth, fifteenth, and sixteenth centuries, and connected with the history of the Knights Templars in Scotland; while the collections of Sir J. H. Burnett, Mr. John Guthrie, Mr. Irvine, and Mr. Leith exhibit documents affording insight into the agricultural and social arrangements of the district, others illustrating popular superstitions, and many bearing upon county history, and the condition of society in the seventeenth century. The records of the burgh of Montrose are of early date, and throw light on the early position of a Scottish municipal town.

The University of Aberdeen possesses a large set of documents relating to its foundation and history. A copy of "The Mirrour of our Lady" for half of the year is among its MSS. The library of Marischal College has, with other interesting MSS., the original papers and correspondence of Maclaurin. The records of St. Andrews commence almost with the foundation of the University in 1411, and contain materials for its history both before and after the Reformation; its schemes of study, its modes of collegiate life, and its eminent members. Among its valuable manuscripts is a copy of Wyntown's "Cronikil" and a notable Formulare of the sixteenth century. Besides a large correspondence bearing on the Scottish Episcopalian Church, Trinity College, Glenalmond, possesses documents relating to the Eastern Church and the proposals for an alliance between it and the Nonjurors, which was mooted early in the eighteenth century. The MSS. of Blair's College chiefly relate to the early ecclesiastical history of Scotland; among the more important of these are documents connected with the history of the Scottish Benedictines in Germany.

We understand that in Ireland also the labours of the Commission have during the past year been attended with very satisfactory results. Among the archives of the Earl of Granard the documents of the house of Forbes are important as illustrating the public affairs of Ireland; they also contain information respecting the embassy of Admiral Forbes to Russia in 1733-4, and other matters of interest. Lord Granard has too a manuscript whose authorship Mr. Gilbert assigns to Sir Alexander Stewart, first Viscount Mountjoy, in 1689, which consists of a hitherto unnoticed personal narrative of affairs in England and Ireland from the Restoration to the accession of James II., and supplies fresh details. Several fragile papers connected with Irish affairs from 1641 to 1690, and of high interest, are in the collection of the Earl of Rosse. The "Plunket Manuscript," belonging to the Right Hon. F. Plunkett Dunne, is all that is now accessible of a large work compiled in the seventeenth century, and mentioned approvingly by Carte, on Irish affairs from 1641. It is hoped that the now missing portions of this work which, revised by Dryden, was offered for publication in 1741, may be discovered. The O'Connor Don's MSS. include two volumes in Erse, not hitherto described in print, with some original papers which are the only specimens of their classes yet brought to light in connection with Irish Roman Catholics from 1641 to 1690. Dr. Lyons submits Archbishop King's correspondence and papers comprising unpublished documents relating to England and Ireland from 1681 to 1728, and letters from Addison, Berkeley, and other celebrities. The "Register of the Antiquities and Statutes" of Kilkenny compiled in 1609, by Robert Rothe, its first recorder, is of high value as supplying copious extracts from long-missing documents. It has hitherto been unknown to historic investigators. The unarranged and uncatalogued collection of the Marquis of Ormonde at Kilkenny Castle includes much of high interest in England, while, as regards Irish history, Mr. Gilbert considers its value as beyond appreciation. Its original documents commence with the time of Henry II., extending to the early part of the eighteenth century. Besides parchments, there are letters, papers, and books in great numbers, including a large mass of correspondence in connection with the public life of the second Duke of Ormonde, *temp.* Anne, which affords valuable new matter for history. Two manuscripts in the collection of Mrs. Willes, Goodrest, Berks, afford great insight into the state of Ireland about the middle of the last century. They consist of letters and memoranda on the subject written by the Right Hon. Edward Willes, who was Chief Baron of the Exchequer in Ireland. The letters are addressed to Lord Warwick, and detail the writer's observations during his several circuits as Judge of Assize, between the years 1757 and 1768; the autograph memoranda were made by the Chief Baron in Dublin and elsewhere during his residence in Ireland. The interest of both volumes is almost entirely social and economical; they supply information not be be found elsewhere, on the character of the people, the tenure of land, the agriculture, the industrial and economical relations, of the country; in short, its entire social condition during the last century.

G. Waring.

Intelligence.

In the *Revue des Deux Mondes* for February 15, M. Rénan gives an interesting account of Pierre du Bois, and the writings which, with different degrees of certainty, have been ascribed to him. He was a zealous supporter of the royal supremacy, was probably concerned in the forgery of the Bull *Scire te volumus*, and certainly took an active though obscure part in the measures for the destruction of the Templars. He was a firm believer in astrology, and appears to have been satisfied that Charlemagne reigned not less than 125 years, but his remarks and counsels on the internal administration of France are remarkably acute and provident. His views on foreign policy were vast and more chimerical, embracing a scheme of universal dominion for the King of France, to be attained with the co-operation of the Pope, under cover of a grand Crusade. The Holy Land was to be extensively colonised, and the rest of the East converted by the instrumentality of a college like that of the Propaganda, only with students of both sexes.

The *Revue archéologique*, we are sorry to hear, will shortly cease to be published.

Miss Cusack's history of the county of Kerry is on the eve of publication. The work will embrace all the materials contained in Smith's history of the county (which was published in 1756, and is now extremely rare), as well as much additional matter derived from documents in the possession of local families. We are not able to indicate the actual value of this additional matter; but we apprehend that it has little connection with the affairs of "the kingdom of Kerry" previous to the year 1700, a period after which its history assumes a most commonplace character. Miss Cusack has not acted wisely in undertaking a work of this kind, without being able to avail herself of the information contained in the *native* sources.

Apropos of Dr. Gustav Oppert's theory about Prester John, expounded by Prof. Liebrecht in the *Academy* for Feb. 1, some remarks by Mr. H. H. Howorth, in No. 6 of the *Phœnix*, may be found interesting. Mr. Howorth adheres to the old view that Prester John was a Khan of the Keraites, not the Gourkhan of Kara Khitai, as Dr. G. Oppert supposes. He gives the three following reasons:—1. The Persians and Arabs identify the Keraites with the people of Prester John, and can hardly have confounded the former with an empire so well known to them as Kara Khitai. The same is true of the Franciscan missionaries. 2. The grandfather of Oang Khan (d. 1198), the Khan of the Keraites, was called Marcouz Bouyouronc; Marcouz is clearly a Christian name. 3. The Keraites are, as Mr. Howorth adduces strong evidence to prove, identical with the Kalmucks. And whereas the Turkish tribes, among whom the people of Kara Khitai are to be reckoned, have exhibited a strong tendency to Islamism, the Mongol races show an equally strong inclination to Lamaism.

We learn from the new Spanish *Revista de Archivos* that a volume of indices of the national archives will shortly be published in Spain, containing an account of the documents which belonged to the Benedictine monastery at Sahaquin. The collection consists of diplomatic correspondence dating from the ninth century.

The first issue of the collection of original documents in the Madrid archives has appeared; and contains the interesting *Fuero* made for Magerit (Madrid) in 1240.

M. Hertz has followed up his review of Peter's *Historicorum Romanorum reliquiae*, contained in the *Academy* for February 15, by an examination of certain points of detail, reprinted from the *Index Scholarum* of the University of Breslau. The fragments have come down to us in such a second-hand form, through Nonius and other grammarians who had not the original works before them, and did but carelessly copy from previous compilations, that the task of arrangement is by no means easy. M. Hertz has succeeded in restoring to the Clodius Licinus mentioned by Livy 29, c. 22, as having written a book called *Res Romanae*, several fragments hitherto assigned to Licinius Macer, or Claudius Quadrigarius. Claudius Licinus was Consul A.D. 4, and therefore Livy's contemporary. He also shows that Q. Elogius, the supposed author of a book on the Vitellian family, has been created out of a misreading of the sentence "extatq. elogii libellus." A fragment quoted from Sisenna reads thus: "Sisenna historiarum libro IIII: accolis celeriter consumptus ad gladios certationem revocaverunt." Lipsius corrected "iaculis" for "accolis," Hertz remarks that the first letter of iaculis had slipped back to the number of the book, and therefore the fragment belongs to Sisenna's third book, and not to the fourth. Some of the fragments retain the picturesque charm which revived the popularity of the old authors in Hadrian's time; *e. g.*: "equae hinnibundae inter se spargentes terram calcibus," "arma plerique abiciunt atque inermi inlatebrant sese," "conprehensare suos quisque, saviare, amplexare." Peter's second volume will contain the fragments of the historians who wrote under the Empire—a work, strange to say, not yet attempted.

Señor Gonzalez has commenced a very interesting series of papers, in the *Revista de España*, on the Moriscos who remained in Spain, and merged in the general population, after the decree of expulsion by the Government of Philip III. He protests against the imputation of special intolerance with which the Spaniards are charged by those who forget the deeds of Henry VIII. and Mary in England, of Charles IX. and Louis XIV. in France; and he shows, in his first number, that, when Christianity first gained definite preponderance in the Peninsula, a system of toleration was established. This spirit appears in the stipulations at the surrender of Toledo and other towns of Castile, when the Moors were allowed the right of being judged by their own tribunals. Mendoza, the Sallust of Spanish literature, does not hesitate to do full justice to the Moriscos, and to commiserate their fate; while many chivalrous tales, creditable alike to Christians and Moors, had their effect on the public mind. These considerations must be placed against the bigoted policy of the Spanish government in later times; and the kindly feeling of the people seems to have caused the permanent settlement, in Spain and Portugal, of many families of converted Moors.

Señor Sanchez de Molina Blanco has undertaken the useful but very laborious task of compiling a digest of the whole body of Spanish civil law from the *Fuero Juzgo* of the Goths to the latest enactment, together with the sentences of the Supreme Court of Justice. The first number of this work has just been published in Madrid.

Mr. Cartwright's sketch of Bergenroth has recently been supplemented by the interesting obituary published last year in his native province, which is based chiefly on correspondence with his mother and sister. Time and separation never weakened his home ties, nor his feelings of warm affection for his family. In one of his last letters he expressed his regret that his work was in a language which prevented his mother from reading it, and declared his intention of translating it for the use of the dear ones at home. Besides the beginning of his *Charles V.* he had completed a collection of several volumes of valuable historical materials.

The *Gazzetta Uffiziale* of Florence of Feb. 16 and 17 notices the endeavours now being made to discover the burial-place at Milan of an unfortunate member of the House of Braganza, D. Duarte (Edoardo), who died there 1649, after seven years of imprisonment. The *G. U.* of Feb. 27 describes the discovery in the Lake of Agnano of a Roman fountain. This lake is not mentioned in ancient writers, and probably has only existed since the Monte Nuovo was raised by the volcanic forces at work in 1538.

The University of Cracow is publishing its original documents (*Codex Diplomaticus*) from the year of its foundation, 1364, to the present day, in five volumes. The first reaches to 1440: the struggle between the German and Polish elements in this university is noteworthy, as also the part played by the Jews. Our own universities might follow the example of Cracow with advantage, and a good beginning was made by Anstey's *Munimenta Academica*.

Contents of the Journals.

Göttingische gelehrte Anzeigen, March 1.—G. Kauffman reviews Dahn's book on the history of the Visigoths, and points out that the theory of their having acted on a nominal theory of subjection to Rome has no real foundation in contemporary authorities. March 8.—Zacharia discusses the constitutional question as to the right of voting the Budget yearly by the Prussian Chambers. March 15.—F. Matz reviews the first volume of Brunn's great Collection of the Reliefs on Etruscan Vases. These come mostly from North Etruria, the South kept long to burial in sarcophagi. The material available at each place makes a great difference in the representations. The alabaster of Volterra admits of very fine work, while the wretched travertine of Perugia is as bad material as can be. Each place seems to have its favourite subjects; the offering of Iphigenia occurs rarely except at Perugia, Ulysses and the Sirens only at Volterra. The value of the book is great, both as illustrating the sources of Greek mythology which were known in the West (especially the Greek heroic poems), and as throwing light on Etruscan art and Etruscan character, which seem always to prefer bloody and painful scenes, as became a nation from which Rome borrowed her gladiatorial shows.—Frensdorff analyses the progress made in publishing the original documents of Silesia. G. Korn, the editor of the Breslau documents, was one of those who fell in the great battles before Metz.

Augsb. Allgemeine Zeitung, Beilage, March 10, notices the inscription by the gate of Siena which commemorates the meeting of the Emperor Frederic III. with his bride, Eleonore of Portugal, in 1452, under the auspices of Pius II. (Æneas Sylvius); an event also commemorated in the paintings on the wall of the "Libreria" in the Cathedral. Monuments relating to the emperors are rare in Central Italy.

The **Gazzetta Uffiziale**, March 1, contains a detailed account of the tombs discovered at the Salarian Gate, and described by Mr. Hemans in our last number.—March 6 analyzes Gozzadini's researches as to the mansions (or rather towers) of the old families of Bologna, some of them famous names, *e.g.* the Lambertazzi, mentioned by Dante.—March 13 notices the opening of the outer Loggia of the Palazzo Ducale, which has been adorned with medallions of 119 Doges. One of them, that of Marino Faliero, is copied from a miniature in the Chronicle of Raffaello Caresini, now in the Library of St. Mark.

Bullettino Archeol. 1871.—De Rossi, in an article on "Archeology in the 14th century," shows that the "Descriptio urbis Romae ejusque excellentiae" is probably a work of the famous tribune Cola di Rienzo.—Finzi gives a summary of Palma's discoveries and excavations in Cyprus, especially at Golgos and Soli; the excavations at Golgos have brought to light the temple of Venus.

Literarisches Centralblatt, March 18, contains a notice of the important publication by the Academy at Vienna of the "Acta et Diplomata monasteriorum et ecclesiarum Orientis," vol. 1. This volume contains two collections from Asia Minor and one from Thessaly. Besides the facts of church history, some new information is given about the Greek emperors at Nicaea, and the two first of the Palaeologi. Slavonian history as well as Byzantine will receive illustration from the future volumes.—A. Hantke's book on the Chronicle of Gislebert of Mons is praised. Gislebert gives us a history of Baldwin V., Count of Flanders, a man of some importance in both English and French history.

New Books.

Archiv für österreichishe Geschichte. Herausgeben von der Commission der Kaiserlichen Academie der Wissenschaften für vaterländische Geschichte. Vol. XLIV. Part 2. Vienna: Gerold's Sohn.

Calendar of State Papers. Reign of Henry VIII. Arranged by J. S. Brewer. Vol. IV. Part 1. Longmans.

Cuno, J. G. Forschungen im Gebiete der alten Völkerkunde. Vol. I.: Die Skythen. Berlin: Bornträger.

De' Medico (Giovanni, sopranominato delle Bande Nere). Lettere due al Comune di Faenza edite per la prima volta dei Filippo Raffaelli. Tesi: Mancini.

Dümmler, Ernst. Gesta Berengarii Imperatoris. Ein Beitrag zur Geschichte Italiens im Anfange des X. Jahrhunderts. Halle: Waisenhaus.

Giesebrecht, W. Deutsche Reden. Leipzig: Duncker und Humblot. [Immediately.]

Kuckhahn, A. Zwei pfälzische Gesandschaftsberichte über den französischen Hof und die Hugenotten. München: Franz.

Memorie e Documenti per servire alla storia di Lucca. Vol. XI. Part 2. Lucca: Giusti.

Oelsner, L. Jahrbücher des deutsches Reiches. König Pippin. Leipzig: Duncker und Humblot. [Immediately.]

Prutz, Hans. Kaiser Friedrich I. Vol. I.: 1152–1165. Danzig: Kafemann.

Ranke, Leopold von. Die deutschen Mächte und der Fürstenbund.

Deutsche Geschichte von 1780 bis 1790. Leipzig: Duncker und Humblot.

Ranke, L. Der Ursprung des siebenjährigen Krieges. Leipzig: Duncker und Humblot. [Immediately.]

Sachau, E. Zur ältesten Geschichte des muhammedanischen Rechts. Vienna: Gerold's Sohn.

Straeter, B. T. Oliver Cromwell. Ein Essay über die englische Revolution des17 ten Jahrhunderts. Leipzig: Frohberg.

Wattenbach, W. Das Schriftwesen im Mittelalter. Leipzig: Hirzel.

Wratislaw, A. H. Diary of an Embassy from George of Bohemia to Louis XI. in 1464: translated from a contemporary Slavonic MS. Bell and Daldy.

Philology.

THE PRONUNCIATION OF LATIN.

III.

Professor Munro (in his privately printed *Remarks on the Pronunciation of Latin*, p. 8), Mr. Roby, and the editor of the *Public School Latin Grammar* (p. 486), all advocate a *w* pronunciation of Latin *v*. As of all the changes which a new system of pronunciation would introduce this would undoubtedly be the most startling, and, to my mind, the most repulsive (fancy, for instance, *Aen.* iv. 459-461 pronounced

> Welleribus niweis et festa fronde rewinctum.
> Hinc exaudiri woces et werba wocantis
> Wisa wiri),

I venture to offer a few considerations on the other side.

1. Priscian, i. 46 (quoted by Corssen, i. p. 310), says that anciently *f* had the same sound which *u* consonans had afterwards, whence *af* was written for *ab;* but as vau or the digamma could not stand at the end of a syllable, it was changed to *b*. This is perfectly intelligible if *u* consonans was like *v*, unintelligible if it was like *w*.

2. In another passage, where he speaks at length on the pronunciation of consonantic *i* and *u*, Priscian says (i. 22) contrasting the Æolic digamma with the Roman *v*, that the former constantly represented an aspirate, and was used to avoid a harsh aspiration, whereas this was only true of a few Roman words, e. g. *uespera*, *uis*, *uestis*. If these were pronounced *wespera*, *wis*, *westis*, would they represent an aspirate at all? whereas the transition from *h* to *v* (and I believe this is the meaning of Priscian in all three cases) is the natural change from a hard to a softer breathing.

3. Priscian goes on to say that the digamma was used in some Greek words as a means of avoiding hiatus, e. g. in δαϝιον Δημοφαϝων Λαϝοκοϝων; and that the Romans interposed similarly a *v* in *Dauus*, *Argiuus*, *pauo*, *ouis*, *ouum*, *bouis*. If the interposed *v* was in sound a *w*, it would not have been the effectual barrier against hiatus which it proved, nor could Priscian have proceeded to mention as parallel instances of interposed consonants the *b d* and *c* of *prodest*, *comburo*, *sicubi*. And that Priscian gave to the digamma in the Greek words mentioned a sound more like *v* than *w* would seem to follow from the varieties of spelling in the MSS. δαφιον, δημοφαφων, λαφοκαφων.

4. Priscian (i. 38), after stating that *u* was anciently represented by *o* in many words, particularly when preceded by the digamma, as in *seruus*, *uulgus*, originally spelt *seruos*, *uolgus*, proceeds to remark, *est quando amittit uim tam uocalis quam consonantis ut cum inter q et aliam uocalem ponitur, ut quis quoniam.* The same sound, neither of a vowel nor of a consonant, but something between, he heard in *sanguis*, *lingua*, *suadeo*, *suauis*, *suesco*, *suetus*, and in the Æolic forms τῦιδ' and πήλυι. *This* sound must have been very like a *w;* and it follows that the strict *u consonans* was different, and if so, it must have approximated to the more clearly defined, more properly consonantic sound of our *v*. The same seems to follow from what Priscian (Partit. xii. 24, 5) says of the sound of initial *vĭ* and *fĭ*, followed by *d*, *t*, *m*, *z*, *x*. In such words, e. g. *uideo*, *uitium*, *uim*, *uir*, *uix*, *fides*, in all of which the *i* was naturally short, it had a sound like Greek υ, as opposed to its ordinary coarser sound in *uidi*, *uita*, *uires*, &c. The difference is easily intelligible if we give *v* the sound of English *v*, and the analogy of the two cases (*vi*, *fi*) is at once perceptible; pronounce *video* as *wideo* and the pinguitude of the first letter will be found, if I mistake not, to prevent, or at any rate to stand in the way of refining the second.

5. The change from the original *fu* of the perfect and pluperfect to *v* in *audiui audiueram* is simple and natural if *v* represented a sound like our *v*, i.e. a sound containing elements both of *b* (*bhu*, &c.) and *f*. This could not be said if *v* was a *w*.

6. The argument in favour of a *w* sound drawn from Greek writing of Latin words is inconclusive. Corssen shows that οὐ, β, οὐβ, as well as ο and υ after *q*, are all used as expressions of Roman *v:* and Blass (*Ueber die Aussprache des Griechischen*, p. 31), comparing the forms Αὐεντῖνος, Ἀουεντῖνος, Ἀβεντῖνος, infers, and, I think, justly, that none of the forms was an exact representation of the Latin sound. If side by side we find Οὐάῤῥων Βάρρων, Οὐεργίλιος Βεργίλιος, Οὐαλέριος Βαλεριάνος, it is impossible to acquiesce in a *w* sound of these words as the final and only one. *W* is a gross, I would almost say, a barbarous sound; *b* is a refined and delicate sound. The conclusion is, it would seem, rightly drawn by Corssen; Latin *v* was midway between Greek οὐ and β, like the Greek digamma with which it is constantly compared (cf. Quint. xii. 10, 29, i. 4, 7), and which also could scarcely have passed into β in βρόδον βρέχω, if it had not been more like a *v* than a *w*. We may put the argument in another shape: suppose a Greek to have heard the Roman name Vennonius pronounced with the English pronunciation of *v*, the German of *w* in *wie;* how *could* he have transliterated it in his own alphabet? He had lost the digamma; φ would not express it; the only single letter he could use was β; but β is after all quite different. He was reduced to a mere copy of the Roman letter *u*, i.e. οὐ, not as expressing the sound exactly, but as suggesting the Roman spelling, and thus recalling their pronunciation, at the same time that it, in some degree, represented the sound. And this may be the meaning of the passage of Nigidius Figulus quoted in A. Gellius, xix. 6, and referred to by Professor Munro. Speaking of vowels, Nigidius says: *A et o semper principes sunt, i et u semper subditae, e et subit et praeit; praeit in Euripo, subit in Aemilio. Si quis putat praeire u in his, 'iampridem,' 'iccur,' 'iocum,' 'iucundum' errabit quod hae literae cum praeeunt ne vocales quidem sunt.* That is, *u*, like *i*, is never the first of two coalescing vowels, always the second, *Euripus eidem;* in words where *u* or *i* seems to be the first of two coalescing vowels, this is a mere mistake occasioned by the spelling; in words like *Volusius iocum*, the *u* and *i* not only do not coalesce as vowels with the following *o*, they are not even vowels at all. He is speaking, I think, not of an actual nearness to a vowel sound which attached to *i* and *u* in these cases; but simply to the possibility of mistaking each of them for the first vowel of a diphthong, owing to their being written without anything to distinguish their real consonantic nature. Still less support can be drawn in favour of *w* from the other passage of Nigidius Figulus (A. Gell. x. 4). Arguing that words are the

outgrowth of nature, he says, "when we say *uos* [we place the mouth in a position which agrees with the meaning of the word itself, we move the front of the lips gradually outwards and direct the breath and air straight before us towards those with whom we are speaking." Surely it will not be denied that this is a description of an outward, not of an inward, sound; of a projected *v*, not a half-withdrawn *w*. And so the description of the letter given in Hagen's *Anecdota Helvetica*, p. 307, *V ore constricto labiisque prominulis exhibetur.*

7. The last point I shall touch upon is the interchange of *b* and *v* in Latin words. Corssen traces *b* for *v* in inscriptions from the end of the first century A.D. onwards; *v* for *b* from the second century. But if MSS. may be taken as any guide to determine the spelling of authors,—and I believe that this is more true than not of the earliest and best,—the two letters must have sounded very like each other in a large number of words from the time of Cicero and Varro onwards. In the first book of the *de Republica* alone, imperfect and fragmentary as the palimpsest is, will be found, sometimes unaltered, sometimes with the more ordinary spelling superscribed, *lavoribus lavoris provabiles dauant bita salutabit* (for *salutauit*) *nouilior uello adprouauissent inuecillis uelli liuidinis liuidinibus gustabit* for *gustauit liuidini pribatum.* Varro's *Bimarcus* is more usually spelt *Vimarcus* in the MSS. of Nonius, including the excellent Harleian; *uoluae* appears as *boluae* (Non. 201) in the Eumenides of the same author; and both Lucilius and Varro used alternately *bulga* and *uulga* (Non. 78, 187). Again, Varro derives *ueruex* from *uerto* (L. L. v. 99); the same word is quoted from Varro in the accusative *uerbecem* (Non. 189), and is identical with the *berbix* of Paulus Diaconus (pp. 4, 46, Müller). So again *urbs* is derived by Varro *ab orbe et uruo* (L. L. v. 143), an etymology countenanced by Festus (p. 375, M.), by Pomponius in the Digest, 239, § 6, and by Placidus (p. 491, vol. iii. of Mai's *Classici Auctores*), whose glossary is believed by Ritschl to have been composed with special reference to Plautus. There is the same doubt as to *bicessis* or *uicessis* (Varro, L. L. v. 170), *uibices* or *uiuices* (L. L. vii. 63). And if Laberius said *ad amorem iniciendum delenimenta esse deliramenta, beneficia autem ueneficia* (Fronto, i. 7), can we doubt that the *b v* approximated much as the *d* of the one word to the *d* of the other? That the sounds were notwithstanding distinct is clear from Priscian's words, ix. 43, *feruesco. dicitur tamen etiam per b ferbeo ex quo ferbui.* This seems to give the right point of view; *v* was sufficiently near in sound to *b* to be spoken and written for it in many words; sufficiently different to allow a grammarian to call *feruere, ferbere, feruescere, ferbescere,* different forms. If this was so, *v* was not a *w*, but a *v* or something like it; and this change from *ueruex* to *berbex* whence Italian *berbice*, French *brebis*, from *uesica* to Port. *bexiga*, from *neruus* to *nerbo*, &c., is the counterpart of what takes place in children's pronunciation of *have dove give* as *hab dub gib.*

R. Ellis.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—There are two principles on which the pronunciation of a foreign language, living or dead, may be regulated:—

(1) We may endeavour to approximate as closely as possible to the actual sounds used. This may be called imitative pronunciation.

(2) We may aim at representing the written language by the use of so many of the sounds of our own language as may be necessary. This may be called representative pronunciation, or pronunciation addressed to the eye.

In the case of a living language—that is to say, a language which is the mother-tongue of some people now living—the former method, when attainable, is always preferred. In the case of dead languages the second method has been followed by scholars of all nations, perhaps without exception. Even in the highly exceptional case of Sanscrit, where the right manner of reciting has been handed down as a sacred duty for thousands of years, it does not appear that European students try to imitate all the distinctions observed in Indian pronunciation; *e.g.* between d and *d*, ç and s.

I venture to think that universal experience has in this matter followed the best course, namely, that every nation should construct a conventional system out of its native sounds capable of representing the written words to the eye and the understanding.

The chief reason for this course I take to be that the effort of acquiring an imitative pronunciation is not repaid by the result. It takes a great deal of time and trouble to learn the sounds of a foreign language, even in the imperfect degree which is usually attained. In the case of spoken languages there is a good reason for giving this time and trouble. Our motive in learning the real sounds of French and German words, rather than pronouncing them in our own way, is that we wish to be understood by Frenchmen and Germans. But when we read or speak Latin, the more English our accent is the more certain we are of recalling to our hearers the precise words which we intend. And this, after all, is the main, if not the only, object in pronunciation.

Secondly, it is not of much use to learn the "right" sounds of a language when after all we cannot tell how nearly we have succeeded. Although the main outlines of the pronunciation may be theoretically certain, there are endless shades of difference, constituting what we call the accent of a language, without which an imitative pronunciation is hopeless. Let us suppose that we possessed the most accurate instructions for pronouncing French, and followed them most carefully, but had never heard the sounds from a living Frenchman, would our imitation of these sounds be worth the trouble of making? The case is the same in Latin, with the additional circumstance that we are certain never to have to put our success to the test. We cannot hope to imitate the Latin of an ancient Roman; and if we could do so, we should still be unable to find an ancient Roman to recognise and profit by the accomplishment.

There appears to be a general feeling against the usually too favourite proposal of a "compromise," and on the side of making a reform, if adopted at all, as complete as possible. If so, it is clear that we ought also to reform our pronunciation of Greek. What more confessedly one-sided "half-measure" can be imagined than that which consists in reforming one of the two classical languages without the other? If our present plan will do for Greek—and I hear not a word of dissatisfaction with it—surely there is no pressing need of change in respect of Latin.

There is a reform, however, depending on the second of the two principles stated above, and applicable to Greek as well as to Latin, which I should not be sorry to see adopted. It is substantially that which the Oxford Committee proposed for Latin, and consists in pronouncing the Latin vowels *a, e, i, o, u*, and the Greek α, η (ε), ι, ω (ο), ου (perhaps υ), like the English vowels in *father, where, fill, whole, full*, respectively. This plan would give no vowel a sound which it does not have in some English word, except perhaps *ī* (long), which would be sounded like *ee* in *feel* rather than *i* in *fill.* The difference from the present practice would be that the same vowel would always be pronounced with the same tone or quality, instead of varying in quality along with variations of quantity. This uniformity is not merely right as an approximation to the "right" sounds, and to the sounds used in most cases by other countries, but it is desirable in order to make our pronunciation represent the written language. We should thus extend the principle applied by Winchester men to *a*, by Irishmen to *a* and *e*, and by Scotchmen and English Roman Catholics to all the vowels. Incidental advantages of such a method would be, that the music of the language, which depends mainly on the vowels, would be restored, and that a considerable approach would be made to European agreement. It would also greatly facilitate the attempt, should that be made, to distinguish quantity in pronunciation: a reform which might be left optional, the more so that any one could adopt it, and abandon it again as he pleased, without inconvenience to his neighbours.

Some of the arguments now used, such as the desirableness of representing the same letter by the same sound, undoubtedly apply to the pronunciation of *c* and *g*. I will only say that, placing on one side the inconvenience, which I feel, of having only one pronunciation for words whose spelling is different, *e.g.* for *scena, cena, Sena*, and on the other the inconvenience of having to learn and to teach an entirely new way of pronouncing the combinations *ce, ci, sce, sci*, &c., I prefer the former inconvenience to the latter. As to the comparative "rightness" of the two methods, few who have read Mr. Munro's argument can

entertain any doubt. He has supplied all the defects which Mr. Max Müller so well pointed out in Corssen's proof. But it does not follow that the speculative rightness of this or that pronunciation is decisive on the question of adopting it in practice.

Although no reform in this matter should come to be adopted—and I confess that I look upon the advantages to be gained by any reform as very trifling—the discussion will not have been fruitless if it excites an interest in the historical study of Latin. Mr. Munro's article, and, I may venture to add, the privately circulated paper of which it formed a part, have already made a considerable advance upon the state in which Corssen's book left the subject. Yet this brings us no nearer a decision of the immediate question. While his discoveries extend and complete our knowledge of the Latin sounds, the difficulty of expressing this knowledge in our ordinary pronunciation is made proportionately great. The present is not a time to add to the labour of learning Latin and Greek. It would be as impolitic as unreasonable to burden the memory of every beginner with the results of a new and refined enquiry; and it would be no less a pity to clog the enquiry with merely practical and pædagogic considerations. D. B. Monro.

P.S.—Let me add a remark on the speculative question. An article in the last number of *Kuhn's Zeitschrift*, "Messapisches," by Dr. Moritz Schmidt, gives instances of Greek σ and ζ for Latin *c*: especially in the name of the great family of *Dasii*, in Latin *Decii*. This instance, like those quoted by Mr. Max Müller from Umbrian, and by your correspondent Mr. D. Bikelas from modern Greek dialects, only shows that changes like the softening of the *c* usually take place unequally over the area within which a language or group of dialects is spoken.

THE EARLY ENGLISH TEXT SOCIETY.

The Early English Text Society was founded by a few members of the Philological Society, who, wishing to continue the publication of Early English texts, which the society had begun, but been obliged to discontinue from want of funds, formed a committee for the purpose of collecting subscriptions and printing MSS. The chief cause that seemed to make the formation of a new society desirable was the unsatisfactory way in which the already existing societies brought out their works, limiting their issues to 100 copies, and impeding their circulation in every way. The result was that after the Philological Society had ceased to publish Early English texts, several of the members had to send their texts to German periodicals, there being no society in England which would print them. The committee resolved therefore from the beginning to keep free of all dilettanteism and exclusiveness, and limit themselves to the production of plain working editions that should be accessible to all. The society started in 1864 with 22 subscribers, whose number at the end of the year had risen to 145, and gradually increased, till, at the end of 1868 it had 660 members, without counting those who subscribed to the extra series, intended for re-editions.

These statistics show good progress, but it is to be hoped that when the study of Early English has taken firm root, the society will number its members not by hundreds but by thousands.

With this poor support the society has done more to illustrate the life, literature, and language of our forefathers than any other printing club or society in the United Kingdom. If it had produced nothing else but *Piers Ploughman*, *English Guilds*, *Ayenbite of Inwit*, and the *Early English Homilies*, the society would have deserved well of English literature. The publication of Bishop Percy's MS.—the foundation of his celebrated *Reliques*—was also undertaken by three members of the society. The Chaucer Society, which has for the first time laid a sure foundation for the critical study of Chaucer's works, was founded by members of the E. E. T. S.: nothing but want of funds prevented Chaucer's works from being included in the publications of the original society.

The quality of the society's work is, generally speaking, good; much of it is far above the usual average of editorial work. Some of the texts show signs of carelessness and incapacity, yet even the worst of these will bear comparison with the average work of some societies we could mention, and in most cases the committee have either given careful corrections of these faulty texts or promised to have them re-edited.

It is a question whether the society has not sometimes gone too far in its attempts to popularise its editions. We allude particularly to the translations which accompany the older works. It is evident that all the texts do not possess an equal or the same kind of interest. Why, then, should a work like the *Ayenbite*—a literal translation from the French—be edited on the same principles as *Hali Meidenhad* or the *Homilies?* The latter are of high social and antiquarian interest, and therefore there is some reason for making them accessible to those who take no interest in the language, but in the case of the *Ayenbite*, whose value is wholly philological and dialectic, such an aid as a translation is superfluous, if not positively injurious, leading as it does to shallowness and inaccuracy, and a neglect of grammar and dictionary work, which is as essential to a sound knowledge of Early English as of any other language. In those special cases where a translation is really required, it should be stowed away at the end of the book, so as not continually to stare the reader in the face and suspend the exercise of his faculties. At any rate, different styles of editing should be adopted for different classes of texts, even if it is not advisable in all cases to replace translations by explanatory notes and glossaries.

Henry Sweet.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—You are no doubt aware that the study of Sanskrit lexicography has hitherto yielded as few chronological facts as that of any other branch of Hindu literature, and that of the more prominent authors of Koshas the dates of two only, viz. *Maheśvara* and *Hemachandra*, seemed to have been pretty satisfactorily settled. *Hemachandra*, the reputed author of a dictionary consisting of a synonymous part, the *Abhidhânachintâmaṇi*, and a homonymous one, the *Anekârthasangraha*, and of several other works, appears to have lived before A.D. 1292, since a commentary on one of his works is dated in that year. On the other hand, as his homonymous glossary is, to a great extent, identical with that of *Maheśvara*, the *Viśvaprakâśa*, which claims to have been compiled in Śaka 1033, or A.D. 1111, Wilson, for reasons of some plausibility, inferred that Hemachandra was posterior to Maheśvara, especially as there was other evidence showing him to have lived about the middle of the twelfth century; although according to Wilson a Gujarat king was converted by him to the Jaina faith in A.D. 1174, whilst Dr. Bhâu Dâjî, in a recent number of the *Journal of the Bombay Asiatic Society*, makes him die in A.D. 1172.

As regards *Maheśvara's* work, the *Viśvaprakâsa*, this Kosha consists, in the first place, of two chapters, one treating of homonymous nouns, the other of indeclinables. At the end of the second chapter the MSS. hitherto known contain several Ślokas, the last of which states the work to have been compiled in Śaka 1033. After this there follow in the MSS. two more chapters, one on words spelt in different ways, the other on gender. Prof. Aufrecht, in describing the Oxford MS. (Catal. p. 188), expresses some doubt as to the genuineness of these two chapters, chiefly on account of their being preceded by the date, which one may naturally expect to find at the end rather than in the middle of the work. Of the India Office MSS. of the same work, three were known and compared by him (Nos. 246, 322, 1539), none of which would appear to be more than a hundred years old, whilst the Oxford MS. was not copied before 1820. In examining some MSS. I have lately found another copy of the same work (I. O. 1937), written in Western India in Samvat 1728, or A.D. 1671. This MS. would seem to corroborate Prof. Aufrecht's conjecture, since it does not contain the two last chapters, there being nothing to lead one to suppose that it is not the whole of *Maheśvara's* Kosha. On the other hand, the colophon is preceded by three Ślokas only, while the one containing the date is *wanting*. It therefore remains to be seen whether MSS. of this work which may hereafter be discovered in India may or may not contain that precious Śloka. In MS. I. O. 1539, I may remark, it occurs in the beginning of the third chapter, whilst there are four other couplets at the end of the second chapter. I need hardly tell you that the authenticity of this date is a matter of some importance, not only for a true appreciation of the relation between *Maheśvara* and *Hemachandra*, which, it is to be hoped, may still be established by a close comparison of their Koshas, but because it has been made the starting-point for settling the relative dates of several other writers. Of the commentators on the *Amarakosha*, several give their own dates, as *Râyamukuṭa*, Śaka 1353, or A.D. 1431; though another commentator, *Nayanânanda*, who must be much posterior to the former, claims the same date for his compilation, the *Amarakosha-Kaumudî*; *Nârâyaṇa's Padârthakaumudî* was compiled in Śaka 1540, A.D. 1618.

In concluding these remarks I may mention, what few scholars are probably aware of, that a great part of Hemachandra's grammar, the *Śabdânuśâsana*, together with the *Laghuvṛitti*, exists in MS. in the I. O. Library: MS. 725, dated in Samvat 1495, or A.D. 1438, contains the first and fourth Adhyâyas, in four Pâdas each, the first and second Pâdas of the second, and the third and fourth Pâdas of the third Adhyâya. Hemachandra's arrangement is, generally speaking, pretty much the same as that of other modern Sanskrit grammars, whilst his terminology is that of the Sarasvatî, Kâtantra and others. Of his *Anubandhas*, however, only part are identical with those of *Pâṇini*, the rest being peculiar to his system. J. Eggeling.

THE MOABITE STONE.

We have already announced Prof. Hitzig's pamphlet on the Moabite Stone; it proves to be as unsatisfactory as it is original. In spite of M. Ganneau's assurance that the word in the original (lines 1, 2) is הדיבני, Prof. H. insists on הציבני, contrary to the general Biblical usage. In line 3, H. reads בכל ישע; he renders קרחה "Freiplatz," *i.e.* a place without trees, analogous to שפי. In line 19, he reads האשמ[מ]ין, and renders "prisons for the convicts." In lines 27, 28, he translates, "I built Bezer, for the men of Dibon in arms hindered me, for Dibon was in rebellion." Here משמעת is taken as if from משמעדת, analogous to ללת. In lines 28, 29, he renders, "And I dwelt at Bezer, in order to see the horn, which I have added to the land." The horn means Bezer; comp. "the horn of Moab," Jer. xlviii. 25. Prof. H. rejects the notion of taking Astar Chemosh, line 17, as the name of a god, and translates עשתר "treasure" by an impossible derivation. Prof. Schlottmann has a paper "On Astar-Kamos" in the *Zeitschr. d. d. m. G.* xxiv. 649–671. He defends his own explanation of Astar, "consociatio," and refutes Hitzig's. In the same periodical, Schlottmann gives a list of the numerous passages where H.'s conjectures conflict with Ganneau's latest corrections. An interpretation of the inscription by a Hungarian professor (Dr. Ballagi of Pesth) is described by Dr. Goldziher (p. 710); it was made at too early a stage to be of much use. We have already referred (pp. 104, 148) to Dr. Himpel's two able papers in Merx's *Archiv* and in the *Theolog. Quartalschrift*, and have only to complete our record by Prof. A. B. Davidson's judicious summary in the *British and Foreign Evangelical Review* for January, and M. Jules Oppert's translation given in the *Journal asiatique*, mai-juin 1870, just received. M. Oppert renders line 18 thus: "J'enlevai de là les [? veaux] de *Jéhu*," where all other critics now render Jehovah. The translation was read before the Société asiatique on April 8, 1870. No commentary is attached.

Intelligence.

The University of Cambridge has just been presented with 102 vols. of Oriental MSS., chiefly Arabic and Persian, by the representatives of the late Arabic Professor, the Rev. H. G. Williams.

The fourth part of W. Radloff's great work on the nomadic races of Central Asia is in the press; it is to contain the dialects of the Tobolsk country. An account of the work and its author by a competent hand is given in *Trübner's Record*, Feb. 28.

Dr. A. Wilmanns, hitherto librarian at Freiburg, has recently been nominated to the post of Extraordinary Professor in the same University. We trust that one result of his advancement will be the speedy publication of his long-promised edition of Varro *de Lingua latina*.

Among the latest publications of Messrs. Teubner is a critical edition of Cornelius Nepos by the learned editor of Cicero and Quintilian, C. Halm; it will be most welcome to all those who are aware of the numerous fluctuations of reading in an author so widely read as Cornelius Nepos. But no doubt the most important philological publication of the month is the *new* edition of F. Ritschl's *Trinummus*, forming the first instalment of his new edition of Plautus. It is now twenty-three years since the first edition of the *Trinummus* appeared, and much has been done and achieved since then in the study of Latin in general, and of Plautus and archaic Latin especially; but it should be remembered that most of those studies received their first impulse from the Prolegomena to the first edition of the *Trinummus*. The editor promises new prolegomena at the end of the first volume of his new edition. We shall soon bring an extensive article on this important publication.

A new edition of *Antiphon*, with an elaborate critical commentary by Dr. F. Blass, has just been published by the firm of Teubner; also a new edition of Cebes' *Tabula*, by F. Drosihn. The first number of the *Acta Societatis Philologae Lipsiensis* (with a preface by F. Ritschl) has also come out.

The two concluding numbers of F. L. K. Weigand's new edition of Schmitthenner's German Dictionary (the first volume of which appeared as far back as 1857), have at length been published. We think it right to direct the attention of our readers to this work, now complete in two large volumes, which may be justly said to be the most *scientific* and methodical work of its kind, and which, as long as Grimm's gigantic Dictionary is incomplete (and how many will live to see it finished?), is at once the most reliable and convenient dictionary of the German language. We presume that our readers know that Prof. Weigand is one of the gentlemen appointed by Jacob Grimm himself to continue his work, when death took the pen out of his hand.

We learn with great regret that the *Revue critique* is to be discontinued after the numbers already subscribed for have been published. It is to be hoped that it may again come to life in quieter times and in an enlarged shape.

The second number of the *Revue celtique*, only half of which is at present printed, will contain:—De la disparition de la langue gauloise en Galatie, par M. G. Perrot, un des directeurs de la *Revue archéologique*.—Fionn's Enchantment, a popular tale of the highlands of Scotland, Gaelic text with the English translation, by J. F. Campbell, Esq., author of the Popular Tales of the Western Highlands of Scotland.—Welsh Phonology, by the Rev. John Peter.—Le Mystère de Ste. Tryphine, par M. Reinhold Kœhler, conservateur de la Bibliothèque Grand-Ducale à Weimar.—Les nains dans les traditions de la Basse-Bretagne, par M. R. F. Le Men, archiviste du Finistêre.—Études sur la phonétique bretonne (suite), par M. d'Arbois de Jubainville.—Mythological Notes, by Whitley Stokes, Esq., &c.

Professor Michele Amari of Florence, of whom we lately gave an obituary notice, has written to say that he is alive and well. Our news came direct from Florence, through a person who was there with the intention of seeing Amari: we considered, therefore, that it might be relied upon. But instead of proving to Signor Amari, as Swift did to Mr. Partridge the almanac-maker, that, despite his own assertion to the contrary, he is really dead, we are glad to correct our blunder, and not less so to announce that the last volume of the Professor's *History of the Musulmans in Sicily* is to be finished this summer, after which he will commence an Italian version of his *Biblioteca Arabo-Sicula*. He is also contributing to the *Rivista Sicula* a series of notices of the Arabic inscriptions found in Sicily, illustrated with photographs.

The Royal Asiatic Society has just received as a present from Captain S. B. Miles, Assistant-Resident at Aden, another Himyaritic copper-plate inscription in beautiful preservation, consisting of eight lines and measuring 6½ in. by 4½ in.; besides two Himyaritic coins, a gold and a silver one, with Himyarite monograms, the first as yet discovered; also two gold Ethiopic coins, a small brass figure dug up at Mareb and supposed to represent a Himyarite god, and an iron amulet with Himyaritic characters engraven on it.

Dr. Stengel of Basle is preparing an edition of the *Roman de Durmart le Galois* for the Stuttgart Literary Society. The "Roman" is an O. F. poem of the "table ronde," containing 16,000 verses, and is curious in many ways. It has been copied from an apparently unique MS. at Berne.

A Philological Society has been formed in Cambridge, consisting of the following members: Professors Cowell, Kennedy, and Munro; Mr. W. G. Clark and Mr. Jebb, of Trinity; Mr. F. A. Paley, Mr. J. E. B. Mayor, and Mr. J. E. Sandy's of St. John's; Mr. W. W. Skeat and Mr. John Peile of Christ's; and Mr. Fennell of Jesus College. The society limits itself to the languages and literatures of the Indo-European family, as there has been for some time back a "Hebrew Society" which would not readily amalgamate with the society in question.

Mr. Frederick Muller, bookseller of Amsterdam, is in the possession of a collection of Hebrew and Jewish works, comprising about 2800 volumes, which he intends to sell *en bloc*. Amongst these books are a large number of the greatest variety and highest importance. This collection comprises, I. of Bibles and parts of the Bible, with and without commentaries, 280 vols.; II. Commentaries and Versions of the Bible and Parts thereof, 760 vols.; III. Talmud, 115 vols.; IV. Commentaries of the Talmud, 200 vols.; V. Rituals, 380 vols.; VI. Responses, 90 vols.; VII. Midrash, 25 vols.; VIII. Cabala, 80 vols.; IX. Sermons, 95 vols.; X. Liturgy, 150 vols.; XI. Philosophy and Ethics, 220 vols.; XII. Medicine, Astronomy, Geometry, &c., 30 vols.; XIII. Grammars, Dictionaries, Concordances, &c., 310 vols.; XIV. Geography, History, Biography, 225 vols.; XV. Belles-Lettres, Criticisms, Periodicals, Literary History, Bibliography, 225 vols. &c. &c.

Contents of Journals and Selected Articles.

Zeitschrift für vergleichende Sprachforschung, xx. 1.—Zur etymologischen Wortforschung, von Sophus Bugge. [Proposes a great many new derivations, especially Scandinavian. The following are a few of the most interesting:—Old Norse meiss, and cognate words in Lithuanian; Germ. roth, Sanscr. rohita, Lat. raudus (aes), rufus, from

rudh, to stream (?); ἔρευνα, Old Norse raun, trial; Old Norse lé, from *lĕva, λήϊον, Sanscr. lu, to cut, reap; Goth. laikan, to sport, Sanscr. reg, Lat. ludere; Old Norse lauðr, Eng. lather, λούω; losna, Lat. luna, Zend. raokhshna, bright, Old Prussian lauxnos, stars; *f* for *v* in Latin—formica, μύρμηξ, Sanscr. valmīka; formido, μορμώ, &c.; forma, μορφή, Vedic várpas, later rupá; fornix, οὐρανός, váruṇas; Lat. sarcio, ῥάπτω; ἔεσα, from sas, to sleep; sudus, εὔδιος; πτ for original *sk*, φθ for *sp*; φθέγγομαι, φέγγος; λ (in terminations) for *n*.]—Messapisches, von Moritz Schmidt. [Some proper names, Rudiae, Lupiae (Lecce); Dasumas, Δαζίμας, answering to the Lat. Decimus, may be added to Professor Max Müller's instances of softened *c* in Italian dialects.]—Reviews: Zimmer'sche Chronik, herausg. von Dr. K. A. Barack; by Birlingen. [Of great importance for history, popular tales, and language.]—Benfey: Ueber die im Sanscrit mit *r* anlautenden Personalendungen; by R. Roth. [The endings rantè, ranta, are 3 pl. pres. and impf. middle of ar, or, as Roth thinks, of ram, more exactly, ran.]—Die Ruhlaer Mundart, dargestellt von Karl Regel; by E. Kuhn.—Pi*nd*apit*r*yagna, das Manenopfer mit Klössen bei den Indern, von Dr. O. Donner; by E. Kuhn. [Contribution to the knowledge of Indo-Germanic ritual usage.]—Das Fremdwort, &c., von Aug. Boltz; by E. Kuhn. [Condemned.]—Kleine Schriften von Jacob Grimm, 4. Band; by A. Kuhn. [Reviews, &c., reaching over the years 1807–1826.]—(1) Fastus, "der Trotz": [Θράσος, root dharsh]; (2) Pectus [Sanscr. paksha, side-wing], von Michel Bréal.—Suffix -υγή, by E. Kuhn.

Göttingische gelehrte Anzeigen, Feb. 1.—Madvig's Cicero de Finibus. Ed. ii. [Reviewed by O. Heine in a highly appreciative spirit. After a well-deserved encomium on Madvig's first edition, as marking an epoch in Latin Philology, the reviewer shews the various ways in which the second edition is an improvement on its predecessor, more especially through Madvig's judicious use of the critical labours of Baiter. He regrets, however, that the exposition of Cicero's philosophical ideas is left in pretty nearly the form in which it originally appeared thirty years ago.] Feb. 22.—Index Aristotelicus. Edidit Hermannus Bonitz. [Reviewed by R. Eucken, with whose eulogy of this grand work we fully concur. Among the points to which he draws attention are—(1) the interpretation of the scientific terms in Aristotle; (2) the articles on the proper names (from which we may get some idea of the influence exercised by his contemporaries and predecessors on Aristotle's mind); (3) the value of the Index to the critical student, as furnishing a synopsis of the peculiarities of Aristotelian phraseology—a matter on which Dr. Eucken is a well-known authority.]

Philologischer Anzeiger, vol. ii. part 12. (Principal articles.) Aristoxenus rhythmische und metrische Messungen, von Bernard Brill. Rev. by Fr. Susemihl. [The book is directed against Westphal's theory of ancient Rhythmic, but, in spite of some correct observations, is a failure.]—A. Conze: Beiträge zur Geschichte der griechischen Plastik. [Chiefly relates to the Attic artists before Phidias, and to Polycletus.]—A. Conze: Zur Geschichte der Griechischen Kunst. [Traces the Greek ornamentation beyond the period of Asiatic influence, to a highly peculiar system of lines which is found again in Northern antiquities. The conclusion is that we have before us an art which is the common property of the Indo-Germanic peoples.]—Die Sage vom trojanischen Kriege in Bearbeitungen des Mittelalters, von Dr. H. Dunger. [Most versions are mainly derived from the *Historia de excidio Trojae* of Dares Phrygius, but other sources were used.] Vol. iii. part 1.—R. Westphal: Methodische Grammatik der griechischen Sprache, i. 2. By H. D. M. [Takes exception to some parts of the theory given of the verb.]—Eduard Lübbert: Die Syntax von *Quom* und die Entwicklung der relativen Tempora im ältern Latein. [Proves and works out the view that in Plautus, and probably in Terence, *quom* does not of itself govern the subjunctive.]—W. Weissbrodt: Specimen grammaticum. [On the doubling of consonants: chiefly epigraphical.]—M. F. von Jaborneg-Altenfels: Kärnten's römische Alterthümer. [Meritorious, but without much special knowledge.] G. F. Schömann: Hesiodi quae feruntur carminum reliquiae. [Convenient small edition.]—Otto Kreusler: Observationes Theocriteae. By E. v. L. [Deserves attention.] Jules Girard: Le Sentiment religieux en Grèce d'Homère à Aeschyle. By L. G. [Most successful on the æsthetic side of the subject.]—R. Pilger: Ueber die Athetese des platonischen Sophistes. By L. [Defence of the dialogue against Schaarschmidt.]—W. Onchen: Die Staatslehre des Aristoteles: Id. Aristoteles und seine Lehre vom Staat. By Fr. Susemihl. [Suggestive and interesting work: mainly on Aristotle's criticism of the Platonic and other ideal states.]—Rettigii Catulliana. By E. v. L. [The reviewer insists on the importance of Terpander's musical divisions for Catullus, as well as for Greek elegy.]—Ad. Holm: Geschichte Siciliens im Alterthum. 1. Band. [A valuable work, although with some defects of plan and execution; the general connection is somewhat buried in details.]

Zeitschrift der deutschen morgenländ. Gesellschaft, vol. xxiv. No. 4.—On the Shîite poet Abu-lḳasim Moḥ. Ibn Hâni', by A. v. Kremer.—Scholia of Bar Hebræus on Gen. xlix. l., Ex. xiv. xv., Deut. xxxii.–xxxiv., and Judg. v., by R. Schröter.—Extracts from Dschâmî's Love-poems, with metrical translations, by F. Rückert.—The Adverb כאן, by Dr. Zunz.—List of the Magdala Collection of Ethiopic MSS. in the British Museum, by W. Wright.—On Surnames among the Arabs of the Maghrib, by Baron v. Maltzan.—On the Æthiopico-Himyaritic war, by F. Prätorius.—On Tibetan Words and Names in Huc's Tartary, by H. A. Jäschke.—A Himyaritic Sepulchral Monument, by W. Wright. [Corrections of lithograph on p. 178.]—On the Discovery of the Moabite Inscription, by H. Petermann. [Describes the efforts of Mr. Klein to obtain the stone; a contract was actually made with the Sheikh of the Beni Hamide for its purchase.]—Additamenta on the Inscription of Mesha, iii. iv. v., by C. Schlottmann. [See elsewhere.]—On the Gypsies, by A. Mordtmann and A. F. Pott. [*Atropos* of Paspati's new work.]—Notes and Letters.—Review of "An Old Pahlavi-Pazand Glossary," &c., by E. Sachau.

Journal Asiatique, vol. xv. No. 58.—Études bouddhiques. Les quatre vérités et la prédication de Bénarès. Par M. Feer.—Nouvel essai sur l'inscription de Marseille, par M. J. Halévi. [Perhaps the best interpretation yet given; the Phœnician words are explained uniformly from the Hebrew, except in the case of two Aramaic words, and the double negative אי־בל, which is compared with Æthiopic *enbala*, "without." The inscription of Carthage, which illustrates and is illustrated by that of Marseilles, is appended.]—Nouvelles et mélanges; M. Oppert on the Moabite Inscription, &c.

Zeitschrift für die öster. Gymnasien, xxii. 1.—J. Vahlen: Horace's Letter to Augustus. [Explanation of Hor. 2, Ep. i. at some length: criticizes the arbitrary alterations and transpositions of Lehrs and Ribbeck.]—J. Vahlen: Qu. Ennius und Plautus. [On Ennius' Iphegenia, p. 123, ed. Val., against Fleckeisen.]—J. Kviçala: Rev. of Wecklein's, Ars Sophoclis emendandi. [Industrious collection of materials, but his conjectures and emendations often unnecessary and demonstrably wrong.]—O. Lorenz: Rev. of Geschichtsquellen der Provinz Sachsen. [Carmen occulti auctoris, and Chronicon Sampetrinum (13th and 14th centuries). Discusses relation of the Chronicon to the Chronicon Thuringicum Viennense, and to a compilation edited by Wegele.]

Jahrbuch für Romanische und Englische Litteratur, vol. xi. part 4.—Contents: Felix Liebrecht: Cyprische Märchen. [Eight sagas of Cyprus, selected and translated out of the third volume of the Κυπριακά, by Athanasios Sabellarios, Athens, 1868; cf. Gött. Gel. Anz. 1869. A few notes facilitate the identification of these sagas with such known among other peoples.] Hermann Fruust: Ueber den Grundtext der Bocadas de Oro. [These Spanish golden sayings, of which the same scholar had treated in the tenth volume, p. 171 f., are according to him of Arabic origin, as well as the Latin version, of which a fragment is preserved in the Arundel MS. 123 of the Brit. Mus. But the Arabic original has not yet been discovered.]—A. Mussafia gives a critique of the important important publication "Delle rime volgari Avattato di Antonio da Tempo giudice padovano composto nel 1332 dato in luce integralmente ora la prima volta per cura di Giusto Grion," Bologna, Gaetano Romagnoli, 1869. [The critic is in the whole favourable.]—Bibliographie of the year 1869:—I. French literature, by A. Ebert. II. English literature, by L. Lemcke. III. Italian literature, by A. Tobler. IV. Spanish. V. Portuguese. VI. General literature. VII. Philology. VIII. History of civilisation, by L. Lemcke. [Short valuable notes and references are frequently appended to the titles.]—Title and index of the 11th volume.

On Thibaut's Jaṭapaṭala, by Benfey, in Lit. Centralblatt, Feb. 22. [Favourable.]

On Ahlwardt's Six Arabian Poets, by Lagarde, in Götting. gel. Anzeigen, March 8. [Points out one Hebrew word (*irân*, Tharafa 4, 12, = ארון), one Syriac, six or eight Greek, and thirteen Persian, scattered in the Arabic texts.]

Abstract of Dr. Haug's paper on Vedic accentuation, in Trübner's Record, Feb. 28.

New Publications.

Bibliotheca Geographorum Arabicorum; ed. M. J. De Goeje. Pars prima. Viæ Regnorum, descriptio ditionis Moslemicæ, auctore Abu Ishák al-Fárisí al-Istakhrí. Leyden: Brill.

Codicem Manuscriptum Digby 86. in bibliotheka Bodleiana asservatum descripsit, excerpsit illustravit E. Stengel. Halle: Waisenhaus.

Delbrück, B. Der Gebrauch des Conjunctivs und Optativs im Sanskrit und Griechischen. Halle: Waisenhaus.

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THE ACADEMY.

"Inter silvas Academi quærere verum."

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General Literature.

Critical Miscellanies. By John Morley. Chapman and Hall, 1871.

It would be generally admitted, outside the school of Tübingen, that the pagan literature of the second century was freer, richer, and more interesting than the Christian; yet the Christian literature was the more important, for it was the meagre and immature expression of ideas which were gradually swallowing up all the earnestness there was left in the world. It would be a poor compliment to one of the most accomplished essayists of the day to put Mr. Morley on the same level of literary interest as the fathers of the second century; but in him as in them the literary interest is secondary. The primary importance of these full and thoughtful essays is that they are applications of a doctrine which the majority of educated men regard, perhaps with better reason, with something of the angry contempt with which Marcus Aurelius regarded Christianity, and which in spite of their contempt is making progress which they ought to find alarming. Of this doctrine the author is indeed a very independent adherent: he rejects not only Comte's factitious revival of the externals of Catholicism, but also by implication his limitation of speculation by supposed social exigencies; but upon first principles he does not separate himself from the master. It would be easy and pleasant to judge him by those parts of his work where his insight and acuteness display themselves apart from any system; but he himself would probably refuse to be appreciated apart from his doctrine. Most essayists are like performers on the flying *trapèze:* it is waste of time to criticise their standpoint; indeed to make the parallel complete, we ought to suppose that during the performance the supports of the *trapèze* are being dragged about by wild horses out of sight. The worst that any one can say of Mr. Morley is that it is a curious thing to cast anchor upon a Kraken *because* you have watched it rise. To say nothing of the other difficulties of his method; he seems to us to fall into the double paralogism of using relative ideas as other people use absolute, and supposing that ideas must be permanent because they have a provisional value at the present day. Thus in the course of the book he gives two or three not very consistent but strictly relative descriptions of justice; and then in the appendix assumes that women ought to have votes because it is just. In the same way he assumes that because modern governments find it inconvenient to be bound by ecclesiastical considerations, the formula, a free Church in a free State, has a meaning, and can be permanently applied; or, to take an example that reaches further, that mankind can dispense with assumptions on the subjects on which men of science are at present increasingly disinclined to speculate. No doubt, as experience shows, it is very difficult to get on without attributing permanent and absolute value to one's ideas, but that is only an argument against ideas which in virtue of their *raison d'être* are compelled to disclaim those convenient attributes. Again, the standpoint of the author leads him to bestow an attention which most readers will think disproportionate on appreciating the precise extent of the contributions to the doctrines which he holds of the characters which he passes under review.

This leads to a somewhat excessive estimate of Vauvenargues and Condorcet. The former had thought over the same subjects as occupied Pascal's thoughts, and he had remained right-minded, and after such a hard life as he lived, this proves real strength and elevation of mind; among other things he thought the everlasting dualism between reason and passion, duty and inclination, mischievous; Comte thought he saw in this an anticipation of his own theory of the supremacy of the heart over the head. Such achievements are hardly sufficient to place a man on the level of such Moralists as Pascal or La Rochefoucauld, or even Bacon. It is very easy for a distinguished mediocrity to find good reasons for disagreeing with great men; the difficulty is to make his own moderation a power in the world capable of balancing their excesses, an object for which the world generally and wisely is content to trust to its own deadweight. Condorcet was doubtless the first to formulate the conception of progress in the sense in which it is used by the Positivists, though almost every writer since Locke had made free use of the less elaborate but hardly more inaccurate conception which is now the common property of liberal journalists. Such explanations as are possible of the transition from one period to another are probably facilitated by the hypothesis of something like a necessary succession of events, but they are only embarrassed and falsified by the further hypothesis that this succession consists of an uninterrupted though not equable series of improvements; especially as no formula has yet been devised to express the supposed improvement of a nature to bear developed statement, much less serious discussion. Each generation, in emancipating itself from the limitations of its predecessor, imposes new limitations on its posterity, and it is much more certain that the collective force of humanity is liable to fluctuate and to decline than that the increasing diffusion of its results represents an augmentation of its average intensity. This fundamental question is never examined, yet it deserved examination quite as much as the precise proportions in which Montesquieu, Turgot, and the deservedly neglected Physiocrats contributed to suggest what is not proved to be other than a platitude. The real value of Condorcet's work lay in its acute *aperçus* on comparatively secondary subjects, for it is much better to throw light on one or two periods than to misexplain all, and Mr. Morley perceives clearly how radical was the defect with which his hero's anticlerical passions penetrated the whole of his work. It is curious that Mr. Morley himself should be so ready to admit the justice of those passions, since the clergy of that period could hardly be charged with anything worse than sensuality and hypocrisy, and Condorcet was the eager apologist of both, while the clergy had at least the grace to be ashamed of them. We have no desire to attenuate the heroism of a man who could develop his Utopias so brilliantly and so industriously with death full in his face for nine months; but in spite of his heroism it is possible to overrate his peroration. He has been speaking of the thought of the future of the race: "This contemplation is for him a refuge, into which the recollection of his persecutors can never follow him; in which, living in thought with man reinstated in the rights and dignity of his nature, he forgets man tormented and corrupted by greed, by base fear, by envy; it is here that he

truly abides with his fellows, in an Elysium that his reason has known how to create for itself, and that his love for humanity adorns with all purest delights." Brave words of a brave man; but when we are told they embody a fervour as purely spiritual as Calvinism or Catholicism at their best, and infinitely less interested, we have to turn to the *De Imitatione* or *Rutherford's Letters* to make sure that we know what spirituality means, or even to the *Funeral Oration* of Pericles to satisfy ourselves that we comprehend wholesome, hearty, unsophisticated enthusiasm which feeds on things, not on words; on facts, not on fancies.

Like Vauvenargues, Joseph de Maistre lived a hard life cheerfully: but his cheerfulness proceeded from religious faith, not from stoicism. The difference expressed itself not only in their lives but in their view of life. The stoicism of Vauvenargues comes out more clearly in nothing than in his contented acquiescence in the wickedness of most of his neighbours, which he hardly expected to alter and thought it mischievous to dwell upon. De Maistre could not think it "a perfection of men" to be capable of "being content with imperfection," and therefore it was impossible for him to accept the world as he found it as contentedly as Vauvenargues, even if the universal convulsion which he witnessed had not forced him to reflect upon the condition to which it was due.

It is a curious question whether, if De Maistre could have read Mr. Morley's paper, which states with exceptional completeness and liberality the ordinary progressist's view of the great reactionist, whether he would not have regarded such a respectful attempt to put him quietly out of the way as really more insulting than a passionate onslaught like his own upon Bacon. At least he regarded Bacon as a real power to be reckoned with, while liberals regard ultramontanism as an obsolete theory to be classified and a fact to be pulverised as mechanically as possible. This leads to a rather onesided appreciation of men like De Maistre, who is allowed to be a great publicist of a lost cause, to avoid the necessity of answering him as a great theologian, appealing to a series of events which has never been disproved and an order of facts and feelings which seems likely to be permanent. As it is, it is hardly a caricature to say that Mr. Morley sometimes writes as if De Maistre's claim to remembrance was that he had invented ultramontanism in order to save civilisation. His criticisms in detail are sometimes just, as when he points out the tendency which De Maistre shares with most if not all apologists of Christianity to explain away its promises; at other times they are inadequate, if not captious. The aphorism that when a point has been established by its appropriate proof insoluble objections to its truth may be disregarded deserves to be examined seriously, not to be dismissed with a surmise that De Maistre invented it in order to construct a theory "under which the communities of men might find shelter." We are quite unable to see any inconsistency between the theory that earthly prosperity is distributed upon fixed conditions which it is easier for honest men than rogues to satisfy, and the further theory that original sin is the reason why these conditions are hard for both. Whatever either theory may be worth, they complete each other as their author intended they should.

The essay on "Some Greek Conceptions of Social Growth," the only one in the volume which has not appeared wholly or in part before, is on the whole the weakest in the series; it is the record of a voyage of discovery in a country which the writer supposes to be as unfamiliar to others as it evidently is to him. This unfamiliarity must be taken as an excuse for the regret that Greek philosophers did not go on hatching systems of society after society had collapsed in Greece. There is much that is suggestive, if little that is satisfactory, in the short but acute discussion of the development of morality. The writer believes that the only immutable element in morals is the conviction that such a thing as duty exists, and that the quality of the sentiment which this conviction inspires is invariable, and that the progress of morals consists partly in the fitful but progressive increase of this sentiment in quantity and partly in its improved application, so as to be distributed more accurately among a larger number of actions, which last kind of progress is clearly due to the advance of knowledge. It is not explained how an universal without content can be valid, or again how the sentiment which accompanies acts done under a sense of duty can be independent in quality of the character of the acts with which it is associated.

The best thing in the book is certainly the essay on "Carlyle," though even this is a little distorted by anxiety to claim the prophet for a precursor of the true faith. Perhaps also the literary defects of Carlyle's style are somewhat exaggerated, especially as his qualities are inseparable from them, and his reputation and influence only began with the writings where he allowed both to grow together. Nor are we always inclined to agree with Mr. Morley in all points where he agrees with Mr. Carlyle. Both for instance overestimate, if not the importance of the present crisis in England, both the urgency and the magnitude of the changes it demands: the history both of the Roman and of the Byzantine empire contain more than one example of the almost imperceptible reforms which are sufficient to enable society to begin a new career of prosperity. Both again overrate the worth of English Puritanism. Mr. Morley calls the Commonwealth the most elevating period of our national history, and actually believes that while James II. was overthrown by "an aristocratic faction grasping power for its order," Charles I. fell before "a nation rising and smiting its oppressor," in the face of the fact that the nation welcomed Charles II. to deliver it from the Puritan minority, and acquiesced contentedly for near a hundred years in the rule of different factions of "the Venetian oligarchy."

But the main positions of the essay, that Carlyle is the English representative of Rousseau, and that his permanent significance is as an antidote to Byronism, are a nearer approach than has yet been made to a final estimate of one of the most problematical personages of the day: and though we think that Bentham's labours in the "Scoundrel province of Reform" have so far been rather unproductive, it is always worth while to point out that the passionate unreason of Mr. Carlyle can never be other than barren. There is really a charming irony in the fact, which Mr. Morley is well qualified to certify, that Mr. Carlyle's present popularity is chiefly among the representatives of "Beaver industrialism," and it is certainly a decisive condemnation of his method that with all his hankering after "natural supernaturalism" he has only escaped accepting this as the practical outcome of his teaching by a blind idolatry of military force, which, as his critic well observes, is really more reactionary than the teaching of De Maistre, who would have been satisfied if we had gone back to the twelfth century, while Carlyle does not stop short of prehistoric barbarism.

The essay on Byron is a curious specimen of the essential similarity of all systems. An orthodox writer can never altogether resist the temptation of speculating upon what became of Byron's soul: Mr. Morley cannot refrain from asking how nearly he missed being an organ of humanity and an adequate representative of the modern spirit. The answer to these questions would have been more satisfactory if the writer had not recoiled from an examination of Byron's

personality—a task which it must be admitted has become intolerably unsavoury since Mrs. Stowe has imposed upon all who meddle with the subject the necessity of believing or refuting her "True Story." Still, without touching Byron's life, it might have been possible to extract Byron's character from his writings before attempting to fix the historical significance of his poetry. Such an enquiry would have modified Mr. Morley's estimate of Byron as "the genuine exponent of that immense social movement which we sum up as the Revolution." There is much force and insight in the way in which the parallelism between Byron's poetry and the spirit of the period is developed in detail; but the whole has to be taken with one important qualification. The men of the Revolution were with one exception perfectly well satisfied with themselves; they only rebelled against circumstances, against institutions, in fact against the world; even Rousseau, as great a self-tormentor as Byron, believed in Nature. Byron's rebellion was in the first instance a rebellion against what he found the constitution of his mind had got to be by the time he came to look into it. His revolt against religious and social orthodoxy was an afterthought; he set himself to defy if not to subvert their authority: because he said it condemned him as he was and as he felt himself compelled to remain. Apart from his remorse there is abundant evidence of his instinct to "consent unto the law that it is good." If he had not had an interest in palliating the evil in himself by exaggerating the evil in the world, he might have contemplated the irrationalities and littlenesses which he saw around him as comfortably as Gifford or any other respectable satirist. In fact, he makes some approach to this tolerant temper in *Don Juan*, which he wrote when remorse was giving way to lassitude.

After attributing Byron's defects to the lack of scientific culture, the author describes in a singularly beautiful passage what he conceives to be the healing effects of science approached in the positive spirit:

"There is none of the baleful distortion of hate, because evil and wrong-doing and darkness are acknowledged to be the effects of causes, sums of conditions, terms in a series; they are to be brought to their end or weakened or narrowed by right action and endeavour, and this endeavour does not stagnate in antipathy, but concentrates itself in transfixing a cause. In no other condition of the spirit than this, in which firm acquiescence mingles with valorous effort, can a man be so sure of raising a calm gaze and an enduring brow to the cruelty of circumstance. The *last appalling stroke* of annihilation itself is measured with purest fortitude by one whose religious contemplation dwells most habitually upon the sovereignty of obdurate laws in the vast revolving circle of physical forces, on the one hand, and, on the other, upon that moral order which the vision and pity of good men for their fellows, guiding the spontaneous energy of all men in strife with circumstance, have raised into a structure sublimer and more amazing than all the majesty of outer nature."

This would be a seductive description if it did not apply, with the alteration of three words, to an older religion of humanity as it was preached in its original purity two thousand years and more ago. We know what Buddhism has become, a mass of flowery puerilities and unmeaning incantations, a narcotic as indispensable and as pernicious as opium to "the atheistic civilisation of China." After all those who differ on first principles must hear and say very often, "*Blasphemant quod ignorant.*" G. A. Simcox.

The Earthward Pilgrimage. By Moncure D. Conway. Hotten.

"'Tis a whole population of well-dressed men and women out in search of a religion," says Emerson somewhere, speaking of the world he knows. Such a "population" Mr. Conway, a disciple of Emerson, offers to lead—earthward. What doctrine, worship, or rule of life they may expect to find in the Terrene Religion seems but dimly indicated in this volume. Indeed, a simple Secularist might complain that Mr. Conway does not lead his readers earthward, but lounges at the roadside, railing delicately at the pilgrims moving in an opposite direction. The greater part of the book is occupied with a polemic against Christianity, of which the substance is in striking contrast to the form. The charges which Mr. Conway brings against the traditional religion of the Western world are as violent, one-sided, unqualified—and, I must say, unenlightened—as those of any open-air infidel lecturer; but they are uttered in a manner so refined and cultivated, so cool, disengaged, full of well-bred restraint, as almost to persuade us of their moderation. Mr. Conway's style is attractive enough to carry us, almost without tedium, through thirty-two short lectures, with no connection and much iteration. It is well imitated from Emerson's: avoiding the affectation and obscurity of the Angelic Lecturer, and the excessive comminution of thought, which makes his utterance a stream of glittering sand, hardly to be twisted into ropes by the most docile reader; but attaining the high intellectual vitality, the subtle, pointed, exquisite manner, the fertility in sparkling conceits, striking analogies and similes, happy historical allusions and anecdotes, and in general, the easy omniscience of its model. There seem to be few departments of knowledge with which Mr. Conway is not sufficiently familiar for rhetorical purposes. At the slightest occasion he will survey mankind from China to Peru, and gallop the thorniest paths of antiquarian criticism like a high-road. He has an imagination pleasantly fantastic and unfettered in its play, yet never parted from real insight; and often a stirring glow and winning delicacy of moral feeling. With these gifts, it is singular that Mr. Conway makes so few criticisms on Christianity which are either novel, subtle, sympathetic, or even fair. He devotes himself to enforcing such propositions as these: that bishops have a great deal too much money for preaching a carpenter's son's religion; that our learned advocates of Christianity are drugged with promotion and luxury; that the Ritualists cling to the Establishment for the sake of the loaves and fishes; that our religion generally is pervaded with a mercenary spirit, and our youth brought up to study "the law and the profits." The Church, we are told, among the elements of present society is conspicuous and solitary in its neglect of the poor. The "natural habitat" of Christianity, viewed scientifically, is ascertained to be a "sultry, uncomfortable desert." Against the Bible Mr. Conway's invective grows especially fiery. It has murdered "thousands of innocent persons as witches;" it has polluted the minds of our children with its obscene stories; it has maintained despotism, slavery, flogging; it is a Juggernaut to which the happiness of human beings is still continually offered. The polemic becomes almost ridiculous when the story of Cain and Abel is represented as a dangerous incentive to murder, and it is maintained that President Lincoln would scarcely have abolished slavery if he had not fallen in his youth under the wholesome influence of Tom Paine. The essayist might have recollected that we had abolitionists of our own, and that our thoughts would revert to Wilberforce. The theme of persecution, I need scarcely say, is treated with much eloquence. While we read, we feel as if thumbscrews and Smithfield fires were preparing for Dr. Colenso and Mr. Voysey. When we turn to our newspapers, and find that the question is whether a man who insists on teaching the opposite of what he is commonly believed to have undertaken to teach should suffer the horrors of dismissal, Mr. Conway's language seems antiquated. He himself has no objection to a little social persecution. He urges "scholars" to exclude from their social circle "the surpliced believer in Balaam's ass." In such

case, it would surely seem not extravagant in the surpliced gentlemen to retaliate by deposing the incredulous scholar from the office of Chief Pastor.

There is no doubt much truth in many of Mr. Conway's particulars; but the colouring and perspective are so false that the total effect is coarse caricature. For instance, if he were as subtle in taking as he is in expressing his points, he would have charged Christian churches not with neglect of the poor, but with acquiescence in pauperism, and discouragement or distrust of scientific effort to eradicate it. Again, the incongruities that result from the interpenetration of the Church and the World certainly attain a special grotesqueness in Anglicanism. That the leading preachers of the Religion of Self-sacrifice should be said to have "won the prizes of their profession" when they have attained dignity and luxury, is a fair subject for sarcasm; but when we have so many examples of educated men who devote themselves to the religion of Jesus without hope of gain, it is idle to accuse the mass of "successful" Christians of hypocrisy.

Again, few educated laymen would maintain that all parts of the Bible are adapted for family reading, or the Jewish view of witchcraft for civilised legislation; or that the attitude of early Christians towards the Roman empire and its institutions furnishes a good political model for modern Europe. Yet most men who have observed dispassionately the effect on the world of the consecration of Hebrew literature are surprised to find how little, rather than how much, harm has been mingled with the undoubted good that it has done; how wonderfully the moral instinct of mankind has, on the whole, protected them against their "exemplar" in so far as it is "vitiis imitabile."

It is hard to ascertain either the nature, proof, or place in human life of the creed for which Mr. Conway is so anxious to clear the ground. Sometimes it hovers on the verge of Pantheism; sometimes it catches a glow from the intense personal Theism of Parker. Sometimes it seems to place us in almost Epicurean independence of the Deity which we are yet to recognise: we are to trust and feel the Divine Love, but not to stultify ourselves by praying against an unalterable Destiny, or directing moral effort towards one whom we cannot benefit. "Religion is a man's duty to himself." Elsewhere, however, we are told that "the capitalist must feel that he is doling out pitiful and unjust wages not to Sullivan or Smith, but to Almighty God." It does not seem natural for the capitalist who has completed his Earthward Pilgrimage to feel this. There is only one essay in which Mr. Conway at all indicates an argumentative basis for his theology. He describes himself as explaining to some sceptical working men how we may infer from the love and thought within us analogous facts throughout the universe; their relation however to the universe we cannot ascertain. However, the laws of the universe are great and good, and by sympathy with these we ourselves become good and strong. One can conceive a contemplative person of culture deriving much elevated pleasure from such thoughts as these. But when he has evaporated religion to a shadowy aspiration or unverifiable metaphysical inference, and denied it its natural expression in service and offering, he cannot expect it to retain its potency to stimulate or restrain action. In some passages again it is intimated that we ought not so much to seek for a religion as to trust that Providence, or rather the laws of Nature, will send us one. "The new seed will shape itself into sufficient branches and leaves; the rain will not cease, nor the sunshine." These sudden gleams of optimism rather puzzle us. We do not understand why a man so discontented with the present should be so placidly reliant as to the future. Nature, no doubt, produces religions adapted to different ages and countries; but what Nature has given us in this year of grace 1871 is the Church of England, with her venal pulpits and overpaid bishops. Grant that it is ill-suited to the enlightened intellect: we do not perceive that Nature studies the tastes of the *élite* in the social organs and processes to which she gives birth. Grant that it is decrepit and decaying: why should we not trust the laws of the universe to destroy as well as to construct? Nature does not get rid of the old till the new is ready. It is trite to show that religious customs and costumes have continually changed, and that the old fashions always seem uncouth to the new time; it remains true that in no previous age have men ever calmly stripped themselves of the vesture of their beliefs, and danced gaily off in spiritual nakedness, to such piping as Mr. Conway's. If perfect emancipation from "Precedent and Dogma" is really to prove a panacea for our social ills, the result will be a supreme instance of Nature's surprises.

In a few lectures some social features of the new terrestrial Jerusalem are dimly sketched. The writer's breadth of view, warmth of sympathies, and flowing eloquence render the sketch sufficiently attractive. There are to be as few laws as possible, except laws of Nature: all are to be free and equal, especially women; no one is to regulate any one else; but all are to be (through secular education) willingly enlightened and spontaneously harmonious. This democratic Eden is as curious a contrast to Comte's ordered Utopia as the shadowy Theism of Mr. Conway is to the "demonstrated faith" by which certain other pilgrims offer to guide our steps earthward.

Henry Sidgwick.

LITERARY NOTES.

The *Westminster Review* for April opens with an essay of much spirit and originality on the genius of Aristophanes. The writer is peculiarly happy in bringing out the magic of those bursts of intense poetry with which the Aristophanic burlesque is interspersed, and in insisting on the spectacular or operatic character of the whole exhibition. What is singular in the article is the space which it devotes to the discussion and justification of the moral grossness of Aristophanes. Having taken as the key-note of his criticism Heine's phrase of the *Weltvernichtungsidee*—the riot of the imagination in setting all human relations topsy-turvy—he at one time brings under this idea the orgiastic animalism of the old comedy, and at another explains the animalism as consonant with normal Greek manners, especially (in regard of its Dionysiac source) with established religion. The apparent contradiction of these two accounts the writer does not seem to have recognised as calling for reconciliation.

Among the literary events in Paris is the extinction of the liberal Protestant paper, the *Lien*, and the appearance of a new political, philosophical, and literary journal, *La Renaissance*. The address to the reader thus describes the principles on which France may be regenerated:—"Ne te laisse plus conduire ni par un monarque, ni par un clergé qui, tôt ou tard mais infailliblement, te meneraient de nouveau à ta perte. En toutes choses, pour ton gouvernement comme pour ta foi, pour le ciel et l'avenir comme pour la terre et le présent, si tu veux renaître et vivre, fais tes affaires toi-même."

Dutch literature, which really deserves to be more studied than it is at present, has for its *Revue des Deux Mondes* an ably conducted monthly magazine called *De Gids* (The Guide). The April number contains a clear and forcible exposition of the method and results of comparative mythology, in which among other objections those of the *Edinburgh Review* are met and answered; also a warm appeal in behalf of Mr. Hare's system of representation; an account of Spinoza's *Korte Verhandeling*; and a paper on the state of singing in Holland—a country which "in the fifteenth and sixteenth centuries was the most musical in Europe."

The *Sacristy*, a quarterly which appeared last month for the first time, is a magazine wholly devoted to the interests of the elder children of the Anglican Church. Not only are the contents strictly ecclesiastical in character, but even the advertisements are confined to memorial brasses and works written on church principles. It will therefore be obvious that the articles which it contains cannot fairly be subjected to those rules of criticism which would apply to work done in the open grounds of literature. It can but be said that the contents of the present number prove that the editor has at his disposal contributors who show a fair measure of intelligence and literary skill. Herr Eckl's paper on "Christian Symbolic Zoology" displays some reading, and Mr. Heaton's "Hints on Colour for Decoration" are not only excellent in themselves, but so clearly and intelligibly put that they will be readily understood by the beginners for whom they are intended.

The first part of Mr. Haye's translation of Taine's book on Intelligence noticed in the *Academy* (vol. i. p. 290) has been issued separately, as the suspension of communication with France has retarded the work. So far as it has proceeded the translation is very satisfactory. It is to be completed in May.

Mr. W. G. Palgrave begins a series of "Arabiana" in the current number of *Fraser*, with a very interesting sketch of 'Omar, a poet, who flourished under the Ommiadæ at the culminating moment of purely Arabian civilisation, before the aristocratic culture of the Arab race had been destroyed by the egalitarian despotism which is the natural fruit of the Coran.

Señor Amador de los Rios, in the last number of the *Revista de España*, has commenced a very interesting series of essays on the famous Constable Alvaro de Luna—

> "Spain's haughty Constable,—the true
> And gallant Master, whom we knew
> Most loved of all."

Alvoro de Luna was an able, resolute, and patriotic statesman; an enterprising and successful captain; and the leader of a court in which most of the best poets of that age were, as Lope de Vega remarks, great lords, constables, admirals, and kings. The great Constable was the author of an unpublished prose work, dated 1446, *On Virtuous and Famous Women*, to which Juan de Mena wrote a preface. It is not, as its title might seem to indicate, a translation from Boccaccio, but an original work of the Castilian minister when at the height of his power. The great interest of the essay by Señor Amador de los Rios is caused by the view he gives of the political and social opinions of the Constable, derived from a study of the above work. The patriotic sentiments of Alvoro de Luna were of the loftiest and most self-sacrificing kind, and he denounced tyrants who attempted to rule in defiance of the law; though he considered the prosperity of the State to be impossible without the supremacy of royal power. This policy accounts for his fall; which was caused by the insatiable thirst for vengeance of the Spanish grandees. The patriot's death was a decisive triumph of a middle-age aristocracy.

In the number of the *Revista de España* for March 25, Señor Fulgosio gives some additional notes for the history of Galicia. He discusses the events connected with the destruction of the treasure fleet in Vigo harbour, by the English in 1702, in some detail. A company was recently formed for raising the treasure supposed to have gone to the bottom in the Spanish ships; but Señor Fulgosio conclusively shows that it was landed before the enemy arrived, and plundered by the country people in the confusion of the attack.

Don Emilio de Olloqui, a patriotic citizen of Vigo, has recently taken a very active and energetic lead in the promotion of measures for the improvement of that important Galician port, and with the completion of the system of railroads, a prosperous future may be anticipated for the cradle of Christian Spain, and for its commercial outlet at Vigo.

The recent republication of Lord Lytton's *King Arthur* has given occasion to the Rev. F. W. Farrar (in the *Fortnightly Review* for April) for what the average reader will think a strange escapade in criticism. Or rather he may accept the writer's own account of the matter, and decline to call it criticism at all. But then he will wonder why it should have been written, and how the author can have expected, as he evidently has, to reverse the general estimate of the poem by a mere discharge of superlatives in its behalf, proving no more than a confined personal persuasion of its excellence. It is true that he vouches for the sympathy of Shakespeare and Ariosto in his view; but even this testimony will fail to carry conviction in face of the quotations with which he has been ill-advised enough to furnish his pages.

Art and Archæology.

MACLISE'S CHARACTER-PORTRAITS.

There is much in the function of criticism which absolutely needs time for its final and irreversible settlement. And indeed some systematic reference to past things, now at length presenting clearer grounds for decision, seems a not undesirable section in any critical journal, which finds itself necessarily at the constant disadvantage of determining the exact nature of all grain as it passes with dazzling and illusive rapidity through the sieve of the present hour. Thus it might be well if a certain amount of space were willingly granted, in such journals, to those who, in the course of their own pursuits, find something special to say on bygone work, perhaps half if not wholly forgotten, yet which, for all that, may have in it a vitality well able to second any reviving effort when that is once bestowed.

Maclise stands, it is true, in no danger of oblivion; though he has lately passed away from among us with infinitely less public recognition and regret than has been bestowed, and that in recent cases, on painters infinitely less than he. His was a force of central fire whose conscious abundance descends at will on many altars, and has something to spare even for *feux d'artifice;* and it is fortunate that, after the production of much which, with all its vigour and variety, failed generally to represent him in any full sense, his wilful and somewhat scornful power did at last culminate in a perfect manifestation. His two supreme works—the "Waterloo" and "Trafalgar" in the House of Lords—unite the value of almost contemporary record with that wild legendary fire and contagious heart-pulse of hero-worship which are essential for the transmission of epic events through art. These are such "historical" pictures as the world had perhaps never seen before; bold as that assertion may appear in the face of the trained and learnedly military modern art of the continent. But here a man wrought whose instincts were absolutely towards the poetic, and yet whose ideality was not independent, but required to be exercised in the service of action, and perhaps even of national feeling, to attain its full development. These two splendid monuments of his genius, thus truly directed, he has left us; and we may stand before them with the confidence that only in the field of poetry, and not of painting, can the world match them as realised chronicles of heroic beauty.

However, my desire to express some sense of Maclise's greatness at its highest point is leading me away at the outset from the immediate subject of this notice, which has to do merely with an early and subordinate, though not ephemeral, product of his powers. I allude to the long series of character-portraits—chiefly drawn on stone with a lithographic pen, but in other instances more elaborately etched or engraved—which he contributed (under the pseudonym of "Alfred Croquis") to *Fraser's Magazine* between the years 1830 and 1838. Some illustration of Maclise's genius, in the form of a book ready to hand, and containing characteristic work of his, would be very desirable; and I am not aware that any such exists at present. If unfortunately the original plates of these portraits have been destroyed, they are exactly such things as are best suited to reproduction by some of the photo-lithographic processes, and I cannot doubt that by this means they might be perfectly and permanently recovered and again put in circulation. I suppose no such series of the portraits of celebrated persons of any epoch, produced by an eye and hand of so much insight and power, and realized with such a view to the actual impression of the sitter exists anywhere; and the period illustrated possessed abundant claims to a worthy personal record. Pre-eminent here, among literary celebrities, are Goethe, Walter Scott, Coleridge, Wordsworth, Charles Lamb, and Thomas Carlyle. Each produces

the impression of absolute trustworthiness, as in a photograph. The figure of Goethe alone, though very vivid as he gazes over his shoulder with encountering unreleasing eyes, is probably not derived from personal observation, but reproduced from some authority—here surpassed (as one cannot but suspect) in clear directness of rendering. The portrait of Scott, with its unflinching enjoyment of peculiarities, gives, I have no doubt, a more exact impression of the man, as equipped for his daily life, than any likeness that could be met with. The same may be said of the "Coleridge"—a mournful latter-day record of him, the image of a life subdued into darkness, yet survived by the soul within its eyes; and of the "Wordsworth"—beneficently enthroned, as if for the distribution of some order of merit to encourage the forces of nature; while Lamb, on the contrary, is shown to us warmly ensconced, sucking at his sweet books (and some other sweets) like a bee, and only conscious of self by the thrills of that dear delight provided. As for our still living glory, Carlyle, the picture here given of him, in the simple reserved strength of his earlier life, convinces us at once of its priceless fidelity. Fortunately this portrait is one of those most carefully modelled and engraved, and is a very beautiful complete piece of individuality. This, no doubt, like some others, is a direct portrait for which the original actually stood; while many, on the other hand, are reminiscences, either serious or satirical, of the persons represented.

It would be vain, in such space as I have at disposal, to attempt even a summary of the numerous other representatives of literature here gathered together; from the effete memorial effigy of Rogers, to Theodore Hook, jauntily yet carelessly posed, and with a twinkling, self-loving face, which is one of the special masterpieces of the collection. But I may mention, almost at random, the portraits of Godwin, Leigh Hunt, Cruikshank, Disraeli the elder, and the Arctic voyager Ross, as presenting admirable examples of the series. To convey a correct idea of the manner of these drawings to those who have not seen them would be difficult. Both in rendering of character, whether in its first aspect or subtler shades, and in the unfailing knowledge of form which seizes at once on the movement of the body beneath the clothes and on the lines of the clothes themselves, these drawings are on an incalculably higher level than the works of even the best professional sketchers. Indeed no happier instance could well be found of the unity, for literal purposes, of what may be justly termed "style" with an incisive and relishing realism. A fine instance, though not at all an exceptional one, is the figure of the poet Campbell, leaning back in his chair for a few whiffs at his long pipe, amid the lumber of an editor's office. The whole proportions of the vignetted drawing are at the same time so just and fanciful, and the personage so strongly and unflinchingly planted in his place, that the eye and mind receive an equal satisfaction at the first and last glance. Kindred instances are the figures of Jerdan and Galt, both equally admirable. Of course, as in all cases of clear satisfaction in art, the gift of beauty, and no other, is at the bottom of the success achieved. I have no room to point to many instances of this, but may refer to one; namely, the rendering—whimsical, as in the spirit of the series, yet truly appreciative—of that noble beauty which in Caroline Norton inspired the best genius of her long summer day. At other times the artist allows himself to render character by playful exaggeration of the most obvious kind; as in the funnily-drawn plate of Miss Landon, where the kitten-like *mignonnerie* required is attained by an amusing excess of daintiness in the proportions, with the duly charming result nevertheless. The same may be said of the "Count D'Orsay," that sublime Avatar of the eighteen-thirties, a portrait no doubt as intensely true to impression as it is impossible to fact.

I have already spoken of the literary leaders represented. Here too are the kings of slashing criticism; chiefs of that phalanx of rampant English and blatant Scotch mediocrity: insolent, indolent Maginn; Lockhart, elaborately at ease; Croker, tasteless and shameless; and Christopher North, cock of the walk, whose crowings have now long given place to much sweet singing that they often tried to drown; and who, for all his Jove-like head, cloud-capped in Scotch sentiment and humour, was but a bantam Thunderer after all. Not even piteous inferiority in their unheeded successors can make such men as these seem great to us now. There they lie—broken weeds in the furrows traced by time's ploughshare for the harvest which they would fain have choked.

It may be doubted whether Maclise saw clearly the relative importance of all the characters he portrayed in this gathering. His instincts were chiefly those of a painter, not of a thinker; and moreover he was doubtless, as a young man then, a good deal under the influence of association with the reckless magazine-staff among whom he worked in this instance. Accordingly some of the satire conveyed by his pencil is now and then not in the best taste; though perhaps the only really strong instance of this is the laughable but impertinent portrait of Miss Martineau. Many are merely playful, as the "Siamese" version of Bulwer-Lytton at his shaving-glass; or that flush of budding Oriental dandyism here on record as the first incarnation of Benjamin Disraeli.

But one picture here stands out from the rest in mental power, and ranks Maclise as a great master of tragic satire. It is that which grimly shows us the senile torpor of Talleyrand, as he sits in after-dinner sleep between the spread board and the fire-place, surveyed from the mantel-shelf by the busts of all the sovereigns he had served. His elbows are on the chair-arms; his hands hang; his knees, fallen open, reveal the waste places of shrivelled age; the book he read, as the lore he lived by, has dropped between his feet; his chap-fallen mask is spread upward as the scalp rests on the cushioned chair-back; the wick gutters in the wasting candle beside him; and his last Master claims him now. All he was is gone; and water or fire for the world after him—what care had he? The picture is more than a satire; it might be called a diagram of Damnation; a ghastly historical verdict which becomes the image of the man for ever. This is one of the few drawings which Maclise has signed with his *nom-de-crayon* at full length; and he had reason to be proud of it.

But I must bring particulars to a close, hoping that I may have roused in such readers of the *Academy* as were hitherto unacquainted with this series, a desire to know it and an interest in its possible reproduction. This, I may again say, seems easy to be accomplished by photo-lithography, though I do not know myself which of the various methods more or less to be classed under that title is the best for the purpose. The portraits should be accompanied in such case both by the original magazine-squibs necessary for explanation, and by some competent summary of real merits and relative values as time has shown them since. And before concluding, I may mention that in the Garrick Club there is a sketch of Thackeray by Maclise, in pen or pencil (I forget which), evidently meant to enter into this series. It is Thackeray at the best time of his life, and ought certainly to be facsimiled with the rest in the event of their revival.

D. G. Rossetti.

INTERNATIONAL EXHIBITION OF 1871.

(*To open on the* 1*st of May.*)

The permanent brick buildings erected for this important undertaking are very extensive. They reach from the great Conservatory behind the Albert Hall down either side of the large garden of the Horticultural Society to the remaining portion of the 1862 Exhibition erections, in which the portrait collections have lately been opened to the public, and where the Meyrick armour at present stands. These buildings contain two floors, communicating by ample staircases, and are entered by two wide approaches on each side—on the west from Prince Albert's Road; the east from Exhibition Road, on which side there is an additional building, the "French Court," erected to accommodate the industries and science of our neighbours, and which it is hoped they will fill, in spite of their national disasters and dissensions. This "Court," which will contain a Restaurant, the general Refreshment Rooms being in the south centre in the old 1862 premises, communicates directly with the upper floor of the Exhibition building proper, appropriated on this east side to the pictures of all nations. The corresponding upper floor on the west side is the gallery of English paintings: sculptures in marble being distributed along the floors, along with other Fine Art productions, breaking the length of line by many various groups, and in or near the centre of the eastern galleries is a division appropriated to reproductions. The principal object here is the stupendous cast from one of the gates of the Sanchi Tope, lately arrived from India, with a model of the entire Tope in soapstone. This cast of the gate gives the spectator a sense of the surprising magnitude and rich elaboration of the entire monument. Besides this, there are reproductions of Byzantine

mosaics, the S. George from Prague, and other early works. Below this entire east line of galleries is a series of apartments, or rather a long vista partially divided by arched openings. This large space is for the exhibition of earthenware, porcelain, tiles, and mosaics of all nations—England, as we might expect, bearing away the first place in excellence and the lion's share in point of space. Oriental productions are also placed here, carpets, &c. On the western side, under the English Fine Art galleries, the same vista of space is furnished with innumerable wheels and belts from a steam engine of enormous power, and is appropriated to machinery in motion, improvements in mechanics, models, implements, and metal works.

As yet this whole line is void; it will not be till nearly the opening that the machinery will be brought in, as it requires daily care and attention from the exhibitors of each article. The English Fine Arts galleries are at present the most complete portion of the entire arrangement, but there is no propriety yet in particularising the more prominent works. On the other side, the Earthenware galleries are very forward. Curious and interesting ware from Tangiers and Portugal stand alongside of the indian-red highly-polished clay from Egypt and Assoin. As yet we notice few examples from the Continent, nor any glass. But the Irish ware showing the faint metallic lustre will attract attention, and W. B. Simpson and Son's mosaic and tile productions are very remarkable. Of course all our great Staffordshire potters are strong. The two most perfect pieces yet placed, certainly among the most perfect porcelain triumphs in the world, are Minton's Vase with the Lovers surrounded by cupids, and Binns' two Vases with Maclise's Norman Conquest series of designs worked round them in enamel. Of course it is the art not the manufacture of these things that makes them priceless, and the names of the artists we will take care to celebrate in a future notice.

The French picture gallery is at the end of the line nearest the French "Court." Ample room has here been apportioned to our neighbours, but as yet little is done to fill it, one line of pictures being all now visible. There is a confident expectation, however, that a display worthy of the school and of the friendship of the two nations will be ready before the 1st of May. Meantime Düsseldorf, Munich, Weimar, Brunswick, Norway, Hungary, Italy, Rome in particular, all appear in forwardness, and one large gallery entirely given to Belgium is already hung. Many of the pictures are very large; some in a high degree sensational.

Van Lerius, the present Director of the Fine Arts in Brussels, exhibits "Godiva," a picture which cannot fail to be one of the leading attractions. The greatest work we noticed, however (only in such confusion, and among so many it is difficult to concentrate attention), is a large work by Emile Wauters, the subject being a young woman examined before a civic tribunal in the fifteenth century. Works in miscellaneous sculpture, plaster, architectural enrichment, &c. will be distributed under the long arcade or piazza looking on the Horticultural Gardens.

SOCIETY OF BRITISH ARTISTS, SUFFOLK STREET.

This is the forty-eighth annual exhibition of the Society. We have not visited it for years, and going to it now suggests sundry reflections which may be more worth record than our extended opinions of particular pictures. The Society of British Artists we observe severely handled by some critics, and we understand many artists as well as critics show it little respect. There is nothing so successful as success, and on the whole this society has not taken, or at least has not held, the high place it ought to have, as an independent body requiring only a fair field and no favour, affording the younger artists a place for exhibition and the elder ones who are not in the Academy an important united position. Why does it not receive respect, and why is this gallery not filled with all the best pictures done in England not exhibited in Burlington House? To answer this question is very difficult. Perhaps some quite external and accidental reason is at the heart of the matter, causing men to inaugurate new petty societies and cliques in the Egyptian Hall and Bond Street, instead of amalgamating with this larger and earlier established body of "British Artists." The legitimate reason would be that the Suffolk Street exhibition is already a bad one, but even this would be radically changed by the best of rising artists joining it: the real reason is it has got a bad name. Here is as much landscape talent, as many admirable works in that department, as in all our other exhibitions put together, except indeed occasionally in Burlington House; animal painters of eminent ability, whom we may as well mention at once—Ernest Griset (177), C. Jones (365), and J. S. Noble, Jun. (201); and genre painters equal to any we have perhaps, yet all these fail to give the collection importance. Criticism on the exhibitions in London is a matter of *on dit* and second-hand amateur opinion, and the writers judge exclusively by names. It is the same with the publishers of engravings, otherwise one of these gentlemen would rush to Mr. Haynes King, and instantly arrange for the publication of No. 78, "From one who loves me dearly," as a companion to Mr. Faed's "Lassie writing a love-letter on the top of a tea chest;" No. 100, by Edwin Roberts, "A Hard Case," would attract the crowd at Graves' window, dividing attention with "The Pet Pigeon" (174), by A. F. Patten. Is "A Nymph and Bacchanal" (139), by W. Salter, inferior to old Henry Howard's best works of that class? If not, the name of the painter should be held in equal regard.

The landscape painters we would particularly notice are numerous. "Moonlight" (401), A. Clint, the President of the Society, is a very successful realisation, and charming in colour. In other pictures by this artist we object to compositions instead of actual places, but in this "Moonlight" the arrangement of the scene is properly subordinate to the effect required. "Dawn in the New Forest" (196), by H. Moore; "Dewy Eve" (299), by G. Cole; "An Autumn Evening" (143), by J. Syer; and a "Summer Evening" (508), by A. Panton, all deal with the same sentiment, and all have a distinct character and a large degree of mastery. "A Welsh Stream" (405), by J. Peel, and "Pirates burning their Prize" (277), by J. Danby, are both noticeable works, admirable in several respects; also "Homeward Bound" (502), E. W. Downard; "Oyster Boats going out" (129), G. S. Walters; and "Retour au Port" (509), by J. J. Wilson. In these, especially in the last, there is a conventional commonplace in the manner of painting the water, but after all, it is about as good in its way as Stanfield's best seas used to be, and has a suggestion of fresh sea air. Among the water colours Miss F. M. Keys' "On Dartmoor" (700) is admirably felt, and exceptionally good in execution. Miss Gilbert's "Lady Macbeth" (710) deserves mention in the same room.

Besides the figure pictures we have mentioned, and a few contributed by the popularities of the day, we have "The Warrior's Cradle" (146), by Maclise, one of his works we believe not previously seen by the public; and two by A. B. Donaldson, "The Princess and her Seven Swan Brothers" being admirable in colour and invention. Messrs. Ludovici and Woolmer are in considerable force; but the "Death of Gaveston," the favourite of Edward II., by Valentine W. Bromley, is the only important historical subject in the collection. The absence of works of a poetic interest, or dramatic ability, is very marked; but it is only here as elsewhere, the intellectual calibre is narrow, and the standpoint not very high. The great defect of the exhibition is that it has too many pictures, half of them being detrimental, a defect perhaps inherent in the constitution of the Society.

EXHIBITION OF PICTURES BY ARTISTS OF THE CONTINENTAL SCHOOLS, FRENCH GALLERY, PALL MALL.

This is the eighteenth annual display of works by French and Belgian painters, and we cannot help thinking the slight change in the title, widening the range of the collection to "Continental Schools" a judicious one. Not that there are any other Schools represented than those hitherto seen on these walls, but the attention of the London public may be now supposed pretty well used up in French art as in French affairs generally. It is true "the love of our neighbours" in a certain sense is on the increase with us, an underground contagion has communicated a tone or flavour to the taste and professional bias of a few of our poets and painters; but this is rather the affectation of men who are exactly at the impressionable period of life, and the English masses equally with our most highly cultivated chiefs must remain unsympathetic to the leading characteristics of French art. Nothing is so distinctively national as taste in the plastic arts, and of all the arts, most truly so in painting, which reflects the public desires and views of well-being and beauty.

Greatly superior as the French are technically to us, we are quite certain that familiarity will not make their painters more highly appreciated by us; on the contrary, after the first admiration caused by excellent manipulation has ceased to surprise us, their motives, their views of love and lovable women, their amateur Orientalism, their exclusive atelier education, all make them antipathetic to a nature-loving public like ours. Moreover, the French artist has an exclusive regard for Paris, and if he remains in London or paints for London, will not produce his best; even so good an artist as M. Gerome, in the works he exhibited in this very gallery's Winter Exhibition a few months ago, and in the Dudley Gallery Water Colour Collection, was unworthy of himself. From the catalogue of the exhibition now under review, we learn that Daubigny, Robert Fleury, Gerome, Heilbuth, L. G. E. Isabey, Saintin, Yvon, are all in London, and many more whose talents are worthy of all respect. Without any inhospitable feeling or want of respect, we hope that the troubles of France may cease and relieve them from exile.

Turning to the pictures themselves, we find all over the walls things that excite more or less very pleasant and grateful feelings, but principally by their executive excellence. Among the landscapes, although these are not very numerous, are some of the most perfect and surprising realisations. "Une Plage de Villerville-sur-Mer" (7), C. F. Daubigny, is the simplest possible in materials, but truly masterly and charming in handling and style. "On the Coast of Schevening" (13), F. H. Kaemmerer, and its companion, "Friends or Foes?" (19), though nothing but a cannon on a carpet of snow, are perfect as far as they go. "Early Morning" (73), J. B. Corot, is full of colour, and painted with the artist's most rapid and powerful hand. "North Sea—Morning" (154), H. W. Mesdag, is an accomplished work by a new name. But more important figure pictures of the best class are unusually deficient. "A Chorister Boy" (16), by Henriette Brown, a life-size boy in scarlet, rubbing up a pewter or silver crucifix, is vapid in the extreme, the scarlet cassock alone having induced the painter to do the picture. "The Vision of S. Hubert" (24), by J. Gallait, a highly popular painter in this country, is incredibly commonplace and melodramatic. Even those pictures that produced a sensation at the Salon just before the war began will fail to do so here. The principal among these is "Gulliver fastened to the ground and surrounded by the army" (58), by G. J. Vibert, in which the great ability in depicting a serio-comic multiplicity of action among the Tartar-like Lilliputians does not interest for any length of time. Another is "Indecision" (44), by Saintin, which retains "Medaille," a talismanic word in Paris, on the frame; but while we admit the perfect workmanship, the extraordinary finish, and altogether admirable realisation and good taste, is so vacuous in subject—a young woman looking at the weather by the edge of a Venetian blind—that our wonder is changed into perplexity, to understand how a man who paints so well can find nothing else to paint. "Pages playing at Chess" (12), A. Guès, is exceedingly well drawn, and the background is a well thought out medieval interior. But we must confess that there is something in all figures in tight costume one sees on French canvasses that raises one's dislike somehow or other. There are, however, more lovable pictures here, female beauty of course occupying nine painters out of ten. "An Eastern Girl" (35), J. L. Gerome, is a leading example, though not an important one, by the master. It represents a very young woman, draped so as to intensify the supposed voluptuous impression. No. 151 is another "Eastern Girl" by C. Landelle, a good work in many respects, in spite of the smooth surface of the painter. We wonder how many Eastern Girls are annually painted in Paris, and fail to see any *raison d'être* for the whole of them. Then we have the usual *Conversational* subjects, or *Tableaux de Société*, for example, "Selecting a Flower" (33), F. Willems—all of them so beautifully painted and so vacuous. The finest things in this exhibition it appears to us are Josef Israel's productions, especially two, "Going Home" (8), and "A Cottage Madonna" (57). These are truly fine as art and also as emotional inventions. Alma Tadema's "In the Temple" is quite worthy of mention before closing our brief notice, and "Evening in Genoa" (101) is certainly one of the very best works in the room. It is full and rich in composition, tone, colour, and indeed is a picture of thorough accomplishment. The name of the painter, Jos Fluggen, is new to us.

William B. Scott.

Music.

NOTES ON MUSIC.

The noble "function" on the eve of Good Friday, for which, so it is said, we are indebted exclusively to the munificence of the Dean of Westminster, was attended by an enormous congregation. Not since the Middle Ages, possibly never, has so vast a crowd been gathered within the walls of the most interesting of English churches. The "Special Service" announced proved as remarkable for its "order" as for the means employed in its "administration." A portion of "Evensong" was followed by a selection from "The Passion of our Lord according to St. Matthew, set to music by John Sebastian Bach;" and this not by a few voices, and with the necessarily mutilated and imperfect accompaniment of the organ, but, after the design of the composer, with a large chorus and band of instruments, wind and string, each divided into two; these being placed not in a gallery, but, according to time-honoured church use, facing one another on stages gently rising from the floor. The chorus consisted of men and boys only, without exception surpliced; and by these the instrumentalists were slightly masked, though not avowedly hidden—for to have hidden them would have been, in a certain sense, to have stultified the whole proceeding; seeing that *their* presence was the chief novelty involved in it—a novelty which has, in our own time, struck the first blow to a superstition deeply planted in the English religious mind—that performance on pipes blown by artificial bellows, and set in vibration by putting the fingers on certain pieces of ivory and the toes on certain pieces of wood, may be an act of worship and may tend to edification, but that the inflation of pipes by human lungs and the setting in vibration of strings by certain motions of the human arm are acts necessarily worldly, not to say profane.

Four "grand original fantasias," for full orchestra, chorus, military band, &c.—the &c. proving to be *cannon*—were performed at "The Royal Alhambra Palace" in immediate succession on Thursday. They had been selected for trial from thirty-nine compositions of as many candidates for a prize of 200*l.* offered by the directors for the best work answering the description quoted above. In their views of the capabilities of music to describe or suggest any conceivable incident or sentiment, the four composers, to judge from their printed programmes, are thoroughly agreed. One has not been withheld from expressing, by musical sounds only, that "every house is illuminated;" another gives, through the same medium, the "preliminaries of peace," and even "sneers at the King of Prussia's proclamation" and "the Emperor Napoleon's declaration," which might have seemed without the functions of his art. In another view or intention the four, and no doubt th. thirty-nine, composers are altogether at one—that of getting the utmost amount of noise out of one of the largest bands (for the most part "military") ever got together. The choice of the "jury," fully confirmed by the suffrages of a large *invited* audience, fell on the third piece performed, which, on opening the sealed envelope containing his name, proved to be the composition of M. F. Van Herzeele, a Belgian band-master. It will of course at once be made a stock piece at the Alhambra concerts and doubtless prove attractive, being cleverly written and skilfully scored—no better proof of which could have been given than the attention with which it was received on Thursday by an audience already nearly deafened by two compositions of like duration and intensity.

Rossini's setting of the *Stabat Mater* is so recent and, whatever its faults or failings, so beautiful that the great body of musical amateurs might be excused having forgotten, even if they had ever known, that the most touching and popular of mediæval hymns has continually exercised the genius of musicians since anything that would now be called music has had existence. Not to speak of the remoter efforts of a Josquin or a Palestrina, a contemporary of Handel, Pergolesi, some of whose compositions still keep their places in public favour, has left us a setting the popularity of which in its own time is attested by very numerous editions; and, almost in the memory of living men, the father of instrumental music—the last of the fine arts to attain to anything like perfection—that further illustrated the various phases of feeling suggested by Jacopone in

music as varied and beautiful as it is thoroughly well made. A performance of this music occupied the principal portion of the "public rehearsal" given at the Royal Academy of Music on the 4th inst., and presented proof, if such were wanting, in the manifestly deep interest of a crowded audience, that, like innumerable works all but unknown to the present generation, Haydn's *Stabat Mater*, fairly interpreted, might hold its own in comparison with some even of the best of the very few compositions of its class which the public ever have a chance of hearing. It consists of no less than seven airs for each of the voices male and female—a duet, a quartet with chorus, and five choruses more or less intermixed with solos. The orchestration is of a kind that brings it within the reach of very moderate musical means. No wind instruments are employed save *corni di bassetti* or, in their default, *oboi*. So ingeniously, so tastefully, and so effectively, however, is the stringed quartet employed, and so various as well as beautiful are the musical ideas which it is employed upon, that even to the modern and somewhat exacting ear no sense is apparent of any shortcoming either in force or variety. The directors of choral societies will do well to turn their attention to this work, which, though susceptible of any amount of finish that can be given to it, presents no insuperable difficulties of execution, and will give great pleasure during its practice and preparation. A word—more to those as yet *in statu pupillari* would be unadvisable—of praise is due to the for the most part youthful performers to whom its revival is owing. The solos without exception were delivered with feeling and method; the chorus was faultless in time and tune, and singularly fresh in *timbre;* and the orchestra forcible or delicate, as force or delicacy was called for; exhibiting, too, a feeling for those they were accompanying very rare among young *virtuosi*.

New Publications.

Axon, William E. A., F.R.S.L. Folk-Song and Folk-Speech of Lancashire. Manchester: Tubbs and Brook.

Conversations on War and General Culture. By the Author of Friends in Council. Smith, Elder, and Co.

Howell, W. D. Suburban Sketches. Sampson Low.

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Stephen, Caroline Emelia. The Service of the Poor. Macmillan.

Theology.

The Jesus of History. By the Right Hon. Sir Richard Hanson, Chief Justice of South Australia. London and Edinburgh: Williams and Norgate, 1869.

Two impulses have contributed of late years to render the life of Christ a fertile department of theological literature. In Germany, almost ever since Strauss's first *Leben Jesu*, a succession of critics has been occupied with researches into the origin of the Gospels, and the attempt to connect them with the earliest history of the Church. The progress already attained may be seen by comparing the first work of Strauss with the second, though the latter fails on some points to do justice to the present state of criticism. A second impulse has been given by M. Renan, who, not without a good acquaintance with German works, has been the first to renew the bold attempt to reconstruct the life of Jesus. Although in doing so he has often allowed too much play to the fancy, yet he has said much that is striking and stimulating, and has infused new life into the criticism and literature of the subject. The problem is one of the most difficult in history, not only because it is subject to the influence of religious opinion, but because few of the sources in their present form are direct or primary, and because the central point of this history is almost entirely beyond the range of observation and analysis. A knowledge of the facts seems only attainable by the twofold method of analysis and hypothesis. The foundation must be laid in an analysis, according to the strict rules of criticism, of the historical contents and the style of the documents. But this criticism cannot be carried out without drawing a distinct, though only probable, outline of the life of Jesus Himself, and of the course of the earliest Church history. Such an outline is a hypothesis, resting on observations made at the sources of our knowledge, and is the condition of making new and more exact observations, by which again the hypothesis itself may be confirmed, corrected, or even overthrown. Hence no work on this subject will now possess scientific value, unless it to some extent combines a critical examination of the documents, with an attempt to represent the history itself as a whole. *The Jesus of History*, closely connected as it is with the German and French literature on the same subject, is a proof of the international character of these inquiries. But it is in many respects quite original. The author has devoted the larger share of his attention to the task of setting forth the life of Jesus from a purely historical point of view, and of recovering, so far as is possible with existing data, the exact degree of knowledge possessed by the Jewish Christians before the fall of Jerusalem. We have followed him step by step, and cannot withhold our testimony to his strict and disinterested love of truth, as well as his calm and careful deliberation. With great conscientiousness, he has everywhere distinguished between what we can really ascertain and what we can only venture to accept as probable. For that very reason he has also in many cases confined himself to showing that on certain points nothing is known, and he carefully abstains from filling the void with dogmatic inferences or imaginative pictures. His style is free from all rhetorical pathos; it is the style of a sober, cautious, and reflective writer, who declines to work with any but given quantities. What more than anything else distinguishes his mode of treatment, is the care with which he detaches his views from all accustomed ideas and opinions, and seeks to transfer himself entirely to the mental position of the persons described. It may be true that he has not done full justice to the higher force of ideas, which, in the supreme moments of history, extend their sway far beyond a particular age; still a strictly practical estimate is desirable of the motives and plan which may conceivably have been present to the mind of Jesus. Such investigations were common in the early decades of this century, though now, perhaps, they are too much forgotten.

The work falls into three books. The first treats (1) of Judaism, (2) of the documents respecting the life of Jesus, (3) of the Synoptics, and lastly (4), under the title of "Probabilities," of some preliminary questions on points of detail. The investigations into the documents are supplemented by the fourth section of the second book, in which the relation of the first and the third Gospel is examined still more closely. As sources of information, the author recognises only the synoptic Gospels. He excludes the fourth Gospel on account of the lateness of the testimonies to it, the opposition between its contents and the point of view which the Epistle to the Galatians compels us to ascribe to the Apostle John, and the internal improbability, or rather the evidently unhistorical character, of many of the narratives contained in it. We cannot altogether approve of this treatment of the fourth Gospel, nor of the reasons assigned for it. Even the synoptic Gospels are hardly better attested than the fourth; and as to the position of John we learn scarcely anything from the Epistle to the Galatians. Nor is the character of the several narratives of the fourth Gospel really decisive. Granting the very extraordinary character of the narratives of the resurrection of Lazarus and the visit of Jesus to Samaria, still we may match each of these by several passages in the first Gospel, *e. g.* the sending of

the evil spirits into the swine, and the intercourse of Jesus with the publicans, &c. We do not deny that these Johannine narratives have an artificial air when examined in detail. Still this does not necessarily involve the condemnation of the whole Gospel. That this cannot be regarded as historical in the ordinary sense of the word is now all but universally recognised among scientific critics. But a careful examination of it reveals, above and beyond the undeniable influence of the ideas of its author, such a definite residuum of documentary material that the question forces itself upon us, how far we have here to deal with a historical tradition distinct from that of the Synoptics. This question is difficult to answer; indeed one may say that properly speaking its examination has only just begun, and we are very far from finding fault with those to whom the unavoidable impressions of the unhistorical character of the Gospel occur with irresistible force.

But we believe the author has not taken sufficient account of the other side of the question. Among the synoptic Gospels he gives the first place to St. Matthew. This, at least in its present form, he justly declines to regard as the original of Mark, or as in any sense an ultimate authority. The oldest Gospel was gradually added to, and in our Gospel according to St. Matthew, the original Judaistic and anti-Judaistic portions, he thinks, may still be distinguished. He connects with this the statements respecting both Gospels in Papias, and adopts the view that the Logia of Papias, as well as the "Mark" described by him, are combined in our "Matthew." This combination forms the basis of our present "Mark," but it was not till after considerable additions that it assumed the full form of our first Gospel. Some of the elements of this theory are no doubt correct. But it is founded far too much on merely general observations and conjectures, and thus is much less unassailable than according to the present condition of science it ought to be.

The relation between the two first Gospels can only be determined accurately by having recourse to the third. This is no doubt the latest of the three, but its author had certainly not our first Gospel before him, and probably not our second. Its coincidence with these can therefore only be explained upon the supposition that he was acquainted with some form of the documents upon which they were founded. In this way we may discover with a fair degree of certainty the original form of the Mark-record, and the form and modifications of the collection of the λόγια of the Lord ascribed to Matthew. There is still considerable variety of opinion on these questions, and therefore the author has some excuse for passing them over. But the omission is a defect in a scientific work, for a historical picture of the life of Jesus can only be based upon an exact determination of the contents of the earliest record, and not upon a merely arbitrary selection of passages, as Renan bases it, nor, as our author, upon a one-sided preference of a single Gospel.

Again, it is assumed that we have in our first Gospel the essential elements of the tradition received in the Church of Jerusalem, prior to the destruction of that city, and approved by the "pillar" apostles. There is much to be said against this view, and no direct evidence of its truth. All the records in use in the Judæo-Christian Church, were without doubt Aramaic. On the other hand, all investigations hitherto made into the language of our first Gospel have led to this double conclusion, 1. that it was originally written in Greek, and 2. that it is to be regarded as a perfectly independent version of the earliest records, and not a translation of them. The inconsistent character of the contents of the first Gospel has not escaped our author, who sets aside as later additions the doctrines of the rejection of the Jews and the extension of the Gospel to the Gentiles, on the ground that such views were impossible in the Jerusalem Church at that time. More accurate inquiries prove that the views on these matters which prevailed in the Jerusalem Church were by no means unanimously and continuously Judaistic. The fierce Jewish persecution which soon arose, and with brief intervals of respite broke out again and again, can only be explained upon the hypothesis that the Christians were regarded as the enemies of the Law; and this is confirmed in the most direct manner by the testimony of the Apostle Paul. Moreover, the prophecy of the destruction of the Temple and the decadence of the established religion, constitutes in the Synoptics such an integral part of the oldest tradition as can only be disregarded on the most arbitrary principles of criticism. These prophecies reveal circumstances, a state of opinion and expectation, totally different from those attributed to the earliest Church by our author. They supply us with a new means of estimating the oldest tradition respecting Jesus, and, indeed, the views which must be assigned to Him. Our author, on the other hand, in his chapter on "Probabilities," regards the exclusive Judaism which he attributes to the original Christian Congregation as the only direct result of the teaching of Jesus, and considers the passages in the Gospels which reveal a larger horizon, as of later origin. This is a mere assumption, unsupported alike by literary criticism and by history. This question, it should be borne in mind, may be decided quite independently of the conflicting theories as to the supernatural or merely human character which may be assigned to the teaching of Jesus. The extension of the Church beyond the Jewish nation may have been asserted by Him quite consistently, *e.g.*, with the truth of the latter of these theories.

In speaking of miracles the author asserts his right to subject them to critical investigation. He is correct, no doubt, in holding that in the interval between the death of Jesus and the formation of the earliest records miraculous stories may have grown up, and he lays stress on the very important fact that we have to deal with an age to which the belief in miraculous agency was natural, and that therefore the testimony of eye-witnesses, that they had seen miracles, amounts to nothing more than the testimony that they believed that they had seen them. In the section on "The Preaching of the Kingdom of Heaven," the author points out the distinction between two kinds of miracles attributed to Jesus, the cures, and the great miracles affecting the system of Nature. The former he is inclined to regard as having really occurred, and as explicable on the supposition of a peculiar gift in the operator, the historical existence of which in other persons and at other periods cannot be denied. In dealing with the latter, he holds that the explanation of such stories as gradual developments out of floating mythus into definite narrative, is both natural and legitimate, and relieves us from the violent alternative of fact or imposture. This seems to us a very fair argument, still it should always be remembered that a thoroughgoing distinction between the two classes of miracles cannot be maintained. Even the miracles of healing are only known to us through the medium of the views and beliefs of the eye-witnesses and the earliest narrators; it is now impossible to speak positively as to the actual occurrence. All that can be inferred with certainty from the collective evangelical tradition is that in some sense the healing of the sick formed part of the ministry of Jesus. But we will not dwell further on these objections. The observations of the author as to the value of this class of narratives, in which he shows that they are not to be taken as decisive proofs of a contemporary belief in Christ's Divinity, deserve the most careful consideration. He admits that the utterances of

Jesus himself on the subject of his miracles are not uniform, that while rejecting a faith which rests only on the evidence of "signs," Jesus expressly appeals to the testimony of his works. Difficult as it is to bring the several passages into complete harmony, their variety of expression may probably cover two facts, 1. That Jesus declined to give those particular signs which were expected of the Messiah, 2. That He pointed notwithstanding to His beneficent works as an evidence of His mission. C. Weizsäcker.

(*To be continued.*)

THE HEBREW TEXT OF PSALM LXXXVIII. 2 (1).

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In the Authorised Version this verse appears to be quite simple and distinct: "O Lord, God of my salvation, I have cried day *and* night before thee." But the Hebrew text is not equally free from difficulty and obscurity; it is indeed faulty both in grammar and in rhythm.

Ewald translates:—

"O Jahve, meines Heiles Gott,
wann Tag's ich rufe, in der Nacht vor dir:"

Hupfeld:—

"Jhvh, Gott meiner Hülfe,
am Tage da ich geschrien habe—in der Nacht vor dir."

Hitzig:—

"Jahve, Gott meiner Rettung,
zur Zeit, dass ich schreie Nachts vor dir:"

The most literal rendering of the present text appears to be:—

"Jehovah, God of my salvation,
In the day that I cried by night before thee:"

which, of course, must be erroneous.

I venture to suggest the following emendation of the text:—

יְהוָה אֱלֹהֵי שִׁוְעָתִי יוֹם
צָעַקְתִּי בַּלַּיְלָה נֶגְדֶּךָ

which, by a very slight alteration (viz. the omission of the initial י of ישועתי, which may have been but a repetition of the final י of אלהי), removes the faults of grammar and rhythm, restores the parallelism, and brings the verse into harmony with other similar passages in the Psalms, such as xxx. 3 (2)—

יְהוָה אֱלֹהַי שִׁוַּעְתִּי אֵלֶיךָ

Ps. xviii. 7; &c.

Glasgow, March 7, 1871. Duncan H. Weir.

Intelligence.

The death (March 16) of Prof. M'Gill, of St. Andrews, demands more than a passing allusion, as he was not only a promising Semitic scholar, but a valued correspondent of the *Academy*, and, in intention at least, a contributor to its pages. He was born in 1832 in the parish of Glenluca, Wigtonshire, and studied at the university of Glasgow. Whilst minister of the chapel of Sauchie, near Alloa, he gave all his spare time to the Semitic languages, particularly Chaldee. The results of his studies were partly embodied in an article on Biblical Chaldee in the *Journal of Sacred Literature*, the substance of which was afterwards transferred to Dr. Pusey's *Daniel*. Whilst at Sauchie he began to collect materials for a Chaldee Grammar and Chrestomathy, and it is hoped that some of his most valuable notes on Biblical Chaldee and the Targums may yet be published in some form. He was appointed to the Hebrew chair in St. Andrews in 1868. His loss is much felt, as he was not less liked as a man than admired as a scholar.

Contents of the Journals.

The Roman Catholic **Theologisches Literaturblatt** continues to set an example of learning and candour which our English reviews would do well to imitate. The two March numbers present us with able and candid critiques of the Life of Reuchlin by Dr. L. Geiger (son of the eminent Rabbi), and of Hase's Manual of Protestant Polemics. Dr. Kampfschulte recognises the solidity of Geiger's researches, though he questions whether the struggle of the Humanists was really for free thought, as the author represents. Dr. Reusch is equally appreciative (with some qualifications) of the merits of Hase, who is no bigoted Protestant, but allows the *raison d'être* of Catholicism. Dr. Langen notices Schegg's commentary on St. Mark, and shows at great length the early origin of the modern way of counting the hours; while Evelt reviews favourably the recent work of Schuerer on the Paschal Controversies.

In the **Theologisch Tijdschrift** for March, Prof. Hoekstra endeavours to confirm the theory of the late origin of Mark in its present form by the peculiar character of its Christology. Dr. Tideman discusses recent theories on the Essenes and Therapeutæ; he defends the historical character of the treatise On the Contemplative Life, and also of the Therapeutæ, which has been called in question by Kuenen. Mr. Tiele analyzes the contents of Dr. Muir's new volume of Sanskrit Texts, and Kuenen those of Merx's edition of Tuch's Genesis.

In the **Theological Review** for April, Mr. Mackay gives a sketch of the origin of Christianity as expounded by Baur; Miss Cobbe discusses Mr. Darwin's theory of the origin of the Moral Sense, and his doctrine of the nature of Repentance, which she rejects on the basis of psychology; and, to omit ephemeral articles, Mr. R. Martineau notices, perhaps too leniently, Dr. Williams' Hebrew Prophets, vol. ii., and Mr. Crowfoot's Fragmenta Evangelica.

In the **Götting. gelehrte Anzeigen**, March 15, H. E. gives a thorough and severe critique of Grätz's edition of Ecclesiastes. Prof. Lagarde reviews (April 5) Hartel's edition of Cyprian, and indicates the lines on which critical enquiry will have to move before a definitive edition can be produced; he recognises, however, the careful editing and provisional utility of Hartel's work.

In the **Literar. Centralblatt**, March 18, a high opinion is expressed (from a "liberal" Protestant point of view) of a R. C. work on the Psalms, which forms the first part of a popular commentary on the O. T. by various writers. Philological matter is relegated to appendices. (See New Publications.) Th. N. reviews (April 8) vol. ii. of Fürst's History of Biblical Literature, &c., a very extravagant work.

New Publications.

Geiger, P. E. E. Der Psalter Salomo's herausgeg. u. erklärt. Augsburg: Wolff.

Hefele, C. J. A History of the Christian Councils from the Original Documents. Transl. by W. R. Clark. Edinburgh: Clark.

Perowne, J. J. S. The Book of Psalms: New Translation, with Notes. Vol. II. New edit. Bell and Daldy.

Rohling. Die Psalmen übersetzt u. erklärt. Münster: Koppenrath.

Science and Philosophy.

The Dialogues of Plato, translated into English, by B. Jowett, M.A., &c. 4 vols. Clarendon Press.

The high academical reputation of the Master of Balliol, and his early success as a writer of thoughtful and graceful essays, will have prepared scholars and men of letters to expect from him a complete and discriminating estimate of the merits of Plato and Platonic philosophy. The union of boldness with reverence which candid readers have recognised in his writings, in spite it may be of dissent from his conclusions, his subtle perception both of differences and analogies, above all his unquestioned zeal for truth and spirit of enquiry, seemed to guarantee the lovers of Plato against any want of sympathy with an author who exhibits all these qualities in their highest degree: while his long Oxford experience, and acquaintance with the shifting tides of Oxford opinion during periods of stormy controversy, afforded in themselves no indifferent training for the task he has just completed. It is hardly too much to say that in him—

αὐτὴν ἐδοκοῦμεν τὴν Ἀκαδήμειαν βλέπειν·

—we seemed to see an epitome of the university he adorns.

Nor has he frustrated these expectations, which we ourselves fully shared. The work as a whole is worthy of Professor Jowett's reputation. He has evidently spared no labour either in mastering the difficulties of his author, or in the less congenial work of comparing the conflicting theories of his predecessors, English as well as German, with the conclusions he may have been led to form by independent enquiry. This in itself is no mean praise, for those

who know how voluminous is the Platonic literature of Germany, on which every passing year leaves fresh deposits, can alone appreciate the industry and self-devotion, the love and power of work which have enabled a most assiduous college tutor and university professor to bring to completion so vast an *opus subsecivum* as the present.

A review of these bulky but handsome volumes, which, let us say once for all, are in every respect creditable to the Clarendon Press and its intelligent publishers, naturally divides itself into three heads. We propose to give some account, 1st, of Mr. Jowett's views on what is called the Platonic Canon, 2nd, of the order in which he conceives the dialogues ought to be arranged, and lastly, of the style and character of the introductions in which these topics are discussed. We shall also have a few words to say on the manner in which he has performed his self-imposed task of a translator. Under the first two heads it will be necessary to notice certain opinions concerning the Platonic philosophy which are not met with elsewhere, and which necessarily hang together with the question of genuineness and with that of arrangement.

1. Of the thirty-four dialogues recognised in the Alexandrian Canon, Mr. Jowett has translated twenty-seven. Of these he holds twenty-four to be certainly genuine, including in that number the *Parmenides* and the *Laws*, which some of the later German critics are disposed to condemn. Of the remaining three he speaks with hesitation, inclining, on the whole, to admit their genuineness, and thinking each worthy of a separate introduction. These are—the lesser *Hippias*, the greater *Alcibiades*, and the *Menexenus*. Of the greater *Hippias*, which he has not translated, he speaks still more doubtfully, deeming it *à priori* unlikely that Plato would publish two dialogues under the same title. The *Theages* and the second *Alcibiades* he condemns, with the *Erastae*, *Clitophon*, *Minos*, *Epinomis*, *Hipparchus*. The epistles he thinks equally spurious with the small dialogues (*Sisyphus*, *Axiochus*, &c.), that were rejected by the ancient critics. This last opinion is so decisively pronounced that we have no right to suppose that it was formed without careful examination; we regret, however, that Mr. Jowett has not discussed the question in the present work. We trust he will take some future opportunity of letting us know his reasons—a step which the equally pronounced, but directly contrary, opinion of his "father Parmenides," as he pleasantly styles Mr. Grote, would render peculiarly graceful. Mr. Jowett's scepticism (vol. ii. p. 101) as to Plato's Sicilian relations will, we think, startle scholars. Doubt as to the Platonic authorship of that *Apologia pro vita sua* commonly called the "Seventh and Eighth Epistles," may be forgiven; though we confess that after some change of opinion we are disposed to believe them genuine. But that they have no historical authority is an opinion, so far as we know, which is peculiar to Mr. Jowett. A critic not too easy to please has said, "Platonis ipsius esse hanc epistolam (*sc.* septimam) et argumentum et stylus clamant, et neminem alium in Græcia novimus qui de his rebus *sic* scribere potuisset." We confess that, as at present advised, we think Gabriel Cobet's the more credible opinion of the two.

Of the other suspected dialogues, the second *Alcibiades* is the most certainly spurious. It contains solecisms of language which even a contemporaneous "falsary" (to use Bentley's term) could not have been guilty of; and there is nothing in the matter or treatment to remove the suspicion hence arising. In the *Hipparchus*, if the text is sound, there are some queer expressions, but its antiquarian lore indicates an Athenian author. The first *Alcibiades*, though a somewhat common-place production, and destitute of Plato's charm of style, has not the same direct notes of spuriousness. The second *Hippias* ought to be taken out of the list of doubtfuls. Aristotle calls it "*the* Hippias"—as he speaks of *the* Phaedrus and *the* Phaedo—and we cannot think that he would have paid it this compliment had he not believed it to be Plato's. Let those who dispute this inference produce a single instance in which he thus cites the work of an inferior writer of dialogues, whether Xenophon, Aeschines Socraticus, or any other. So when he mentions the Antigone and the Electra, he means the *Antigone* and *Electra* of Sophocles, not those of Euripides, which were less famous. His recognition of the *Menexenus*, though under another title, settles the question as regards that work also, which, indeed, we think ought never to have been disputed. The *First Hippias* is not mentioned by Aristotle, but a passage in the Topica has been surmised to refer to it (p. 146, a, Bekker). We almost wish that Mr. Jowett had translated this dialogue, for whether genuine or not, its satire, if broad, is vastly amusing; and besides, it presents one or two ethical questions in a striking light, as for instance the relations of the beautiful, the good, and the useful. After all, the only unanswerable proof of spuriousness is the co-existence of common-place thoughts, or unskilful treatment, with gross violations of Attic usage; and where no such abnormities exist, a wise critic will not at once condemn a dialogue because it seems to him "unworthy of Plato." Mr. Jowett has, we think, shown due caution in dealing with these delicate questions. As a good specimen of his method, we may point to his explanation of certain peculiarities of phrase in the *Laws*, which Zeller has adduced as arguments against the genuineness of a work unhesitatingly accepted by Aristotle.

> "There is no real ground for suspecting their genuineness because several words occur in them which are not found in the other writings of Plato. An imitator will often preserve the usual phraseology of a writer better than he would himself. But, on the other hand, the mere fact that authorities may be quoted in support of most of these uses of words, does not show that the diction is not peculiar. Several of them seem to be poetical or dialectical, and exhibit an attempt to enlarge the limits of Greek prose by the introduction of Homeric and tragic expressions. Most of them do not appear to have retained any hold on the later language of Greece. Like several 'experiments in language' of the writers of the Elizabethan age, they are afterwards lost; and though occasionally found in Plutarch, and imitators of Plato, they have not passed current in Aristotle or the common dialect of Greece."

Professor Jowett's vindication of this great dialogue is perhaps the best specimen of refined apologetic criticism to be found in our language, and it ought to set at rest a question which, had all critics been equally circumspect, would never have been raised at all. We say this without any disposition to underrate the marks of failing power which are but too evident in this product of Plato's old age, its "tautology, obscurity, self-sufficiency, sermonizing, and rhetorical declamation," all of which are strongly felt and clearly set forth by Mr. Jowett. We are glad to find that he recognises the reference to the *Laws* in Isocrates' *Oratio ad Philippum*, which proves that the work was published within two years after Plato's death: if, indeed, it does not invalidate the tradition that it was published posthumously by Philippus of Opus. The very unsatisfactory state of the text in the *Laws* is not noticed by Mr. Jowett, who in his apparent estimate of MS. authority seems to us somewhat too indulgent.

Very striking also is the skill with which he disposes of objections to the genuineness of that subtlest of dialogues the *Parmenides*. This work, it is true, is not one of the comparatively few named by Aristotle; but the coincidence between portions of his critique of the Platonic ideas and that put in the mouth of the Eleatic sage in this dialogue is too close, we think, to have been accidental: and we may

perhaps add this to the somewhat numerous list of cases in which Aristotle's treatment of the philosophers who preceded him may be qualified as more or less consciously unfair.

"Perhaps," says Professor Jowett, "there is no passage in Plato showing greater metaphysical power than that in which he assails his own theory of ideas. The arguments are nearly, if not quite, those of Aristotle; they are the objections which naturally occur to a modern student of philosophy. Many persons will be surprised to find Plato criticising the very conceptions which have been supposed in after ages to be peculiarly characteristic of him. How can he have placed himself so completely without them? How can he have ever persisted in them after seeing the fatal objections which might be urged against them? The consideration of this difficulty has led a recent critic (Ueberweg), who in general accepts the authorised canon of the Platonic writings, to single out the Parmenides as spurious. The accidental want of external evidence, at first sight seems to favour this opinion.

"In answer, it might be sufficient to say that no ancient writing of equal length and excellence is known to be spurious. Nor is the silence of Aristotle to be hastily assumed; there is at least a doubt whether his use of the same arguments does not lead to the inference that he knew the work. And, if the *Parmenides* is spurious, a similar condemnation must be passed on the *Theaetetus* and *Sophist* and, therefore, on the *Politicus* (cp. *Theaet.* 183 E, *Soph.* 217). But the objection is really fanciful, and rests on the assumption that the doctrine of the ideas was held by Plato throughout his life in the same form. Whereas the truth is, that the Platonic ideas were in constant process of growth and transmutation; sometimes veiled in poetry and mythology, then again emerging as abstract ideas, in some passages regarded as absolute and eternal, and in others as relative to the human mind, existing in and derived from external objects as well as transcending them! The *anamnesis* of the ideas is chiefly insisted upon in the mythical portions of the dialogues, and really occupies a very small space in the entire works of Plato. Their transcendental existence is not asserted, and is therefore implicitly denied in the *Republic* and *Philebus;* and they are mentioned in the *Theaetetus*, the *Sophist*, the *Politicus*, and the *Laws*, much as Universals would be spoken of in modern books. Indeed, there are very faint traces of the transcendental doctrine of ideas; that is, of their existence apart from the mind, in any of Plato's writings, with the exception of the *Meno*, the *Phaedrus* and the *Phaedo*. The stereotyped form which Aristotle has given to them is not found in Plato."

We may add in passing that Aristotle, while he states pretty clearly his master's philosophical relation to the Pythagoreans, nowhere alludes to the at least equally potent influence of the Eleatics, whose speculations he examines at great length, but without once comparing them with Plato's.

2. This brings us into the neighbourhood of another problem which has greatly exercised interpreters—the order in which the surviving dialogues were actually written. The discussion of this question has provoked many very pretty quarrels among the countrymen of Schleiermacher, who, as he was the first to propose, was the first also to offer a solution of the entire problem. His daring theory took strong possession of the learned mind of Germany, and was maintained, we believe, to the end of his days by the late venerable and excellent Professor Brandis. This scheme is based, as Mr. Grote says, on the hypothesis "of a preconceived Platonic system with a canonical order of the dialogues adapted to that system," a hypothesis which Mr. Grote has, in our opinion, justly characterised as neither founded on direct evidence nor consistent with the phenomena which the dialogues present. In this opinion Professor Jowett agrees. He "rejects as futile the attempt of Schleiermacher and others to arrange the dialogues into a harmonious whole," "any such arrangement" appearing to him "to involve an anachronism in the history of philosophy." The historical or evolution theory, first advanced by that diligent student of Plato, the late C. F. Hermann, is now in principle very generally accepted by scholars: though, as might have been expected, the greatest difference of opinion prevails as to its application to particular dialogues. The advantage possessed by this principle over that assumed by Schleiermacher is that it provides a natural explanation of the discrepancies, real or seeming, which abound in Plato; and which all the ingenuity of the acute Schleiermacher can for the most part only explain away.

The principle is simply this, that each dialogue, as Mr. Grote puts it, "was generated by the state of Plato's mind at the time it was composed," and that the changes which took place in his views are to be accounted for partly by his personal history, his travels, and other external conditions, and partly by his increasing acquaintance with the speculations of other philosophers. If we add to these agencies the spontaneous development of ideas once planted in a most fertile brain, we seem to exhaust all the possible data. We do not seek to justify the exact order in which Hermann, on these, or rather on the two former of these grounds, would arrange the different dialogues: while on the other hand we do not agree with Mr. Grote that the problem altogether defies solution. We do know, for example, the ultimate form of Plato's convictions on many important questions, especially those of an ethical character. This no one can dispute who holds with Mr. Grote that the *Laws* are a genuine work. On the other hand, setting aside tradition, can we fail to see that dialogues such as the *Lysis*, *Laches*, *Charmides*, and *Protagoras* were composed under the influence of very different ethical ideas from those which animate the *Gorgias*, the *Philebus*, and the *Republic?* Now the teaching in the latter group approximates far more nearly to the teaching in the *Laws* than to that contained in the four former dialogues. They are also more like in spirit and tone, and the changes we observe in their style seem to tend in the same direction. These remarks will we think be recognised as true and even obvious by any Platonic scholar. In the next place, whatever changes Plato's views may have undergone in the course of a prolonged "life in philosophy," there is an *à priori* probability, almost reaching certainty, that such changes would be continuous rather than desultory and irregular. Minds like his "know no harsh transitions:" their very inconsistencies are the result of laws which, to use an Aristotelian phrase, are "knowable in the abstract," if not always "knowable by us."

But though we differ to this extent from Mr. Grote, we by no means ignore the service he has rendered to Platonic criticism by reminding its professors of the delicacy and difficulty of the task which some of them have undertaken in pure gaiety of heart. No previous diasceuast is more free from the charge of levity than Mr. Jowett: none have approached the task in a more modest spirit and with less of preconceived theory. At the same time he is a thoroughly independent enquirer, resolved to use his own eyes and not those of Schleiermacher or Hermann or any other of the numerous scholars and historians of philosophy who have applied themselves to the solution of the same problem. That the question of the order of the Platonic dialogues will henceforth be considered as closed is more than the most sanguine could anticipate; but we think that the book we are reviewing will render new and valuable help to those who really care to trace the mental development of the greatest philosophical genius of his own, perhaps of any age.

One chief merit in our eyes of Mr. Jowett's method is its tentative character. He does not dogmatize, nor think it necessary to seize and hold some conspicuous point of view which he is prepared to make good against all comers. Though on the whole we have come to the conclusion that the order in which the dialogues succeed each other in his book is an approximation, in his opinion, to that in which they were actually written, he nowhere expressly tells us that such is the case. We do not feel justified in assuming that he thinks the *Charmides* earlier than the *Lysis* or *Laches;* but it is clear he wishes us to regard the group, ending with the *Protagoras*, as representing the first stage in Plato's philosophical career. In this opinion, along with perhaps a considerable majority of German critics, we

concur, while at the same time we protest in passing against placing the *Euthydemus* in the same category. In spite of Mr. Grote's arguments, we can see no improbability, but rather the reverse, in supposing that the four dialogues which we have named, and possibly some others of the simpler kind, were written during the lifetime of Socrates. We cannot see why it was more indelicate to introduce the living Socrates in the *Lysis*, than Simmias and Cebes in the *Phaedo;* for one or both were alive when the Thirteenth Epistle was written (if, as Mr. Grote believes, it was written by Plato), and in this the *Phaedo* is distinctly referred to.* The argument that Plato, on his own showing in the Seventh Epistle, was a politician rather than a philosopher during his intercourse with Socrates, seems to prove far too much. In the first place he himself tells us that his resolve to take part in public affairs was coincident with the revolution which ended in the tyranny of the Thirty. That he did take any active part he does not tell us; but only that the treatment experienced by Socrates at the hands of the new rulers disgusted him for the time being with political life. Nor must we forget that his philosophical studies do not date from his first introduction to Socrates. He had previously found time to acquaint himself with the philosophy of Heraclitus, as expounded by Cratylus; and he held through life one of the most important of the Ephesian doctrines. And this consideration apart, who can venture to fix a limit to the productive activity of a youth of Plato's genius, stimulated by a teacher like Socrates? That he had a passion for writing seems to follow from his early attempts in lyrical and dramatic poetry—in which Mr. Grote believes—and even if his friendship with Socrates dates from so late as 407, the eight years between that period and the death of Socrates in 399 would afford ample time for the composition of three or four dialogues on subjects which his διατριβαί with Socrates must have made familiar to him. Mr. Jowett refrains from giving an opinion on this point, though from a passage in his introduction to the *Euthydemus*, we surmise that he sides with Mr. Grote. The anecdote that the *Lysis* was read to Socrates, and that he was displeased, or (as the words attributed to him may very well mean) that he was highly diverted with the liberties his bright young scholar had taken with his name, he would doubtless reject, though for our own part we think it as likely to be true as not; for what motive could have led an inventor to select so comparatively insignificant a dialogue as the *Lysis* when there were others better known in which Plato takes quite as great liberties with his master? However this may be, there is a cheerfulness, a lightheartedness in these firstlings, as we hold them to be, of Plato's genius which we seek in vain among the grander and more sombre products of his riper age, so many of which seem haunted by the shade of his dead master. This consideration, combined with the fact that the dialogues we have named contain no element of doctrine or method which an intelligent pupil of Socrates might not have found expressed or implied in the teaching of his master, inclines us to the belief that they, or at least the three smaller ones, were composed during his lifetime. The *Protagoras* indicates, it is true, a certain discontent with the pure Socratic dogma; and its sceptical conclusion seems to favour the idea that Plato's ethical convictions were even then developing into something more "rich and strange" than the utilitarian rationalism of his master. "If virtue is knowledge then it must be matter of teaching, and the Sophists are in the right; if it cannot be taught, then it is not knowledge, and Socrates must be in the wrong." Such is, or seems to be, the ethical outcome of a dialogue which Mr. Jowett aptly describes as perhaps the last, certainly the greatest of the earlier or purely Socratic works.

The second group in Mr. Jowett's arrangement begins with the *Meno*, and ends with the *Republic* and its supplementary dialogues, embracing also the *Phaedo*, *Symposium*, and *Phaedrus*. All these dialogues—we say nothing of minor works such as the *Apology*, *Euthyphron*, and *Crito*, which are classed, though they have no distinct philosophical connection, with the former—have one feature in common: the "ideas" are in all alike presented in their transcendental as distinguished from their merely logical aspect. Mr. Jowett wisely refrains from fixing the order of this group of dialogues among themselves—though, somewhat oddly, as we think, he ventures to place the *Symposium* before rather than after the *Phaedrus*, and puts the *Cratylus* just before the *Republic*.

Between this second, and his third group, consisting of the *Parmenides*, *Theaetetus*, *Sophist*, and *Statesman*, he intercalates, as transitional dialogues, we may suppose, the *Gorgias* and the *Philebus*. In this, we think, he attributes too much scientific maturity to the *Gorgias*, which appears to us one of the earliest specimens of Plato's second manner, and rather in the nature of a work *d'occasion* than of an integral part of a great philosophic series. That it can have been written after the *Republic* is to us incredible; and perhaps we are misinterpreting Mr. Jowett in inferring such to be his opinion.

On the other hand, his view both of the places of the *Philebus* and of the great dialectical Tetralogy, the *Parmenides*, *Theaetetus*, *Sophist*, and *Statesman*, strikes us as both original and profound. The introductions to these works exhibit a faculty which in a historian of philosophy is of all the most valuable—the faculty of philosophical imagination. It is this in fact which contributes the great charm of Mr. Jowett's work, and which makes ample amends for his, perhaps, too serene indifference to testimony, historical facts, textual criticism, and other such empirical considerations. Mr. Jowett has not only the power, in a remarkable degree, of thinking himself into the mind of his author, but also of expressing with rare truth and delicacy meanings and shades of meaning which escape equally powerful but less subtle thinkers. The most delicate handling is indispensable in the treatment of such questions as the growth of a theory so attractive yet so thin and impalpable as that of the Platonic ideas—that "dream which was not all a dream." What were the steps by which Plato arrived at it? what modifications did it undergo in the mind of its author? how are we to account for those modifications, and for its entire disappearance from the work of his old age?—these are questions which will be found better treated in these volumes, we do not hesitate to say, than in any critique of the Platonic philosophy known to us. The following extracts will make Mr. Jowett's point of view sufficiently intelligible to those who are exercising or have exercised themselves with similar enquiries. In his introduction to the *Philebus* (vol. iii. p. 130) he says:—

"The omission of the doctrine of recollection, derived from a previous state of existence, is a note of progress in the philosophy of Plato. The transcendental theory of pre-existent ideas, which is chiefly discussed by him in the *Meno*, the *Phaedo*, and the *Phaedrus*, has given way to a psychological one" [in the *Philebus*].

The *Philebus* is also later than the *Republic*, because of—(1) Its "general resemblance to the later dialogues and the *Laws;* (2) The more complete account of the nature of good and pleasure; (3) The distinction between perception,

* We would not, however, be understood to accept the Thirteenth Epistle as genuine ourselves. The reference to the *Phaedo* is surely a note of spuriousness, and too much in that sophistical manner which Bentley is in other instances so quick to detect.

meaning, recollection, and opinion, indicates a great progress in psychology; also between understanding and imagination, described under the figure of the scribe and the painter (p. 39)." "A superficial notion," he thinks, "may arise that Plato probably wrote shorter dialogues, such as the *Philebus*, the *Sophist*, and the *Politicus*, as studies or preparations for longer ones;" but "this view is seen to be fallacious, because," in Mr. Jowett's opinion, "these three dialogues make an advance upon the metaphysical corruptions of the *Republic*. And we can more easily suppose that Plato composed shorter writings after longer ones, than suppose that he lost hold of further points of view which he had once attained." —*Ib.* p. 143.

Those who in spite of the plausible reasonings of Socher and his followers remained true to their critical instincts, and refused in the *Parmenides*, *Sophist*, and *Statesman*, to hear any other voice than the voice of Plato, will probably welcome Mr. Jowett's explanation, as the most satisfactory that has yet been devised, of the instances of apparent disagreement with recognised Platonic doctrine which are found in the dialogues in question. The *Parmenides* contains a searching elenchus of the doctrine of ideas, considered as transcendentals. The "Sophist" not only seems to speak lightly of the εἰδῶν φίλοι (who may be the Megarians), but promulgates a theory of ideas seemingly contradictory to Plato's, and more nearly resembling the Aristotelian view of the εἶδος as an immanent formative principle (*Soph.* pp. 248, 249). Now if this is, as we believe, a deeper form of idealism than that which is usually associated with Plato's name; and if Mr. Jowett is right in finding in the *Sophist* and its continuation, the *Statesman*, a progressive decline in style, and an approximation to the more rhetorical diction of the *Laws*—and so far as the *Statesman* is concerned, we have held this view ourselves—it is at least reasonable to infer that the better thoughts of Plato were also his later thoughts, and that his proverbial "inconstantia" in this as in other departments is to be attributed to the enduring vitality and unresting progressiveness of his mind. Γήρασκεν δ' ἀιεὶ πολλὰ διδασκόμενος.

We cannot now go further into this interesting enquiry, but we may say that, as a whole, Mr. Jowett's grouping of the dialogues seems to us at least as probable as any that has preceded it. We have already indicated dissent in the case of the *Euthydemus* and of the *Gorgias*: we think also that the *Symposium* is more likely to have followed than preceded the *Phaedrus*—indeed we do not know that Professor Jowett would insist on the opposite view. And however we explain the apparent breach of continuity between the *Theaetetus* and *Sophist*, dialogues professing to stand to each other as two succeeding dramas of a Trilogy, we see in the former dialogue no trace whatever of the stylistic decadence which Mr. Jowett detects in the *Sophist*, and which we have admitted to exist in the still admirably well composed *Statesman*. Schleiermacher, it is well known, interpolates three dialogues between the *Theaetetus* and the *Sophist*: and though his choice is, as usual, somewhat crotchety, the instinct which led him to suspect an interval of time in the composition appears to have been a sound one. We think also that the terse and pregnant *Philebus* hardly deserves to be classed with "writings of Plato in which the style begins to alter." If this were true, we should find in it one reason the more for separating its composition by several years from that of the *Gorgias*, a dialogue which to us bears traces of robust youthful vigour rather than of senescence.

W. H. Thompson.

(*To be continued.*)

Scientific Notes.

Miscellaneous.

Mr. Herbert Spencer's article on "Morals and Moral Sentiments," in the *Fortnightly Review* of this month, is interesting, though inevitably sketchy. He distinguishes, with timely insistance, "Morals" and "Moral Sentiments"—the ideal regulation of conduct, according to Mr. Spencer's view of Moral Science, and the actual regulation that has historically existed among men. For the former Mr. Spencer has promised us a complete system of demonstrative or rational, as distinct from empirical, utilitarianism: wherein deductions "from the laws of life and the conditions of existence" as to the "kind of actions which *necessarily* tend to produce happiness" will override "direct estimation of happiness or misery." But the chief object of the article is to point out (in reply to some misdirected criticisms of Mr. Hutton) that the moral intuitions of mankind are derived, according to the writer's view, from *unconscious* association of revived pleasurable and painful feelings: not from conscious recognition of relations between these feelings and the acts approved and condemned. The moral sentiments spring from a double root, "ego-altruistic" and "altruistic." The ego-altruistic sentiments are directed towards actions as associated with praise or blame, which are themselves impellent or deterrent from their association with pleasures and pains in general. This latter connection is only strengthened not formed in the individual's experience, being originally inherited in his nervous system. The root of the altruistic sentiments (which are later in development) is sympathy, the natural concomitant of gregariousness, though repressed in low states of society by the needs of self-preservation, and the want of sufficient intelligence to interpret the expression of feelings. These two forms of moral feeling are originally distinct, though they ultimately blend with and support each other, the altruistic feelings tending continually to predominate. But here Mr. Spencer's exposition wants clearness: as he does not recognise the distinction (carefully expounded by Mr. Bain) between the volitional effect of sympathetic pleasures and pain, and the sympathetic impulses to action on behalf of others, out of proportion to the pleasure and pain actually communicated. Only the latter impulses can properly be called altruistic. Some explanation too is wanted of the characteristic property of ethical apprehensions, the recognition of *rule* or *standard*, which is implied in the word approbation. Adam Smith (whose subtle and penetrating work Mr. Spencer notices appreciatively) gave himself some trouble to derive this from the complex operation of sympathy, but his account is not adequate.

An elaborate work on the physiology of vocable sounds is promised by Prof. Donders of Utrecht. He has already brought out a pamphlet on this subject. The kindred question of pronunciation has been taken up by the eminent Semitic philologist, Prof. Land, who recommends the adoption of a phonetic system of spelling. Both works have a primary reference to the Dutch language; they are noticed in the *Gids* for April.

Geography.

An American Arctic Expedition under Captain C. F. Hall, who explored Frobisher Bay in 1862, and subsequently spent five years (1864-69) in the neighbourhood of Repulse Bay, south of Melville Peninsula, and in re-searching the scene of the wreck of Franklin's expedition, is being fitted out, to sail in May, under the direction of the Smithsonian Institution of Washington. Captain Hall will be accompanied by Dr. Emil Bessels, also a practical arctic voyager, known through his interesting observations made in 1869 in the seas between Spitzbergen and Novaia Zemlia.

The preliminary report of a South African journey, made by Edward Mohr in 1869-70, from Natal through the Transvaal Republic and the region of the goldfields of Mosilikatse's kingdom, to the Victoria Falls on the Zambesi, appears in the fifth part of *Petermann's Mittheilungen*. Mohr has sent to Europe a most valuable series of astronomically determined positions on this route; and his journey will prove an important addition to the geological knowledge of South Africa.

An examination of the mean monthly and annual temperature of the British Isles, based on observations extending over a period of thirteen years (1857 to 1869) at 155 stations, has been made by Mr. A. Buchan, the secretary of the Scottish Meteorological Society, and published in a recent number of their *Journal*. This paper affords the first reliable solution of this meteorological problem, which has an important bearing especially on the agricultural interests of the kingdom. The monthly isothermals illustrate the powerful conserving influence of the ocean on the temperature of these islands, and they enjoy that mean annual temperature (45° to 52°) which experience has proved to be most conducive to health and longevity.

Geology.

Discovery of the Remains of a Glutton in England.—In *Nature* for March 30, Mr. T. M'K. Hughes records the discovery of a fossil bone which has been determined by Mr. W. Boyd Dawkins to be that of the glutton. The locality is a cave which has long been known to exist close to Plas Heaton, near St. Asaph. Along with the bone in question (a portion of the jaw), a large number of others have been found, including the remains of reindeer, elk, &c., the animals upon which the glutton principally feeds. The cave is situated on very much higher ground than any of the other bone-bearing caves of the district, and runs down into the hill with the bedding of the rock. Where the other end may be there is as yet no evidence to show, but it promises to be a cave of great extent, and, judging by the festoons of stalactite already arrived at, of great beauty also. Its chief interest, however, lies in the strong probability, from its size and position, that it will contain a very full record of the early natural history of the district.

Shell Heaps in New Brunswick.—It is stated in a recent number of our American contemporary, *Harper's New Monthly*, that a careful search on the shores of Kent and Northumberland Counties, on the eastern coast of New Brunswick, has shown that in consequence of the wearing away of the soft sandstone shale of the coast for many rods, all traces of the shell-deposits, believed to have once existed in abundance, have now entirely vanished. This is the more to be regretted as of late years many discoveries have been made in regard to the habits and characteristics of the aborigines inhabiting the coast of North America before the time of Columbus, by careful examination of the artificial heaps of refuse shells, bones, &c. accumulated in the vicinity of their villages.

An American Bone-cave.—In the *American Journal of Science* for March is a preliminary report, by Prof. E. P. Cope, on one of the most interesting scientific discoveries in America, that of a true bone-cave near Phœnixville, Pennsylvania. The remains hitherto found have been very extensive, for the greater part of extinct animals, and include species of mastodon, horse, and mylodon, and of some animals entirely new to science.

Zoology.

The Crustacea of the Gulf-stream.—The *Bulletin of the Museum of Comparative Zoology at Cambridge* has printed a portion of Dr. Stimpson's report on the brachyurous crabs dredged up by Count Pourtales in the Gulf-stream off the coast of Florida. The total number of Crustacea dredged up is eighty-one species, of forty-seven genera, fifty-two of the species and nineteen of the genera being considered new. Only a small proportion of the species were from great depths, fifteen only being recorded as coming from below 100 fathoms, and none from below 150 fathoms, those from the greatest depth belonging to the family *Portunidæ*.

Geographical Distribution of the Ostrich.—The ostrich has usually been considered as peculiar to the continent of Africa, where two species have been recognised, one belonging to the northern portions, the other to the regions nearer the Cape of Good Hope. These species were long considered identical, and their distinctness was first suggested by the difference in the texture of the egg. In a recent work by Hartlaub and Finsch on the Birds of Eastern Africa, it is shown that either the ostrich of Northern Africa or a third species was known at a very remote period in Central Asia, and perhaps even in India; and that at the present time it occurs wild in Syria, Arabia, and Mesopotamia, where, in fact, it was mentioned by the earliest writers, including Herodotus, Aristotle, and Diodorus.

Physiology.

The Supposed Fungoid Origin of Cholera.—Mr. T. R. Lewis, M.B., Assistant-Surgeon to H.M. British Forces in India, has recently published a report on the microscopic objects found in cholera evacuations, illustrated with engravings of microscopic slides, executed with remarkable beauty and correctness in the office of the Surveyor-General of India. In this report Dr. Lewis has added considerably to our knowledge of some obscure points of microscopical science, while his conclusions are in direct opposition to those of Hallier and Pettenkoffer with regard to the fungoid origin of cholera. His general conclusions may be summed up as follows:—1. That no cysts exist in choleraic discharges which are not found under other conditions. 2. That cysts or "sporangia" of fungi are very rarely found under any circumstances in alvine discharges. 3. That no special fungus has been developed in cholera discharges, the fungus described by Hallier being certainly not confined to such. 4. That there are no animalcular developments, either as to nature or proportionate amount, peculiar to cholera, and that the same organisms may be developed in nitrogenous materials even outside the body. 5. That the supposed *débris* of intestinal epithelium is not of this origin, but appears to result from effused blood plasma.

Structure and Function of the Mucous Glands of the Stomach.—An investigation into this subject has recently been undertaken by M. Ebstein, the subjects of his experiments being principally dogs. The glands in question are chiefly found in the pyloric region, where they replace the true peptic gastric glands. The pyloric region is of a paler tint than the rest of the stomach, and gives an acid reaction to test-paper, though not quite so intense as the other parts. The epithelium lining the interior of the stomach and the pits or alveoli is cylindrical, the cells being usually closed; but sometimes, especially during digestion, burst, the mucous contents then escaping. At their bases are smaller cells which at first resemble lymph corpuscles, but gradually develop into the columnar cells, and are particularly distinct in preparation made with perosmic acid, by which reagent they are less strongly tinted than the ordinary cells. Into the bottom of the alveoli of the pyloric region two, three, or more mucous glands open. These present an orifice, a neck, and a clavate extremity. Their interior is lined by a layer of columnar epithelial cells, the nuclei of which are near their attached extremities. The cells are shorter, darker, and more granular than those of the surface of the stomach generally, and there are no "supply" or secondary cells at their bases. They resemble the cells lining the peptic glands which have been described by Heidenhain under the name of "principal cells" (Hauptzellen) not only in the points mentioned above but in their microchemical reactions and the changes they undergo during digestion. From all this it appears that the statements made in physiological works to the effect that there are two kinds of glands, one destined to supply the gastric juice, the other to yield the mucous fluid of the stomach, are not borne out by the results of microscopic research. It would rather appear that all the glands of the stomach are lined by an epithelium which produces gastric juice, whilst the general surface of the stomach is invested by an epithelium which is capable of producing the mucus. This *résumé* is taken from the 6th number of the *Centralblatt* for 1871.

On the Movements of the Eyes.—It has long been a question whether, when the head is inclined from side to side, any rotation of the eyes in the opposite direction occurs. Donders was unable to demonstrate any such rotation by the application of his mode of "after impressions." M. Javal however, who is subject to astigmatism, has found that, if the astigmatism be accurately corrected by means of cylindrical glasses when the head is erect, the correction is not perfect when the head is inclined, and that the eyes must consequently have altered their position in the head. A repetition of Donders' experiments of obtaining strong "after impressions" by an improved method also showed that some rotation occurs. The experiments showed that with an inclination of 10° of the head the rotation of the eyes amounted to rather more than 1°, and that it increased proportionately to the inclination, so that when this amounted to 70° or 80° the rotation increased to 8°·6, much less therefore than was admitted by Hueck. (See *Centralblatt*, No. 5, 1871, and Skrebitzky in the *Nederland. Archiv. f. genees- en Naturkunde*, Band V. p. 474).

Nerve-endings in the Tadpole's Tail.—A paper on the above subject, by Dr. E. Klein, whose appointment as Assistant-Professor in the new laboratory in connection with the Brown Trust for experimental pathology has just been announced in the *British Medical Journal* and *Nature*, appeared in May, 1870, in the Transactions of the Royal Academy of Sciences of Vienna (*Sitzb. d. K. Akad. d. Wissensch.* Bd. LXI. 1. Abth. Mai-Heft, Jahrg. 1870). This paper has, we believe, not yet been mentioned in English journals, and as it is of considerable interest, we here give a short account of his results. The tadpoles of *Hyla arborea* were found best fitted for examination, owing to the small quantity of pigment in their tails. The tissue was examined both in the fresh state and after treatment with perchloride of gold. Immediately beneath the epithelium lies a close network of extremely fine nerves, the meshes of the network being round or more commonly polygonal. This network, which forms as it were a sheath to the tail immediately beneath the epithelium, is so fine *that two or even four of its meshes can be covered by the nucleus of an epithelial cell.* Interspersed in the plexus are nuclei and multipolar ganglion cells, the processes of which are in continuity with the fibres composing it. Dr. Klein has never observed any connection between the finest nerves and the epithelial cells, though he has very carefully looked for it. On this point therefore he confirms Hensen's views (*Virchow's Archiv*, Bd. 31, p. 51), and with him denies the correctness of Eberth's observations (*Max Schultze's Archiv*, Bd. 2, Heft 5).

Odours and their Action on the Health.—The following remarks appear in a late number of *La Presse médicale belge*. A knowledge of perfumes reaches to the most remote antiquity. The Jews made use of them in the time of Moses. They were highly esteemed by the Greeks in the time of the wise but rigorous Solon. Their use was carried to excess by the Romans; and finally, in our times, they appear to have arrived at their utmost perfection and delicacy. It has been reserved also for the present day to use them in the greatest profusion. But if the perfumes that are everywhere found, and can be extracted by certain processes, may be used with safety, this cannot be said in every case of the odours that are naturally exhaled by flowers, leaves, or

fruits. Their action on the economy in a limited space, and especially during the night in a closed chamber, deserves to be noticed. It manifests itself by serious disorder, headache, syncope, and even by asphyxia if their action is too long prolonged. In nervous persons numbness may occur in all the members, convulsions, and loss of voice, but in general only a state of somnolence, accompanied by feebleness and retardation of the action of the heart. This state is often associated with well marked dimness of vision. Amongst the flowers that are most deleterious may be mentioned the lily, hyacinth, narcissus, crocus, rose, carnation, honeysuckle, jessamine, violet, elder, &c. In addition to the danger caused by their smell should be mentioned their action on the air. During the night flowers actively produce carbonic acid, which is injurious to health. Majendie even cites a case of death caused by a large bouquet of lilies which the sufferer, a previously healthy woman, had slept with in her bedroom. Amongst the more dangerous plants may be mentioned the walnut, the bay-tree, and hemp. The action of these is well known, the latter indeed producing a kind of drunkenness.

The Transverse Striation of Muscle.—In the *Academy* of last year (vol. i. pp. 76 and 156) will be found an account of the structure of striate muscle by M. Hensen and a critique upon his views by M. Krause. In the last part of the *Zeitschrift für Biologie* (Band vi. Heft 4) the latter writer again takes up the subject and maintains that Hensen, under the name of "Median disk," has confused three separate and distinct things. 1. The true transverse lines as seen with accurate focussing in the Invertebrata, but has at the same time confused the anisotropal with the isotropal substance. 2. In the higher Vertebrata, with accurate focussing and oblique illumination, he has mistaken for the true transverse lines the shadow thrown by the border of the anisotropal substance. 3. In the lower Vertebrata, with too high focussing, he has mistaken for them the dark line which is the expression of the high refractive power of the anisotropal substance.

Preservation of the Contractile Gland Cells of the Skin of the Frog.—Dr. T. Engelmann gives the results of his observations on this point in the last part of Pflüger's *Archiv für Physiologie* (Jan. 1871). The glands in question are very numerous, and are distributed over the whole surface of the body of the frog. They are distinctly contractile under nervous excitation, and are composed of a basement membrane with a lining of cells. The cells are arranged in two layers—an external flat and probably contractile layer, and an internal layer of more cubical form. The two layers are not very readily separable from each other. Prof. Engelmann found that momentary mechanic or electric excitation of the distal extremity of the divided sciatic nerve causes temporary contraction of all the glands of the hind feet. The contraction attained its maximum in from half a second to five seconds. If the shocks be repeated with sufficient frequency, the glands, or rather the gland cells, appear to pass into a state of tetanus, and they then assume a cloudy appearance. Independently of direct excitation, the contraction of the gland cells may be called into play reflectorially as by irritation of the nerves of various parts of the body. The reflex irritation is conducted centripetally through the posterior, centrifugally through the anterior roots of the spinal cord. The contractions entirely cease after complete destruction of the brain and spinal cord. The activity of the motor nerves is not abolished by woorara.

On the Reproduction of the Epithelium of the Cornea.—Stricker's *Medizinische Jahrbücher*, 1871, Heft 1, mention some observations, made by Dr. Hjalmar Heiberg, of Christiania, on the cornea of the frog, common fowl, and rat. The epithelium was scratched off clean with a scalpel from a small space on the surface of the cornea, and a series of corneæ so prepared was observed after intervals of five, six, eighteen, forty, &c. hours. Immediately after the operation the free space is bounded by sharp vertical edges. In five or six hours the edges become flattened, so that the boundary line is no longer well defined. After a lapse of eighteen hours the space is reduced in size by one-half. In from forty hours to three days the space is entirely covered over. So far for naked eye appearances. With the microscope it was found that the epithelium was only reproduced round the edges of the space; an insulated spot of epithelium never appeared. When this occurs in the case of reproduction of common skin over abraded surfaces, Dr. Heiberg believes that the parent epithelium of the spot is derived from some undestroyed gland-duct. As there are no glands in the cornea the phenomenon cannot occur here. Some of the corneæ were watched for from two to five hours under the microscope in blood serum. Wander cells were observed on the free surface of the cornea in its substance and also among the epithelial cells, but Dr. Heiberg was unable to observe the transmutation of these cells into epithelial cells. Between the mass of old cells and the two or three rows of new ones was seen a zone of yellowish masses, apparently of intercellular albuminous substance. These masses appeared to have always a centre of aggregation. They executed amœboid movements, and one of them was observed to separate into five rounded masses. Dr. Heiberg's conclusions were, however, principally drawn from the investigations of sections of the corneæ treated with perchloride of gold. Apparently two layers of cells advance over the denuded space; the cells of the outermost layer sometimes advancing over those of the undermost and sometimes *vice versâ*. Cells with many nuclei are of rare occurrence, but do nevertheless present themselves. One was observed containing five. Dr. Heiberg believes that the cells round the edge of the bare space send out processes in which there appears a translucent spot. The process becomes constricted off and forms a new cell, the spot becoming its nucleus. He thus thinks it probable that the nuclei of the new cells are not derived from the division of those of the parent cells. These new cells then become the parents of others in the same manner, and thus the space is covered up. The results of these observations are directly opposed to those of J. Arnold, who holds that the new cells are developed out of a finely granular mass, which he says at first coats over the abraded surface.

Botany.

Fertilisation in Proteaceæ.—Mr. G. Bentham has been recently investigating this subject, and made it the subject of a paper read before the Linnean Society on April 6. In plants belonging to this Australian order, the anthers mostly discharge their pollen before the expansion of the flower, as is also the case in Compositæ. In this latter order self-fertilisation is prevented by the fact that the stigma remains hermetically closed until after the opening of the flower. In Proteaceæ, on the other hand, the style is undivided, and the stigmatic surface is exposed even in the bud; and the contrivances for screening it from the action of the pollen of its own flower are very various. The anthers generally form, as in Compositæ, a closed tube surrounding the stigma, which is, however, generally immature at the time of the extrusion of the pollen. That self-fertilisation seldom takes place is shown by the fact that in no genus is the style more completely smothered with pollen than in *Grevillea*, while there is none in which fecundated fruit is rarer. In one section the style completely turns away from the anthers while they are discharging their pollen, and becomes buried in a pouch prepared to receive it; while in another the stigma always faces the upper anther, which alone is abortive. In one genus the style is bifurcate, as in Laurineæ, and some authors suppose the ovary to be bi-carpellary, as is the case in Compositæ; but the author has come to the conclusion that this is not the case.

Chemistry and Physics.

On the Effects of Cold upon the Strength of Iron.—In a paper read before the Manchester Literary and Philosophical Society, Mr. W. Brockbank details a number of experiments made with bar-iron, boiler-plates, wire-billets, and rails, which seem to give an opposite result to those of Fairbairn, Joule, and Spence, an account of which appears in the *Academy* for Feb. 15, p. 141. He maintains that these are all materially weakened by the action of intense cold, losing their toughness, the structure being changed from fibrous to crystalline. In one series of experiments, for instance, in which iron bars 1 in. square, made from a mixture of 4 pig-irons of the highest class, added to some good scrap-iron, were tested by a powerful lever machine, the breaking-weight required at a temperature of 15° F. was 780 lbs., whereas at 35° it was 844 lbs., at 52° 859 lbs., and at 70° 893 lbs. Again, ten rails were taken promiscuously from a lot of 1000 and tested by means of a falling weight of 2000 lbs., the centres of support being 3 ft. 6 in. apart: 4 were heated to 120° F. and each withstood two 5-foot and one 7-foot blow. The others were tested at 26° F., only one stood two 5-foot blows, three broke at the second 5-foot blow, and one at the first 5-foot blow. It was further found that a true result could not be obtained either by torsion or the direct application of weights, the bar almost immediately became heated, and the effects of cold disappeared; it was only by the method of sudden impact that the influence of temperature on the strength of the material could be ascertained.

On some Properties of Galvanically Deposited Iron.—M. Leng has found that iron deposited from a solution by means of a galvanic current has the property of occluding under certain circumstances considerable quantities of gas, consisting chiefly of hydrogen with small amounts of nitrogen, carbonic oxide, and carbonic acid, and that this property is also shared by copper electrically deposited. He further finds that, when the iron is thrown down on the surface of a plate, the layer first formed occludes by far the largest proportion of gas, the volume of gas absorbed decreasing rapidly as the thickness of the deposit increases. The volume absorbed varies within very wide limits.

On the Theory of Flame.—In the number of Kolbe's *Journal für praktische Chemie* for June 1870 is a short account of some experiments by H. Karl Knapp, which seem to show that the explanations usually given of the non-luminosity of the flame of a Bunsen's burner, viz. that it is a consequence of the perfect combustion of the coal gas, is not the cause, or at least not the only one, of this phenomenon. H. Knapp finds that, if instead of allowing air to mix with the coal gas, a sufficiently strong stream of nitrogen, hydrochloric acid, or carbonic acid gas, neither of which can act as a supporter of combustion, be passed into the flame, the latter becomes perfectly non-luminous. Probably this is in great part due to the reduction of temperature and pressure in the flame consequent on the introduction of the above gases.

On the Spheroidal State of Liquids.—In the well known experiment of Leidenfrost it may be supposed that the drop of water assumes the spheroidal state when the tension of the steam formed at its under surface is sufficient to support the pressure of the atmosphere plus the weight of the drop itself, and that, therefore, if the pressure be removed, a lower temperature must suffice to cause the phenomenon. E. Budde has proved this experimentally by means of the following apparatus: a glass bell jar was cemented on a copper dish standing in a water-bath; the bell was connected with an air-pump and exhausted, and by means of a simple arrangement described a drop of water brought on to the plate. The author found that when the pressure was reduced two-thirds more, the drop assumed the spheroidal state at a temperature of 83° C. The paper concludes with an explanation of the various star-like forms usually exhibited by the drop. (*Pogg. Ann.* cxlii. 158.)

On Cooling and Conduction of Heat in Gases.—Newton enunciated the law in reference to the cooling or heating of a body: that the quantity of heat lost or gained in a second is proportional to the difference between its temperature and that of the surrounding medium. A large number of experiments made by Dulong and Petit seemed to show that this law was not so general as Newton supposed, and their results were afterwards confirmed and extended by De la Provostaye and Desains. In all these experiments the heated body was allowed to cool in a copper or brass chamber, the inner surface of which was coated with lampblack. By a series of careful experiments, F. Narr has found Regnault's observation confirmed, that it is almost impossible to render such blackened surfaces absolutely dry. Dulong and Petit's results being, therefore, open to objection on this score, as well as on others, he has executed a fresh series of experiments by means of an entirely different method, and has arrived at the following conclusions:—That the mathematical expression deduced by Dulong and Petit does not represent the true law of alteration in the rapidity of cooling with the temperature; that the cooling effect of various gases is very different, and that they do not arrange themselves in the order of their chemical, but in the order of their physical behaviour, hydrogen and carbonic acid forming the extremes, whilst nitrogen and air possess almost identical rates of cooling; that the deviations from Newton's law are inconsiderable, and that this law is *probably* the true expression of the cooling effect of radiation. The author further calls attention to the remarkable relation in the behaviour of the various gases to Newton's and Mariotte and Gay-Lussac's law, for whilst hydrogen shows the least, carbonic acid shows the greatest deviation from both laws, air and nitrogen taking up a mean position. He entirely repudiates the idea that the anomalous behaviour of hydrogen is a consequence of its analogy with the metals.

Philology.

THE PRONUNCIATION OF LATIN.

IV.

There are two questions which should be kept quite distinct, but have been much confused in the present enquiry:

I. What is the most convenient method of pronouncing the classical languages?

II. What was the ancient pronunciation?

I. The classical languages being the universal languages of literature, taught in all upper schools throughout the civilised world, it is certainly most convenient to have one pronunciation in every place where they are used, and that that pronunciation should be generally easy to acquire. The only places that can aspire to set the rule are Rome and Constantinople or Athens, where a traditional pronunciation of at least a thousand years old, certainly descended from the ancient, although certainly different from the ancient, prevails for derived forms, and in the ecclesiastical use of the ancient forms. Such slight deviations as would not render pronunciation unintelligible, but would make it easier to particular nations, might be allowed. For instance, an Englishman might pronounce his short vowels as in *pit, pet, pat, pot, to put*, although everyone of them is somewhat different from the Italian sound. Also, as in Rome and Greece, the sound of *h* is unknown, and no notion of quantity exists—vowels being made short or long at pleasure, although the position of the stress is determined in Latin by the rule of penultimate quantity, and in Greek by a written accent which originally depended mainly on ultimate quantity,—we should not cease to be intelligible, and we should improve our reading of versification by sounding *h* and regarding quantity, without altering the position of stress. A little practice would render this easy.

II. Such a system would be avowedly not a restoration of the old, and as we are not now in a position, and probably never may be in a position, to determine the old, it seems better to adopt a uniform plan, thoroughly acknowledged in the classical homes, than to adopt a theoretical pronunciation, which may be as false as that which Erasmus, Smith, and Cheke introduced into England for the Greek language. But the enquiry into the ancient pronunciation is extremely interesting, and it is very desirable that means should be furnished for arriving readily at a knowledge of everything bearing upon it. The means required are:—

1. The publication in ordinary lower-case letters, with divided words, and expanded contractions (indicated by italics), of all old inscriptions, or rather such parts of them as contain varieties of orthography, with strict indications of date and place.

2. A similar arrangement of extracts from the oldest known MSS., and especially of any which give Latin in Greek characters and conversely (as in the instances cited in my *Early English Pronunciation*, pp. 519 and 527).

3. A *catena* of all the passages from ancient authors and later grammarians bearing upon pronunciation, especially of imitative sounds and puns, and, in case of grammarians, of such subsidiary passages as serve in any way to explain the meaning of the terms employed, and the notions of phonetics entertained by the authors.

4. In order to judge of the preceding, a great increase of phonetic knowledge.

Allow me to enlarge a little on this last point, with especial reference to Prof. R. Ellis's remarks on the Latin *v*, in your last number, p. 208. The amount of phonetic knowledge possessed by the greater number of those who are ready to settle the question of classical pronunciation offhand, or at any rate do not hesitate to give a very decided opinion on the subject, is generally woefully small. Even those who have best studied the subject, such as Lepsius, Max Müller, Brücke, Merkel, Melville Bell, have at most but an incomplete and fragmentary amount of knowledge to draw upon. The anatomy of the vocal organs has been pretty well ascertained. The nature of vowels has been also divined by Wheatstone and established by Helmholtz. The difference between vowels and consonants is almost understood. The variety of vowel sounds and of consonant modifications has been to a great extent ascertained, but not nearly to the extent asserted. For example, the notion that all existent varieties are known, or that all possible varieties could be *à priori* enumerated, must be exploded. Sounds exist in such home languages as the Basque which have not been satisfactorily analyzed. Nay, every cultivated language in Europe presents some marked peculiarity which is not thoroughly understood. If we add the peasant dialects (which are phonetically and linguistically of extreme importance) the unconquered difficulties enormously increase. Our philologists have been mainly concerned with *letters*, to the enforced neglect of the living sounds alphabetic signs inadequately infer, rather than represent.

But leaving these general considerations of elementary sounds, of which our knowledge is least incomplete, we know almost nothing of the mode in which different nations feel the combinations of these elements into those extraordinary masses of articulate significant sounds which they utter so glibly. The action of vowel on vowel, of consonant on consonant, of vowel on consonant and conversely, of general syllabication, of the hierarchy of syllables in a word as indicated by accent, stress, quantity, voice-inflexion,

pitch, emphasis, intonation, glide, hiatus, catch, and so on, whereon depend the whole force and meaning of words, and, combined with powers of appreciation and imitation, all the habits of change and interchange of sounds,—the very foundation of philology, without which a proper conception of the descriptions of sound given by men of different nationalities and ages cannot be formed,—all this, the main ingredient in the problem of restoring classical pronunciation,—is as good as utterly unknown, so small, so confused, so ill understood, is the very little knowledge of it which we possess. It is a point on which I speak feelingly, because my own ignorance has constantly stood in my way in the cognate researches with which I have been so many years engaged.

And now to take up the question of Latin *v*, on which Prof. R. Ellis has given us so much valuable information. There is a series of sounds which, for convenience, may be written *p b*, *p‿h b‿h*, *f' v'*, *f v*, *wh w*, *‿wh ‿w*. Of these *p b* are readily discriminated by English, French, and Italian. In Upper Germany, and among many tribes of North American Indians, the greatest difficulty is experienced in hearing any difference between them, and certainly in Saxony at the present day, the initial value of either *weiches b* or *hartes p* (for without these adjuncts they cannot tell which letter is meant) is an intermediate sound, which may be written °*b*, and apparently consists of *b* with that peculiar *voix voilée* which enables us to distinguish *b* from *p* when whispering, instead of the usual addition of voice. Throughout Germany final *b* is professedly not distinguished from *p*. Between two vowels, in great part of Middle and Southern Germany, *b* becomes *v'* that is, *v* in which the lower lip does *not* touch the teeth; this is also prevalent in Pennsylvania German. This *v'* is the true sound of German *w* throughout the same districts, but in Northern Germany it is professedly *v*, the denti-labial, not the pure labial. Yet careful observers will find that most Germans can be distinguished when speaking English, by their inability to pronounce pure *v* or pure *w*, and their use of the much easier *v'*. To this *v'* corresponds the voiceless hiss *f'*, in which the teeth have no part, as they have in *f*. The difficulty experienced by Upper Germans, from whom the High German of literature is derived, in distinguishing *p b*, *t d*, is probably very old. They are still inclined to post-aspirate *p* into *p‿h*, and this sound probably first generated *pf'*, whence arose the modern High German initial *pf*. Similarly the effort to distinguish *t* produced *t‿h*, and the modern *ts*, written *z*. The *k* has remained in the form *k‿h*. The post-aspirated *b‿h* is not known in Germany, but is familiar to us from the Irish brogue, and is common of course in India.

Now for *v'* the tongue is flat, or actionless. But for *w* it is raised into the position it assumes for *oo* (the English values of vowels are purposely chosen), that is nearly into the position of *k* or '*k*, the latter being the Hebrew ק and Arabic ق, which are usually assumed to have been the original sound of Latin *q*. The contact for '*k* is however much more inward than for *k*, and produces a thickening or obscuration of the following vowel, very similar to that resulting from rounding the lips. Hence, perhaps, when '*k* was lost in Latin, its effect was imitated by *kw'*, that is a *k* spoken with rounded lips, or a *simultaneous* $k + w$, the present English *qu*, and perhaps Latin *qu*; although it must always remain doubtful whether *kw'* or *gw'* be the correct ancient form. In German, where *w* with the back of the tongue raised is unknown, we may hear *kv'*, a sequence, not a simultaneity. The English *w* is there confused with the vowel *oo*, and the true nature of its voiceless form *wh* misunderstood. But *wh* is related to a labialised form of *kh*, which may be written *kwh*, and is common in Scotland. In Welsh *chw* is written for the same sound, which is not $kh + w$, and is pure in North Wales, while *wh* replaces it in South Wales. Precisely the same thing has happened in English, where *kh* labialised through the action of a preceding labial vowel has passed through *kwh* into *wh*, and thence, through *f'* perhaps, into the familiar modern *f*, in such words a *laugh*, *trough*, *dwarf*, *draft*.

For *‿w* the tongue is raised, not into the *oo*, but into the *ee* position, so that *‿w* bears the same relation to *ue* (German; French *u*) as *w* does to *oo*. As *w* is related to *k*, '*k*, so is *‿w* to *ky'*, *k'*, of which *ky'* is that palatalised *k* spoken of by Prof. Max Müller (*Academy*, Feb. 15), common still in old-fashioned English, in Icelandic, in French, and even Italian, and *k'* is a peculiar Picard form of the same, approaching to *ch'*, the true monophongal Roman sound of the Tuscan *c*, slightly differing from our own diphthongal *ch* in *cheese*. The *‿w* form is not acknowledged, but it is developed in the French diphthong *ui*; thus *puis* is generally *p‿wee*. The audible effect is much more like *v'* than like *w*. This consonant was probably developed from the Greek diphthongs αυ, ευ, with true *ue*, not *oo*, and then the *‿w* passed, before voiceless consonants, into *‿wh*, whence the modern Greek form of αυ, ευ with *v'* or *v* before vowels and voiced consonants, and *f'* or *f* before voiceless consonants. Special observations on modern Greek pronunciation lead me to think that φ β should be assumed as intentionally *f' v'*, but that every degree of transitional state between these sounds and full *f v* exist, owing to the more or less pressure of the lower lip on the upper teeth (see *E. E. P.* p. 518, with the note on the digamma; also p. 549 for the corresponding Icelandic usage).

These considerations (which might be easily extended) serve to show the difficulty of deciding with certainty on the Latin sound of *v*. All the facts deduced by Prof. R. Ellis are reconcilable with the pronunciation *v'*, and not with *w*, and others are adduced in *E. E. P.* p. 513 *à propos* of the Anglo-Saxon letter which was probably *w*. The interchange of *u* and *v* is not more striking than the constant change of उ ऊ into व in Sanscrit, and yet the Sanscrit grammarians, as Prof. Goldstücker informs me, persist in calling व a *denti*-labial, that is, *v*, and neither *v'* nor *w*. Latin *f* was probably *f*. There is nothing anomalous in a language pairing *f*, *v'* in place of *f'*, *v'* or *f*, *v*, for we find the pair *f*, *v'*, both in German and Spanish. In that case the Greek φ in Cicero's time was not *f*, but whether it was *p‿h* or *f'* is hard to say; perhaps the latter. If the lost digamma were *f*, this would be another reason why a Greek at that time could not say *f*.

This slight disquisition is sufficient to show how premature any *ex cathedrâ* enunciation of opinion, and how much more premature the introduction of any hypothetical pronunciation into schools must be considered. In arriving at a notion of the old pronunciation, we have to bear in mind, not only the dicta of old grammarians (mostly grossly ignorant of the very elements of phonetics), but the relations of ancient to modern sounds in chronological and geographical sequence. The ancient are as it were the protoplasm of the modern, and we must beware of attributing to the former a status out of which an examination of existing phonetic transitions and relations show that the development of the latter is, to say the least, improbable. This final consideration has been so strongly forced upon me during my researches on Early English pronunciation that I have found it advisable to institute an examination of existing varieties of English pronunciation, in which so much co-operation is necessary that I hope I may be allowed to say in conclusion that I should

be much obliged to any reader who would write to me as below for my tract in explanation of what is required.

25, *Argyll Road, Kensington, W.* ALEXANDER J. ELLIS.

Leabhar na h-Uidhri: a Collection of Pieces in Prose and Verse, in the Irish Language; compiled and transcribed about A.D. 1100, by Moelmuiri Mac Ceilechair: now for the first time published from the original in the Library of the Royal Irish Academy; with an Account of the MS., a description of its contents, and an Index. Dublin: Royal Irish Academy House, 1870.

THE Council of the Royal Irish Academy have acted wisely in determining to publish authentic transcripts of the more ancient Irish MSS. in their collection, before they become illegible from age and decay. But these transcripts would be much more useful to scholars in general if accompanied by good translations. The present work is merely a lithograph copy, printed from a transcript of the original, admirably executed by the skilful hand of Mr. O'Longan, who has carefully reproduced the characteristic features of the handwriting in the ancient MS., and the forms of abbreviation in which it abounds. Nevertheless, it is very questionable, notwithstanding its accuracy, if it will prove of much practical utility to more than four living scholars out of Ireland. The four scholars here excepted, to whom the publication of *Leabhar na h-Uidhri* will be a welcome boon, are Dr. Whitley Stokes, M. Adolphe Pictet, Herr Ebel, and Chevalier Nigra. In issuing the text in its present form, without a translation, the Council of the Royal Irish Academy, no doubt unintentionally, seem to lend a tacit approval to the idea entertained by some, that the archaic character of the language of the original presents insurmountable difficulties to the mere native Irish scholar. But this idea is without foundation. Large selections from *Leabhar na h-Uidhri* have been already published and translated by scholars now deceased, as well as by others happily still living; and the purity of its ancient text, which entitles it to be regarded as the most valuable Middle-Irish monument now remaining, renders the translation of its general contents a matter of little practical difficulty to any Irish scholar of more than average capacity.

The work is described in the preface as "the oldest volume now known entirely in the Irish language;" but this is at least doubtful. There is in the Bodleian Library an Irish MS. classed "Rawlinson, 502," which the late Dr. Todd, a good authority on the subject, considered to have been written about the year 1100. And his opinion is supported by the internal evidence of the MS., which contains a pedigree, written during the lifetime of a man who died in 1113.

The contents of *Leabhar na h-Uidhri* are of a mixed character, the principal part, however, consisting of mythological tracts of great value to the student of comparative mythology. It comprises also a few historical pieces, including an Irish version of the *Historia Britonum* of Nennius, made by an Irish writer who died in the year 1072.

The tract of greatest importance to the philologist is the very ancient elegy, or eulogy, of Colum Cille (*amra Coluim Cille*), composed not later than the seventh century, which preserves some of the oldest forms now extant of the Irish language. This tract is at present in course of publication from the original by Mr. Crowe, who has already edited some other pieces from the same MS.

The general scholar, however, if furnished with the translation that he had a right to expect, would find more interest in the remarkable romance called the *Tain bo Cuailnge*, a fragment of which occupies fourteen folios of *Leabhar na h-Uidhri*. Fortunately for the investigator of ancient Celtic mythology, of which it is unquestionably the oldest and most important repertory now in existence, a full copy of the tale is contained in the *Book of Leinster*, a MS. written towards the end of the twelfth century. The text is not so pure, however, as that now produced. With this remarkable prose epic (the publication of which would elevate the character of ancient Celtic manners and civilisation) is connected the title of the MS. The story of this connection, which forms the subject of Dr. Samuel Ferguson's fine poem, the "*Tain Quest*" (*Lays of the Western Gael*, 1865), is related in O'Curry's *Lectures, &c.* (pp. 29, 30). Briefly told, it is as follows:—The history of the *Tain* (or Cattle-spoil), which took place in the first century, being altogether lost in the sixth, Murghen, the son of Senchan Torpest, chief poet of Ireland, went to the grave of Fergus MacRoy, one of the principal characters in the *Tain*, sang a lay to his tomb, and raised his spirit, which dictated the whole tale from beginning to end. St. Ciaran of Clonmacnois wrote down the tale in a book made of the skin of his pet cow, which was called the Odhar, or "dark-grey," from her colour; and though this old book has disappeared, the name of *Leabhar na h-Uidhri*, or the "Book of the dark-grey [cow]," is attached to the present MS., out of the belief that it preserves much of the contents of the old book.

The present publication, as already remarked, is very well executed; but the attentive critic will find, nevertheless, some mistakes. These mistakes are not numerous, however; and it is but fair to say that Mr. O'Longan, the transcriber, and his colleague, Mr. O'Looney, have recovered many obscure words, which they might well be excused for failing to detect. The word *todgarach* which appears between lines 21 and 22, p. 11, is wrong. The *t* should not be marked with an aspirate sign, and the abbreviation for *n* should appear over the letter *o*, to represent the word *tondgarach*, which the glossarist intended. The words *nar necustos* (p. 37, col. 2) should be *nar necmuis*, and the name abbreviated *Ag.* in p. 67, col. 1 (last line but one) should represent *Lug.* for *Lugaid*, although a misplacement of a fractured piece of the original MS. may have doubtless caused the error here. It would have been desirable, also, that some notice should have been taken of inaccuracies in the original MS., such as the omission of signs of abbreviation, which are inconveniently frequent, and orthographical errors calculated to mislead the uninitiated. The loss of the contents of col. 1, p. 125, and col. 2, p. 126, as well as col. 1, p. 131, and col. 2, p. 132, should also be indicated in the Table of Defects in the appendix; in which, it may be added, there are some errors requiring correction. W. M. HENNESSY.

Intelligence.

Professor Grassmann of Stettin has just finished writing a dictionary and grammar of the Vedic language.

Dr. Corssen is at present in Italy, where he intends to remain five years, in order to study the inscriptions and monuments of Etruria.

New Publications.

CUNO, G. Forschungen im Gebiete der alten Völkerkunde. Part I. Die Skythen. Berlin: Eggers.

KAULEN, Fr. Handbuch der Vulgata. Eine systematische Darstellung ihres lateinischen Sprachcharakters. Mainz: Kirchheim.

LYSIAS, Ausgewählte Reden des. Ed. Frohberger. 3tes Bändchen. (With Index.) Leipzig: Teubner.

MERGUET, H. Die Ableitung der Verbalendungen aus Hilfsverben und die Entstehung der lateinischen *e*-Declination. Berlin: Eggers.

MIKLOSICH, Fr. Vergleichende Grammatik der slavischen Sprachen. Vol. IV. part 2. Vienna: Braumüller.

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ERRATUM IN No. 21.

Page 192 (a), 10 lines from bottom, for "wife" read "mother."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, May 15, and advertisements should be sent in by May 10.

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General Literature.

Impressions of Greece. By the Right Hon. Sir Thomas Wyse, K.C.B., &c., with an Introduction by his Niece, Miss Wyse; and Letters from Greece to Friends at Home, by Arthur Penrhyn Stanley, Dean of Westminster. London: Hurst and Blackett. 1871.

On one occasion, when a person who had journeyed in the East was introduced to the late Joseph Wolff, the veteran traveller exclaimed, without further preface than a wave of the hand, "I hope he has seen man." The suggestion contained in this remark is peculiarly applicable to travellers in Greece. In consequence of the beauty of the scenery and the absorbing interest of the historical associations, they have too often been disposed to regard the present inhabitants either as ideal representatives of the Hellenes, or as a race of unreclaimable knaves, without inquiring into their real character and the circumstances of the country. It is the merit of Sir T. Wyse's books of travel in Greece that this part of the subject receives its fair share of consideration; and in this respect the present volume has an advantage over his former work, the *Excursion to Peloponnesus*, because the comparative absence of important ruins in North Greece enables him to give more space to what is modern, instead of entering into minute details of topography, which add nothing to the information we already possess. It contains an account of three journeys—the first in Bœotia, including some romantic wanderings among the glens and peaks of Helicon; the second in Eubœa; the third through Bœotia to Parnassus. In the middle of the third excursion Sir T. Wyse's narrative breaks off, and the rest of the account is given in letters by Dean Stanley, one of his companions on that occasion, which conclude the volume. It would be ungracious to institute a comparison between the styles of the two contributors; but we cannot help noticing, in passing, the contrast they present to one another: the one writing as a cultivated English gentleman, who describes the scenery and antiquities with the taste of an amateur artist and archæologist; the other as a scholar and thinker, whose remarks are drawn from a wide circle of ideas, and who by the force of his imagination can invest the past with reality. Many travellers visit the sites of Thebes, Haliartus, and Delphi; but it is not every one who could remark, that when following Pausanias's description of the buildings and sights of Thebes, "you feel that you are following an invisible guide—a ghost among ghosts;" or of Haliartus, which, Pausanias says, had temples without roofs and without images, so that he could not make out even to whom the altars were dedicated, that "it must have been a primitive puritan place;" or that "there is this awful feeling at Delphi beyond any other place that I have seen, that you are standing on the grave of an extinct religion." In writing on Greece, Dean Stanley is only returning to a subject of deep interest to him in former years, as is shown, among other places, in his delightful essay on "Greek Topography," in the first volume of the *Classical Museum*.

On the politics and social prospects of Greece Sir Thomas Wyse was eminently qualified to express an opinion, from his long residence in the country as British Minister; and the account he has given in this volume is truly lamentable. The land scantily cultivated, the agriculture bad, the rural population powerless to help themselves, the Ministry at Athens, to whom all look to initiate improvements, indifferent to all interests except their own personal advancement, and jealous of such foreigners as might lend a helping hand—this is the picture presented to us. The system of taxation, in particular, is represented as hopelessly bad. "The treasury is a sort of Genghis Khan. It encamps and levies contributions, as if on ground which it conquered yesterday, and will leave to-morrow. It comes with no lack of exactions, all heavy, all complicated, all unfair; not made to enrich the treasury, but to impoverish the people; and a host of officers, who combine, and leave the people poor and the Government hungry." In Miss Wyse's interesting preface the origin of this deplorable state of things is with good reason referred to the demoralizing influence of the first rulers, Otho and Amalia, at the time of whose arrival the institutions of the country were yet young, and the national character, which with all its faults contains numerous fine qualities, was capable of being moulded into a very different type from what it now presents. They, by sanctioning, or at least permitting, corruption throughout the length and breadth of the land, and by encouraging men of the blackest reputation, and persecuting the honest and straightforward, in order to centralize all the power into their own hands, rapidly lowered and debased the whole people. To the evils already mentioned must be added the now only too notorious one of brigandage. The preface gives an account of the causes of this, and rightly distinguishes between the Klephts under the Turkish rule, who were in some ways the assertors of the rights of the defenceless, and the modern brigands, who are the terror of the rural population. The antagonism which is felt toward them is frequently illustrated in Sir Thomas Wyse's journals; and the responsibility for the existence of these bands is shown to rest upon the Government, because the periods at which they have principally infested the country have been those following the raids into Thessaly in 1854 and Crete in 1868, on both which occasions the prisons were thrown open by the authorities, and criminals of the worst class sent forth to swell the ranks of the invaders. The natural result was that at the conclusion of those luckless expeditions the country was filled with abandoned characters, who had no honest means of subsistence, and to whom the life of a brigand was in every way attractive. The name of the captain of one of these bands, Daveli, occurs over and over again in these pages, especially in the neighbourhood of Helicon, the recesses of which were his favourite haunts; and the story of his death, which occurred close to the spot where Œdipus killed Laius, is given by Dean Stanley, together with a spirited translation of a Greek ballad on the subject, which originally appeared in *Fraser's Magazine*. This, which is an excellent specimen of the Romaic songs, was recited at Arachova on Parnassus, by the village chorus, in honour of Sir Thomas Wyse and his fellow travellers, and describes how the guards of that place, with the help of the inhabitants of the neighbouring villages, surrounded and destroyed the brigands. The sudden transitions which occur in this poem, and the introduction of the birds as a sort of chorus, are very characteristic features of this class of ballads.

To notice a few of the more interesting points which are illustrated in this volume:—in connection with the great earthquake at Thebes in 1853 the frequency of these occurrences in Greece is mentioned, some violent movement occurring at least every second or third year in some portion of the country: this accounts in great measure for the disappearance of temples and other public buildings since classical times. In visiting the local schools, to which Sir T. Wyse paid especial attention, he remarks that, while many subjects are learnt very superficially, language and grammar are everywhere carefully studied. "The children, as well as masters, delight in grammatical victories, and pursue their verbs through all their ramifications with keenness and pleasure." It is this traditional fondness for the study of language which has caused the general uniformity of the Romaic tongue over so wide an area with little help from literature; and it is well worthy of the consideration of those who care for the dialects and idioms of the modern language that these are being rapidly driven out by the Neo-Hellenic of Athens, in consequence of the rapidity with which this is acquired by the people, and are liable to become extinct if they are not soon collected and compared. The reasons of the disappearance of trees in Greece, which has prevailed for centuries and still continues, are here very clearly given. These are, the improvidence of the proprietors, who hire out the cutting for very small sums; the incursions of herds of goats, which destroy the shoots and young trees; the burning of the forests, either by accident or intentionally, by the shepherds, for the sake of the luxuriant grass that springs up after such conflagrations; the hacking of the pine-trees for the sake of the turpentine, which is used for mixing with the wine; and, lastly, the ravages of the charcoal burners. With all these destructive agencies constantly at work the wonder is, not that the trees are disappearing, but that any still remain.

In conclusion, we should mention that we have searched in vain for the dates of the years in which these tours were made—an omission of some importance where the political and social state of the country is being treated of; but we can recommend this volume as pleasant and instructive reading.

H. F. Tozer.

LITERARY NOTES.

Most of the famous conquests of the Spaniards in South America were not only recorded in chronicles, but also furnished subjects for epic poems. The best known is the *Araucana* of the soldier-poet Alonzo de Ercilla; but the conquest of Peru is the theme of Peralta's *Lima Fondada*, the discoverers of the river Plate are celebrated in the *Argentina*, and the valorous deeds of the first explorers of New Granada are sung in the *Elegias* of Juan de Castellanos. In the last number of the *Revista de España* there is a very interesting essay on the latter work by Señor Vergara, who has made several discoveries respecting the personal history of the author of the *Elegias*, concerning whom scarcely anything was previously known. Castellanos had been a soldier, and ended his days as a devoted missionary-priest amidst the scenes of his former conquests. Ercilla wrote the cantos of his famous epic in his tent at night, recording the events of the day by the light of his camp fire. Castellanos wrote the reminiscences of himself and of his companions in arms in his old age. Yet, as material for history, the *Elegias* are more accurate and reliable than the *Araucana*, and the power of easy versification displayed by the old soldier-priest is marvellous. Señor Vergara gives several long extracts from the *Elegias* as examples of the style of Castellanos.

In an article in the *Nuova Antologia* for April, on the "Orlando Furioso," Signor Francesco de Sanctis brings out with much felicity of expression the distinctive features of Ariosto's genius, and of the relation in which he stood towards his own time. The perfect ease and naturalness of Ariosto's genius, his artist's *bonhomie* and thorough seriousness of pure artistic purpose, enabled him to treat chivalry without the studied irony of Cervantes, and to blend it harmoniously with the modern spirit. Ariosto's world is a bright Homeric world, in which the dream of the Renaissance has found reality.

The poetical contributions in the *Wandsbecker Bote*, which appeared from 1771 to 1775, have been collected and reprinted. All the great names in German literature are represented with the exception of Wieland.

A German translation of Lord Acton's article "The Vatican Council" (*N. B. Review*, Oct. 1870) has appeared at Munich.

It has been a long disputed question whether the discovery of printing was made by the German Guttenberg of Mayence, or the Dutchman Coster of Haarlem. A valuable contribution to this controversy has lately appeared in the *Augsburg Gazette*, under the title "Die Haarlemer Costerlegende," by Dr. A. van der Linde, who, although himself a native of Haarlem, shows, on historical and typographical grounds, that the important invention of moveable types, which is in fact printing itself, is undoubtedly due to Germany, while the priority ascribed to the Haarlem citizen rests on mere patriotic legends.

Bohemian and Sclavonic literature generally have sustained a great loss in the person of M. Karel Jaromir Erben, archivist of the city of Prague, a poet and *savant* of great distinction. Born in 1811 in the little town of Miletin, M. Erben devoted himself in early life to the study of the national literature and of its historical sources. His great work, *Regesta diplomatica necnon epistolaria Bohemiae et Moraviae* down to the year 1253, is indispensable for all students of Ancient Bohemian History. Among his more important re-publications of old Sclavonic texts, special notice here is due to his edition of the Tcheque writings of John Huss (Sebrane Spisy, &c., 3 vols. in 8vo., 1864–1868). We may also mention his *Prostonarodni Czeské Pisně*, or *Popular Songs of Bohemia*. M. Erben achieved great success as an original poet with a volume of poems entitled *Kytice* (The Nosegay), which has passed through three editions, and ranks as a standard work in the estimation of Sclavonic critics.

Blätter f. liter. Unterhaltung (April 20) contain a notice of the most promising lyric poets of Germany. The reviewer observes with regret the dearth of originality and power amongst the writers he had selected, but seems unaware that refinement of thought and melodious expression are nearly as conspicuous by their absence. He has no severer criticism than "unklare mystik" for some silly doggrel about birds and flowers, in comparison with which Miss Ingelow at her worst is sober, sensible, and musical.

Art and Archæology.

ARCHÆOLOGICAL PROCEEDINGS IN ROME.

The new Government, faithful to its promises, continues the public works and *scavi*, under direction of the newly appointed Archæologic Committee; and on the Palatine and Forum those undertakings progress in a satisfactory manner, though no discoveries of importance have been made during the last few weeks. The excavations at Ostia, by which so much of the ruined city has been brought to light, are necessarily suspended, owing to malaria, in the summer, and have not yet been resumed since the change of Government at Rome. In the range of sacred antiquities the authorities of the present *régime* have not yet interfered, but left that department to the Cav. di Rossi, who is responsible to the Cardinal-Vicar alone, and still directs all that is done in the Catacombs—the most important in that sphere being the works in the hypogeum called after Pretextatus, and entered from a point near the Appian Way—remarkable for the fine examples of construction in the best brickwork there laid open, but not so much so for art or symbolism, nothing distinctively Christian having yet been found there. At the extra-

mural S. Agnese I am sorry to learn that the monks of the adjacent cloisters have been obliged, for want of means, to discontinue the excavations undertaken at their own risk, and by which they had opened a branch of the Catacombs called after that saint, immediately under the tribune of their church. Though nothing of artistic value has been found, the epigraphs, all in their original places, and the still unviolated tombs, render this part of the S. Agnese cemetery interesting; and several are of such orthography as indicates early date. We here see Latin and a few Greek inscriptions in the best, some also in the worst, style. In only one instance is there a symbolic representation, a dove perched on an olive-branch, incised on the marble besides an epitaph—that of a child of eight years: *Pelagiae Fil. benemerenti q. annos viii. fecerunt parentes in pace.* Among the Greek epitaphs is the following, in the best-formed letters, to one Felicitas: Φηλιχιτα Μνησοοις; and more remarkable, indeed unique, in this range, is another, Latin, in mosaic of blue and red, not easily legible, and much mutilated.

The British Archæological Society is now authorized to carry on works in any part of Rome except the Palatine and Forum, on the sole condition of paying for the ground occupied. I am glad to report that, recently, the same anonymous lady who contributed last year 100*l.* to the excavation fund of that Society has repeated the same liberal donation; and it is to be hoped that the University of Oxford, from which was received also 100*l.* in 1869, will not cease to afford support to the same efforts of antiquarian undertaking. At present sixteen labourers are daily at work for the Society, and the site where these men are now mostly engaged is near the Thermæ of Antoninus (Caracalla), the outer range of vaulted chambers pertaining to which on the side of the Appian Way are shown, through the results of recent labours, to be undoubtedly subordinate bathing rooms of the humbler description, and probably gratuitous, whilst the luxury of the bath had to be paid for, in the smallest copper money, by those admitted to the principal compartments. Other buildings, also laid open in the course of these works, belong apparently to the patrician residence at the southern end of the thermæ, with painted chambers, mosaic pavements, and a lavarium, which was discovered at considerable depth below the surface about five years ago, and which has been arbitrarily called the House of Asinius Pollio. The character of the paintings here found indicates the Antonine period; and it seems probable that the ruins, now proved to be of greater extent than hitherto known, may have been an imperial palace of the second century, filled with earth, and thus sacrificed to the great thermæ built at a higher level in the century following. Other works ordered by the British Society have secured some results on the northern slope of the Viminal hill, where stood the ruins (not considerable) of the lavacrum of Agrippina (baths for her own sex founded by the empress). Here have been laid open the remnants of two towers in stonework, similar to, but much less massive than, that of the fortifications of the ancient city; also a channel, cut through the rock, for supplying water to these baths, and a cavern, also opened in the solid rock, supposed to be a sacred spelæum of Mithras, narrow at the entrance, enlarging at the innermost part, and containing three marble busts, probably for statues, but no other symbol or accessory of Mithraic worship. As to these towers, which Mr. Parker refers to the period of the kings, I must own that they seem to me too magnificent, and rather like later constructions thrown up with such antique material as was at hand, than anything pertaining to the mighty bulwarks of ancient Rome. Near the same spot have been discovered ruins of a mansion with vaulted chambers, and masonry partly of rude opus reticulatum, no doubt of an early period, and supposed to be of the century before our era.

Among the discoveries obtained by Government works must be mentioned the chambers, seventeen in all, of an extensive building near the Thermæ of Diocletian, on one side of, and considerably below, the new line of road, to be built as a long street, leading from the height of the Quirinal to the central railway station. A few paintings on inner walls, but not of value, have been found here, and it seems more probable that the edifice was a patrician mansion rather than any adjunct to the vast buildings of the thermæ, where now stand the church and monastery of S. Maria degli Angeli. The promised researches for buried antiquity in the Villa of Hadrian have not yet commenced.

Other antiquarian undertakings, for which permission has just been obtained by Mr. Parker, and which will be carried out by the British Society, as directed by him, may lead to interesting results. In the winter of 1868 was discovered, through works ordered by that gentleman, a remnant of ancient construction, identified as the Porta Capena, as to the site of which Roman archæologists had disputed. The proof thus afforded suffices to set aside the theory of the learned Canina and his school. But the excavation in the gardens of the S. Gregorio monastery was filled up in the ensuing summer by order of Baron Visconti, then head of the Archæologic Committee under the pontifical government. The Camaldulese monks of S. Gregorio, who are now left to act as they please, have given the requisite permission for reopening and extending farther the same *scavi*, and we may expect additional light to be thrown, in the result, on that portion of the ancient Roman city-wall and its gateway of the kingly period.

The site of the remains discovered in 1868 is 136 yards north of the hitherto assumed site of the gateway. Here, at the depth of eighteen feet, were found fragments of the joints and the sill of the Porta Capena, the pavement of the Appian, and the crepidines (raised footpaths) on each side of it; also one of the square towers of the Servian walls; drawings of all which objects were shown at a meeting of the British Society.

From a private proprietor has been obtained another permission long desired and applied for by Mr. Parker. An exploration made by him and Signor Gori (a well-known Roman archæologist), in 1868, led to the identifying of some spacious vaulted chambers, in massive and evidently antique masonry, long utilized as wine-cellars, below the *Via del Ghettarello*, near the north-eastern angle of the Forum, as no other than an additional wing of the Mamertine Prisons, the two other subterranean chambers of which, one below the other, are entered beneath the church of S. Giuseppe on the Forum,—both these latter being consecrated as oratories on account of their legendary association with the history and martyrdom of SS. Peter and Paul. The descent into those chambers more distant from the Forum is immediately under a massive structure of lithoid tufa, in regularly hewn blocks, with three enormous arches, two entire and one broken, regarded by Canina as sole extant remains of the Forum of Julius Cæsar. The first chamber here entered, after a scrambling descent in darkness, is rectangular, 12·82 mètres in length by 4·92 in width, and 4 mètres high. An ascent of two mètres leads hence into the second, a chamber of trapezian form, height 3·35 mètres, in its minor length 4·27, and in its greatest length, laterally, 11·72 mètres. These interiors are partly filled up with soil, and in profound darkness; but by taper-light are distinguished blocks of stonework, parallelopipeds of lithoid tufa. Not far distant, in the *Via Marforio*, which traverses the eastern slope of the Capitoline hill, we enter a wine-shop (No. 40), below which a wooden staircase leads us into another vaulted chamber, alike in construction, and divided by a huge arch of similar stonework into two parts,—one rectangular, length 13 mètres; the other triangular, with sides measuring 4·5 and 2·30 mètres. A deep cavity at the extremity of the rectangular chamber seems destined to communicate with another part of the buildings at a lower level, those, namely, below the ruins ascribed to Julius Cæsar, eastward behind the *Via Marforio*. The masonry of the walls is travertine; and the vaulting a kind of concrete, probably more modern. These, and other vaulted chambers under the shops in the same street, are indicated in the topographic map of Rome by Canina, as pertaining to the same Forum of Julius; but their antiquity and resemblance to the other subterraneans above described serve to confirm (I think convincingly) Mr. Parker's theory, also that of Signor Gori, that all these buildings belong to the Mamertine Prisons, hitherto supposed to be represented *only* by the two consecrated chambers, so horror-striking in gloom, under the church of S. Giuseppe. From the lowest of those prisons, whence SS. Peter and Paul are said to have been led to death, is an ingress, hitherto always closed by an iron door, into a vaulted channel, which ignorant custodi point out as communicating with some Christian catacombs. Mr. Parker, convinced that this must be the communication between the two sets of prison-chambers, has obtained leave to open the passage to its full extent, and thus secure such proofs as we may expect will be the solution of the problem respecting the identity of the entire aggregate,—the well-known prisons entered *below* the church

on the Forum, and the cellars recently explored under *Via Marforio* and *Via del Ghettarello.* The completed discovery may bring to our cognizance the entire (or almost entire) extent of these celebrated prisons, sole place of durance in the Rome of most ancient time, and of the less depraved moral conditions contrasted with those of the imperial city by Juvenal :—

> "Felices proavorum atavos, felicia dicas
> Saecula, quae quondam sub regibus atque tribunis
> Viderunt uno contentam carcere Romam."

On one of the archæologic walks arranged by the British Society, the other day, all these constructions were visited. With others of the party, I explored the channels entered from the lower prison, the iron door being now open. It is a scene to inspire horror, dark as night, fetid, and mysterious. The masonry is of tufa, tolerably regular. The vault, under which I had to stoop low in advancing, is moistened by the foul water which trickles down from a sewer passing above. At the distance of about twenty feet from the entrance the corridor widens, and divides into two branches, right and left : that on the left closed by a modern wall ; that on the right permeable to the extent of about 150 feet, at which point farther progress is impeded by earth, which must have been brought hither from the prisons in order to prevent explorations perhaps deemed dangerous.

Signor Gori has published a learned report, *Il Carcere Mamertino*, on these prisons and the recent discoveries and theories respecting their supposable extent. At the meetings of the British Society on Friday evenings they have been several times mentioned.

In a few weeks will, I understand, be produced the first part of a magnificent publication long promised by Spithöver, *Christian Mosaics*, principally those in the churches of Rome, with chromolithographic illustrations prepared at the same establishment where the work will be printed, with text by the Cav. di Rossi. The chromolithographic press was founded by Pius IX. in the suppressed convent of S. Ambrogio several years ago, and at expense mainly supplied from the private purse of his Holiness. The specimens of the coloured plates for the *Christian Mosaics*, which I have lately seen at that establishment, gave me a high idea of the promised work ; the last impression from the mosaics of the thirteenth and fourteenth centuries, or the façades of S. Maria Maggiore, is an example of splendid execution in its way, only too vivid and brightly tinted as compared with the now somewhat dimmed but still beautiful original.

I am sorry to hear of the suspension of another publication at the same press of S. Ambrogio—the *Tavole cronologiche critiche della Storia della Chiesa Universale*, commenced some years ago by Padre Ignazio Mozzoni, of the order of Hospitalers, and first produced at the monastery of the Mechitarist Fathers on their island near Venice ; subsequently continued at Rome, whither the learned editor and compiler had been invited by Pius IX. After this series had reached and illustrated the eighth century the estimable Padre died, 1861, since which event it has been continued by two anonymous priests of the Barnabite order, assisted by the Cav. di Rossi. A volume is supplied for each century, with tables of events, biography, and outline biographies of popes, prelates, and ecclesiastical writers; also plates, coloured and uncoloured, of the principal monuments serving to illustrate church history. The last volume brings the subject down to the end of the twelfth century, and was finished in 1867, —though the date 1869 is on the outer title page. In the present state of Rome, and of monastic orders, whose future is so clouded with uncertainty, it has been deemed necessary to suspend this publication; and from what I hear I conclude there is but little hope of its being resumed or completed.

Since writing the above I have learnt that it is expected that the entire range of sacred archæology, researches in Catacombs, &c., will soon be placed under the same supervision and direction as the classic antiquities and works for discovery in that branch, now superintended by the Roman Committee of which Signor Rosa is the chief, as appointed by the new authorities.

C. I. Hemans.

THE SOCIETY OF PAINTERS IN WATER COLOURS.

This long established and favourite exhibition has been saved from the fate of the British Institution ; the crisis in its affairs, brought on by the unwillingness of some of the elder members to admit new associates with new ideas and new styles, and their continued antagonism to such as were received, has been wisely and safely passed over; and since the admission, three years ago, of Holman Hunt, some of the best painters we have in their several ways have been added to the Society. Indeed, but for Gilbert, whom we consider one of the greatest artists now living in the world, the annual show of the Society of Painters in Water Colours was in danger of settling down into a display of landscapes, only varied by architectural and sea pieces. The figure painters were becoming fewer, the best having left the Society, and others scarcely exhibiting at all. The new men, those of this season, are no fewer than six, some of whom ought to have been in long ago, and the majority are, we prognosticate, likely to maintain the credit of the body. However, as we see them now on the walls of the gallery, these new members have the most singular and ominous family likeness! Holman Hunt being scarcely an exhibitor, and Dobson being also an oil painter, Mr. Pinwell has been the most fortunate accession to the body these few years past ; and the peculiar clear, sharp, bright elaboration of warm colour, so successfully distinguishing that gentleman's drawings, seems, strange to say, to have determined the style of the aspirants to membership, and to have opened the door for them ! Like the children running after the Pied Piper here they come : R. W. Macbeth, who imitates in subject and treatment, as well as in colour, and whose fate consequently appears as clear to us as if written in an open book ; J. W. North, with charming taste and indeed genius in landscape, unable to resist the fascination of trying figures, and doing so in the manner indicated ; A. Goodwin, trying to overrule his natural depth and fulness of effect ; W. M. Hale, also as bright as possible ; and lastly (as H. S. Marks, the sixth new member does not exhibit) A. B. Houghton, one of the ablest draughtsmen in England, and one of the most original observers with the crayon in his hand. Perhaps it is unjust to all these new members to say they imitate ; there may be something in the air that makes primitive colours and prismatic hues fatal to the coming men in water colour painting ; we have a Japanese superstition on the one hand, and on the other photography, which warns the painter that he must give an equivalent for the perfect sun-work, and that he must depend on *colour* as the element in art still his exclusive property. Some one or two of the older members are similarly affected, avoiding neutral tints and shadows. One or two of the landscape painters in particular would contemplate a field of green grass, or a blue sky, with the greatest horror, or indeed the painting of anything solid and tangible, anything more material than "light" and "air." In a few years we may hope a reaction will set in, and we shall again tread on the firm earth, and see pictures of "The green woods when the shaws were long," as well as faint yellow and white vaporous autumns, and men and women as old W. Hunt used to paint them, as well as creatures thin and sharp as tin-foil.

To descend to particular pictures before us. "In Captivity" (67), A. B. Houghton. The subject has been suggested by the words so often painted, "By the waters of Babylon we hung our harps on the willows." Groups, admirably drawn, are standing listlessly under a faint hot light, by the side of a great stream ; two pelicans, characterized with great beauty, are by the edge of the water ; and behind all a Persian soldier leans upon his weapon guarding the captives. The great stream, however, breaks over rocks and falls just as it disappears from the picture ; and there are no trees whatever, as these would require some little amount of shadow ; so Mr. Houghton calls it simply, "In Captivity." The Eastern character of the figures, and the weariness intended to be expressed, are well associated with the yellow haze of sunlight ; but in "Hiawatha and Minnehaha" (138) we have a condition of intense colour that really requires explanation, if such were possible : the clods of earth are painted in vermilion, light red and pink madder, while the dignity and beauty of the figures are truly admirable. Mr. Gilbert has no fewer than six pictures, all of them remarkably complete in their way, but by far the finest is "Joan of Arc entering Orleans" (66). In this work the artist's astonishing readiness of hand and prolific power find ample scope in the crowd surrounding the Maid, accompanying and receiving her, every figure animated by various emotions, and expressed by the hand of a master. Our readers do not require to have any detailed criticism of Gilbert's works—they have so distinct a character, and have been so long before the public ; but there is no man in England who is more truly a

great painter by natural gift, and whose works refresh our feeling of manhood and healthy life in history. Painting, of all the arts, deals with externals—the appearances of things—and as much of the *subjective* as these exhibit, and no more; so that painters who try to make their art subserve high aims and objects fail, while men who are wholly without high aims and objects succeed. "A Midsummer Night" (118), E. K. Johnson. This is a very remarkable work. The condition of light represented is very original in observation and powerfully felt: the local colour of every object, pronounced within a veil of darkness, so to speak, conveys at first sight an unearthly character. It takes a little time to recognize what we have seldom seen; but by and by the truth of representation dawns on the spectator, and we acknowledge the success of the work. "Away from Town" (130), G. J. Pinwell. Not so interesting or important as some of Pinwell's former works, but quite as admirable in feeling and realization. The women are individual and charming in character and sentiment, and the background lovely beyond praise. "Danger in the Desert" (104), Carl Haag. We wonder if Mr. Haag has really a genuine sympathy with the East, that makes him go on painting it? Many questions suggest themselves, in spite of the exceeding cleverness of the work; questions as to the likelihood of the whole story. "Farmyard Favourites" (86), J. D. Watson, is fresh in its daylight, and very solidly painted; the white calf is especially excellent. "The Lark" (266), F. W. Topham: two children, whose faces are turned to the lark at "heaven's gate" singing, are beautifully expressed. There are other works by the same that ought to be mentioned, as well as three by F. J. Shields, and two by Lamont, especially "In Tune" (162), and Dobson exhibits three pictures of great delicacy and beauty; but the little space left must be devoted to the landscape, where Alfred Hunt, G. P. Boyce, S. Palmer, W. W. Deane, G. A. Fripp, and E. Duncan, are all very strong this year. Indeed the Society is rich in landscape, and very varied in the characteristics of the painters; and this year the new names add largely to the value of this portion of the exhibition. Certainly Boyce never did any more delicate and lovely work than those here exhibited, although they are so small; and "A Land of Smouldering Fire" (70), by Alfred Hunt, his most important work, is one of the noblest landscapes we have seen for years—impressive in sentiment, rich in colour, and almost sublime in effect.

NATIONAL GALLERY.

It appears that the Government, while advancing the large sum of money for the purchase of the Peel collection of pictures, does so with the clear understanding that the annual sum placed at the disposal of the Commissioners for the National Gallery is thus forestalled for a number of years. The National Gallery had actually two years' (£20,000) allowance to dispose of; the Government have therefore advanced £55,000 to make up the £75,000 to expend on this enormous quantity of things by Wouvermans, Metzu, Van de Velde, Hobbema, &c., &c., and for five years and a half the National Gallery can make no additions, except by application to the supreme authority. In this case, one would say Sir William Boxal's office will not be very onerous to him.

ALMA TADEMA'S VINTAGE: ANCIENT ROME.

This picture, which is now being exhibited at 1, King Street, St. James's Square, is not only the largest and most important work of the painter yet seen, but it is his greatest success; and not only his greatest success but the most successful and delightful rendering of antique life ever done on canvas. How many of us in various ways have tried to recreate Roman times, and failed; how much French art has striven to reproduce the ways and aspects of the times of the Gracci, the Horatii, of Hannibal and of Cleopatra, and given the world only a sculpturesque schoolboy's interest in the past! And here it is at last: a little ornate, a little standing in need of explanation as to the architecture, where they are going and what they are preparing to do; but here is the material luxury, the strength of enjoyment that identified itself with religion, the eclectic cosmopolitanism that assimilated the art and cultus of all the conquered world, the little biting taint of the savage showing through the highest civilization, all expressed beautifully in point of art, in the character of the actors and in the scene in which they act.

To describe the composition at length would require a good deal of space and is not profitable after all; the visitor will receive a printed account as he enters the room; it is only well to remark that the picture does not deal with the Vintage properly speaking, but the scene represented is the festival, on the conclusion of the wine-making season, in the temple of the god. The procession is led by a young woman like our queen in the Harvest Home—a priestess on this great day of joy, her head covered with a broad wreath of vine, the leaves of which are nicely distinguished from the ivy, having fallen with the heat, while the ivy round the great amphora is still sharp and bright—who looks round to the timbrel players dancing and shaking their shining instruments, and to the players on the flute, whose faces are bound by the *capistrum*, the leathern band that supplemented the muscles of the cheeks. After all these come the priests bearing votive amphoræ of the primitive brown clay. The procession passes along a raised colonnade, from which the atrium (we may call it) is visible, filled with the crowd wildly advancing with cries and madness. These multitudes of figures are, however, of little importance, the excitement of the Bacchanals being judiciously kept out of view. Rather too much so, we think; the worship of the god whom Horace describes (ii. 19) as binding the hair of his Thracian priestesses with vipers without hurt, and whose feet, as he returned from hell decorated with his golden horn, Cerberus licked with his triple tongue, was still in the days of Julius, which time Tadema's picture is intended to represent, more exuberant and demonstrative than here expressed. But the learning which has manifestly gone towards the completion of this work shows us that the painter was ignorant of nothing, and selected his materials, as his success proves his right to do. He has the traditional Dutch delight in accurate details, and the whole canvas is full of the richest and most lovely as well as recondite belongings of classic worship and life. The dramatic interest is in the *mise en scène*, not in the passion; nor is there a morsel of that vague and flaccid *poetic* element that deals with the barbaric pearl and gold of Pagan times in the mediæval spirit of sentiment and sadness. Nevertheless there is no lack of force in the expression of the living actors in this elaborate scene; they are painted, as the whole work is, with extraordinary solidity as well as individuality. Indeed the execution and texture of all the surfaces are absolutely perfect, the broad daylight everywhere bringing out the loveliness of white marble, silver, bronze, and woven fabrics. And it is this executive perfection that marks the whole of the works of Mr. Tadema, carried out in the present picture in all its parts, as if every single object had been painted from nature, that conveys so decided a feeling of reality and veracity, and mainly distinguishes this illustration of antique life from all that have gone before.

On reading over what we have written we feel that we have made scarcely any limit to our praise, and yet it does not seem that we ought to qualify our approbation. What Mr. Tadema has set himself to do he has absolutely accomplished. His work is not a great original creation of transcendent genius—it stands in distinct relation to certain pictures of the French school; but this picture is completer; it is the most masterly, judicious, accomplished, and beautiful work of its class, and we do not wish to discount its value by a single farthing, but to say to our readers that here for once is something they had better see.

W. B. Scott.

TO THE EDITOR OF *THE ACADEMY.*

Rapallo, 12th April, 1871.

Sir,—In your issue of the 1st of this month I find the following remark:—"The taste of Sir Robert Peel was limited, hide-bound we may say; the Dutch school alone was the school he appreciated, and that distinctively from the Flemish properly so called." Some injustice is accidentally done to the taste of the great statesman and lover of art by the above remarks, however true they may be of the period of his life during which he formed his collection. At a later time, when he made a short visit to Italy, in that year when he was summoned so hastily by his party to return to England, he saw the late Mr. Andrew Wilson in Rome, from whom he sought information with reference to Italian pictures. He then expressed to Mr. Wilson his regret that he had not become familiar with Italian art before he made his collection, and his fervent admiration of the pictures of the great masters which he had studied during his tour in Italy. We thus find Sir Robert Peel appre-

ciating the Italian masters, and expressing his admiration of their works, at a time when a taste for Dutch and Flemish pictures was still prevalent in Great Britain, not only amongst amateurs and collectors, but very generally amongst artists also. Picture-dealers then carried Flemish and Dutch pictures about with them in mahogany cases; and such was the desire to possess specimens that skilful imitations, especially of the works of Wouvermans and Teniers, were fabricated in London for the provincial market.

I well remember that artists in those days spoke impatiently of Italian art, the Venetian school excepted; and many of them, in visiting Paris or Italy, sketched from or copied Flemish pictures in the very presence of those of the great masters.

That Sir Robert Peel could then express his high sense of the beauty of Italian art and of its varied claims to admiration, and could frankly regret the mistake which he had made, are proofs of the quality of his taste which should not be forgotten; and from that time at any rate he was neither "limited nor hide-bound" in his taste.

Your obedient servant,

C. Heath Wilson.

ART NOTES.

The representation of the Ammergau Passion Play will recommence on June 24, and be repeated July 2, 9, 16, 25, and 30; August 6, 14, 20, and 22; September 3, 9, 17, and 24.

The initials H. G. are appended to an essay on Domenico Fiorentino (D. del Barbiere) in the *Preussische Jahrbücher* for April. The aim of the writer is to show that Domenico, but for the circumstances of his career and his long residences in France in connection with the school of Primaticcio, might have held the same relation to Michelangelo as Marc Antonio held to Raphael. On the strength of his authenticated extant engravings, especially of the two unique pieces lately purchased by the British Museum—the "Repose in Egypt" and the "Pacë"—H. G. claims for Domenico a foremost place, if not the very foremost, among Italian engravers of the sixteenth century. The value of H. G.'s criticism is, however, on his own confession, impaired by want of personal inspection of several of the rare remaining plates attributed or attributable to Domenico.

The April number of Dr. von Zahn's *Jahrbücher für Kunstwissenschaft* opens with a very long and interesting article by W. Bode on the life and art of Frans Hals, the great portrait-painter of Haarlem, in which several new points are added to the investigations of Thoré (W. Burger), especially in regard of the relations between the work of Hals and his scholars. This essay is announced for republication in a separate form, and with two etchings by Unger and Flameng. In the same periodical Dr. Hermann Grimm (in a thesis written in Latin) disputes the received account of the authorship of the famous letter on Roman antiquities once ascribed to Raphael, and since Francesconio generally considered to have been addressed to Leo X. by Baldassare Castiglione, out of materials supplied by Raphael. Dr. Grimm, on the other hand, is led by internal evidence as to date, which the letter supplies, and partly also by its style, to attribute it to another hand, under the pontificate of Julius II. He thinks it had nothing to do with Raphael, but was addressed to Julius II. by the antiquarian Andreas Fulvius, when the work on Rome, published by that author, with a dedication to Clement VII. so late as A.D. 1527, was already projected by him. The association of Raphael with Fulvius in his researches, to which the preface of the book bears witness, would thus have been long subsequent to the date of the letter. In the designs of classical temples, altars, porches, &c., engraved by Marc Antonio, after Raphael, Dr. Grimm sees the helping hand of Fulvius, and the rudiments of the great work in which Raphael intended to depict the ancient city restored. In the remaining paper Dr. Alfred Woltmann combats with much asperity, on epigraphical and other grounds, the arguments of Dr. Grimm, and more especially of W. Schmidt, against the now received attribution of the early works of Hans Holbein the younger, at Augsburg.

One of the veterans of the Munich School of Art, the painter of battles, Peter von Hess, died at Munich on the 4th of April. He was born in 1792, at Düsseldorff, where his father, R. P. C. Hess, the engraver, was professor. He went through the campaigns of 1813–15 as a soldier under Wrede, and thus became familiar with the details of military life and action which give their chief interest to his martial compositions; but he seldom painted pictures without studying their scenes from nature. In the suite of Otto, king of Greece, he visited the ground on which battles were fought for Greek independence. In 1839 he visited Russia, preparatory to composing his canvases illustrating the war of 1812. Hess's best-known pieces are the "Battle of Leipzig" and the "Entry of King Otho into Athens." Others are in the Palace and Pinakothek of Munich. Some of his sketchy frescos may be seen in the arcades of the Hofgarten at Munich.

The Dresden Holbein Exhibition, which is to be opened on the 15th of August (and so earlier than we anticipated), will disappoint those who believed, as we did, that some of the Queen's Windsor pictures would be seen there. Her Majesty was willing, it would seem, to lend some of the best examples in her possession; but the office of the Lord Chamberlain has had a word to say in the matter, and it is not probable that the Royal Holbeins will be sent across the Channel.

Schnorr von Carolsfeld resigned the presidency of the Saxon Academy of Arts, and gave up the direction of the Dresden Museum, on the 29th of March—his seventy-seventh birthday. Schnorr's successor at the museum is Hübner.

The German papers report the destruction, by the operations of war, of some valuable paintings formerly belonging to the distinguished artist Bouterwek. Madame Bouterwek had been resident since her husband's death at a small property in Bougival, which was ruined during the siege while its owner was engaged in hospital-work within the city. Among the losses are two Titians, two Murillos, two Paul Potters, and a Hobbema, destined after Madame Bouterwek's death to have been bequeathed to the museum of Berlin.

A bust of the Emperor of Prussia, executed on commission by Professor Halbig of Munich, is spoken of as a first-rate example of modern sculpture in Germany.

A large series of woodcuts after Rethel's frescoes at Aix-la-Chapelle have lately been published by the Rhenish and Westphalian Art Union at Düsseldorff.

The artist Heinrich von Mayr of Nuremberg, whose death (in his sixty-sixth year) took place on the 5th of April, was distinguished less as a painter than for his attainments in subsidiary branches of the arts. His book of Oriental Illustrations (*Genrebilder aus dem Orient:* Stuttgart, 1846) had an immense success in its day; and the service of his reputed taste in decorations and curiosities was called in by more than one European potentate. He was the inventor of a baking clay of extraordinary fineness and tenacity, the secret of which appears to have been lost.

Professor Gustav Jäger, the distinguished historical painter, died at Leipzig on the 19th April, in his 63rd year.

Music.

UNPUBLISHED LETTERS OF ROBERT SCHUMANN.

III.

The most striking feature of the following letters is the perfect unselfishness and the amiable modesty of their writer. The interest which he takes in the literary productions of his friends, the enthusiasm with which he defends the cause of Berlioz and lavishes his praise on Mendelssohn, Henselt, and Sterndale Bennett, show the kindly disposition of

Schumann's character in a most favourable light; especially when we remember that he had already produced at this time works of the stamp of the *Carnival* or the *Kreisleriana*, on the strength of which he might have justly considered himself as the rival, if not the superior, of all these men. But this idea seems never to have occurred to him, and the language in which he mentions his own compositions leads one to believe that he himself was scarcely aware of the value of his own work.

(7)

"*Leipzig, Jan.* 31, 1837.

"My dear Sir,—First of all I must tell you how I gave Mendelssohn, with whom I dine every day, your article, 'Erste Töne.' I stood aside and watched his face to see what impression would be made upon him by your last sentence, which I confess had several times brought the tears into my own eyes. He read the article attentively; his face (what a glorious, divine face it is!) revealed all his impressions as he went on. The further he got the more it seemed to light up, till at last he came to the passage: it was a pity you could not see him. 'Ha!' he cried, 'what's this? That is really too much; I am quite delighted. There are different kinds of praise, but this comes from a pure heart.' And he went on to say a great deal more. You should have seen him and heard him: 'Ten thousand thanks to the man who wrote this.' So he went on until we dived into our champagne. The fact is, as I have long ago made up my mind, 'there is no man who can write on music like Wedel;' and I think that I can read the same verdict in the delicate but continual motion of Mendelssohn's countenance, which is a record of all that is passing both within and without him. So full of life is each word of your prose, so picturesque are its little turns of expression, its cadences so melodiously falling and rising; but enough of this. Do you know his *St. Paul*, in which one beauty relieves another without interruption? He was the first to grant to the Graces a place in the house of God, where they certainly ought not to be forgotten. Hitherto they have not been able to make their voices heard for the multitude of the fugues. Do read *St. Paul*, the sooner the better. You will find in it nothing of Handel or Bach, whatever people may say, except so far as all church music must be alike. Many thanks for your letters. The 'Erste Töne' I received with your letter of October 28, only a fortnight ago. I wish I could see you and have a talk with you this summer, only I am sorry that you are not likely to find Mendelssohn here, as he hopes to spend the summer at Frankfort in the arms of his beloved. Since he was engaged he has become quite a child. Have you got any little *Poems for Music* which might be published in my paper? For your tragedy I can't do anything. As soon as he heard the word 'tragedy,' Mr. Booth stared at me from top to toe, looking very much amazed. You had better collect your *Wedeliana*, for which I shall hope to do something, with God's help. I am very anxious to hear your opinion on Florestan's sonata (the article about it in the *Zeitschrift* was by Moscheles, as I think I told you before). Some one has just called, so farewell, and don't forget

"Your

"Schumann."

(8)

Leipzig, April 16, 1837.

"My dear Sir,—I had scarcely read your letter when my brother, the publisher of Zwickau, who had come for the Leipzig fair, entered my room, and in answer to my hasty question about the *Mosellieder*, told me they would be here in about seven days, and in print. I was very much surprised to hear this, but am now rather afraid that it may have been done without your full consent. Please set me soon at ease about that. For the same reason I have retained the parcel for Menzel in Stuttgart, because you may now perhaps wish to dispose of it otherwise.

"The enterprising publisher, R. Freier of Leipzig, is engaged in printing your north-southern *Furte*. (?) Something occurs to me that might yet be done. Could you not add to these poems an introduction in prose, as Goethe has done so admirably to his *Divan*? The number of unusual expressions ('Furte,' to begin with, was new to me) seems to require some explanation, which you might put in a poetical form.

"The *Splitterrichter* I remember to have read; but I must first search for it among my papers, which can't be done in a moment. If you are particularly in want of it, let me know.

"I shall be extremely glad to see you here. In me, however, you must not expect to find much. I scarcely ever talk, except in the evening, and most while playing the piano. The Florestan sonata, and the back numbers which are wanting, I prefer to give into your own hands. If you don't come soon, I am sorry to say you won't find Mendelssohn nor Bennett (an angel of a musician), but in any case David and Clara Wieck, both remarkable people.

"Write to me please as soon as possible, and send me heaps of articles; the world wants them. My paper has lately gained much ground. For the next volume I hope to come to an arrangement with another publisher, more favourable both to myself and my contributors. You are of course the first I have to think of, and in whose debt I am deepest. Keep me in your kind remembrance.

"Yours truly,

"R. Schumann."

(9)

"*Leipzig, May* 18, 1837.

"Be kind enough to receive at last from my hands the first copy of your *Furte*. The Roman characters I do not like, but it was too late to change them. You will soon receive by parcel delivery several copies of the *Furte* and also ten of your *Mosellieder*: one of the latter, together with the tragedy, has been sent to Menzel in Stuttgart, so the most important things are settled.

"Of Bach's concerto in D minor only Mendelssohn has a copy. As soon as he comes back from the Rhine—that is, not before the end of September—I shall have it copied out for you and myself; I always considered it as one of the most admirable productions in existence.

"I am very sorry that you can't come, because I want to talk over several things with you which it would require a great deal of time to explain in writing. I have a variety of plans and schemes for which I want your assistance. First of all, I have thought for a long time of giving real life to the Davidsbund by bringing men of the same opinion (even if not professional musicians) in a closer connection by means of letters and symbols. If Academies with dunces at their head designate their members, why should not we, the younger generation, do the same? There is another idea which has a great attraction for me, and which, though of more general importance, might be connected with the former; that is, to found an *agency for publishing works of all composers* who would submit to its statutes. It would aim at preserving for the composer the profits which hitherto have been almost entirely absorbed by the publisher. The only thing required is to engage an agent for the business, whose rights would be legally secured. The composer would have to make a deposit for the publishing expenses of his work, and receive, say once a year, an account of the sale and the overplus due after the expenses have been paid. Thus much to day. Please consider the matter carefully by yourself; perhaps it might be realised some day for the great benefit of composers. Please think about it and let me know your opinion. I should have liked to sound you a little on another point, whether we might not publish together in a double work our past and future ideas on music, your *Wedeliana* and my *Davidsbündleriana*. For many of them it would be a pity that they should be buried in a periodical. My brother would be the publisher. All we should have to do would be to amalgamate our work and put it in an interesting form, and on this point it would of course be necessary to come to some agreement. To all this, my excellent friend, I hope you will devote a few hours of your meditation. It seems to me at times as if I had not very long to live, and so I should like to do more work before I die. I am longing for your answer.

"Yours faithfully,

"Robert Schumann."

(10)

"*Leipzig, August* 20, 1837.

"My dear Sir,—The reason why I have kept you waiting so long for an answer to so many kindnesses of yours, is partly because my hope for Mr. Ernemann's arrival is still a mere hope. I was anxious to tell him all I had to say, my esteem and all I feel for you. It now seems doubtful whether he will come at all; some weeks ago he sent from Dresden some manuscripts of yours, since then I have not heard anything of him.

"Now let us begin about our music. I am in some difficulty about your letter on Berlioz, as I was before about that of L., which really is exaggerated. May I tell you the reason why it was accepted? it is not a very noble one, but it is always best to speak out the plain truth. L. sent me the letter, and at the same time asked me urgently for money. This I gave him with pleasure; but then I did not wish to be the loser by it, and, besides, as I have worked for the paper for years I don't want to pay money out of my own pocket; and so it happened. Besides—

pardon me for saying so—you judge the overture without having *heard* it. *You have no idea* what he contrives to make out of the orchestra. If you have heard a *good* performance of the overture and still wish to have your article published, I shall do so with pleasure. Altogether the whole business is not worth all this trouble, and the point is more or less settled by a short notice of the overture in a former volume. My opinion as therein expressed seems to me quite correct even now. I am only sorry that you should have written your excellent article to no purpose. Perhaps you can propose a compromise.

"Your other letter I must keep back until things are more advanced. If I printed it now, and the foundation of my great German "Artistic Union" should afterwards come to nought, the effect would be rather ridiculous. So I must ask you to have a little patience.

"The article against Nikolai was remarkably good and carried conviction with it in every word. Don't forget to write more articles of that kind. By-the-bye, which concerto of Bach's do you want to have copied out—the one for three pianos, or that for one? Perhaps you would also like to have a copy of his great mass? I should like for once to make you one or two Christmas presents. Write and tell me what you wish to have. As for Freier's manuscripts I sent them off to Messrs. Schott as early as the Easter fair. Haven't you received yet a copy of the *Moselllieder?* They have been despatched safely from here, as well as the copies for your brother at Cologne. All the manuscripts you sent me are in my brother's hands. He is so difficult to manage that I am sorry I have recommended him to you. Do you still like the idea of writing new words to Mozart's operas? To tell you the truth I think it is impossible. I am over head and ears in work, and so must finish with my kindest regards and in the hope of an early answer. "Yours truly,

"Robert Schumann."

(11)

This letter refers almost entirely to private matters. We select the following characteristic passages:—

"*Leipzig, January* 13, 1838.

"I for my own part understand Berlioz as clearly as the blue sky above me. . . . . I think there is really a new time in music coming. It must come. Fifty years have worked great changes and carried us on a good deal further."

And about Henselt—

"Ask him to play to you for hours together, and then only will you learn how to appreciate and admire him. Of all pianists (and I have heard all of them and often) he has given me the greatest pleasure."

(*To be concluded.*)

NOTES ON MUSIC.

"Her Majesty's Opera" (Drury Lane) opened on Saturday the 15th inst. with a performance of Donizetti's *Lucrezia Borgia*, one of those operas which keep the stage less by their music than the interest or neat construction of their *libretti*. The cast was not of a kind to give a favourable—or, as has been already shown, a fair—idea of the strength of the company; including as it did but one performer of the highest class, Madlle. Titiens, whose special gifts and accomplishments admirably qualify her to realize the *Lucrezia* of Victor Hugo and Donizetti, if not of Roscoe or of reality. But, on the third night of his season, Thursday the 20th, Mr. Mapleson put forth more of his strength, in a performance of *Linda di Chamounix*, which, in the equality and high standard of its excellence, surpassed any performance which has been heard on a London operatic stage since Sir Michael Costa. About this gentleman's intentions in regard to a good deal of music with which he has to do, opinions differ widely: about his intentions in regard to operatic music, and his ability to carry them into effect, there can be but one opinion. That accepted and experienced artists like Madlle. Ilma di Murska and Madame Trebelli should be susceptible to a conductor's influence may be hard to believe, though it is certainly true. To debutants like Mr. Bentham and Signor Moriami it must be simply invaluable; while, given of course a certain amount of skill, as is the *chef* so will be the band and chorus. By the time these lines are in print Mr. Bentham will in some degree have overcome the nervousness natural to, and not displeasing in, a first appearance, and have demonstrated, what he has as yet only indicated, that he possesses a beautiful voice and has attained to a graceful style. The part in which he appeared is one in which the most experienced actor might fail in producing the smallest effect. *Linda's* lover is simply a singing gentleman. Signor Moriami is as well endowed as Mr. Bentham. His voice is a baryta of touching quality and sufficient compass and volume, as yet quite unforced. He has already more than indicated considerable powers as an actor. But (parenthetically) why should the stage father of a girl just attaining marriageable age assume the look and bearing of a man of ninety? Madlle. di Murska's great-grandfather could hardly present a more decrepit appearance than that of Signor Moriami. An acquaintance of some four years since, Signor Agnesi, comes back to us one of the most finished singers of his class now before the public. If his talent is as varied as it is undoubtedly great in the one style in which it has been as yet exhibited, he will prove indeed a great acquisition to Mr. Mapleson's *troupe*. Sir Michael Costa has got together, and, what is more, has already got into working order, a superb band, and a chorus of agreeable *timbre*, who, incredible as it may seem, show some disposition and ability for acting.

The Royal Albert Hall is still "on its trial" on two counts—one, that the music performed in it is imperfectly heard; the other, that it is heard twice over. Neither assertion is at present altogether without foundation. All voices and some instruments, especially when delivered slowly, are *heard* in the Albert Hall much as they are heard in the open air, *i.e.*, clearly, but with a loss of force and individual character; while other instruments, always capable of great intensity, here find themselves capable of still greater and even incapable of less. Thus the *proportions* of the orchestra, as the great masters have laid their passages out for it, are always partially, sometimes entirely, changed; that which was meant to be principal becoming subordinate, that which was meant to be subordinate becoming principal. That it may be possible to *score* or *re*-score music in such a way as to meet this difficulty there can be no reason to doubt; that, in its present state, the orchestral symphonies and overtures of Haydn, Mozart, Beethoven, and their peers, as they have left them, should ever be heard with pleasure in the Albert Hall is out of the question. Of the "echo," about which so much has been said and written, some means will no doubt be found to get rid. It is only now very perceptible in certain parts of the building, and even in those to a less extent in proportion as it is well filled. But then how is this filling to be achieved? What chance is there of attracting, more than occasionally, to the very extremity of London the right number of "dampers" for a "sounding-board" of such capacity? The "right thing" sooner or later gets to be said about most things. What will be said about the Albert Hall as a music-room at last will be what was said by many and probably thought by all musicians about it at first: simply that it is too big—for London, though not for Lorbrulgrud.

The two most important pieces of the Twenty-fifth Saturday Concert at the Crystal Palace are Schubert's Symphony in C and Chopin's Pianoforte Concerto in F minor. The symphony was finished in March 1828, a few months before Schubert's death, and displays his creative genius in its perfection. The richness and originality of the ideas it embodies, coupled with its powerful instrumentation, render it a masterpiece scarcely equalled by Beethoven himself, of whose symphonic style it is quite independent. Notwithstanding its great merits, the work remained entirely unknown for more than ten years, when Schumann discovered it amongst a heap of other MSS. in the possession of Schubert's brother Ferdinand; and, with his usual enthusiasm for the creations of others, he sent it at once to Mendelssohn, who soon afterwards conducted its first performance at the Gewandhaus Concert, 12th December, 1839. Chopin's concerto is very seldom heard in public, owing no doubt to the great difficulties of execution which it contains, and which were overcome by Mr. Darnreuther in a remarkable degree. The accuracy and feeling displayed by him in the larghetto, with its intricate rhythmical phrases and tempi rubati, were highly praiseworthy. The pianoforte part of the first movement did not, in consequence perhaps of the great dimensions of the hall, sound quite strong enough. The work itself is not representative of Chopin's real power, the orchestra being treated simply as a foil to the pianoforte, without any characteristic

features of its own; besides which, the principal motives, founded in part on national dance-rhythms — though they would be of extreme beauty in little *pièces de salon*—have hardly enough importance to fill up the larger forms of a concerto.

Herr Wagner has written two new pamphlets on music, which are to appear immediately, under the following titles: "Ueber die Bestimmung der Oper," and "Ueber die Aufführung des Beethovenfestspiels: der Ring des Nibelungen."

The *Independent* (New York, 13th April) notices the "production for the first time in America of Wagner's *Lohengrin* brought out at the Stadt Theater on the 3rd April."

The Beethoven Festival at Bonn—which was postponed in consequence of the war—is to take place in the month of August, on an enlarged scale.

New Publications.

Caravita, D. Andrea. I Codici e le arti a Montecassino. 8° Montecassino pei tipi della Badia, 1869–1870. Vols. I. and II.

Dante-Gesellschaft, Jahrbuch der deutschen. 3te. Bd. Mit Taf. u. Plan von Rom. Leipzig: Brockhaus.

Fechner, G. T. Zur Experimentalen Æsthetik. 1str Theil. Leipzig: Hirzel.

Fastenrath, Johann. Das Buch meiner spanischen Freunde. 2 Bd. Leipzig: E. H. Mayer, 1871. (Poems, mostly translated or imitated from the Spanish.)

Klein, L. Dramatische Werke. Vol. I. T. O. Weigel.

Miller, Joaquin. Songs of the Sierras. Longmans.

O'Driscoll, W. Justin. A Memoir of Daniel Maclise. Longmans.

Reber, Dr. Franz. Kunstgeschichte des Alterthums. Leipzig, 1871.

Schneider, Fr. Der heilige Bardo; Erzbischof v. Mainz von 1031–1051. Nebst Anhang: der dichterische Inschriftenkreis Ekkehard's IV. d. jüngeren zu Wandmalereien im Mainzer Dom. Mainz: Kirchheim.

Schuchardt, Chrn. Lucas Cranach d. ältern Leben u. Werke. Nach urkundl. Quellen bearb. (pp. x., 309.) Leipzig: Brockhaus.

Schwabe, L. Observationum archæologicarum. Parts I. and II. Dorpat and Berlin: Calvary.

Theology.

The Jesus of History. By the Right Hon. Sir Richard Hanson, Chief Justice of South Australia. London and Edinburgh: Williams and Norgate, 1869.

[Second Notice.]

The history of Jesus himself forms the subject of the 2nd book, which is divided into eight sections:—1. the Gospel of the Infancy, 2. the Precursor, 3. the Herald of the Kingdom, 4. the first Gospel and the third, 5. the preacher of righteousness, 6. the Messiah, 7. Controversy, 8. the Crucifixion. The first of these discusses the first two chapters of St. Matthew and St. Luke, the unhistorical character of which is proved partly by their inconsistency with one another, and partly by *à priori* considerations. Often as this deduction has been attempted before, it is not even now superfluous, and the clearness and vigour of the author's arguments deserve all praise. That the descent of Christ from David was not an element of the original tradition is scarcely shewn so conclusively as the author seems to suppose. St. Paul himself was convinced of the descent from David, and the stress which he lays upon it proves that he derived his information from the elder apostles. The controversial discourse of Jesus in Matt. xxii. 41-46, cannot be urged in favour of the author's opinion. The same language would have been equally suitable, whether Christ were really a descendant of David or no, the object of the speaker being to confute the narrow and distorted views held by the scribes on the nature and kingdom of the Messiah. In the second section the author points out the close connection between the history of Jesus and that of the Baptist. He thinks the preaching of the latter presupposed the existence of the Messianic expectation, which it was designed to animate and purify. Upon the death of the Baptist, Jesus became conscious of a call to fill the vacant place. This he did by coming forward in Galilee as a prophet and a reformer of the exposition of the Law. A faithful image of His teaching is preserved in the main features of the Sermon on the Mount in St. Matthew, excluding the Messianic passages which interrupt the sense, and are therefore generally regarded as interpolations. It appears by this Sermon that Jesus had no desire to alter the Law, or revolutionise society, but merely to lead men to a right understanding and practice of the Law in its true sense. This was the necessary preparation for the Messianic kingdom, the advent of which He announced in common with the Baptist, and the establishment of which was to be effected by miraculous means. What distinguished Him from the Baptist was the largeness of His invitation, which He addressed to all the people without any apparent intention of forming a separate association. He regarded His mission as a mission simply to His own people, and accordingly He confined the twelve disciples, whom he sent forth to preach, within the limits of the land of Israel. His attitude towards the tradition and practice of the Pharisaic party was of a piece with His exposition of the Law, as is shewn by His intercourse with the publicans; though this probably was partly due to the fact that so little interest was shewn in His teaching by the higher classes of society. But His public acts soon gave much greater offence than His teaching. The masses, as well as their leaders, soon ceased to follow Him; the latter had been denounced by Him, whilst the former were disappointed because the Messianic advent, which formed the background of His preaching, was still delayed. This turn of popular feeling could no longer be disregarded, and Jesus retired to His native town Nazareth, and from thence to the wilderness, and even crossed the border into the neighbouring Phœnicia. The brighter side of the feelings of Jesus during this period of His life are expressed in a cycle of discourses, to which the parables placed together in St. Matthew belong. In their original signification they are by no means merely general instructions on the nature of the kingdom of God, but are concerned with very definite practical objects, which He desired to attain among His disciples. Those objects can no longer be fully defined, but the principal one was certainly to console His companions with the hope of a brighter future. Yet even into this collection of parables some later elements have penetrated; in particular, the parable of the enemy who sowed tares, which belongs to the time when the majority in Jerusalem regarded the apostle Paul as such an enemy. The time now arrived when Jesus, regarding the prospects of His ministry as hopeless in Galilee, and having no desire to start on an unsuccessful mission abroad, found no way left, but to make a last decisive effort and begin His work over again in the very centre of the nation. With this resolution, a new view respecting His own person came to maturity, the origin of which indeed is shrouded in mystery, but which, as far as we can see, formed itself by degrees in these last times of trial, and probably not only affected, but was affected by, the corresponding hopes of His disciples. It was at this point that He ratified the utterance of Peter, and came forward publicly as Messiah; such is the way in which His triumphal entry into Jerusalem, and His subsequent course of action there, are to be explained. But here, too, the same course of events which had already driven Him from Galilee is repeated. Since no event took place which decisively ratified His preaching in the eyes of the Jews, His appearance in Jerusalem produced but little effect. Even when maturing His resolution, He was conscious that

He was risking life on the issue, and He seems already to have comforted His disciples with the hope of His resurrection. And now He saw the end of His career at hand, and might well regard Himself as a sacrifice to be offered, and express His resignation. Before long His destiny was actually accomplished. His foes had formerly been the Pharisees; now they were to be found in the Sanhedrim itself. Yet His enemies would seem not to have done much more than direct to Him the attention of the Roman authorities, and call upon them to deliver Him up to them. A man like the procurator Pontius Pilate must long have had his eye on Jesus, and would regard the possibility of a new revolt a sufficient cause for removing one whom he conceived to be a dangerous person.

Many points in this sketch are certainly open to serious objections from a purely historical point of view. That the author has worked out a consistent story cannot be denied. To mention the central point of the whole, viz., the resolution of Jesus to come forward as the Messiah, no doubt the author's statement is perfectly just. It is evident from the synoptic Gospels that the announcement of the Messiahship belongs to the latter period of Christ's ministry. Otherwise the confession of Peter would not really mark a crisis, which the synoptic Gospels distinctly represent it as doing: an argument which is not counterbalanced by certain passages in the Sermon on the Mount, for the whole structure and connection of that discourse compels us to regard them as interpolations. Nothing however justifies the assumption that after this announcement of His Messiahship during the last journey to Jerusalem, Jesus looked forward to the miraculous foundation of a Messianic kingdom in the national and Jewish sense. There is one remarkably well authenticated saying (that on the tribute-money) which at once excludes every thought of rebellion against the Roman dominion as well as of its overthrow by miraculous means. If the expectation of a miraculous advent of the Kingdom of Heaven was called forth by Jesus (as it almost unquestionably was), the fulfilment of His words was at any rate not connected by Him with His present life, but with His promised return. And hence, His appearance as the Messiah must have had a different sense from that ascribed to it by our author. It must have meant not that Jewish expectations were to be fulfilled, but that His disciples were to adopt a new conception of the Messiah derived from His own Person and teaching. But if so, Jesus himself must long since have had the consciousness of being the Messiah in this higher sense, to which in course of time he gave utterance in those two titles, which He applied to Himself, "Son of Man" and "Son of God." The author is too much inclined to see in these the expression of the belief of a later age. But we have no right, from a purely historical point of view, to exclude them from the authenticated discourses of Jesus, or to assign them a subordinate position. According to the Gospels they stand in the very centre of Christ's teaching, and it is undoubtedly historical that Jesus had it in view from the first to awaken in His disciples such a faith in His Person.

We do not wish to prejudge the case from the point of view of Church dogma in raising these objections. We quite agree with the author that the life of Jesus can only be treated historically by viewing it apart from a supernatural foundation, as the history of a purely human life. In this sense, too, we may leave it an open question whether His belief in His mission was produced by God in some special way, or whether it grew up in Him naturally. The author's narrative is so far clear and consistent, that it describes Jesus as clinging throughout His career to the hopes of His nation, and working for their fulfilment simply by moral and spiritual means. But though we may admit that the possessors of great moral power are rather animated to unusual exertions than depressed by disappointment, how are we to account for the strange self-delusion of which the author represents Christ as becoming the victim, and for the suddenness of the transformation in His character from calmness to ardent fanaticism? The difficulty is increased by the forms assumed by the Messianic expectations of the age. The Messiah was either to place himself at the head of a popular rising, or else to descend from heaven. Now, since Jesus refused to gratify the former of these expectations, He must, on the author's showing, have *suddenly* come to regard Himself as the Heavenly Messiah, a supposition which is more difficult, or at least not less difficult, to realize than the doctrine of the union of the divine and human natures in His Person.

The author has appended to the history of Jesus a third book, containing a sketch of the development of dogma in two sections, the first of which describes its course within the Church, the second the external influences to which it was subjected. The primitive Church is represented as having remained quietly in Jerusalem; it was not charged with the duty of continuing the struggle against the national authorities; it had merely to wait for the return of the Lord. Its home was in Jerusalem, because there it hoped to see the establishment of the Messianic dominion; but it maintained the observance of the Jewish law. Christianity remained so far entirely national; indeed the author thinks that the Christians played the part of zealous patriots in the first Jewish war, and that James the Just was martyred for that very reason by the Sadducean authorities in the interest of peace with Rome. The first great alteration was brought about by the Apostle Paul, when he began to receive the heathen without circumcision. This was connected, however, with an entirely new view of the person of Jesus himself. The object of Paul's faith was not the historical Jesus, but only the risen and heavenly Christ—the ideal Being whose divine character and relation to the universe he estimated higher and higher, the more he became absorbed in musings upon Its infinite operations. Two elements combined to modify the Pauline doctrine from without: first, Gnosticism, which had already appeared with its system of intermediate beings; and, secondly, the Alexandrian doctrine of divine "powers"—the former by challenging opposition, the latter by direct influence. But, on the whole, Paul's position was an isolated one, particularly in regard to his Christology, by which he was probably distinguished from the original apostles. In fact, his whole teaching was an anticipation of the future, for which the age was not yet ripe. Soon after the death of Paul the situation was changed by the first destruction of Jerusalem. The Gentile Christians now began to predominate over the Jewish; the influence of the (restored) Church of Jerusalem was at an end; every Church was free to organise itself as it pleased. The result was a period of transition, marked by the decree of the Apostolic Council, which (supposing it to possess any historical foundation) can only belong to this later time. The Gentile Christians were no longer required to be circumcised, but the Christian Church was still a Jewish sect, and its teaching still based on the hope of the Kingdom of Heaven. This stage may be traced in the writings of Luke. It received an abrupt but inevitable termination in the rising of the Jews under Barkochba, from which the Christians this time carefully abstained. A new gospel was thus rendered necessary to embody the widened views of the Gentile Christian world, and the author of the fourth Gospel became the second founder of Christianity as the universal religion. That Gospel shows that the idea of comprehending all nations was no longer a goal to be

attained, but a realised fact. It is a faithful copy of the form given to Christianity by its propagation among the Gentiles. Its author has in a general way connected the vivid image present to his mind with the established evangelical tradition; probably he has also made use of some documentary material—chiefly, it is true, a tissue of misunderstandings—which is distinct from that which forms the basis of the Synoptics. His object was not to paint a merely imaginary figure, but to represent the historical as a realisation of the ideal Christ. With a view, no doubt, to the honour of the Lord, the unknown writer of this Gospel renounces his own personality, and appears, in all good faith, under the authoritative name of St. John.

This account of the development of dogma is closely allied to many similar sketches which have appeared in the last five-and-twenty years; it is, however, original enough to claim special attention. We will not enter on the consideration of such doubtful points as the existence of Gnostic doctrines in the Apostolic age—points which the author himself merely proposes as conjectural. The real merit of the book lies in the vigour with which the author draws out the consequences of his hypothesis, which leads him to strain to the last possible degree the Jewish character of primitive Christianity. But a further result of this unswerving logic is that he is obliged to propose theories which are not only unsupported by the records but even inconsistent with them. Such, for instance, is the theory that the Christology of St. Paul formed the subject of dissensions between him and the original Apostles. (It may safely be argued from the Pauline epistles that this was not the case, and the author himself allows that the Apocalypse speaks against his view.) Such, too, is the view that the ideal Christ alone existed in the mind of Paul, whereas the Apostle himself refers, in several important instances, to distinct sayings of Christ. Nor is the author's statement better supported, when he says that the Jewish Christians took part as patriots in the first Jewish war, which is contrary not only to the Christian but also to the Jewish tradition. The hatred of the Jews towards their renegade brethren was certainly not confined to the second Jewish war; it was hardly less conspicuous in the first. A further objection to the author's sketch of the development of dogma is that he has only employed a part of the necessary documents. Writings like the first epistle of Clement, and like that of Barnabas, at once alter the entire aspect of the case. We must add in conclusion that such a transformation as Christianity is said to have experienced in its progress among the heathen is only conceivable on the supposition that the new doctrine was, in its essential points, unconsciously held by many previous to its appearance. Only thus can the progress and the influence of the new religion be explained. We by no means wish to imply an adhesion to that view of the early history of Christianity, which seeks to fuse the varieties of doctrine exhibited in the records into a compact whole, such as never really existed. But the other extreme, though tempting enough, is equally to be avoided, viz. the endeavour to dissolve the entire phenomenon of Christianity into heterogeneous elements. Real history is not confined by the law of strict succession and gradual development; sometimes it produces a full-grown principle all at once, expressing itself with an exuberant variety which seems to mock calculation; and in this sense, even from a purely human point of view, the primitive age of Christianity cannot fairly be denied the character of a revelation or an inspiration.

The analysis of historical phenomena, and of our ideas respecting them, is a duty which cannot be ignored, and yet this ought only to be the means of attaining a more accurate knowledge of the life and movement of the whole. The author, in his introduction, has very justly rejected the superficial attempts of many to argue from the historical effects of Christianity to its Divine origin. We fully join with him in recognising the fact that other influences besides have concurred to produce this result, and that Christianity itself has assumed very different forms in different ages. But it is certainly not merely by accident or in name alone that all these different forms belong to one and the same Christianity: and the question we have to determine is, what is the exact nature of the unity which pervades them. In the same way we may say of the New Testament statements respecting Christ that, though they exhibit a great variety of conceptions of His Person, yet the fact of their origin in one and the same epoch forms a real bond of union between them, and the collective consciousness of this epoch is the ultimate fact with which the historian has to deal.

C. Weizsäcker.

Science and Philosophy.

The Dialogues of Plato, translated into English, by B. Jowett, M.A., &c. 4 vols. Clarendon Press.

[Second Notice.]

3. Having attempted to give our readers some account of Mr. Jowett's views on the two questions of the Platonic canon and of the arrangement of the dialogues he conceives it to include, we may say a few words in praise of his very interesting introductions. Each of these contains a somewhat minute analysis or "argument." Such summaries of contents as Stallbaum's we confess in our careless youth to have regarded with aversion—an aversion we have not yet quite succeeded in conquering; and we doubt whether they are much read even by more diligent students. But Mr. Jowett's abridgments are as lively in style as his translations, and in some cases more readable—for in many parts of Plato's dialogues there is a "Weitschweifigkeit" which fatigues the modern mind when they are rendered into English or German. Nothing, *e.g.* can be better than the humorous account of Socrates' extraordinary description of his own mental midwifery in the *Theaetetus:* we almost think it better than the original, for in addition to our enjoyment of the grotesque humour of the philosopher we sympathise with Mr. Jowett's inward glee, and laugh with him as well as with Socrates. In passing we breathe a prayer (to which we think all scholars will say, Amen) that Mr. Jowett would re-consider his rendering of *Theaet.* 171, D— πολλὰ ἂν ἐμὲ ἐλέγξας . . . . ἀποτρέχων.

Besides the analysis of contents, each introduction to the more important dialogues contains prefatory and, with a few exceptions, concluding remarks, frequently original, not seldom conclusive, always thoughtful and suggestive.

We have already spoken in praise of Mr. Jowett's skilful treatment of the obscure *Parmenides*, and we now mention with approval the observations prefixed to the *Sophist.* Notwithstanding his well-founded reverence for Mr. Grote, we thought it unlikely that he would omit to notice the controversy respecting the so-called "Sophists" and the justice of their treatment at the hands of Plato and Aristotle. As used by Greeks living in the fourth century, the word Sophist suggested many and various associations. In addition to its etymological meaning of professor or *savant*, it seems to "connote" the idea of a pedant, of a charlatan, an itinerant lecturer, a *littérateur*, a verbal quibbler or "eristic," a self-seeking educational speculator, a paid teacher who "had no other visible means of support," and so forth. It had come, in truth, to be a "term of endearment" among philosophers and men of letters, by whom it was bestowed

more or less liberally on all of whose tenets or modes of teaching they especially disapproved; as by Isocrates on the Socratics and all those who exalted dialectic, which was his aversion, above the rhetoric in which he gloried. And the avidity with which the newer word, "philosopher," was adopted by all sects alike, is of itself a proof that "Sophist," though occasionally still used in a neutral sense, had quite lost its originally more honourable associations. Mr. Jowett is, we think, quite right in asserting that by Xenophon, as well as by Plato and Aristotle, the Sophists were regarded as a separate and, on the whole, a definable class. The assertion that "the bad sense of the word was imprinted by the genius of Plato and Aristotle" is in our opinion quite untenable, and is satisfactorily disposed of (III. p. 451).

On the question of the moral character of the Sophists, so eagerly defended by Mr. Grote, Mr. Jowett's opinion is not unfavourable. He acknowleges that they were probably not so foolish as Plato sometimes paints them, and may have been respectable as well as accomplished men. He might, we think, have added that Plato's censure of the older Sophists is by no means indiscriminate; that his banter of Protagoras and Gorgias is largely tempered with respect for their attainments; and that, if he does not spare Thrasymachus and Hippias, Euthydemus and Dionysodorus, his contempt may, for anything we know to the contrary, have been as well-founded as it was apparently sincere. After all, he does not paint them as vainer or more self-conceited than Isocrates is painted by himself.

We have already spoken of the Introduction to the *Theaetetus*. This dialogue—a critique, and as we think a very masterly critique, of theories of knowing and being maintained by Plato's contemporaries and predecessors—is on the whole very satisfactorily treated by Mr. Jowett. He has avoided the too frequent error of confusing the subjective theory of Protagoras, as contained in his well-known aphorism πάντων μέτρον ἄνθρωπος, with the cognate, perhaps, but still perfectly distinct dogma that ἐπιστήμη and αἴσθησις are one; which it is doubtful whether Protagoras ever heard of. But we are a little surprised to find that Mr. Jowett should even notice what seems to us an equal anachronism in the history of speculation. Protagoras, he says, "like other great thinkers, was absorbed with one idea, and that idea was the absoluteness of perception. Like Socrates, he seemed to see that philosophy must be brought back from 'nature' to 'truth,' from the world to man. But he did not stop to analyse whether he meant 'man' in the concrete or man in the abstract: any man or some men, quod semper quod ubique, or individual judgment." What Protagoras was understood by Plato to mean we know—ἄνθρωπος δὲ σύ τε κἀγώ—in other words, not the species but the individual is the criterion of truth. Is there therefore any room for the alternative suggested by Mr. Jowett, and have we any right to say that Plato "treats Protagoras as he himself is treated by Aristotle; that is to say, he does not attempt to understand him from his own point of view"? We do know something of Plato's point or points of view, but do we know anything whatever of Protagoras except at second hand, and is it not a hazardous procedure, in the absence of any but the merest fragments of the original, to conclude that the oldest and most intelligent testimony we possess is either intentionally or unintentionally misleading? We think and have always thought it probable that the identification of the Protagorean Measure with the Ephesian flux-doctrine was first effected by Plato himself. But we think this because Plato himself, as Mr. Jowett says, "does not mean to imply" (as some interpreters have supposed) "that such a connection was admitted by Protagoras." Indeed he seems to us to give intentional indications in the dialogue itself that such was not his meaning; but that he wished to have the credit (which is not inconsiderable) of having perceived the mutual bearing of two philosophies so unlike in their physiognomy. We confess to a growing belief that Plato's insight into the meaning of the philosophers or sophists whom he seriously undertakes to criticise is as remarkable as any other characteristic of his mind. That there was probably more in Heraclitus himself than could be inferred from Plato's notices, we are ready to grant; but then Heraclitus himself is not seriously criticised in the *Theaetetus*, but only his degenerate successors and representatives, αὐτοὶ οἱ περὶ Ἔφεσον. And, to revert to Protagoras, there is a coincidence between a notice of his opinions in the *Theaetetus* and one in the dialogue bearing his name, that, so far as we know, has hitherto escaped observation. Mr. Jowett has drawn attention to the remarkable admission that though "hot" and "cold," "white" and "yellow," "comely" and "uncomely," are distinctions existing only in the perceiving mind, the same cannot be said of the notion of good and evil, which had, according to Protagoras, an existence independent of the individual consciousness. From this it would have been safe to infer that, whether consistently or not, Protagoras would have rejected the doctrine that the good is but another name for the pleasant, or in whatever more refined form the hedonistic theory might have been presented to him. Safe, we say; for if there is one distinction of which the man alone is the measure, it is that of pleasure and plain, whose "esse" is "percipi." Now, all readers of the *Protagoras* must remember the repugnance evinced by the sophist to Socrates' doctrine that the good and the pleasurable were the same. We have no doubt that Mr. Grote is right in maintaining that Plato herein represents the real teaching of his master, though by the more "developed" Socrates of the later dialogues the same thesis is persistently controverted. But, on comparing this passage (*Protag.* p. 351) with the language respecting the Good attributed to Protagoras in the *Theaetetus*, we are led to conclude with equal probability that the opinions of the Abderite sage are faithfully reproduced in both dialogues.

We should be guilty of omitting the part of Hamlet if we entirely passed over the introduction to the *Republic*. On this the author has expended, as might have been expected, much thought and labour. His account of the great Ideal State is comprehensive and appreciative, and he disposes with great skill of the objections of critics less many-sided than himself. He sees clearly all that Plato means when he describes his Republic as a πόλις ἐν οὐρανῷ κειμένη.

> "He attempts a task really impossible, which is to unite the past of Greek history with the future of philosophy, analogous to that other impossibility, which has often been the dream of Christendom, the attempt to unite the past history of Europe with the kingdom of Christ."—P. 138.

Plato himself did not "imagine that such a State is possible. This he repeats again and again: first in the *Laws*" (v. 739) . . . . "then when in the *Republic*" (v. 472, D) "he argues that ideals are none the worse because they cannot be realised in fact . . . . and at the end of the Ninth Book, when he has completed the structure, he fairly tells you that his Republic is a vision only, which in some sense may have reality, but not in the vulgar one of a reign of philosophers upon earth." "In heaven," to quote Mr. Jowett's translation, "there is laid up a pattern of such a city, and he who desires may behold this, and, beholding, govern himself accordingly. But whether there really is or ever

will be such a one is of no importance to him; *for he will act according to the laws of that city and of no other.*" That a pupil of Plato, a philosopher, too, of equal rank, should have left this passage wholly out of consideration in a formal critique of the *Republic* would have seemed incredible, had it not been a matter of fact. Yet how few modern critics of Plato have felt its full force and pregnancy!

We may also direct attention to the conclusive answer given to a somewhat peevish remark of Niebuhr, that Plato was "not a good citizen," as a fair specimen of that apologetic criticism which we have already commended. (II. p. 139.)

Perhaps the portion of Mr. Jowett's book which will prove most attractive to cultivated readers who are not professed scholars is that examination of the paradoxes of Plato in the *Republic* which occurs towards the end of his introduction. These are—(1) the community of goods; (2) the community of wives and children and the equality of the sexes; (3) Plato's notion of "kings philosophant or philosophers regnant," which he holds to be the only cure for the ills of humanity; (4) his identification or rather exaggerated analogy of the State and the Individual. We do not think that any previous writer has treated these topics so well, and it costs us some effort to abstain from numerous quotations. This part and the following section (III.) on Plato's views of education contain many remarks of the highest interest on Platonic thought in relation to modern life political and intellectual; besides some pregnant apophthegms in the history of philosophy. We select the following as specimens:—

"No metaphysical enquirer has ever seen the real value of his own speculations, nor understood that what appeared to him to be absolute truth may reappear in the next generation as a form of logic or an instrument of thought. And posterity have also sometimes equally misunderstood the real value of his speculations. They seem to them to have contributed nothing to the stock of human knowledge. The *idea* of good is apt to be regarded by the modern thinker as an unmeaning abstraction; but he forgets that this abstraction is waiting ready for use, and will hereafter be filled up by the divisions of knowledge. When mankind do not as yet know that the world is subject to law, the introduction of the mere conception of law, or design or final cause, or the far-off anticipation of the unity of knowledge, are great steps onward." —II. pp. 147, 148.

"To be struggling towards a higher but unattainable conception is a more favourable condition of mind than to rest satisfied in a narrow portion of ascertained fact."

"The question has been asked, In what relation did Plato suppose the idea of good to stand to the nature of God? Is God above or below the idea of good? Or is the idea of good another mode of conceiving God? The latter seems to be the true answer. To the Greek philosopher the perfection and unity of God was a far higher conception than his personality, which he hardly found a word to express, and which to him would have seemed to be borrowed from mythology. To the Christian, or to the modern thinker in general, it is difficult if not impossible to attach reality to what he terms mere abstraction; whereas to Plato this very abstraction is the truest and most real of all things. Hence, from a difference in forms of thought, Plato appears to be resting on a creation of his own mind only. But if we may be allowed to paraphrase the idea of good by the words 'intelligent principle of law and order in the Universe embracing equally man and nature,' we may find a meeting-point between him and ourselves."—II. 149.

"Plato is the first writer who distinctly expresses the thought that education is to comprehend the whole of life, and *to be a preparation for another in which education is to begin again.* This is the continuous thread which runs through the whole of the *Republic*, and which more than any other of his ideas admits of an application to modern life."

"The education of Plato is really the ideal life of the philosopher or man of genius, interrupted for a time by the application to practical duties—a life not for the many, but for the few. And he has already told us that the world could not be a philosopher, and that a very few such natures at all existed. Whether the combination of politics and philosophy is possible is a question which has been much debated, and may perhaps be resolved by saying that the great practical leaders of mankind must have some element of philosophy. But we do Plato injustice when we apply to his theories the test of practicability, for in his conception of education he is really describing his ideal of a philosopher, and in his ideal of a philosopher he is embodying his principles of knowledge."—II. 159.

And the introduction ends with the following finely thought and finely expressed sentences:—

"Human life and conduct are affected by ideals in the same way that they are affected by the examples of eminent men. Neither the one nor the other are immediately applicable to practice, but there is a virtue flowing from them which tends to raise individuals above the common routine of society or trade, and to elevate States above the mere interests of commerce or the necessities of self-defence. Like the ideals of art, they are partly framed by the omission of particulars; they require to be viewed at a certain distance, and are apt to fade away if we attempt to approach them. They gain an imaginary distinctness when embodied in a state or an individual, but still remain the visions of 'a world unrealized.' Most men live in a corner, and see but a little way beyond their own home or place of occupation; they 'do not lift up their eyes to the hills;' they are not awake when the dawn appears. But in Plato, as from some 'tower of speculation,' we look into the distance and behold the future of the world and of philosophy. The ideal of the State and of the life of the philosopher; the ideal of an education continuing through life and extending equally to both sexes; the ideal of the unity and of the correlation of knowledge; the faith in good and immortality—are the vacant forms of light on which Plato is seeking to fix the eye of mankind."—II. 162, 163.

Mr. Jowett has also bestowed immense pains on his introduction to the *Timaeus*. He begins by some general remarks, the design of which is to "orientate" the reader, by reminding him of the little Plato knew or could know about natural science, of the confusion between subject and object incident to Greek speculation, and of the strong temptation to identify number and mathematical relations with the laws and forces by which phenomena are actually regulated (a matter which is perhaps not even yet thoroughly cleared up). He also draws attention, though with hardly sufficient emphasis, to the indications Plato himself gives of dissatisfaction with his own physical method and its results, and points out the significance of the circumstance that he has put his mythical and semi-mythical speculations into the mouth of a Pythagorean philosopher. Into the details of his subtle analysis of contents we do not propose to follow him; but it may not be amiss to call the attention of those whom it may concern to Mr. Jowett's remarks on a controversy which Sir George Lewis's work on the *Astronomy of the Ancients* and Mr. Grote's chapter on the *Timaeus* have brought under the notice even of non-Hellenizing astronomers. What was the position Plato assigns to the earth in the planetary system as he understood it? was he or was he not acquainted with her diurnal rotation? The answer to this interesting question unfortunately depends on the meaning of an ambiguous word, εἱλλομένην (or, as Mr. Jowett prefers to spell it, ἰλλομένην), which, it is thought, may either mean "revolving," or, to use Mr. Jowett's word, "compacted" ("wound" or "wrapt," we should rather have said), "round the pole which is extended through the universe." On this question Mr. Grote and the Greek Professor take opposite sides: but to neither has it occurred to inquire whether the tense of the participle used is consistent with the meaning "compacted;" in other words, whether this sense would not have required the perfect instead of the present. We do not expect that such a battle as this will be allayed like that of the bees, by flinging on the combatants a handful of grammatical dust: nevertheless we would recommend students who feel how "long is art" and how "short is life," to satisfy themselves on this point before plunging into the thick of the fight. If the present participle can only imply a habitual or continuous action, εἱλλομένην must here mean "revolving," as Aristotle understood it to mean, and as we venture to think a Greek scholar ignorant of the context, and regardless of Plato's reputation for consistency, would instinctively translate it. And the gloss of Simplicius, προσδεδεμένην, will be seen to favour this view rather than his own.

We observe that Mr. Jowett has spared no pains in the elucidation of the mathematical portions of this dialogue and of the *Republic*. He has indeed been so fortunate as to discover a new solution of "Plato's number;" and this reminds us to ask why the equally difficult problem in the *Meno* (p. 276 of the translation) has been passed over in silence. We think the reader should have been informed of the difficulty and its probable cause; and we venture ourselves to direct attention to the neat if not perfectly satisfactory solution proposed by Dobree in the *Classical Journal* for March 1815. We must not take leave of the *Timaeus* without inviting the attention of our physicists to the concluding section of the Introduction (p. 528).

A critique, however brief, of this great work, must necessarily say something of the way in which Mr. Jowett has discharged the laborious office of a translator. This duty we would gladly leave to others, for our own views of the proper mode of translating an author like Plato would probably be demurred to by a majority of scholars. To say that this is the best English translation of the whole, or what may pass for the whole, series of dialogues is to say but little. We have had good and scholarlike translations of particular dialogues, as that of the *Philebus* by Mr. Poste, of the *Republic* by Messrs. Vaughan and Davies, of the *Gorgias* by Mr. Cope, and of the *Phaedrus* and some others by Mr. Josiah Wright. But the two complete English versions contain little to be proud of. Thomas Taylor's is barely sane; though he had sense enough to include in his heavy quartos the few dialogues which poor Sydenham lived to finish, and which, all things considered, are highly meritorious. The first of Mr. Bohn's volumes is creditable to Mr. Cary; but any merit which his translations or those of the translator of the dialogues in the second volume may possess is overshadowed by the demerits of the remaining volumes, which are the work of the late egregious Mr. George Burgess, whose versions, with their accompanying notes, are real curiosities of literature. It is therefore a poor compliment to Mr. Jowett to praise him by comparison with these his English predecessors. It is more to the purpose to say that his English is, in our somewhat diffident judgment, superior as a literary performance to Schleiermacher's unduly-praised German translation. But the Introductions are the part of his work on which Mr. Jowett's fame will ultimately rest. That one capable of producing these admirable essays should have condescended to the laborious office of a translator is more than the public, learned or unlearned, had a right to expect; and that he has gone through with his task so well and with so few oversights should call forth no expressions but those of satisfaction. Merely to have conveyed Plato's meaning in fluent, natural, and agreeable English would have been an important service both to Greek students and to cultivated persons not able to read the original with facility. Mr. Jowett has done more than this: for his renderings are often very happy, and he frequently shows great skill in converting an intricate Greek sentence into an intelligible English one. But he does not seem to have aimed in his translation at the performance of a feat of literary prowess. He does not always care to reproduce in English the effect—call it rhetorical, aesthetic, stylistic—of the brilliant original. Whether, in the present state of our language, a translation which should accomplish this object thoroughly be possible or not possible may admit of doubt; at any rate, we fancy that those who have tried will be less disposed than others to underrate its difficulty. Even the excellent German version of Müller seems to us to fall short of the standard we have hinted at. Though the opinion will probably shock the prejudices of many accurate scholars, we cannot refrain from saying that the translation which on the whole conveys the best idea of the grace and splendour of Plato's style, is to our mind that which bears the name of Cousin. Whether this be due to the ability of the translator or translators, or to the superior elegance and vivacity of French prose as compared with English, or to both causes combined, we do not venture to say; but we fancy that the second reason might be sufficient to account for the result. As a general rule our English translations from Greek prose are, accuracy apart, inferior to the French; whereas in translating poetry the French are nowhere, and our metrical versions are perhaps as good as the best German. The fact that French is admittedly the best conversational language fits it admirably for rendering the dramatic portions of Plato; while the variety and at the same time fixity of its idioms and turns of expression make it difficult for a Frenchman to translate baldly. Hence Cousin's translation has less the air of a translation than even the best of our English versions, greatly inferior as it is to these in correctness. As we have said, however, we have no right to quarrel with Mr. Jowett, because he may sometimes have disregarded literary finish in comparison with the higher objects after which he has so nobly striven. His exquisite Introductions are sufficient to establish his reputation as one of the most competent interpreters of the mind of Plato now living in England or elsewhere; and had he thought only of his own fame he might have delegated the inferior task of a translator to others. In that case the daws of criticism would have found in his book little to peck at; while his numerous admirers might still have pointed to the work he had accomplished, as a substantial and important contribution to the history of Hellenic thought.

W. H. Thompson.

Scientific Notes.

Geography and Geology.

Mr. J. Talboys Wheeler, Secretary to the Chief Commissioner of British Burma, has printed at Rangoon his *Journal of a Voyage up the Irawaddy to Mandalay and Bhamo.* Mandalay is the capital of Ava, having been raised to that dignity by the present king, while Amarapoora and Ava, the former capitals, have become insignificant villages; and Bhamo is a town near the frontier of China. An account is given of a visit to the king, which derives its chief interest from the fact that envoys from the monarch are now in England. At Bhamo the population consists of Burmese, Chinese, and hill-tribes called Kachyens. The physical characteristics of these latter are not described, so that we are at a loss to tell to what extent they differ from the more civilized Burmese. A defile of the river below Bhamo is said to be almost unequalled for grandeur and picturesqueness, but the greatest interest attaches to the account of the ruined city of Paghan. This extends for about eight miles along the bank of the river and two miles inland, and contains about a thousand temples of brick and stone, with towers, pagodas, strange carvings, and sculptures richly painted and gilt, with countless images of Buddha, some of colossal size. The city was destroyed by a Chinese army in the thirteenth century. This journal is well and intelligently written, and conveys in a small space a very fair notion of one of the less known of the civilized Indo-Chinese races.

A very good abstract, by Dr. Carpenter, of the results obtained in the 'Porcupine' expedition of last summer in the Mediterranean will be found in the *Contemporary Review* for March. A point of special interest is the evidence that the easterly undercurrent through the Straits of Gibraltar is a necessary result of the tendency of the Mediterranean to acquire an excessive density by evaporation. To the same principle, that an approximate equilibrium of density must be maintained throughout the ocean, and the consequent general circulation of polar and equatorial waters, Dr. Carpenter attributes many effects usually ascribed to the Gulf-stream.

Zoology.

New Corals.—Mr. W. Saville Kent, F.Z.S., read a paper before the Zoological Society on April 6th, on various new species of madrepores or stony corals met with by himself while engaged upon arrang-

ing, naming, and cataloguing the fine series contained in the British Museum. Among the more interesting of these, commencing with the family of the Turbinolidae, Mr. Kent drew attention to a fine species of *Acanthocyathus* from Japan, more closely allied to a Maltese miocene form (*A. Hastingsae*) than to any known existing one, and also to a *Flabellum* allied to *F. anthophyllitis*, whose most remarkable feature consists of the phenomena connected with its reproduction by the process of germination, and which invariably results in the destruction of the parent; the reproductive bud always originating within the margin of the parent calyx, which in the course of its development it splits to pieces. For this aberrant form Mr. Kent proposes the appropriate name of *F. matricidum*. In the family of the Oculinidae, which comprises the majority of the species introduced by Mr. Kent, are three new forms of *Allopora* and numerous ones of *Stylaster*, *Distichopora*, and *Amphihelia*, the first-named genus in particular containing a magnificent arborescent species upwards of a foot in height, of a delicate rose-colour, having a stem of such thickness and of such dense consistence that Mr. Kent is of the opinion that if procurable in any quantity it may eventually prove of high economic value, and even replace to some extent the well-known *Corallium rubrum*. The examination of these new varieties has enabled Mr. Kent to define more precisely the characters of *Allopora* and its true distinctions from *Stylaster*, *Distichopora*, and other allied genera. In all, Mr. Kent introduces some twenty species as new to sience.

The Darwinian Theory.—The first part of the *Zeitschrift für Ethnologie* for the present year contains a remarkable tribute to the influence on the development of scientific thought of Mr. Darwin's writings, in a list of works published since 1858 on the Darwinian Theory. The list is compiled by Dr. J. W. Spengel, fills twelve pages, and is divided into six heads: 1. German translations of Darwin's works. 2. Original works in German on the Darwinian Theory. 3. Works containing incidental references to the Theory. 4. Articles on Darwinism and the Origin of Man scattered in magazines, &c. 5. Works on the question of the Origin of Man. 6. Most important works on Darwinism in English, French, Dutch, and Italian. Dr. Moriz Wagner continues in *Ausland* for March 31 and April 8, his new contributions to the Darwinian Theory, to the first part of which we have already alluded. (See Academy, April 1, p. 200.) In these portions of his interesting paper, he brings forward numerous instances of the manner in which recent geological discoveries have supplied missing links in the connected chain of organic forms. Under this head he refers especially to the *Dinotherium*, which unites the Pachydermata to the Cetacea, which latter group appeared heretofore to be isolated from all other orders of Mammals, to the connecting links existing in tertiary fossils between the Pachydermata and the Ruminantia, and especially to the *Pterodactyl* and the *Archaeopteryx*, which he considers to stand between birds and reptiles, the former presenting the character of three parts reptile and one part bird, and the latter three parts bird and one part reptile. Finally Dr. Wagner enters in considerable detail into the discoveries of Finlay, Lindermayer, and others, in the miocene deposits at the foot of Pentelicon and other localities in Greece and the Pyrenees, which produced the *Hipparion*, an ancestor of our existing genus *Equus*, and the anthropomorphic apes *Mesopithecus pentelicus* and *Dryopithecus Fontani*. In the same magazine for April 24, Dr. Hugo Eisig refers to the great extent to which Darwin's theory of Evolution had been anticipated by Lamarck in his *Philosophie Zoologique*, published as long since as 1809. Mr. Stebbing's recent volume, *Essays on Darwinism*, is an eloquent defence of the theory, though without any originality, and unsupported by any facts or arguments with which the public is not already familiar. In some of the *Essays*, as that on Instinct and Reason, and the one on Human Nature and Brute Nature, the author shows an inability to grasp the main point of the matter in dispute; others are very readable, and will doubtless be popular with extreme advocates of Darwinism.

Ape Resemblances to Man.—Mr. St. George Mivart calls attention, in *Nature* for April 20th, to the strong approach towards the human structure (which he thinks has hitherto not been sufficiently insisted on) displayed by the Hoolock Gibbon, a fine specimen of which is now to be seen in the Gardens of the Zoological Society. It has generally been taken for granted that the palm of resemblance to ourselves can be disputed by the Orang (*Simia*), and by the African genus *Troglodytes* (which includes both the Gorilla and the Chimpanzee) alone. The third member, however, of the anthropoid apes, the genus *Hylobates* (long-armed apes or Gibbons) appears to present claims of relationship in some respects even superior. Although the enormous length of the arms disguises the resemblance, yet the proportions of the Gibbon's frame (as in some respects long ago pointed out by Professor Huxley) are singularly human. The length of the leg as compared with the trunk, and the form and proportion of the bony thorax, are points which may be mentioned. A Gibbon is again the only ape which possesses that striking human feature—a true chin. The slight prominence of the nose is also very remarkable—a point which has not escaped the notice of Mr. Darwin, and which is to be seen in the living specimen referred to. Again the power, quality, and compass of the voice are qualities justly dwelt upon by Mr. Darwin; and, finally, the gentle yet quick and active nature of the Gibbon is eminently noteworthy. A confirmation of the above view is found in the existence, in the miocene deposits of South Europe, of fossil remains of the extinct giant Gibbon—the *Dryopithecus*.

Chemistry, &c.

On the Employment of Bromine in the place of Chlorine in Analysis. By H. Kämmerer.—In the precipitation of manganese, the deposition of nickel and cobalt, and many other analytical operations, chlorine water is used. The author was led (*Berichte der Deutschen Chem. Gesall.*, Berlin, 1871, No. 5), by the difficulties arising through the readiness with which this reagent decomposes, to endeavour to replace it by bromine, and has obtained perfectly satisfactory results. Manganese, which is thrown down by chlorine when heat is applied, is very easily and completely precipitated by bromine in the cold, and the bulk of the liquid is increased to only a trifling extent. The dilution of nickel in the presence of cobalt by Liebig's method, in a solution of their cyanides, does not always succeed when the chlorine water has been some time prepared or is not very concentrated; bromine water, however, immediately effects a complete separation of these metals.

A New Alkaloid in Cinchona Bark.—D. Howard (*Journal of the Chem. Soc.*, March, 1870) has found in the mother-liquors of the manufacture of sulphate of quinine a new alkaloid, which is distinguished by the extreme solubility of its salts, thereby differing from the cinchona alkaloids already known, and rendering it a difficult problem to separate it from the uncrystallizable quioïdine. It has been separated by solution in ether, and subsequently in oxalic acid, its oxalate being allowed to crystallize. Its platino-chloride is almost insoluble in water and cold hydrogen chloride, but can be recrystallized from the strong and hot acid. Analysis shows that it is isomeric with platino-chloride of quinine, but is anhydrous, and in this respect differs from the above salt, which gives off an atom of water of crystallization at 120°. The new oxalate, again, contains nine atoms of water; that of quinine but six. The alkaloid itself is a yellowish oil, and resisted all attempts to solidify it. It is very soluble in alcohol and ether, and separates again as an oil after evaporation. The salts are neutral to test-paper; a small excess of base strongly restoring the colour of reddened litmus. Ammonia precipitates its solution but imperfectly, and it is probably even a stronger base than quinine. In many of its colour reactions it shows a great resemblance to aricine. The author failed to recognize fluorescence in its solutions. Its taste is a peculiar bitter, very much less both in intensity and permanence than that of the other cinchona alkaloids. The new substance is, in many of its reactions, very like the alkaloid which was found by Mr. J. E. Howard in the leaves of the *Cinchona succirubra* of India, and has as yet been imperfectly examined.

Gun-Cotton.—It has been observed by L. Bleckrode (*Journal of the Chem. Soc.*, April, 1871, No. 171), that a flame when applied to gun-cotton which has been wetted with carbon disulphide does not cause explosion. The liquid ignites, the gun-cotton remains intact. Ether, alcohol, and benzol may be employed with a like result. This slow combustion is, the author thinks, a satisfactory proof of Prof. Abel's conclusion that if gases resulting from the first action of heat on gun-cotton upon its ignition in open air are impeded from completely enveloping the burning extremity of the gun-cotton twist, their ignition is prevented; and as it is the comparatively high temperature produced by their combustion which effects the rapid combustion of the gun-cotton, the momentary extinction of the gases, and the continuous extraction of heat by them as they escape from the point of combustion, precludes the cotton from burning otherwise than slowly and imperfectly. Phosphorus placed on the moistened gun-cotton melts and even boils during the combustion, but does not burn.

Websterite.—In the *Geological Magazine*, March, 1871, S. G. Perceval records the occurrence of this mineral, abasic aluminium sulphate, at Brighton. It was found sixteen feet below the surface of the Montpelier-road, under a bed of ochreous clay, and overlying the chalk, the deposit in one instance attaining a thickness of three feet. The mineral varies much in colour and appearance, consisting in some places of a soft white powder, and traversed occasionally by a black mineral which bore a great resemblance to lignite, but on an analysis was found to contain manganese and a certain portion of cobalt.

Synthesis of Substitute Guanidines.—By the action of cyanamide on the hydrochlorides of aniline, toluidine, and methylamine, E. Erlenmeyer (*Zeitschrift für Chemie*, 1871, Heft 2) formed the hydrochloride of phenyl-, tolyl-, and methyl- guanidine. From these salts the platino-chlorides, and then the free bases with some further salts, were prepared and investigated. The clino-rhombic methyl-guanidine (methyluramine), according to Von Kobell, differs somewhat in its crystalline form from that prepared from creatine.

A Substitute for Lime in the Lime-light.—The *Scientific American* for March announces a substitute for lime in the lime-light of the oxyhydrogen jet. It appears that a prism cut out of the mineral dolomite

will emit a light as powerful if not superior to the calcium light. Dolomite is made up of nearly equal parts of the carbonates of lime and magnesia; and the combination of these two earths produces effects superior to those which can be obtained from either of them alone. The light is said to be well suited for photographic purposes, especially for copying pictures. As dolomite is an abundant rock in nature, its application for this purpose may prove of great value.

Intelligence.

Prof. Dilthey, whose *Life of Schleiermacher* has received such high praise from the German press, has been invited from the University of Kiel to that of Breslau.

Mr. Airy, the Astronomer Royal, succeeds Sir E. Sabine as President of the Royal Society; and we understand that Dr. Carpenter, the Registrar of the London University, is to be the President of the British Association for 1872.

New Publications.

Beard, G. M., and Rockwell, A. D. Medical and Surgical Electricity. New York: W. Wood and Co.

Brunnow, Dr. F. Lehrbuch der sphärischen Astronomie. Dümmler: Berlin.

Crookes, W. Select Methods of Chemical Analysis. London: Longmans.

Lea, Dr. Isaac. A Synopsis of the family Unionidæ. Philadelphia: Lea and Co.

Schellen, Dr. Der Elektromagnetische Telegraph. Vieweg: Braunschweig.

Staveley, E. F. British Insects: their Form, Structure, and Habits. London: L. Reeve and Co.

Weyer, G. D. E. Vorlesungen über nautische Astronomie. Kiel: Schwer.

History.

Village Communities in the East and West. Six Lectures delivered at Oxford. By Henry Sumner Maine, Corpus Professor of Jurisprudence in the University; formerly Law Member of the Supreme Government of India; Author of 'Ancient Law.' London: John Murray. 1871.

Sixteen years ago Sir R. Bethell opened the Juridical Society with an inquiry into the causes of the neglect of philosophical jurisprudence in England, nor is it possible to question either the fact, or the explanation of it which he drew from the history and structure of English law. England, nevertheless, has in Bentham, Austin, and Maine, names of the highest eminence in each of the departments into which legal philosophy is divisible, the ethics, the logic, and the history of law. Mr. Maine's *Ancient Law*, published ten years ago, was indeed, like his present volume, a work belonging not to legal philosophy alone—for if history is ever to become a science, it must be by the aid of such auxiliaries; but it gave him rank at once as the founder of an English school of historical jurisprudence. And we refer to it now, because, although his present work adds the fruit of studies pursued in the East under circumstances of extraordinary advantage, the two treatises touch at many points; they describe a common movement evolving individual rights from the blended rights of families or larger groups; and while the lectures on *Village Communities in the East and West* make an invaluable addition to the chapter on the History of Property in *Ancient Law*, the latter contains information respecting the villages of Russia and other parts of eastern Europe, of which the student of the lectures will do well to possess himself. The central proposition of the treatise on 'Ancient Law' is that the unit of archaic society is the patriarchal family, from which individual rights are developed as society advances, so that the movement of progressive society becomes one (to use Mr. Maine's own formula) from status to contract; a formula, we may observe, for the legal side of the great movement which Herbert Spencer formulates as a movement from the homogeneous to the heterogeneous. It is evident that this evolution of individuality from the patriarchal family is no more incompatible with Mr. McLennan's theory that there are stages of savage existence anterior to the patriarchal family, than with Darwin's theory of the descent of man from an inferior race of animals. But Mr. Maine gave reason in *Ancient Law* for thinking that property belonged originally not to families but to larger groups, and that, while the Family was the source of the Law of Persons, the Law of Property might be traced to the Village Community. His present work establishes this proposition, at least with respect to India in the East, and the Teutonic countries of Europe, including England, in the West. At the same time it traces some of the principal steps by which separate property in land has disengaged itself altogether in the West from the ancient collective ownership, and has partially disengaged itself in the East. We need hardly say that Mr. Maine brings to the investigation of such a subject qualifications which no other writer in England, and probably no other in Europe, combines.

Our attention is first drawn to the ancient Teutonic Mark, the territory belonging to a village community or group of families; with its threefold division into the village or township (containing the separate dwellings of the families), the arable mark or cultivated area (itself divided into three portions or "fields," in order that but one-third might lie fallow at one time), and the common mark or waste. To this agrarian organization, of which not a few traces still remain in England, Mr. Maine exhibits the closest analogies in the structure of the Indian Village Community; for in India "these dry bones live." There is the village, composed of habitations, each ruled by a despotic paterfamilias; there is the cultivated area, divided, like the Teutonic arable mark, into separate lots, and cultivated according to minute customary rules binding on all; lastly, there is the waste or common land, out of which the arable mark has been cut, used for pasture in common by the whole community. And in the extraordinary secrecy of family life in the humblest Indian village dwelling, Mr. Maine's sagacity discovers a probable explanation of the lateness of the interposition of society to control the despotism of the patriarch in ancient Roman life. For, as he remarks, the magistrate or the legislature would have rarely found an occasion for interposition, if the secrets of family were nearly as well guarded as they are at this moment in India. Again, the differences of the organization and customs of living village communities in India from those of the ancient Teutonic communities are for the most part such only as diversities of climate or of political history readily explain. One very interesting difference is that India presents nothing answering to the assembly of adult males in the ancient Teutonic groups, save the council of village elders. The Indian villages have submitted without resistance to monarchs surrounded by mercenary armies. The causes, therefore, which gave importance to young men in the Teutonic village community were wanting. The soldiers of the community were absent in the pay of the monarch, and nothing was needed in the village council but experience or wisdom. Mr. Maine's pages abound in information of this kind; but our limits compel us to pass at once to the process by which separate property has become completely disengaged in the West and partially so in the East from the co-ownership of the village community.

Mr. Maine points to the allocation of a separate lot in the arable mark to each household as the first step towards separate property, and the cessation of the ancient customs of periodical redistribution of the lots as the second. We are

more inclined to treat these as later steps, and to designate as the first the acquisition of a separate dwelling and surrounding plot of ground by the head of each household. This would lead at once to the distinct ownership of several articles of movable property, and foster a tendency towards the acquisition of other immovable property. We suspect, too, that it is here we should look for the source of the idea of absolute property in land, which Mr. Maine is disposed to trace to the proprietorship of the feudal lord in the domain around his castle or manor-house, tilled by dependants under his own eye. However this may be, we might give reason for questioning a conclusion to which Mr. Maine's observations seem to lead, that absolute individual proprietorship in land is the ultimate form of property to which the progress of society tends. We are concerned here, however, only with the actual evolution of individual ownership to the point which it has reached. The steps of the process in England possess more than a historical interest; they are connected not remotely with some of the chief social controversies of our own day.

The first inquiry before us is, how was the ownership of the soil by a number of village communities (with separate property on the part of the householders in their own dwellings and in the lots into which the arable mark was distributed) transformed into the dominion of a number of suzerains? How did the village association grow into the fief—the mark into the manor—the free householders of the village community into the tenants of the lord of the manor—the common waste into the lord's waste? The only explanation forthcoming prior to the researches of recent English and German scholars was, that the territories conquered by the various tribes which successively overran the countries once held together by the Roman empire were granted by their chiefs to their companions on conditions of tenure derived from Roman precedent; the system thus introduced—commonly known as the feudal system—involving, it was supposed, a total discontinuity with the previous agrarian systems, and a complete break in the history of landed property. English writers on the law of real property, far from going behind the feudal and manorial system for an explanation of the common rights which survived its establishment, have been accustomed to treat them as of subsequent origin; the commoners being supposed to have acquired their rights by sufferance of the lord. A new school of English and German writers has at length revealed the fact that feudalism involved no such break with the past; that feudalism itself was in a great measure of indigenous and natural growth in Teutonic society; so that other influences, partly traceable to Roman law, were, as Mr. Maine expresses it, met half way. Every step in the political growth of the village community tended to subordinate its members to control, to aggrandize some particular house, to give a superiority in property, rank, and authority to its chief; and these tendencies were strengthened by traditions, ascribing particular eminence of descent to particular families, and favouring the election of the military leader and the judge from their head. "A group of tenants autocratically organized and governed" in the end succeeded to the ancient group of free and equal heads of households; and the lawyer consummated the transformation of the mark into the manor, and of the common land of the village into the lord's waste, subject to certain customs of common use by the lord's tenants and dependants. Highly instructive analogies to this movement are pointed to in India by Mr. Maine; but they and the practical questions of Indian politics with which they are connected are such as only writers with something of Mr. Maine's Indian knowledge are competent to discuss; and we confine our own remarks to our own side of the world, and mainly to England.

We are not sure that we correctly apprehend a sentence of Mr. Maine's, p. 141, that the individual rights issuing out of the transformation of the village group into the manorial group were but slightly affected by the process of feudalism; but if it means, as the context appears to indicate, that the villagers lost nothing of substantial or immediate value, our view would be very different. Even rights, Mr. Maine urges, which savoured of the collective stage, were maintained intact, provided they were ascertained, such as rights of pasture on the waste. But the momentous change to the village community was, that instead of having either undivided proprietorship over the whole territory, or individual proprietorship in equal shares of the whole—as would have been the issue had these rights not been affected by feudalization—the mark was now become the lord's manor, the common waste, his waste; and the onus of proof before technical, costly, and partial tribunals, was laid on the villagers with respect to every surviving right. Mr. Maine himself says: "The encroachments of the lord were in proportion to the want of certainty in the rights of the community." And that the rights appropriated by the lord were held to involve a loss of rights of immediate value to the community, appears both from the frequent suits for insufficiency of common, and from the destruction by night of the hedges and ditches which the lords constructed in the exercise of the right of approvement. Neither does it seem to us that the admitted suffering by which the process of feudalization was accompanied was in any respect atoned for by economic results such as Mr. Maine refers to. "Europe," it is true, "was full of great wastes, and the urgent business in hand was to reclaim them; forests were to be felled, and wide tracts of untilled land to be brought under cultivation." And for these ends Mr. Maine suggests that the autocratically governed group was better adapted than the village group; but it is to Indian experience alone that he appeals in evidence. We will rather look to the regions of Western Europe where feudality gained least dominion, and where its yoke was earliest broken. Was it in England or in Flanders that the waste was first reclaimed, the forest felled, the wilderness turned into a garden? A sentence from M. de Laveleye's *Économie Rurale de la Belgique* affords a pointed answer: "Des digues furent construites, des terres submergées soustraites au retour des marées, des terres vagues soumises à la charrue, des forêts deboissés, des routes tracées, les campagnes converties en une suite des jardins qui faisaient un contraste marqué avec celle des pays ou dominait la feodalité." Mr. Maine thinks the lord of the manor would be more tolerant of novelties than the village community; but in Flanders the village community issued in small separate farms, where agricultural improvements were common early in the middle ages, which late in the seventeenth century were novelties in England. Mr. Maine's step, we may add, is very light and swift over the later portion of the history of the conversion of the property of the village into the domain of the lord; but he refers for a very important chapter of it to Professor Nasse's *Essay on English Inclosures*, which Colonel Ouvry's translation will shortly make easily accessible to English readers. Professor Nasse shows that from the fifteenth century economical causes were at work tending to the dissolution of what remained of the ancient village community and co-ownership; but that these were not the causes which shaped the issue; and that but for violence, fraud, and usurpation on the part of the lords of manors, followed by unjust legislation respecting the inclosure of commons, a flourishing small proprietary might have risen out of the ruins of the old village com-

munity. Mr. Maine notices also another class of causes as having, in addition to those specified by Nasse, tended to throw the land of the peasant and the yeoman into the hands of the great landowners. But the technicalities of English testamentary law are only part of a legal system of feudal origin of which both spirit and form are adverse to small property.

The last lecture in Mr. Maine's volume opens several fresh inquiries of great interest. The suggestions respecting the origin of market price in the sale of movables to strangers on neutral ground, and the steps by which the idea of getting the best obtainable price crept (from dealings with the stranger without) inside the community—and from dealings with movables within the community, to dealings with land, and the regulation of rent—are highly instructive in themselves, and yet more so as examples of the applicability of the historical method to economic as well as to juridical investigation. It is a method which would have preserved one great school of economists, headed by Ricardo, from the besetting sin to which Mr. Maine makes allusion, of deducing elaborate theories from unverified and unhistorical assumptions respecting the "natural" state and tendencies of human society. T. E. Cliffe Leslie.

Intelligence.

The Rev. T. C. Barker has translated De Coulanges' book, *La Cité Antique*, under the title of *Aryan Civilization, its Religious Origin and its Progress*, though with some compression of the diffuse original. The object of the book is to show that the law of the family was based on its relation to its ancestors, who were worshipped after death; and that as this strict and isolated system of rules was entirely inconsistent with the principle of association in cities, as new opinions on religion sprung up a series of revolutions was the result. By examining the customs, stories, words, and rites of classical times, and comparing them with Sanskrit literature, some idea may be gained of what our Aryan ancestors believed from fifteen to twenty centuries before Christ.

In the *Berichte der phil.-hist. Classe der K. Sächs. Ges. der Wissenschaften*, Dec. 12, 1870, Ebert tries to show that the famous book, *De mortibus persecutorum*, is to a moral certainty a work of Lactantius, written at Nicomedia before Licinius had quarrelled with Constantine and turned persecutor himself. It is therefore a valuable religious pamphlet, written at a most critical moment. Ebert also investigates more closely the probable date at which Lactantius wrote the *Institutions* and other smaller works. The essay is a good example of the method of handling a literary question.

Professor Hüffer of Bonn is at present engaged in writing the second volume of his *Diplomatic Negociations during the Period of the Revolution.*

The second part of the fourth volume of Von Sybel's *History of the French Revolution* is about to appear.

The second volume of the *History of Modern Greece*, by Prof. Mendelssohn of Freiburg (now in preparation) will contain some valuable materials from the archives of Vienna bearing upon the War of Liberation.

Mr. Garstin has taken the present opportunity of publishing a pamphlet on the history and origin of the *Book of Common Prayer in Ireland.* His aim is to show that no change in the liturgy is necessarily consequent upon the disestablishment of the Irish Church. He insists upon the essential distinction between the Church of England and that of Ireland, and holds that certain portions in the liturgy of the latter, which have never received the formal sanction of the Irish Convocation, are not, *de jure*, binding on her clergy. Denying any authority to the Rolls MS., he holds up the English printed prayer-book of 1662, and the Irish early editions based thereon, as the liturgical standard.

In the *Allgemeine Zeitung* of March 19, G. M. Thomas gives an account of a collection of Italian MSS. lately added to the Munich Library. They mostly illustrate the history of Europe during the 16th, 17th, and 18th centuries; but though almost all European kingdoms are represented, Venice and Rome have the largest share, and the collection was probably made in the former place. There are a number of the famous Reports of Venetian Ambassadors, made like the "reports on the state of the country" contributed by our foreign agents to the Blue-books. One relates to the war of Cyprus with Sultan Selim, 1570; another to that with Sultan Soliman, 1537–9; another to the Hungarian war of 1661. Much light is thrown on the history of the Cardinals and of the Conclave during the period—the satire and epigram which have their native home in Rome not being wanting. A biography of Sixtus V., and memoirs about Clement XI. in 21 books, are specially noteworthy. The Papal and French intervention in Germany during the Thirty Years' War occupies much room; the plan of breaking up the Empire is distinctly visible on all sides. The anxiety of Rome to get the control of the new art of printing into its own hands, and the watch kept on the Sorbonne, are characteristic. The Bavarian archduke Maximilian is shown to have early manifested that desire to absorb the Palatinate which had such a disastrous effect on German history, and separated Bavaria from the national feeling of Germany for ages. The history of the Palatinate, as introductory to the Bohemian war, has a special bearing on the English history of the Stuart age. There is much on the Jesuits and the Inquisition, something against the Pope's infallibility and superiority to General Councils, and considerable reference to France in the times from Henri IV. to Louis XIV. and during the Seven Years' War with Frederic the Great. Lastly, there are MSS. of Sarpi, Campanella, and G. Capponi. The collector must have had a special taste for historical studies.

Reviews in Foreign Journals.

In the **Neuen Reich**, 1871, No. 15, Mommsen discusses "the policy of Augustus towards the Germans," with much tacit (and some express) reference to late events. Varus, whose army was surrounded and destroyed owing to his utter inefficiency as a general, was appointed to command the newly-formed army of the Rhine owing to a marriage connexion with the Imperial house.

Gotting. gel. Anzeigen.—March 22. Krüger's "Critical Researches on Roman Law" are valuable for the much more correct texts of Gaius and Ulpian employed in them, and which Krüger has turned to good account. Franklin's "Account of the Imperial Law Courts in the Middle Ages" gives a truer picture of German life than any mere civil or military history can do, which never tell us how people really lived in those days. The trials of Henry the Lion, Otto of Wittelsbach, Ottocar of Bohemia, &c., are of much historical interest.—March 29. A. Stern reviews Lujo Brentano's book on "English Guilds," the first sketch of which was prefixed to Toulmin Smith's collection of the Guild Statutes, one of the most important books published by the Early English Text Society. Brentano came over to England with a strong feeling against the modern Trade Unions; the book shows how far he saw cause to alter his opinion. The historical part is specially valuable. A review of Vivenot's "History of the Congress of Rastadt" describes the miserable conduct of the leading German powers; and discusses (without deciding) the perplexed question as to the real instigators of the shameful murder of the French ambassadors by men in the uniform of Austrian hussars.

Literarisches Centralblatt.—April 1. J. Müller's book, "The Historian L. Marius Maximus," is praised for having proved that Marius continued Suetonius' Lives of the Cæsars, from Nerva to Heliogabalus, and that his work is one of the sources of the "Historia Augusta." Müller however thinks Marius only wrote eleven lives: he should have made it twelve by including Macrinus. Forbiger's "Hellas and Rome" is less lively than Becker's well-known "Gallus" and "Charicles;" but makes more reference to inscriptions and works of art, though these materials are somewhat unequally used.—April 8. Ritter's "Letters and Documents connected with the Thirty Years' War" is one of the excellent series of books published under the direction of the Historical Commission at Munich. Of course it lays special stress on the contest between the two branches of the house of Wittelsbach, the Bavarian and that of the Palatinate; but there is much illustration of the policy of Henri IV., and of the affairs of the Netherlands. The first volume carries the history down to the formation of the Protestant Union (1598–1608).

Bullettino dell' Instituto di Corrispondenza Archeologica.—March. De Rossi discusses the interesting point raised by the latest discovery at Alba Longa of a tomb covered by an eruption of peperino. How late in the history of the Roman republic can these volcanic eruptions be traced? The question is made still more interesting by a late discovery of coins belonging to the early type of the *aes grave librale.* The excavations made to discover the site of the Temple of Diana at Nerni are also described. Some works of art and several inscriptions have been found.

Allgemeine Zeitung.—April 19. A review of Ranke's "German History from 1780 to 1790" (vol. i.) describes the effort made by the German princes to form a union under Prussian influence against the Emperor Joseph II., whose plans of aggrandisement and reform had frightened the Pope as well as the lesser sovereigns, and whose attempt to seize Bavaria was only defeated by the resolute action of Frederic the Great. One of these lesser princes was Karl August of Weimar; and one of the most important documents is from Goethe's own hand. Ranke has here, in a manner unusual with him, enlarged on matters closely connected with the interests of the present day; and nowhere is his almost dramatic plan of selecting only important situations for his descriptions (leaving much of the ordinary course of events to be learnt from other authors), and such as he can throw some new light on from his own researches, more manifest or more strikingly carried out.

New Publications.

Fontes rerum Austriacarum. (Ed. by Comm. of Vienna Academy.) 2te Abth., 31ter Bd. Codex diplomaticus Austriaco-Frisingensis, hrsg. v. J. Zahn. Vienna: Gerold.

—— Bohemicarum. Tom. I. Vitæ Sanctorum Fasc. 1. Prag: Grégr u. Dattel.

Hefele, Ch. A History of the Christian Councils, from the original documents, to the close of the Council of Nicæa. Translated from the German and edited by W. R. Clark. Edinburgh: Clark.

Historiens Arméniens, deux: Kiracos de Gantzac XIIIes, histoire d'Arménie; Oukhtanès d'Ourha Xes, histoire en trois parties; traduits par M. Brosset. 1 Livr. St. Pétersbourg and Leipzig: Voss.

Oelsner, L. Jahrbücher d. fränkischen Reiches unter König Pippin. (Jahrbb. der deutschen Gesch.) Leipzig: Duncker u. Humblot.

Palacky, F. Zur böhmischen Geschichtschreibung. Actenmässige Aufschlüsse u. Worte der Abwehr. (Pp. v, 216.) Prag: Tempsky.

Raumers, v. Historisches Taschenbuch, hrsg. v. W. H. Riehl. 5 Folge, 1 Jahrg.

Reliquiæ Tabularum regni Bohemiæ an. MDXLI igne consumptarum. Tom. I., Vol. IV. Prag: Grégr u. Dattel.

Riegel, N. Alarich, der Balthe, König der Westgothen, nach den Quellen, &c. (Pp. 96.) Offenburg.

Schulte, J. F. Literaturgeschichte der Compilationes antiquæ besonders der drei Ersten. (Academy reprint.) Wien: Gerolds Sohn.

Thomas, Edward. The Chronicles of the Pathán Kings of Delhi. Trübner and Co.

Wegele, Fr. X. Kaiser Friedrich I. Barbarossa. Ein Vortrag. (Pp. iii. 27.) Nördlingen: Beck.

Winkelmann, E. Bibliotheca Livoniæ historica. Systematisches Verzeichniss der Quellen u. Hülfsmittel zur Gesch. Estlands, Livlands u. Kurlands. 2te (Schluss) Heft. St. Pétersbourg and Leipzig: Voss.

Philology.

*THE PRONUNCIATION OF LATIN.**

V.

No one can feel more strongly than I do the difficulties in the way of a complete change in our pronunciation of Latin, difficulties so ably and temperately stated by Mr. D. B. Monro in the last number of the *Academy*. I have frequent misgivings as to whether the headmasters of schools have acted wisely in raising the question at all. It may be better to do nothing; it may be better to go no farther than the Oxford circular proposes to go, if so far. The spectre of Greek too is ever before my eyes. It seems unreasonable to reform our Latin pronunciation and leave our Greek unchanged. And I for one know not what to do with the latter and its avenging accent.

My chief perplexity lies in this, that I have heard as yet from so few of the headmasters and others to whom I have sent my paper, and am utterly ignorant what their views and wishes are. Yet most of those from whom I have heard appear to advocate a complete change. Mr. Grignon of Felstead, for example, tells me that he and his boys alike find a complete more easy and agreeable than a partial change; and Mr. Farrar, at Marlborough, does not think it more difficult. If, however, any change is made, be it great or small, I am convinced that the mainstay of an efficient reform is the adoption essentially of the Italian vowel system. It combines beauty, firmness, and precision, in a degree not attained by any other system of which I have any knowledge. The little ragged boys in the streets of Rome and Florence enunciate their vowels in a style of which princes might be proud. Next to the Italian I would acquiesce in the German vowel system. The Scotch is to me disagreeable, the French almost ludicrous. Without a question this would be far the most difficult part of reform. As for the consonants, I have no doubt that any one, if he chose for instance to adopt a uniform *k* sound of *c*, could in a single day learn to look on it as quite easy and natural. But on these questions I say no more at present.

As however Professor R. Ellis in his attempt to show that consonant *u* had the sound of our *v*, not *w*, begins his remarks with my name, I feel bound to say something in support of my own views. As I had so many other things to touch upon in the paper to which he refers, I gave but very few lines to the point in question: I did, however, venture to say that *w* to us English was a nobler sound than *v*. Mr. Ellis on the contrary declares the *w* to be repulsive, and quotes in derision a passage from Virgil with *w* put in the place of *v*. I still adhere to my opinion, and think that "vagio," "vagitus," "vae victis," "Viva videns vivo sepeliri viscera busto," "vivus, ut aiunt, est et videns cum victu ac vestitu suo publicatus," and a thousand other alliterations, lose five-sixths of their effect if pronounced with a *v* sound. As, however, neither his distaste nor my liking for *w* is of any moment in the controversy, I proceed to his proofs, which he marshals under seven heads.

Four of these are grounded on passages in Priscian. I will not deny that at first I was somewhat disconcerted by this, as the passages in question are among the best known in Priscian, with which I had been long familiar, and yet had never drawn from them any such inferences. Priscian is an excellent Latin and Greek scholar for his age; but that age is A.D. 500, subsequent to the overthrow of the Western Empire. He is fond of enlarging on the digamma and its relations with Latin; but, from his often misapprehending the old Greek and Roman grammarians, much that he says is inconclusive and absurd. He cannot rid himself of the notion that F, in consequence of its form, besides its proper sound, represented among the most ancient Latins the digamma as well. Meeting in old authorities with the mysterious *af*, he concludes that it was the digamma attached to *a*. "Thus," he says, "the ancients were accustomed to *write af* for *ab;* but because *vau*, that is digamma, cannot come at the end of a syllable, it was therefore changed into *b*." Even if they wrote an F, they could not pronounce it. All this is perverse enough; but that it "is perfectly intelligible if *u* consonans was like *v*, unintelligible if it was like *w*," is a bold assertion indeed.

Prof. Ellis's second proof rests on Priscian, i. 22. Priscian, not understanding that the aspirate in Greek was often a substitute for the older digamma, says that the Æolians everywhere used to put it in the place of the aspirate to avoid the harshness of this breathing (*spiritus asperitatem*). We, he says, follow them in many words, but not in all; *vespera*, *vis*, *vestis*. "If these were pronounced *wespera*, *wis*, *westis*," asks Prof. Ellis, "would they represent an aspirate at all?" Priscian says they are used not to represent, but to avoid, the harshness of the aspirate: he is quite wrong, but quite intelligible.

The third argument for the *v* sound is as follows: Priscian goes on to say that the digamma used to be inserted to

* The publication of these remarks, which were intended for the last number of the *Academy*, was delayed through an accidental circumstance. In that number, however, our most accomplished master of the science of phonetics, Mr. Alexander J. Ellis, has, I perceive, touched on the question of Latin pronunciation. On much of what he there says I would not presume to offer an opinion, far less any criticism. With regard to the special point on which he chiefly dwells, the sound of consonant *u*, I am bold enough to think that, if he should ever read what follows, he will allow that "the facts deduced by Prof. R. Ellis" do not establish the conclusions they are intended to prove. With regard to the general question, I venture to say that, of the four requisites which he judges necessary for the enquiry into the ancient pronunciation, three have already been provided, or are in course of being provided, if not in the exact shape he desires, yet with a completeness and an accuracy unknown in the case of any other language living or dead. For the fourth, "a great increase of phonetic knowledge," we must look to him and his fellow-workers. Latin will be far easier to deal with than Greek. But however "false" may be the Greek pronunciation introduced into England by Erasmus, Smith, and Cheke, I am persuaded that the great majority of the most sagacious philologers in Germany and England, if called upon to decide the matter, would declare for something like that pronunciation much more unhesitatingly than I should venture to do myself; so strongly do I feel the insuperable difficulties of the whole subject.

avoid hiatus between the vowels, and quotes what he had himself read on a very ancient tripod of Apollo, then in Constantinople. And so he says the Latins sometimes insert a consonant *u* for the same reason, as in *Davus*, *Argivus*, &c. Now, Mr. Ellis concludes, "if the interposed *v* was in sound a *w*, it would not have been the effectual barrier against hiatus which it proved." Why not? However he sounds it, every one allows that the consonant *u* had the same power as any other consonant: in "Neu patriae validas in viscera vertite vires," whether sounded *v* or *w*, it four times prevents hiatus or gives position. "And that Priscian gave to the digamma in the Greek words mentioned a sound more like *v* than *w* would seem to follow from the varieties of spelling in the MSS. δαφιον, δημοφαφων, λαφοκαφων." But, in the first place, Hertz's MSS., the oldest and best, have no such spellings; and in the next, how can the corruptions of bad MSS. tell us how Priscian pronounced, unless he revealed it to the writers in a vision or by a table?

The fourth argument is from Priscian, i. 37. Priscian says that sometimes *u* loses the power (*vim*) both of a vowel and a consonant,—as when it comes between *q* and a vowel, *quis*, *quoniam*; or sometimes *g* and a vowel, as *sanguis;* sometimes too after *s*, as *suadeo:* this is sometimes too the case with *v* in Æolic, as τυῖδ' and πήλυι in Sappho. What Priscian means is simply this: in *equos*, *aqua*, and the like, it has not the power of a consonant, because then it would give position, as in *solvo;* nor of a vowel, because then it would make a distinct syllable, as in *metuo.* Mr. Ellis, however, fancies Priscian is speaking of the sound, and says it must have been very like a *w*, and therefore the consonant *u* must have approximated to the sound of *v*. Quite as meaningless to me are Mr. Ellis's inferences from the curious passage in Priscian (Partit. xii. 24), where the writer says that the *i* of initial *vĭ*, followed by certain consonants, had the sound of Greek υ, and that some so sounded it in initial *fĭ*. "Pronounce *video* as *wideo*, and the pinguitude of the first letter will be found, if I mistake not, to prevent, or at any rate to stand in the way of refining the second." To me *ĭ* is not more crass than υ, rather is it thinner; nor am I at all sure that *weal* has more fat in it than *veal.* How Priscian, writing in Constantinople after A.D. 500, exactly pronounced consonant *u*, I cannot be certain: I believe he still sounded it like our *w*. But I am certain that Mr. Ellis has not proved that he, much less that Cicero or Quintilian, did not so sound it.

The fifth argument carries us from Priscian back into the *primordia* of the language: "The change from the original *fu* of the perfect and pluperfect to *v* in *audivi*, *audiveram*, is simple and natural if *v* represented a sound like our *v*, *i.e.* a sound containing elements both of *b* (*bhu*, &c.) and *f*. This could not be said if *v* was a *w*." I would ask Mr. Ellis whether this *u* fragment of *fu*, *bhu*, or what you will, does not appear also in *hab-u-i*, *habueram*, and other verbs with perf. in *ui*, and whether he rejects what Curtius and Corssen agree in maintaining, that *cāvi*, *mōvi*, &c., represent an original *cāvui*, *mŏvui*, &c., one *u* having absorbed the other. So much for this *v* demonstration.

Mr. Ellis, sixthly, declares the argument for a *w* sound drawn from Greek writing of Latin words to be inconclusive. By itself no doubt it is: I was preparing to say more on this point than I shall say, when the first portion of Mr. Roby's new grammar was brought to me. Let Mr. Ellis read pp. ix–xv, and then see whether he will think as much of Corssen's reasoning as he does now. My own experience entirely bears out the able and comprehensive argument of Mr. Roby, who has shown how superficially Corssen has treated this question. Of the three words mentioned by Mr. Ellis, Βάρρων no doubt appears in the *manuscripts* of Plutarch as well as Οὐάρρων, but for Βεργίλλιος you have to descend to the verses of the Copt Christodorus, for Βεργίλιος to an anonymous worthy who compares him with Κλαυδιάνός: Βαλεριανός is first attested by Petrus Patricius. I cannot help inferring from the hideously barbarous forms in which the older Greek writers express Latin words, that ου came near to the sound of consonant *u*, and that Dion Cassius, for instance, could precisely reproduce *adventus* only by ἀδουέντος: that β, on the other hand, was a substitute like the φ for *f*, or the Italian and French *gu* or *g* for the old Teutonic *w*. But even in French we find *ouest* for *west;* and Italian and Spanish *guai*, French *ouais*, whether they come from Latin *vae* or an older form of German *weh*, as well as *guastare* and *gâter*, which they would seem to have caught up from their Teuton oppressors before the *w* sound of *vastare* had passed into the Romance *v*, all tell the same tale. But "*w* is a gross, I would almost say a barbarous, sound," Mr. Ellis adds; "*b* is a refined delicate sound." I am gross and barbarous enough still to prefer *war* and *woe* to *bar* and *beau.*

After reading Mr. Ellis's demurrer I am still of opinion that the passage which I quoted from Gellius (xix. 6) helps to show that consonant *u* had the same near relation to its vowel that consonant *i* has to its vowel. I had added: "Still more convincing is the curious passage in x. 4: unless *vos* was sounded *wōs* the story would seem to have no point or meaning. Now Gellius quoting Figulus covers the whole classical period." As this in its way was a favourite illustration on which I often enlarged, I was not a little abashed by having it thus retorted upon me by Mr. Ellis: "Still less support can be drawn in favour of *w* from the other passage of Nig. Figulus . . . . . surely it will not be denied that this is a description of an outward, not of an inward, sound; of a projected *v*, not a half-withdrawn *w*." It has nothing whatever to do with the sound of the single *v* and *w:* Figulus is speaking of the contrast between the whole words *nos* and *vos;* and, as this is a practical matter which all can test, I confidently deny that the English enunciation of *nos* and *vos* gives in any way the required contrast, and maintain that only by *wōs* "motu quodam oris conveniente cum ipsius verbi demonstratione utimur, et labeas sensim primores emovemus ac spiritum atque animam porro versum et ad eos, quibuscum sermocinamur, intendimus." In English *we* and *you* would serve the same purpose, *we* taking the place of *nōs*, *you* of *wōs;* but this would not depend on the sound of the single letters *w* and *y*. Mr. Ellis, however, thus clinches his argument: "And so the description of the letter given in Hagen's *Analecta Helvetica*, p. 307, *V ore constricto labiisque prominulis exhibetur.*" May I just observe that the writer is telling us by what position of the mouth and lips we are to pronounce the *vowel u*, and ask whether this *q. e. d.* is not something of a self-inflicted "reductio ad absurdum"?

In the seventh and last place Mr. Ellis touches upon "the interchange of *b* and *v*," and attempts to show that, though their sounds were not the same, *v* was near enough in sound to *b*, to be spoken and written for it in many words, even by Cicero and Varro. He begins his proof by telling us that Corssen traces *b* for *v* in inscriptions from the end of the first century. Let no one take such matters on trust. Corssen has been guilty here of a gross piece of negligence: he quotes from Cohen "Nerba Traianus," and assigns it to the reign of Trajan, not taking the trouble to observe that Cohen is describing a contorniate medal, as late at least as the age of Constantine, probably much later. By the same process he might have proved that a Bonifatius

and a Polistefanus flourished under Trajan. It is useless for Mr. Ellis to quote from a palimpsest of Cicero twenty instances of confusion of *v* and *b*. Every palimpsest, every ancient manuscript in existence revels in this confusion, which had commenced long before they were written, but *not* in the time of Cicero. Still more fruitless is it to cite from our extant codices of Varro or Nonius. Nonius, it is quite true, blunders about *bulga* and *vulga*, but not Varro or Lucilius. Varro derives *urbes* "ab orbe et urvo," but he takes the *ur* from *urvum*, the *b* from *orbis*. This is closer than other etymologies in the same page: "oppidum ab opi," "turres a torvis," "vici a via," or *moerus* from *moenus*, or nine in ten of Varro's derivations. If Laberius can play with *delenimenta* and *deliramenta*, he can do the same with *beneficia* and *veneficia*, without our needing to assume that *b* had the sound of *v*: an assonance, in fact, should not be too exact; for its point is then only blunted.

Neither the old Greeks nor Romans, I believe, had our and the Romance *v* sound: *b* and the consonant *u* were kept quite distinct in the best classical period. Perhaps towards the end of the second century, when many other symptoms of decay began to show themselves in the language, a lazy confusion of *b* and consonant *u* crept into the utterance of many words. But *amavi* was pronounced *amai* before the *v* got its present Italian sound, which was not fully developed, I believe, till post-classical times. We shall thus, I think, better account for Italian *amai* = *amavi*, as well as *amavo* = *amabam*; for *ho*, *hai*, *ha*, *ebbi* = *habeo*, *habes*, *habet*, *habui*, as well as *avevo* = *habebam*, &c. &c.

In my printed paper I said that I hold a *w* sound of consonant *u* to be called for by the whole inner structure of the language, and offered some brief illustrations of what I meant. I was preparing to give fuller details here; but I am glad now to escape from the irksome labour by referring to the elaborate discussion in pp. vi–ix of Mr. Roby's new grammar.

H. A. J. MUNRO.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—Allow me to say a few words on the subject of the pronunciation of the letter *v* in Latin. Professor Ellis, in his article in your impression of April 1, is concerned to prove that this is more nearly represented by the sound of the English *v* than by that of the English *w*. I cannot agree with him that this conclusion is warranted by the authorities to whom we have access. (1) If the Romans had such a sound as the English *v*, it is very strange that their grammarians, usually so precise in their distinctions, should never have been at the pains to analyse the difference between this sound and the cognate but rougher sound represented by the letter *f*. They were careful to prevent confusion between this letter ("tristis et horrida," "inter discrimina dentium efflanda," Quintilian, xii. 10) and the softer Greek φ. Cicero laughed at the Greek witness who could not pronounce the name *Fundanius* (Quintilian, i. 4). "Non fixis labris est pronuntianda *f*, quomodo *ph*, atque hoc solum interest," says Priscian, l. 14. The Greek φ must thus have been but a degree harder than our English *v*. Quintilian assures us (xii. 10) that the Romans had not the Greek φ: if they had had such a sound as our *v*, is it possible that he should not have noticed it, and distinguished it from φ on one side and *f* on the other? or that he could have complained so strongly of the roughness of the Latin spirants as compared with the Greek?

(2) In the pronunciation of the English *v* the breath is passed lazily between the upper teeth and the lower lip. But this process is a different one from that described by Nigidius (Gell. x. 4) as taking place in the pronunciation of the word *uos*, "labeas sensim primores emouemus:" an attitude of the lips which, though it would not exactly produce the English *w*, would not either produce anything like the English *v*, but something like the sound written by Mr. A. J. Ellis—*v'*, a strictly labial semi-vowel.

(3) This brings me to a third point of importance. *I* and *u* are spoken of constantly by the Roman grammarians as sometimes vowels, sometimes consonants, according to the letters which followed them: vowels when preceding consonants, consonants when preceding vowels. Now this must mean that the sounds in question were thought capable of becoming consonants or vowels according as they were pronounced long or very short: *i* (e.g.) in *ius* (like English *y* in *your*) standing for a consonant, in *lis* for a vowel. But if *u consonans* (as in *seruus*) were pronounced like English *v*, it would not represent the vowel *u* passing "in consonantis potestatem," but an entirely different sound. Prof. Ellis grants that in words like *suavis*, &c., *u* must have sounded very like English *w*. But I cannot find that there is any hint in the grammarians of a difference between *u* in *suesco* and *u* in *vespera*: and had there been, it is almost inconceivable that they should not have noticed it. "*Pingue quiddam sonat* (*u*) cum sibi ipsi praeponitur," says Sergius or Servius in Donat. p. 475 (Keil); comp. "Graeci Aeoli *hunc crassiorem sonum* quem facit *u* littera cum consonans est non habent," ib. p. 541; and so the "Commentarium Einsiedlense in Donati Artem Maiorem," p. 223. They apparently thought *u consonans*, as Prof. Ellis thinks the English *w*, a gross sound, but never hint that it was a spirant, like our *v*.

(4) Prof. Ellis, I think, argues wrongly from the passages in the grammarians which distinguish *uĭ* from *uī*. It appears that short *i* after *u* had a comparatively indefinite and confused sound ("*ĭ* et *u* vocales quando mediae sunt alternos inter se sonos uidentur confundere teste Donato, ut *uir*, *optumus*" (Priscian, l. 26). "In quibusdam dictionibus expressum sonum (*i* et *u*) non habent, ut *uir*, *optumus*." (Diomedes, p. 422 (Keil). This sound is described by Priscian in the passage quoted by Prof. Ellis (Part xii. vers. 23, 24) as resembling Greek *υ*. But such an *i*, less pure than the long *ī* of *uita*, is more likely, as I understand Prof. Ellis to grant, to have been produced by the influence of a *w* than by that of a *v* sound.

(5) The affinity on which Prof. Ellis lays stress between Latin *b* and *u* is, I think, obvious, whether *u* resembled our *w* or our *v*. *Bellum* and *bonus* arose out of *duellum* and *duonus*, though *du* must have been pronounced *dw*. *B* might naturally represent a corruption of any labial sound; *m*, for instance, or *f*, as well as *u*; and conversely, if *v* (= *w* or *v'*) were corrupted into a mute at all, *b* is the form which it would naturally take. This consideration would seem to explain the cases of confusion between the two letters; which, however, are never found in the classical age. Not one can, I think, be found in the first volume of the *Corpus Inscriptionum*. Probus (*App.* p. 198–9) marks as incorrect the pronunciation *albeus* for *alueus*, *baplo* for *uapulo*: and even Consentius (p. 392) calls it a barbarism to say *bobis* for *uobis*." If so, the constant confusion even in good MSS. between *b* and *v* proves only the ignorance of the scribes, who followed the debased pronunciation of their time, and cannot be used as an argument for the writing and speaking of the classical era.

(6) The change alleged by Priscian (i. 46) from *af* to *ab* is not certainly made out. On the other hand, Corssen (i. 152 foll.) has rendered it highly probable that *af*, *au*, and *ab* were originally distinct roots, naturally confounded by the grammarians. Taking these arguments together, I cannot consider that Prof. Ellis has succeeded in overthrowing Prof. Munro's and Mr. Roby's view of the Latin *v*.

I wish to add a few words on the practical bearings of the question of Latin pronunciation. It is perhaps true, as Mr. D. B. Monro has urged in his letter to you, that the advantages to be gained by a reform in our pronunciation of Latin would not be very considerable. Still, I think that, so far as they go, they would be real. Though it is true that we cannot hope actually to reproduce the sounds of classical Latin, it must be remembered that the exceptional pains given to the study of their own language by the Roman *literati* and grammarians have put us in an exceptionally advantageous position in the matter. We can at least go so far as to obtain a pronunciation approximately right, and one which would immensely aid not only the teaching of the higher grammar and analysis of formation, but also that of the elementary prosody. I have always myself found the English pronunciation a serious hindrance whenever questions of prosody or etymology have to be discussed or explained at length in presence of a class. The main difficulty after all seems to be that the teachers of Latin must, at great trouble to themselves, unlearn their old pronunciation if a reform is to be adopted. The pupils I have heard are not found to make any difficulty where the experiment has been tried. Speaking for myself, I have no doubt that I should find the trouble of learning the new pronunciation quite repaid by the facilities which it gained me for teaching purposes.

H. NETTLESHIP.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—Though very sorry to differ from Prof. Robinson Ellis, I am glad to think that a scholar of his eminence can find no better arguments for the present pronunciation of Latin *v* than those given in your paper of the 1st inst.

Four of his seven arguments are from expressions of Priscian—an able man, and an author of real weight in a question as to the pronunciation of Latin at Constantinople in the sixth century. But are five centuries nothing in a matter of pronunciation? Is Dr. Johnson an authority for the pronunciation of Chaucer? I have myself little doubt that to Priscian *v* and *b* were indistinguishable. Else what does he mean by "omnia nomina a *vi* syllaba incipientia per *v* scribuntur, exceptis *bitumine* et *bili*," &c. (*Part.* § 23 = iii. p. 465, ed. Keil). Could any writer of the Augustan age have said this? Mr. Ellis alleges the frequent interchange of *v* and *b* in some of our earlier MSS. as a proof that "the two letters must have sounded very like each other in a large number of words from the time of Cicero and Varro onwards." Can he really mean that the MSS. of the fourth or fifth century are better evidences of the pronunciation of Cicero than Republican and Augustan inscriptions are? Yet instances of this confusion in inscriptions before the fourth or at any rate the third century are excessively rare. Inscriptions of the fourth century show plenty of instances. The inference seems to me plain.

The argument from Greek transcriptions I have gone into at some length in the forthcoming preface to my grammar, and I will not here repeat it, but will say a few words about the arguments from Priscian, so far as they do not rest merely on his own pronunciation.

1. I am at a loss to understand how Priscian's statement about *af* being changed to *ab*, because a *vau* could not stand at the end of a syllable, proves that *u* consonans had the sound of English *v*. *w* cannot be sounded at the end of a word, *v* can be sounded there as easily as anywhere else. The little word *of* pronounced *ov* is just in point. No Englishman, but a Christy Minstrel, needs to say *ob*.

2. Priscian (i. 22) speaks of the Æolians using everywhere the digamma, where the other Greeks used an aspirate; and says the Romans did this in a few words. No doubt the Romans said *vespera*, *vestis*, though words from these roots had an aspirate in Greek. But what has this *etymological representation* got to do with Augustan pronunciation? Mr. Ellis' explanation that "the transition of *h* to *v* is the natural change from a hard to a soft breathing" is, I think, neither etymologically nor phonetically sound.

3. In the same passage Priscian speaks of *v* being interposed to prevent an hiatus, *e. g.* in *ovis*, *ovum*, &c. (compare ὄις, ὠόν). "If the interposed *v* were in sound a *w*, it would not have been the effectual barrier against hiatus which it proved." This argument puzzles me. For it is one of the marked characteristics of Latin *v* that it constantly dropped out between two vowels, e. g. *amavisse*, *amasse*; *cavitum*, *cautum*, &c. Yet by his fifth argument Mr. Ellis shows that he is not referring here to a supposed pronunciation of *v* peculiar to these words, but to *v* generally.

4. Priscian's distinction of *u* after *q*, &c. from the strict consonantal *u* might be explained by his knowledge that *aqua*, &c. had a short initial syllable, and *advenio*, &c. a long one. However, I dare say, he really pronounced the *u* in these words differently. But what he says of *vĭdeo*, &c. seems to me to imply the contrary to what Mr. Ellis thinks. I can find no greater aptitude in English *v* to change short *i* into *ü* than in English *m*, or indeed any other consonant; but a vowel *u*, or a semi-vowel *w*, is more likely to have had this effect.

5. The change of *fu* to *v* in the perfect suffix, if it ever occurred, was at any rate prior to any historical Latin, and is small evidence at the best for *v* being a labiodental. But I doubt the fact: for it is more likely that *fu* was a *collateral* relative of the perfect *v*: and if *fui* did become *vi*, the *v* represents not the *f*, but the *u*.

As to the passage in Gell. x. 4, which Mr. Munro has referred to, I ask Mr. Ellis to try the experiment of pronouncing *vos* before a mirror. He will find much more tendency to protrude the lips, if he pronounce *v* as a vowel (comp. French *oui*), or English *w*, than with his underlip against his teeth, as in the labiodental *v*.

I have no space here to set out the arguments for the sound of Latin *v* as English *w*; and I close by protesting, first, against *w* being called "a gross or almost a barbarous sound," when it is, as far as I can judge, a favourite sound in English poetry; and, secondly, against any argument which supposes that the best way to understand the ancient languages is to invent canons of taste, and manufacture a pronunciation for the Romans according to them.

H. J. Roby.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—One of our most eminent scholars, the Dean of Ely, has published in the *Contemporary* of last month a short article on the "classical pronunciation of Latin." Forced as I have been into the position of a reformer, my hard fortune compels me to notice it, as in details it differs so widely from my own published opinions, and Dr. Merivale must not be slighted or ignored. After a few general remarks, he devotes the rest of the paper to the much-vexed Latin *c*.

Let me begin by stating that the "one or more persons of impulsive temperament" include among others the Philological Society of Oxford and the Head-masters of the forty or fifty greatest schools in England. Possibly enough, as I have always asserted, it may not be worth our while to attempt to recover the utterance and intonation of a dead language; but, as I have tried to show in my printed remarks, we have greater facilities in my judgment for approximating to the pronunciation of old Latin than Mr. Merivale believes to exist. We know exactly how Cicero or Quintilian did or could spell; we know the syllable on which they placed the accent of almost every word; and in almost every case we already follow them in this. I have the conviction that in their best days that philological people took vast pains to make the writing exactly reproduce the sounding; and that if Quintilian or Tacitus spelt a word differently from Cicero or Livy, he also spoke it so far differently. With the same amount of evidence, direct and indirect, we have for Latin, it would not I think be worth anybody's while to try to recover the pronunciation of French or English; it might I think be worth his while to try to recover that of German or Italian, in which sound and spelling accord more nearly, and accent obeys more determinable laws.

But on these general questions nobody will care for what his neighbour says or thinks. I proceed therefore to the special topic of Dr. Merivale's paper, the pronunciation of the Latin *c*, of which he wishes "to say a few words before the hour has struck for fixing it irrevocably." And here I would remark that he appears to me to be too hard on Madvig and "his followers," whose theory as to the sound of *c* does not depart more widely from our or the Italian practice than does Dr. Merivale's own; for he is the only scholar of distinction I ever heard of who has maintained that the old Greeks sounded ἄντλος *anshlos*, or that the old Latins pronounced *exanclare exanshlare*, *porta* and *porca porsha*. Dr. Merivale puts poor *Cicero* once again to the question. He not only says what is true enough, that the hardness of the Greek does not prove that of the Latin *c*; but he is not sure that the κ was hard. I showed however in the appendix (printed in *Academy*, p. 185) to my *Remarks*, that *cicer* was reproduced in Albanian by κυικυερε, in German by *kicher*, which allows I think of a more conclusive inference. This inference I will try to strengthen here. Mr. G. W. Mason of Morton Hall has sent me a list of Welsh words, derived directly from the Latin; among them *ceirios* = *cerasus*, *carchar* = *carcer*. No one I think will doubt that these words were taken directly from the living Latin, as the Latin words were from the living Greek. Equally certain it is that Gothic *karkara* and German *kerker* came directly from the living Latin, and *kirsche* too directly or indirectly. Thus then κάρκαρος (κάρκαρον), *carcer*, *carchar*, *karkara*, *kerker*, were all five sounded hard; or else a soft Latin *c* reproduced the hard Greek κ, while all the three languages which took the word directly from the Latin agreed in returning to the hard *k* sound, though they all might have used sibilants to express it. Which hypothesis is the more likely? The argument is not affected if, as Dr. Merivale would deem possible, κάρκαρος was pronounced *sarsaros*: κέρασος, *cerasus*, *ceirios*, *kirsche*, tell the same tale. And yet, as Corssen shows, when the Germans borrowed words after the Romance sounds were introduced, they employed a sibilant: *zelle*, *zirkel*, *zither*. I trust I have now done with the *Kikero-Sisero* business.

Dr. Merivale casually opens his Propertius and finds that the MSS. give *cilices* for *silices*: the MSS. of Propertius are of the late middle ages, and from those times 10,000 similar instances can be got. The same may be said of the *arscedat* of Turpilius, where the true reading is by no means so certain as Dr. Merivale seems to think it: the best MSS. of Nonius, from whom the passage comes, belong to the earlier middle ages. Such blunders being past numbering in post-classical times, unless it can be shown that they were usual in classical times, my inference would be the exact contrary of Dr. Merivale's. And so with the "fluctuation so common in our printed books and MSS. of *ci* and *ti* pure," unless it can be shown that such fluctuation took place in classical times; and I flatter myself I can show it did not. And here let me express my absolute conviction that, with regard to the words he specifies, every scholar whose judgment is held to be supreme on such points, such as Ritschl, Mommsen, Huebner, Haupt, will at once de-

clare that the sole classical forms are *condicio*, *contio*, *nuntius*, *novicius*: reason, authority, and etymology are here at one. *Accius* and *Attius*, *Mucius* and *Mutius*, may all exist, but the different forms point to different origins. *Portia* I know in Shakespeare, but only *Porcius* and *Porcia* have classical authority; and so with *Aebutius*, *Caedicius*, *Sulpicius*, *Itius*. "It is clear that both writers and printers gave a common pronunciation to *ci* and *ti* pure." Yes; but what writer or printer before the 7th century?

Dr. Merivale asks, "Is not *porca*=*porta*, the gateway or space between two furrows? Again, is not *porca*=πόρτις, the pregnant sow or heifer? Is not *Mars* identical with *Marcus*, and accordingly *Martius* = *Marcius*?" So we are to pronounce, it seems, *Marsh*, *Marshis*, *Marshius*, *porsha*, *porshis*. "I surmise, with some confidence, that if one transcriber wrote *exantlare* and another *exanclare*, it was because the word was pronounced *exanshlare*. And this too represented the Greek ἄντλος (anshlos)." I have never before known Englishman, German, Frenchman or Italian go such lengths in sibilation as this. For the first *porca* let me refer Dr. Merivale to *furrow*, *furche*, and Grimm's law. *Mars*, *Martis*, *Martius*, are all in rule: *Marcus*, comparing *Mamercus* and *Tiberius*, I believe to be a child or favourite of Mars; and from *Marcus* comes *Marcius*, as from *Quintus* (*Quinctus*) comes *Quinctius*, from *Sextus Sextius*. But what all this has to do with the sound of *c* or *t* I cannot conceive. Ought a foreigner to maintain that the *k* has an *s* sound in *Tompkins* and *Wilkins* because they are etymologically connected with *Thompson* and *Wilson*? *Exanculare* and *exanclare* are the sole classical forms: the word has no more concern with ἄντλος than with the German *antlitz*. The learned Theban who first wrote *exantlo* wished to connect it preposterously with Greek: perhaps it was he who first discovered *coelum*, *sylva*, *hymbres*, and similar flowers of etymology. But surely the time is come to discard such fancies.

But Dr. Merivale concedes that "the usage of the 12th or 14th century is not conclusive as to that of any preceding one;" and adds, "we possess probably no manuscript authority which goes back to the classical, or nearly to the classical ages." Of Virgil alone, or of portions of him, we possess at least six MSS. which go back to late classical times; and every one of them utterly repudiates any such confusion of *c* and *t*—unless, that is, we are to pronounce *ac* and *at* as *ash* on the analogy of *anshlos*.

How can *infitiae* come from the Homeric ἀμφασίη any more than *fateor* and *confiteor* from φησί? Gellius knew no *secius*: he himself said *sētius*; he found *sectius* in a manuscript of Plautus: we are then to pronounce *quinctus* and *quintus* as *quinshus* on the analogy of *anshlos*; *vita* and *victus* as *visha* and *vishus*. Is an extruded *c* before *t* so foreign to Latin? what of *artus*, *fartus*, *sartus*? Of course Varro, like everybody else before A.D. 600 odd, spelt *pretium* with a *t*; but the jingle "nunc prece, nunc pretio" I prefer with the sounds not entirely coincident, *i.e.* either as we or the Italians pronounce it, or as I believe Ovid and Horace pronounced it, "nunc preke, nunc pretio." I am compelled therefore to doubt that it "was doubly alliterative."

Dr. Merivale comes at last "to the testimony of monumental inscriptions; and about these there can be no misapprehension." My experience, alas! is widely different. He observes that whoever glances over Orelli's *Corpus Inscriptionum*, will find *conditio* and *condicio*, *statio* and *stacio*, *nuntius* and *nuncius*, *fetialis* and *fecialis*. It is true he will; but let me shortly illustrate this point. Of all these words there is one and only one right spelling—*condicio*, *statio*, *nuntius*, *fetialis*: whenever you find in Orelli the wrong spelling, it is taken from some old collector who took it from some one else, or blindly followed the depraved spelling of his time; and whenever a competent observer can test such spelling, it is found to be a blunder. Thus in No. 4132 Orelli gives *conditione*: Mommsen has copied from the original and published the same inscription, and reads *condicione*: "utri creditis?" Another inscription Orelli takes from Gruter, Gruter from an old and worthless authority Apianus. Gruter gives this inscription twice over: once he prints *condicione*, once *conditione*: his authority, Apianus, prints *condictione!* All these works I have before me at this moment. Did space and patience allow, all the other false spellings might be routed in the same way: *patritius* is absolutely without authority. It is met with in Orelli, not "often," but in No. 723: this he takes from Gruter; Gruter, as Orelli remarks, gives this same inscription twice: in the one place he prints *patritios*, in the other *patricios!* Orelli published his collection in 1828, and we are now in the year of grace 1871. "On the other hand, *aedilicius*, *sodalicium* are spelt with *c*:" yes, and *c* is alone right: *t* wrong *de facto* and *de iure*. One or two of the names mentioned have a double spelling, but also a double etymology; but *Sulpicius*, *Caedicius*, *Aebutius*, are the only true forms. "The inference seems irresistible." What inference? Surely this, that, while an ancient stonecutter could not confound *ci* and *ti* pure, because to him the sounds were totally different, a modern transcriber, before the quite recent introduction of a real epigraphical science, could not be trusted not to confound them, because the sounds were to him the same. Thus, with regard to the just-mentioned *sodalicium*, the accurate and accomplished Huebner, in his new volume of Spanish inscriptions, copies from the original, and prints *sodalicium* in No. 3730, while a Spanish scholar in the year 1760 reads *sodalitium*.

And now we are advancing to the final and triumphant climax. "But of all these monuments there is none that comes to us with more authority, both from its age and its authorship, than the 'marmor Ancyranum,' the inscription on which is the undoubted composition . . . . of the Emperor Augustus." "Now in this inscription we find the word *patritius* spelt with a *t*. We find also the two forms *tribunicia* and *tribunitia*, once or twice over. It is plain that to the ear of Augustus either form sounded alike, and he therefore wrote them indifferently. And so, if I may rely on the transcript given by Egger (*Historiens d'Auguste*), it would seem to be absolutely demonstrated that in the best classical age *ci* = *ti* pure . . . and their common sound, as I have already said, can only have been a sibilant, such as *s* or *sh* or *ch*." But the transcript may not be relied on: let Egger be a warning not to pin one's faith on the Reinesii, Apiani, and Gruters of old. For the last six years I have treasured, as one of the most precious works for the study of Latin orthography, Mommsen's elaborate monograph on the "*Res gestae divi Augusti*." Every conceivable pains has been taken to ensure the minutest accuracy; every letter has been studiously pored over. We find then *patriciorum* once, *tribunicius* thrice: I need not say the *t* never occurs. Augustus cashiered an officer who wrote *isse* for *ipse*. What would he have done to one who spelt *patritius* or *tribunitius*? At the very least he would have sent him to keep poor Ovid company. If Dr. Merivale will prove, or even make it probable to me, that Divus Augustus once in his life wrote or spoke *patritius* or *tribunit. pot.*, I will renounce for ever Latin orthography and pronunciation; I will cry *peccavi*, not *peccawi*; I will promise to say *Marsh*, *Marshus*, *Marshius*, and—— But no, I cannot pledge myself to *porsha* and *exanshlare*.

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LATIN WORDS IN WELSH.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—Without desiring to enter into the question as to whether we ought to reform our pronunciation of Latin, I may perhaps be allowed to call attention to a kind of evidence not generally known to the readers of the *Academy*: I allude to the form assumed by Latin words adopted by the Welsh. In the latter language C and G are always hard, whatever vowel may or once did immediately follow them. The instances which concern us here are those where C immediately precedes I or E. First let us take initial C:—

cella, CELL, a cell, cloister.
cera, CWYR, wax.
certare, CERTHAIN, to fight.
cingula, CENGL, a girth.
cista, CIST, a chest or coffer; also CEST, a belly or paunch.
cicuta, CEGID, hemlock.
civitas, CIWED, a multitude, a rabble.
civitat-is, CIWDOD, a nation, a tribe.
cippus, CYFF, a stump, the trunk of a tree: plural, CYFFION, stocks. Cippi, in late Latin, appears to have also had this meaning, as one meets in Neckham's "Dictionary" (*Lexicog. lat. du 12e et 13e siècle*, par M. A. Scheler: Leipzig, 1867), p. 97, with the words, "Assint etiam cippi et columbaria;" to which are added the glosses CEPS and PILLORIS.

In "inlaut" Latin C regularly becomes G in Welsh:—

cancelli, CANGELL, a chancel.
ascendere, ESGYN, to ascend.
descendere, DISGYN, to descend.
deficere, DIFFYG, a deficiency, an eclipse.
locellus, LLOGELL, a pocket.

maceria, MAGWYR, a wall, ruins.
medicina, MEDDYGINIAETH, a remedy.
pascere, PESGI, to feed, to make fat.
praeceptum, PREGETH, a sermon.

Welsh words give no evidence of a hesitation between CI- and TI- : thus natalicia, not natalitia, is postulated by NADOLIG, or, in full, NADOLIG CRIST, Christmas ; similarly, beneficium gives BINFIC in the Oxford glosses, which in modern Welsh assumes the form BENTHYG, a loan.

It would be useless to multiply instances, as there are no exceptions tending to prove the Latin C to have been pronounced soft before I or E, excepting a few of modern date. The same argument may be extensively supported by instances from the other Celtic languages ; these however I prefer omitting at present, so as not to render this letter unnecessarily long. But there are a few other points which I wish to notice. In the Oxford circular it is proposed to make only a minimum of change in the present pronunciation of the Latin vowels. This seems to be treating the present fashion with too much tenderness ; if indeed a change be desirable, let it be an adequate one. Why pronounce OW for the Latin AU, and so substitute O for A ? Why pronounce EU as at present, and not as the Italians do ? I do not think that any student of Latin would at this time of day consider it a great hardship to have to learn to pronounce the German AU and the Italian EU ; glottologically it would be a decided gain. Welsh words proving the Latin AU to resemble the German AU, rather than the English OW, are numerous enough ; in the other case the instances are rarer :—

Europa, EWROB (Welsh W = Italian U), Europe.
eunuchus, EUNUCH (an eunuch), where the E has retained its sound, while the U has been changed to the usual Welch U, which nearly resembles the German Ü. Neither of these words seems to have been borrowed directly from the Greek.
oleum, OLEW, oil.
puteus, PYDEW, a well.
Judaeus, IUDDEW, a Jew.

From this last it would appear JUDAEUS had become Judēus before it was adopted by the Welsh, as AE and OE are favourite diphthongs in our language. Such words as GROEG = Graecus and POEN = poena prove nothing, as their derivation from Grēcus and pēna would be perfectly regular. Lastly, in IUDDEW the I is the semivowel, written Y in English : so in IAU, Jupiter, from Jovis. To these one may add ISGELL, broth, from jusculum, by contraction in the first syllable ; but as it is hardly to be expected that any one will maintain the English pronunciation of the Latin J to be the right one, it is almost unnecessary to point out this evidence against it. It is to be borne in mind that the English sibilants are regularly represented in Welsh by S, the only sibilant we have : *e.g.*, Sion = John ; sinsir = ginger ; siars = charge ; ceispwl = catchpole ; siom = sham ; &c. &c. If C and J were sibilants or palatals in Latin, it seems certain that we should have them represented in Welsh by S.

With respect to the Latin V the evidence of the Welsh is not so decisive ; but so far as one can see, it favours the supposition that it had the sound of the English W, which is represented in Welsh orthography as in English : for the Welsh W represents both the Italian U and the English W, just as I has to do service for I and the semivowel Y. Now Latin words beginning with V begin with GW in Welsh : *e.g.*, GWENER = Vener-is, GWENWYN = venenum, GWAIN = vagina, GWAWL = vallum, Supposing the Latin V = English V, it is highly improbable that the Welsh would have prefixed a G to it ; but if it resembled the English W, and so nearly approached the vowels, this would not be so surprising, as the prefixing of a G to words beginning with vowels, especially O, is by no means uncommon in Welsh : *e.g.*, GORDD, GODIDOG, GONEST, &c., for ORDD, ODIDOG, ONEST, &c. Of course it is possible that a change from V to W took place on Welsh ground,—that is to say, after the words had been adopted by the Welsh : this however does not appear probable, as the language deals quite differently with English words beginning with V. The latter, the sound of which is represented in Welsh by F, is *en phrase* a mutation of B or M ; accordingly words beginning with it imported into Welsh are treated as if presented in a mutation state of their initial consonant, and regarded as beginning with B or M when taken as independent words, or uninfluenced by the rules of "sandhi :" thus we have MANTAIS, MENTER, MILAIN, BERF, &c., from vantage, venture, villain, verb, &c., respectively. J. RHŶS.

Selected Articles and Contents of Journals.

Ellis on the Armenian affinities of Etruscan, rev. by Benfey, in Götting. gel. Anzeigen, March. [Learned and ingenious, but unconvincing.]

On the Caucaso-Tibetan affinities of Etruscan, Phrygian, Lydian, &c., by Hyde Clarke, in Phœnix, No. 9. [Tries to show that these languages are of a Caucaso-Asiatic rather than of an Aryan type. Mr. Ellis failed by assuming too hastily that the Armenians are an Aryan race.]

Hermes, vol. v. pt. 3.—M. Haupt : Coniectanea.—U. Köhler : Studies on the Attic Psephisms. [Restores and explains sundry inscriptions.]—I. Bywater : On the unpublished commentary on Aristotle, Eth. v. [Excerpts from a MS. belonging to New College, Oxford.]—I. Bywater, A. Ceriani, and V. Rose : Porphyry's Life of Pythagoras. [Collation of an important MS. in the Bodleian, with an account of the Milan MSS., and introductory remarks on the state of the text of Porphyry.]—E. Hübner : A new treaty of hospitality found in Spain. [Between Acces, a private individual, and the town of Pallantia, now Palencia, in New Castile.]—Th. Mommsen : New fragments of the calendar of the Feriae Latinae. [Already noticed in our columns.]—Th. Gomperz : Letter of Epicurus to a child. [Deals with one of the Herculaneau fragments of the very highest interest, as illustrating the private life of Epicurus : a facsimile accompanies the article.]—H. Jordan : De Vaticanis Sallusti historiarum l. iii. reliquis. [The result of a re-examination of the Vatican MSS. which had been previously collated by Niebuhr and Mai.]—H. Bonitz : Explanation of Platonic Dialogues. [On the proofs of immortality in the Phaedo, and on the argument of the Laches, which the writer defends against the attacks of Schaarschmidt.]—Th. Nöldeke : Ἀσσύριος, Σύριος, Σύρος. [Maintains that when the Greeks came in contact with the great Eastern monarchy on the Euxine and Mediterranean, they gave the name of *Assyrians* to the inhabitants of both Cappadocia and Palestine ; *Assyrians* being thus a political and not an ethnological designation. Subsequently the abbreviated forms Σύριοι and Σύροι became restricted to the inhabitants of Palestine, although the Cappadocians were often known as *White Syrians*.]—G. Hirschfeld : The Aeginetan Inscription, Boeckh 2138. [Shows that the inscription has been misread, and allusion erroneously found to the worship of a goddess, Colias, whereas the letters may be referred to the name of an Aeginetan demus, Κωλιάδαι.]—M. Hertz : The cognomen of Sp. Cassius. [To be spelt *Vecilinus*, instead of *Viscellinus*.]

New Publications.

ANTON, H. S. Beobachtungen über die Construction der lateinischen Zeitpartikeln *Antequam* und *Priusquam*. Erfurt : Villaret.
BERNHARDY, G. Grundriss der römischen Litteratur. Fünfte Bearbeitung. 2 Abtheilung. Braunschweig : M. Bruhn.
BRÜCKE, E. Die physiologischen Grundlagen der neuhochdeutschen Verskunst. (Pp. vii. 86.) Wien : Gerold's Sohn.
CORPUS INSCRIPTIONUM LATINARUM. Vol. iv. Inscriptiones parietariæ Pompeianæ Herculanenses Stabianæ. Ed. Carol. Zangemeister. Accedunt vasorum fictilium ex iisdem oppidis erutorum inscriptiones editæ a R. Schöne. Berolini : apud G. Reimerum, Fol. xix. 272.
GLOEDE, H. Caesars historische Glaubwürdigkeit in den Commentarien von Bürgerkrieg. Kiel : Schröder and Co.
GOLDBACHER, A. Zur Kritik u. Erklärung von L. Apuleius de dogmate Platonis. Wien : Gerold's Sohn.
JAGIĆ, V. Das Leben der Wurzel dê in den slavischen sprachen. (Pp. iv. 73.) Wien : Gerold's Sohn.
KOCH, E. De *h* sive litera sive nota latina, germanica, romanica observationes. Grimma : Gensel.
KRÜGER, K. W. Epilog zu Krüger's griechischer Sprachlehre. Berlin : Krüger.
MADVIGII, G. N. Adversaria Critica ad Scriptores graecos et latina. Vol. i. Præmittitur artis critica conjecturalis adumbratio. Hauniæ : Gyldendahl. Lipsiæ : Weigel.
MÜLLER, F. Ueber das lateinische Perfectum. Wien : Gerold's Sohn.
MÜLLER, F. Zur Suffixlehre d. indogermanischen Verbums II. Wien : Gerold's Sohn.
MÜLLER, F. Die Vocalsteigerung der indogermanischen Sprachen. Wien : Gerold's Sohn.
PHILLIPS, G. Ueber das baskische Alphabet. (Academy Reprint.) (Pp. 44.) Wien : Gerold's Sohn.
SCHWARTZ, F. L. W. Ueber die Böotia d. Homer namentlich in ihrem Verhältniss zur Composition des Ilias. 2. Bericht üb. e. Ausgrabg. bei Rheinsburg. Neuruppin : Petrenz.
WACHSMUTH, C. Commentatio I. de florilegio Joannis Damasceni Laurentiano. Göttingen : Vanderhoeck and Ruprecht.
ZINGERLE, A. Ovidius u. sein Verhältniss zu d. Vorgängern u. gleichzeitigen römischen Dichtern. 2 Hft. Innsbruck : Wagner.

ERRATA IN No. 22.

Page 226 (b), line 37, for "contributes," read "constitutes."
,, 227 (a), ,, 9 ,, "corruptions," ,, "conceptions."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
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General Literature.

THE AMMERGAU PLAY.

Das Passionsschauspiel im Dorfe Oberammergau. Von Ed. Devrient. Leipzig, 1851.
Das Passionsspiel zu Ober-Ammergau. Von Ludwig Clarus. 2nd ed. München, 1860.
The Ammergau Passion Play. By the Rev. Malcolm MacColl, M.A. 2nd ed. Rivingtons, 1870.
Art in the Mountains: the Story of the Passion Play. By Henry Blackburn. Sampson Low, 1870.
The Ammergau Mystery; or Sacred Drama of 1860. (In Dean Stanley's *Essays on Church and State.*) Murray, 1870.

PARTLY in consequence of the interest excited by the Ammergau Passion Play in 1860, and by the recurrence of its decennial performance during the past year; and partly, also, from the almost tragically sudden termination to which the performance was brought by the outbreak of the war, and from the prospect of its resumption in 1871, the subject has given birth to a somewhat extensive literature. The dialogue of the play itself has never been published, and is guarded with considerable jealousy; but the words of the choric odes are given in a small volume with which most of the spectators provide themselves, containing also an account of the progress of the action, and illustrated by woodcuts from Albert Dürer. Of the numerous books on the subject that have appeared in Germany, the two mentioned above are the most important, and the smaller handbooks which have been lately published are mainly based on these. The pamphlet of Devrient is valuable, as containing the criticisms of one who was himself a singer and actor; but that of Clarus affords more serviceable information than any other, though it is somewhat marred by its polemical tone, and by the attempt to make the Passion Play an evidence of the superiority of Catholicism to Protestantism—a purpose to which it is singularly ill-suited. Those who wish to investigate the subject more closely are referred to Deutinger's book *Das Passionsspiel zu Ober-Ammergau* (München, 1851)—a large octavo volume of more than 600 closely-printed pages, which contains a vast amount of information, though ill-digested. Of the English books, those of Mr. MacColl and Mr. Blackburn are both pleasantly written; the former, the contents of which originally appeared in the *Times*, being the more substantial of the two, though much smaller in size; while the latter, which forms an elaborate volume, depends more on its handsome illustrations. That Mr. Blackburn desires that his book should be regarded from a pictorial point of view, we suppose we may gather from the circumstance, that he has chosen for his frontispiece the figure, not of the Christ, nor of Pilate, nor even of Judas, but of the prettiest girl in the chorus of singers. In these books, however, the course of the performance is simply followed, a method which is liable to be wearisome, from its coincidence with the familiar Scripture story; and we look in vain for elaborate criticism. For this, and for an account of the conception of Scripture characters as represented in this play, the reader is referred to Dean Stanley's admirable paper, which originally appeared in *Macmillan's Magazine* for October 1860, and is now reprinted in the author's lately-published volume of *Essays on Church and State.* There, in a moderate compass, every thing that requires to be said on the subject is put in the best way possible. We should add that the Passion Play has found a poet, in the author of "Ammergau, an Idyll," a poem of no mean order, in *Macmillan* for August of 1870.

Before proceeding further, it may be well to say a few words as to the performance itself, in order to render intelligible what follows. The theatre in which it takes place is a wooden building of large dimensions, capable of containing some six thousand spectators, who are seated on benches, rising gradually one behind the other, and all of them facing the stage. About one-third of this area, at the back, which is reserved for visitors and others who choose to pay a higher price, is roofed in; the remaining part, together with the stage, is open to the sky, and exposed to the rain and sun. The stage itself is very extensive, both in width and depth, to provide for the numerous performers who take part in the representation, as many as 500 persons, including children, being sometimes present at the same time. In the middle of it, and at some little distance from the first row of spectators, is an inner and smaller theatre, within which the most solemn scenes and all the *tableaux vivants* are acted. On either side of this stand the houses of Annas and Pilate, and beyond them again are passages leading to the back of the stage and representing the streets of Jerusalem. The space between the inner theatre and the spectators forms a sort of proscenium, which is occupied by the chorus when they are on the stage. The performance is divided into seventeen scenes, from the Triumphal Entry to the Ascension, and each of these again is composed of three parts—the choral ode, the type, and the history. First the chorus of Guardian Spirits advances from the two sides to the centre of the proscenium, where they face the spectators, and, after their leader has explained to the people the significance of what is to follow, sing a chorale on the subject, with especial reference to the Old Testament type. In the middle of this they fall back to the two sides, the curtain of the inner theatre draws up, and the type is represented in a *tableau vivant.* When the curtain falls the ode is concluded, and the chorus leave the stage, after which the scene in the history of the Passion is represented.

The performance of this Sacred Drama is regarded by some as having a special interest on the ground of its being a representative of the Miracle Plays of the Middle Ages; and accordingly Mr. MacColl has given in his introduction an interesting sketch of the history of such representations in England and Germany. The same thing was suggested by Longfellow, when he used it to illustrate his *Golden Legend*, in the notes to which he has introduced Miss Howitt's account of the performance. But this idea is only true in a very limited sense. The Ammergau Passion Play is, no doubt, almost the only existing attempt to represent the Sacred History in a dramatic form, and it may help us in some slight degree to conceive the nature of such performances in days gone by; but it cannot be regarded as a lineal descendant of them, and the differences between the two are almost greater than the resemblances. The date of the vow which gave rise to it, 1633, is long subsequent to the conclusion of the Middle Ages; and though Clarus suggests

that the performance of such a play did not originate in this way, but only then took a more distinctive and permanent form, yet there is no evidence of this, and all that we can say is, that it resembled other representations which took place in Bavaria at that time. But besides this, though the original draft of the play, which is given by Clarus (p. 62), is not otherwise than scriptural, yet the supernatural agencies, which are so characteristic of the medieval plays —*e.g.* the devils feasting on the bowels of Judas, and the angel and devil carrying off respectively the souls of the two thieves—have now been almost entirely omitted, and new elements introduced in the *tableaux* and the songs of the chorus, which occupy fully half the performance. Under these circumstances it is hardly too strong to say with Dean Stanley that "as a relic of medieval antiquity the Ammergau representation has but a very slight interest."

To the classical student, however, the resemblances which it offers to the ancient Greek drama cannot fail to present a great attraction. What Schiller attempted unsuccessfully, has here been accomplished with great perfection—the reintroduction of the chorus with its old functions. Here, as in the plays of Sophocles, it serves as the interpreter between the performers and the audience, and its songs are intended to point the moral of the representation, and to suggest the lofty truths which underlie the development of the story. But besides this and other more incidental features of similarity, such as the mass of spectators, the open-air performance, and the neighbourhood of impressive scenery, the whole tone and spirit of the play is intensely classical. Many a spectator will have subsequently asked himself the question, how it came to pass that he was not absolutely overpowered by witnessing scenes, which taken by themselves are eminently tragic, and which to a Christian are associated with thoughts and feelings "deep almost as life." The answer is to be found partly in the relief afforded by the *tableaux*, and by a certain element of grotesqueness which appears in some of the scenes and characters, but still more in the uniform solemnity which here, as in the Greek drama, pervades the whole performance. There are no violent shocks, no revulsions of feeling, no alternations of bright light and dark shadow; from first to last we are led on by the most gradual stages to the great consummation. Add to this the deep religious tone that prevails throughout, and the statuesque character of much of the representation, and we have a combination of features, the nearest approach to which is to be found in some of the earlier plays of Æschylus.

Nor must we omit to notice the consummate art with which these peasants have elaborated their performance. On no other stage, we are confident, can such artistic groupings of figures, and such brilliancy and harmonious blending of colour, be seen as in these scenes and *tableaux*. To find a parallel to them we must go to the works of the early German and Flemish painters; and it is to these, if we mistake not, as represented in the neighbouring Munich gallery, and not, as has often been said, to the masterpieces of later artists, nor even to those of Dürer, that we must look for the secret of their inspiration. This is nowhere more noticeable than in the scene of the Deposition from the Cross. Mr. MacColl remarks that the body is lowered, not by a large cloth like that in Rubens's picture, but by a long strip of linen; and in this and many other features this part of the representation much more nearly recalls the school of Memling than the great work of the later master. Similarly, in respect of the Last Supper, we cannot agree with Mr. Blackburn and others in considering it to be imitated from Leonardo; the rigid severity of the grouping of the figures is altogether different from the graceful composition of the Italian artist. The old German costume too is introduced, except where the dress is represented according to a traditional type. The occupation of a large number of the inhabitants of Ammergau in wood-carving has also had its effect on the representation, besides its general influence in educating their taste. Dean Stanley remarks with much truth, that in the Crucifixion scene the painful impression is greatly lessened by the resemblance of the central figure to a sculptured image. But the way in which the characters are sustained is still more truly artistic, from its naturalness and entire freedom from stage-tricks and mannerism. Actors themselves who have been present have remarked that these untrained mountaineers possess a skill to which they cannot attain. The secret of this is to be found in the way in which each actor devotes himself to a single character, so that for six months previous to the time of performance he has it continually before him, and learns to identify himself with it. At the same time the tradition of the place ensures perfect faultlessness in the representation. Just as the Westminster boy, from having seen Terence acted year by year, finds no difficulty in his part when his turn comes, so the Ammergau peasant, from having taken part in the Passion Play when a child, becomes perfectly conversant with the details of the performance and the mode in which they are to be produced on the stage.

We are conscious, in what we have hitherto said, of having dwelt only on the externals of the performance, rather than on what is in reality the life and soul of the whole thing. It has often been objected to the Passion Play that it is not a perfect tragedy, because it does not conclude with the death of Christ; and the scenes that follow are feeble both in conception and execution, as in fact must be the case with any attempt to represent what is so entirely beyond the limits of our experience. But the object of the peasants in their Sacred Drama is not art, except in a very secondary degree; they desire to set forth, with the help of all the appliances they possess, a life-like description of the great events on which the mysteries of our religion depend; and of these the Resurrection and Ascension form an integral part. To the religious character of the performance, and the earnest spirit in which it is undertaken by the actors, all who have written on the subject bear testimony; and the excellent impression that is made on the audience is generally allowed. This is nowhere more evident than in the representation of the Last Supper. If this had been a scene in an ordinary play, nothing could well have been more monotonous. The washing the disciples' feet, the passing round of the Passover cup, and the consecration of the bread and wine, followed by the distribution of them to the disciples, one by one, are incidents of an unexciting nature, and occupy a considerable space of time; yet no part of the play is watched with more rapt attention, or received with more profound reverence. To the uncultivated, this vivid realization of the Sacred History must come home in a way which could not be accomplished by a hundred sermons. To educated persons, who cannot fail to be occupied in criticism in some measure at the time, the advantage will be rather in the retrospect; but these too will find that in not a few points they have carried away a clearer view of Scripture characters and incidents. But we must remember that the Play is acted by peasants and for peasants, and will not bear transplantation to another soil. This will be keenly felt by any one who has narrowly watched the behaviour of those of the upper and middle classes who are present, and has noted, not indeed the irreverence, but the unsympathetic spirit which they betray. On this ground, if on no other, we should be very jealous of the frequent recurrence of the performance.

H. F. Tozer.

Sigismund Kemény's Studies. [*Kemény Zsigmond Tanulmányai, Kiadja Gyulai Pál.*] Pest: Rath Mor. 1870.

Hungary is a small country in which politics have long occupied the first place, while literature has had to be content with a much lower position; consequently political changes, whatever direction they may have taken, have been apt to exercise a pernicious influence on its literature. When the disasters of 1849 deprived the political classes of their accustomed sphere of action, the more energetic and industrious among them threw themselves upon literature, *vocati et non vocati.* When the reconciliation of 1867 reopened the political careers to Hungarian patriots, the literary class poured into the public service that they might obtain a more assured subsistence and a better position in society. The subtraction of so many workers from the field of literature has been marked in Hungary by the large proportion borne by translations and republications to original works since 1867.

The collection before us, whose origin is told in the story which serves as its preface, illustrates very forcibly the state of things which I have described. M. Gyulai had for some years vainly urged upon the Baron—if we may be permitted to allude to a title dropped both in the title-page and preface—the republication of essays and sketches lost for the general reader in newspapers and magazines. A genial moment at last crowned with success his friendly importunity. One evening in the beginning of 1867 the staff of the *Pesti Naplo*, of which journal M. Kemény was the editor, met to celebrate the appointment of the Hungarian ministry. M. Gyulai pointed out the evil effects upon the national literature which might be expected to follow from this otherwise auspicious event, until new literary talent had had time to develop itself. At the same time he renewed his suggestions for the collection of Kemény's essays. The company regarded his fears for the future as exaggerated, but seconded his proposal. The author—either under influence of the genial moment or to rid himself of his friend's importunity—gave his consent on condition that the republished essays should not extend beyond two volumes, and that the responsibility for the republication should be assumed by one of his friends. M. Gyulai accepted the conditions, and has at last published the two volumes before us.

After careful perusal of the two volumes in question the present writer has come to M. Gyulai's conclusion that the studies were worthy of republication, even in their original fragmentary form. M. Kemény has so strictly adhered to his resolution not to give himself the trouble of correcting even admitted defects, that with regard to one of the most important and interesting essays, that on *The Public Life of Transylvania*, 1791–1848, M. Gyulai has been obliged to print as an appendix a letter that appeared in the *Pesti Naplo*, impeaching the accuracy of some of M. Kemény's statements, together with the answer of the latter admitting to some extent the justice of the impeachment.

These "Studies" relate partly to historical, partly to literary subjects. For the non-Hungarian reader only the first may be considered of real importance, unless we make an exception in favour of the essay on the poet Vörösmarty, which defines with valuable precision his exact place in the recent development of Magyar literature. At the same time he perhaps rates Vörösmarty's genius too high. M. Kemény's position as a member of one of the great families of Transylvania, and at the same time a Hungarian publicist, naturally led him to explain to the Hungarian public the modern political history of his native principality. This is done in an exceedingly instructive manner in the abovementioned essay on *The Public Life of Transylvania*, 1791–1848, where out of the immense mass of events only those are selected which actually told on the great legislative changes of 1848. The same subject is told with an unavoidable amount of repetition in the biographical sketches of the elder Szász and the two Barons Nicholas Wesselényi. But the most important essay in the two volumes is a long and laboured defence of the political life of Count Stephen Széchenyi up to the catastrophe of 1848. In it more than in any other Kemény displays both his strength and his weakness. His style has all the vices which are commonly ascribed in Hungary to the Transylvanian authors. It is cumbrous, obscure, and overladen with superfluities both of words and imagery. The reader takes a prejudice against his author when he has read but a few pages, and it is only when he has toiled through the greater part of the essay that he perceives himself gradually being convinced, or at least impressed, by the great amount both of solid and subtle thought which M. Kemény conceals under an ungainly style, and an irregular, if not an inartistic, arrangement of his great mass of materials. As one of the more thoughtful observers of the revolutionary period of 1848–9, it were to be wished that M. Kemény would continue the work he left unfinished in his essays on *Stephen Széchenyi* and on *The Public Life of Transylvania.* Arthur J. Patterson.

Loverdos' Songs of the Mountains. [Τραγούδια τοῦ βουνοῦ. Ὑπὸ Ἰωάννου Δ. Λοβέρδου.] London: 1871.

Mr. Loverdos, in a modest preface, professes himself an imitator of the "greatest" poet of modern Greece, Dionysius Solomos, whose special compatriot he happens to be. I confess not to think so highly of Solomos, a poet whose great power in diction and rhythm I fully acknowledge, but without allowing him much originality of thought or sentiment: in fact, during his whole life he seems not to have arrived at settled notions of poetical composition, and, with the exception of two great hymns on Liberty and on Lord Byron's death, has left only fragments and plans of other works. He is not, therefore, a good model for a young poet; only his style might, perhaps, be imitated, and there we venture to say he has been surpassed by subsequent poets. Its characteristic features are a certain *élan* and, here and there, an indefinite haziness and dreaminess—the latter of which has been well caught by Mr. Loverdos in the vague "melody," pp. 31 seqq. But besides Solomos, our author is apparently influenced by Tennyson, the whole string of poems entitled Θάλεια reminding us in many passages of "Maud," though the fervour and intensity of the English poem here give way to Greek sentimentality. Some passages are, we allow, very fine; but the best of the volume is the poetical tale Κροῖσος καὶ Μάρω, in which a few incidents are brought out in strong contrast—the wedding of a peasant girl, and a vendetta by which her bridegroom is killed the same night, and she herself dies in consequence. We think the idea of the dream in the fourth song very happy, but the poet seems to have dwelt on it too much. We dislike the hermit-banditto at the conclusion: such penitence may satisfy Greek or Spanish readers, but scarcely a refined conscience; and here also the poet strives rather to mystify than satisfy his reader.

It should be stated that the collection, small as it is, contains much that had better remained unprinted; anyone who has read Christopulos can write such a drinking song as we have at p. 56, and such lines as we find here "on the Isle of Wight," or "to Jessie," are good enough for the moment, but not important enough to be brought into publicity. In conclusion, this little volume possesses a certain interest for the philologist on account of its being written in the dialect of Zante. It abounds in misprints.

W. Wagner.

LITERARY NOTES.

Melchior Meyr, whose death is announced as having taken place on the 22nd of April, was one of those writers who achieve a respectable reputation in several branches of literature without exactly attaining eminence in any. To give a fair idea of his genius as it appeared to his friends, all his works ought to be read, yet, on their own merits, many of them are not worth reading. He was born in 1810. In 1835 he published a village idyll, *Wilhelm und Rosine;* then a collection of critical essays on *Die poetischen Richtungen unserer Zeit;* after which for nearly twenty years he wrote little but reviews and somewhat lifeless historical dramas. The *Erzählungen aus dem Ries* was the first of his works to become really popular by the pleasant, life-like reminiscences of the author's native village embodied in it. At the same time the *Erzählungen* are far from possessing either the imagination or the humour of masterpieces like George Sand's village tales. Meyr's poems, several philosophical novels, and a religious work, *Gott und sein Reich*, met with a friendly but not an enthusiastic reception. His poetry, according to a friendly critic in the *Allgemeine Zeitung*, aims at proving too much; his philosophy is content with proving too little. Versatile and sympathetic, but without much depth or power, his contributions to German literature are fairly epitomized in the *Gespräche mit einem Grobian* which appeared anonymously in 1866, and excited considerable attention from its novel form and the comparative lightness with which the author wielded the satiric scourge.

The unpublished correspondence of Jean François Séguier, preserved in the Academy at Nismes, fills sixteen large volumes, from which M. Gaston Boissier has gleaned the materials for a notice of that forgotten "Savant du xviiime siècle." Séguier (born 1703, died 1784) was a good botanist, a zealous numismatist, and an indefatigable antiquarian; but the great work on Inscriptions which he was expected to publish remained a project, while the materials he had collected for it were placed at the service of all the *savants* in Europe. He travelled with Maffei, and lived for many years with him at Verona. After his return to France he kept a "visitors' book" which is still in existence, and gives some idea of the extent of his relations with the scientific world. In ten years 1300 strangers visited him at Nismes; in the year 1777 the number was 210.

Mr. Andrew Lang's contribution to the May number of the *Dark Blue*, entitled "Three Poets of French Bohemia," is an exquisite and careful study of a certain phase—perhaps the most original, at any rate the most attractive, in French poetry and feeling. His sketch of Françoys Villon, the ancestor of the modern Baudelaire, Gérard de Nerval, Théophile Gautier, &c., is remarkable for a power of minute and sympathetic psychological analysis which is not unworthy of Ste. Beuve at his best. The sketch of H. Murger is somewhat hasty and incomplete, and written with insufficient knowledge.

In the number of the *Revista de España* for April 25, 1871, Señor Amador de los Rios continues his review of that most remarkable work of the great Constable Don Alvaro de Luna, the *Libro de las claras mugeres*. His writings show that this remarkable man was far in advance of his age in his political aims, as well as in his views of morals and social life. He firmly believed in the superiority of moral over physical force; and his book contains a splendid passage on the power of eloquence. Señor Amador de los Rios protests against the great Constable being classed with those court favourites of later times who climbed to power by vile means, only to abuse it; although his faults should not be concealed. Few men could bear the analysis to which Señor Amador de los Rios proposes to subject the character of Alvoro de Luna, by making a strict comparison between the acts of his life and the sentiments expressed in his book.

A third edition of Dr. Hermann Kluge's *Geschichte der Deutschen National-Literatur* has just been published (Altenburg, 1871). The book contains not quite 200 pages, and professes to give a short sketch only of the history of German literature from Ulfilas in the 4th century to the present day. It is chiefly intended for schools, but may be read with advantage and pleasure by all who are interested in the long growth of German literature. The bibliographical references are carefully put together.

In the last number but one of the *Grenzboten*, Dr. Eckstein gives a good account of the Renaissance movement on the Upper Rhine, conducted by Sebastian Brandt (author of the "Ship of Fools," well known in English literature), Jacob Wimpbeling, and their followers; which was much aided by the Strassburg press of Gutenberg, so famous in the annals of printing. Goethe took his degree at the Strassburg University in 1771—and of course the essay ends with the usual "Reunion to our Fatherland!"

Archæology.

Christian Inscriptions in the Irish Language. Chiefly collected and drawn by George Petrie. Edited by M. Stokes. Part 1. Dublin: 1871.

This is the first fasciculus of a *Corpus Inscriptionum Hibernicarum*, which promises to be, when completed, of great importance not only to the student of early Christian art in these islands but also to the historical enquirer and philologist.

The present collection (which only comprises about one-fourth of the materials available for the entire work) contains forty-seven inscriptions, to some of which is assigned as early a date as the seventh century; the latest in point of date being referred to the tenth century. They are all, with one exception, taken from monumental slabs or gravestones in the cemetery attached to the monastery of Clonmacnois, the most celebrated place of sepulture in Ireland in Christian times. The exception alluded to is the inscription containing the name "Conlarat" (pl. iii. fig. 10), which was found in the graveyard of Liath-Manchain, or Lemanaghan, a place identified with the beautiful shrine of St. Manchan, and situated within a few miles of Clonmacnois.

Some of the illustrations are from rubbings taken within the last few years by the Rev. James Graves, the late Rev. Dr. Todd, and other competent archæologists. The majority of them, however, are reduced facsimile sketches, carefully executed by Miss Stokes, of drawings made by Dr. Petrie at Clonmacnois in 1822, when a large number of inscribed monuments was still in existence there. But so active has been the process of destruction since the date of Petrie's first visit to Clonmacnois that of the thirty-six inscriptions published from his drawings in the present work, not more than ten can now be found; and some of these are in a very mutilated condition.

The extraordinary disregard of the Irish people for memorials of this class is matter of surprise, considering their remarkable veneration for other historical remains of a less authentic nature. The Irish farmer who preserves from destruction, out of superstitious fear, the ancient *rath* which he ignorantly regards as the workmanship of the ruthless Dane, feels no remorse in devoting the surviving materials of ancient ecclesiastical buildings to such unhallowed uses as the construction of a byre for his cattle, or a *cro* for his swine. Even the sacred character which attaches to Christian sepulchral monuments is not sufficient to protect them from molestation. The curious visitor to an Irish cemetery will not unfrequently see placed at the head of a new-made grave a tablet inscribed with characters almost illegible from age.

A striking illustration of this indifference to the remains of ancient art is furnished by Miss Stokes in the history of the "Columban" inscription (fig. 3), which is philologically very interesting as presenting the dative form "*do Cho-*

lumbon." "The form of the cross and the character of the letters," Miss Stokes says, "belong to the earliest period of Christian art in Ireland. The circle, crossed by lines of equal length, seems to have preceded the cross with a prolonged shaft, which became more common in the eighth century; and the occurrence of the diamond shape ◇ among the letters points to the seventh century, and before it." Yet we learn (p. 15) that when this inscription attracted Dr. Petrie's notice, during his memorable visit to Clonmacnois in 1822, the stone on which it occurs was then used "*in stopping a hole in a wall at the east end of the churchyard.*" "It has since been placed," Miss Stokes adds, "*as a headstone to a grave of recent date.*"

The publication of the present work will not diminish Petrie's reputation for faithfulness and accuracy in everything relating to art and archæology. Where it was found possible to compare his drawings with the original monuments, the accuracy of his pencil was made so manifest that we can have little hesitation in accepting as genuine those which cannot now be so compared.

The legends which the inscriptions present are so very simple, consisting generally of "a prayer for ————," or "pray for ————," that their chief interest consists in the identification of the persons commemorated. Many names have been identified; but it is not surprising that, after the lapse of many centuries, some should still remain the subject of further enquiry. In some cases it will probably be considered that too much importance has been attached to similarity of names; and this is particularly observable in attempts to recover names only partly preserved in the mutilated inscriptions. The student of Oghamic inscriptions, also, will hardly receive as genuine the characters (fig. 4) which represent the word *bocht*, as a soubriquet of a person named Colman.

A much higher value, however, attaches to the forms of the crosses and the style of ornamentation. In her treatment of this part of the subject Miss Stokes has evinced her unrivalled familiarity with the history of Early Christian art in Ireland. The late Dr. Todd (at whose suggestion Miss Stokes seems to have undertaken the publication of the present work), in speaking of Miss Stokes's beautiful illustrations from the Book of Kells, said that "the mantle of the ancient illuminators" had fallen upon the artist. In the present work she has shown that, as in the case of her friend Petrie, the imagination of the artist may be moderated by the severity of the critic. W. M. HENNESSY.

THE ROYAL ACADEMY EXHIBITION.

THE first impression of the great Exhibition of the year is always that it is the best that we have seen, and the last impression is that there is a tidal level reached year after year by the artistic ability of the country, touching the same mark within an inch or two. This year, however, we cannot help thinking the tide is rising, not in popular attractions, but in learning, poetry, mental aims, and sentiment. No doubt we find the same historical organ-grinding going on, and give up in despair the men who persevere, alas! in sentimentalizing Mary Queen of Scots, and the blessed martyr Charles, or triumphantly brutalizing Oliver Cromwell; we still see the pictures of sweet young women and their lovers, suggested by Haddon Hall backgrounds and theatrical costumes. But the preponderance of these has given way to variety of invention, and, above all, to a juster sense of beauty and a purer taste. Besides, this year two or three painters—the most cultivated we have—give us their best, both in intention and in realization, and landscape has resumed its old importance on the walls of the Academy.

The leading pictures, then, it seems to us, are easily pointed out, and all of them are inventive in design and beautiful in colour, without any taint of meanness or bidding for popularity. The painters are Messrs. Leighton, Millais, Leslie, V. C. Princep, and Alma Tadema, who is becoming naturalized amongst us. G. Mason might be added to this list, but for the insignificance of his two pictures, "Blackberry gathering" (168), and "The Milkmaid" (553), which are truly lovely; and W. B. Richmond, by virtue of his "Bowl-players" (523), only he is eclectic and tentative, not understanding why he paints what he does; and Albert Moore, were it not that his pictures are more and more purely decorative, and singularly trivial in motive or meaning. This last painter is unquestionably possessed of "gifts" in power of drawing and sense of beauty, but he persists in a thinness of colour and effect, making solid bodies look like sections or veneers, and his flesh is so feeble that there is absolutely no reality in his figures, and, lovely in design as they are, no enjoyment to be found in looking at them. The two Greek maidens, "Battledore" and "Shuttlecock" (597–601), exemplify this vividly enough. Other men in figure-painting there are who might be mentioned here as coming near to the best in the moral sense of beauty, if we may be allowed such a phrase, but they may come in for mention at a future time. In portraiture there is Watts, who exhibits three pictures, all portraits; Lady Isabella Cocks (75), J. E. Millais (172), F. Leighton (177), and F. Sands, whose half-length of W. H. Clabburn we mentioned before; and in landscape we have MacWhirter, "Into the Depths of the Forest" (15), full of romantic suggestion; Vicat Cole, "Autumn Gold" (52), gorgeous in its sunlight on the wealthy harvest, a very rich and excellent piece of work; Marc Anthony, whose works this year show the greatest mastery and force of feeling as well as hand—witness his "Night and Storm and Darkness" (101), and "The Return after Labour" (264); Alfred Hunt, whose three pictures are all exceedingly fine; P. Graham in "The Bridle Path" (442), and Inchbold, who exhibits "The Upper Cliff, Isle of Wight" (1067), full of subtlety and delicate perception of autumnal sentiment. Orchardson, too, has this year partially gone into landscape. "On the Grand Canal, Venice," however, looks rather like one of the little canals, and the rower, who is no gondolier, is at the wrong end of the boat—defects illustrative of the manner of thinking that besets the whole set Mr. Orchardson belongs to; and (1117), "In St. Mark's," only wants the true shine on the gold mosaic to make it splendid. The leading attraction in landscape is, however, Millais's "Chill October" (14), a perfect realization of the impression such as we seldom see.

The mention of this painter brings us back to the great pictures of the exhibition. We confess to have anticipated finding his landscape a miracle, and his "Moses, Aaron, and Hur" a failure; but found the landscape to be no miracle, and the greater subject no failure. The sun is going down on the destruction of Amalek, and the saviour of Israel looks down on the fight, his hands held up by the younger men. The three patriarchs fill the canvas dark against the fire of sunset, which flames round the head of Moses. This head is the triumph of the picture, and another noble thing done by the painter, yet there is no denying that the picture is incomplete: Hur is especially defective in being absurdly short, and his naked leg too important. But what shall we say of Mr. Millais's "Somnambulist" (313)? Even the brass candlestick, which is the only well-painted thing on the canvas, is a mistake, having been painted by lamplight!

In our last number we directed attention to "The Vintage" by Tadema, a picture of splendour and pleasure without passion and without drama; here is another picture by him full of tragic and terrible interest, "A Roman Emperor, A. D. 41" (210). The miserable Claudius, the only survivor after the massacre of Caligula and his household, is found by the Prætorians concealed among the hangings in the Lararium apparently. The dead bodies lie since yesterday on the mosaic pavement, the lawless soldiers have been looking about for precious things to steal, and with them peers in by the edge of the picture a woman wonderful in beauty but abnormal in character and bearing. Claudius is ghastly with fear, but the soldier in brown leather and steel instead of slaying him makes a mock salaam: he sees that there is the wretch who will pay them for giving him the purple, and who will make Messalina an empress! In this, as in all the painter has yet done, the learning shown in the realization of the scene in all its parts, and the elaborate completion of the work, leave nothing to be desired. And this is the case in colour as well as in other matters; the best of our painters only revert to Venetian colour and the rich tone of the masters of the renais-

sance, utterly destroying the historic propriety; but Tadema has recreated a new class of dyes, indescribable blues, greens, and yellows, such as never were seen on a Christian garment. This is truly like genius, the genius that belongs to the painter distinctively. Close by hangs Mr. Leighton's principal work, "Hercules wrestling with Death for the Body of Alcestis" (215). How singularly different in conception and style, and how utterly different must have been the training of the painters! Here all is art, academic and accomplished, the action full of feminine grace and motion, the colour like Titian, the whole poetic, and full of beauty and enjoyment. But it is scarcely learned since it is scarcely classic, and the Hercules is not the monster of physical strength he ought to be to give Death a fall. In speaking of this and other works of a high excellence, we presume it is not necessary to say we draw distinctions only in a spirit of critical inquiry, thoroughly acknowledging the greatness of the creative faculty our strictures seem to limit. In all Mr. Leighton's pictures this year we find plenty to praise without bounds if such were the function of the critic; in the picture before us, for example, the whole group crowding together at the left, and in "Greek Girls picking up Pebbles by the Sea" (567), the conception is carried perfectly out with a fulness of enjoyment and sense of healthy harmony delightful to the spectator. "Odin, the Northern God of War" (566) is Mr. Princep's leading work, and one of the best pictures not only of this exhibition, but of the kind yet done. In the catalogue we find a quotation from Morris's noble "Lovers of Gudrun":—

> "As slow-paced weary-faced he went along,
> Anxious with all the tales of woe and wrong
> His ravens Thought and Memory bring to him;"

and yet Mr. Princep calls the master-god the "northern god of war!" What he calls him is haply of little importance, since he can paint him with such strength of hand and royalty of invention; over the snow he comes, the northern lights gleaming behind him, and his brother the north wind playing furiously with the mantle and bearskin shrouding his awful face. "Nausicaa and her Maids" (103) G. D. Leslie. This is another of the leading attractions of the year; classic in subject, exceedingly beautiful and modern in art, full of a gentle amenity and broad harmony, painted in daylight with no reservation nor make-believe: the painter must have enjoyed his work, and we know that the spectator does so.

There are still several men who must be entered in this first notice of the Exhibition; artists related in some measure, in motive or manner, to those already mentioned. Indeed the ablest among the advancing painters of our school are all tending to the sentimental and quasi-classic, and leaving as far as possible the historical costume and the railway-station walks of art. E. J. Poynter and S. Solomon, indeed, have little to show this season compared to former years. "The Suppliant to Venus" (115), by Mr. Poynter, and "Feeding the Sacred Ibis in the Halls of Karnac" (238), are in a somewhat different manner from his hitherto exhibited pictures. The endeavour to throw himself into the early ages of the world seems to be exchanged for the fascinations and facilities of broader handling and a richer colour. S. Solomon has one small picture (485), "The Law is a Tree of Life: the Supporters thereof are happy," a Hebrew youth carrying the Book of the Law, excellent in colour, but not otherwise remarkable for the painter. "A Music Piece" (544), by T. Armstrong, is one of the most charming works in the rooms: neither in sentiment nor in treatment, indeed, adding any new poetry to the subject (listening to a player), but still very charming, as is his other picture, "Winter" (577). G. H. Boughton, "A Chapter from Pamela," is one of the idylls we now find on our Exhibition walls, truly delightful; and in this connection there are others who ought to be included in the category, more particularly E. Barclay, represented by "The Steps of Ana Capri" (598), and other works; and W. J. Hennessy, a new name with us, shortly to be well known.

INTERNATIONAL EXHIBITION.

The opening of this immense gathering of works both in the fine and industrial arts is, doubtless, the most important incident in this year's art-history: most important both in the value of the collection and the gain to the London public in having them thus brought together, and in the prospective results, this being the first of an annual series. This inaugural exhibition may of course be reasonably supposed to be more important in the character of the productions shown as well as in their number, the past ten years being here represented; but if an annual gathering at all resembling this can be sustained, the London International will be unique in the world. In painting—and it is only with painting and the other fine arts we have to do here—the entire British School is represented in oil and water colours, except indeed a portion of the Scotch artists and those few in London who do not exhibit, or who have dissented from the undertaking. Besides those who exclusively give themselves to easel pictures we have of late years another class whose designs may be seen in wall and furniture decorations, glass, tiles, and other matters, and these too, of course, appear here with equal prominence. In sculpture we find the same variety; besides the finished marble and plaster model, we have sculpture in the round or in relievo applied to many purposes and in many materials—wood, brass, silver, and gold.

To assist in widening the application of fine art, to break down the imaginary barrier that stood in the artist's way, preventing him from applying his powers to use, limiting him to painting small pictures to be framed and exhibited for sale, and ultimately shut up on the walls of the rich middle class, the great houses in our country having few new English pictures to show, is one important object likely to be effected by such a mixed exhibition. It is thus proposed that the picture gallery shall be also the show room of all artistic novelties in furniture, plate, fabrics, as well as in sculpture: the walls occupied by pictures, the floor by pedestals and glass cases. The division by nationalities or governments will in future, we understand, be done away, and the arrangement of the whole will be by class of production. This is in a way placing all on the same level and may be said to have a republican virtue about it, but we think it far from likely to be for the advantage of characteristic development. Exhibitors of all countries will be brought into direct competition; the Japanese will still further imitate the English, and the English still further imitate the Japanese; every style will attempt to have the value of every other style. Knowledge is good, but in art knowledge has little to do with excellence, and in decorative art it seems to us exceedingly undesirable to do anything likely to impair the distinctive character of styles or of national and historic tradition. Even in high art, pictorial art for example, is it desirable that French and English artists, by the mutual adoption of effective qualities, should lose the distinction of their respective schools?

We have said that the leading pictures of the majority of English artists for the last ten years are assembled in the International. It is not necessary to go over the catalogue and enumerate the leading works; many of them will occur to every one, and the visitor conversant with our annual exhibitions will have his recollection agreeably refreshed. One result of such a gathering it is pleasant to notice, that some of our old favourites rise before us again with unimpaired force, although new men and new views have taken possession of the public since they were painted. Poole's "Seventh Day of the Decameron, Philomela's Song" (64), painted in 1855, and his "Visitation and Surrender of Syon Nunnery" (129), painted still earlier, hold their places, the one in sentiment of colour and the other in character, despite the bias inspired by later successes, although among these we see Millais's "Sisters" (323), and Leighton's "Electra at the Tomb of Agamemnon" (313). A portion only of the English pictures, however, have been seen before. The new works sent to this as to any other annual means of bringing them before the public, are sufficiently numerous and various to prove that the International will exercise a great influence, and be important perhaps above all other exhibitions. Watts's portraits of Carlyle (318) and Prince de Joinville (49) are as fine as any he has yet done; and in landscape painting, on which the Academy has for some years exercised a depressing effect, we find here many admirable works by Anthony, Inchbold, Alfred Clint, Linnell, sen., Raven, and Alfred Hunt. In water-colour painting this exhibition will be also influential; but the place seems too large for small things, as pictures in that manner must be. Sculpture, on the contrary, is admirably seen, and all the applications of fine art are of course made important. This year the prizes offered for designs for fans have made those the specialty. The field of applied art is somewhat without our province, and sculpture is too important to be treated here.

The eastern line of galleries is filled with continental art, Bel-

gium commencing the series with its pictures so materially like French works, yet possessing a clear enough tradition, give it the distinction of a *school.* Here we find a class of historical pictures that has nearly passed away elsewhere, the life-size celebration of some celebrity in a semi-sentimental manner, a typical example of which is Baron Wappers's "Charles I. going to Execution" (875), to whom a kneeling girl presents a rose, which Charles in a magnificently condescending manner accepts. The history-painting which has extinguished the Baron may be seen here also; "Mary of Burgundy vainly entreating the Sheriffs of Ghent to pardon her Councillors, Hugonet and Humbercourt" is a noble picture of its class, with dramatic ability in the action and individuality in the actors. Portael's "A Box at the Theatre at Pesth" (828) is the only example of this leading man, and, although excellent in a way as art, is not interesting. De Vriendt, Slingeneyer, and others known in this country by name may be here studied, and in landscape there are many pictures of excellent quality.

Bavaria follows; but here we do not find the great painters of Munich, so little understood or appreciated in England. Kaulbach is represented by one picture, which does not show the great inventor and perfect draughtsman at his best. The heaviness of hand visible in Bavarian execution and colour, however, prevents the high powers and noble qualities possessed by these pictures receiving their just acknowledgment in England.

Norway, Sweden, and Denmark are all in considerable force; Prussia also, in which the Dusseldorf art is included; and under the general heading of Italy, we find a varied collection of imitative works. To all these and other continental works it might be worth while to return if haply we could make them the text for some remarks on the present conditions of European art.

The French gallery, which is very extensive, is now well filled, and the public will again see the gladiatorial hand of the unfortunate Henri Regnault, Delaroche's "Marie Antoinette," David's "Death of Marat," and other notable things, besides numerous pictures by Delacroix, and others now gone, and endless landscapes by Corot, Daubigny, Dupré —men becoming as well known in this country as in their own. W. B. Scott.

ART NOTES.

Not without regret we see the gallery of Count Scipio Conestabile della Staffa at Perugia catalogued for sale. It is not a large collection, nor, if we except one capital piece, an important one; yet its attractions will be sorely missed by the many lovers of art who visit the city so beautifully commanding the valley of the Tiber. The "Staffa Madonna" by Raphael is the pearl amongst Count Scipio's pictures. Though but six inches square it is full of sparkle, exquisitely finished, and in a perfect state of preservation. We trust it may fall into the hands of some lover of art who will not be a niggard in showing it. In a catalogue, acknowledged as the joint work of Count Gian Carlo Conestabile and Mr. Ruland, keeper of the Weimar Museum, we find some notices tending to prove that the frescoes of the collection —"a Virgin and Child," "St. Herculanus," angels and coats of arms hitherto assigned to Perugino, are by his disciple Berto di Giovanni. Works of interest by Sassoferrato, Maratta, and others, a portfolio of drawings mostly assigned to Perugino and Raphael, complete the catalogue of objects offered for sale.

Since the foregoing was written it turns out that the notice was only published as a blind to cover a sale already effected. The Russian Government bought the "Staffa Madonna" for 330,000 francs, and it is already on its way to St. Petersburg. The whole collection had been valued at 400,000 francs.

Under the title *Satura* appears (Leipzig, A. Dürr, 1871) a volume of twenty-eight outline engravings, after sketches and single figures, by the deceased German painter Bonaventura Genelli, of whom an obituary notice appeared last year in the *Zeitschrift für bildende Kunst.* A biographical and critical text is supplied by Dr. Max Jordan.

The British Museum, after being for a week closed to the public, was reopened on Monday the 8th inst. Several cases in the vase and bronze rooms, and above all in the Blacas room, will be found enriched with new objects of the most precious kind. These belong to the celebrated collection of Signor Castellani of Naples, which was recently brought to England, and which, by an arrangement with the trustees of the British Museum, has been placed in the temporary custody of the antiquities department of that establishment. In future numbers of the *Academy* will appear a detailed critical account of the most important items of the collection.

The various vicissitudes through which this celebrated collection has lately passed, are described at length in the *Pall Mall Gazette* of the 9th inst., from which we also extract the following summary:—"The most important marbles of the collection are a life-sized and well-preserved niche-statue of a priestess, of an exceedingly fine Greco-Roman style; a beautiful and quite uninjured colossal head of the same type as the celebrated Ludovisi Juno; and a head of Tiberius in old age, found at Capri. The terracottas are very numerous and valuable, including four quite unique and inimitable masked figures of actors, the types of the Roman comedy. Its chief strength lies in two things—engraved gems and gold-work, including cases full of exquisite Greek powdered work and filagree, of the bracteated funereal frontlets of the Etruscans, of necklaces, armlets, finger-rings, and ear-rings, chased and patterned with the inexhaustible perfection of a perished skill, and suggesting at a first glance a hundred absorbing problems of archæology and art-history."

The city of Florence seems to be undergoing a process of "improvement" and transformation, not at all arrested by any prospective results of a removal of the seat of government. A correspondent of the *Allgemeine Zeitung* (April 25) speaks with enthusiasm of the trees already flourishing on the piazza in front of San Spirito; of preparations for similar planting in front of San Marco, Santa Maria Novella, and Santa Croce, of a "magnificent boulevard, lined with stately dwelling-houses and charming gardens," soon completely to encircle the city on the north side; and of a grand new road from the Porta Romana over the heights of San Miniato, to command all the finest views of the southern side. Lovers of Florence, as she was, will have more sympathy with this writer when he goes on to protest, on grounds alike of public utility and of imperial and civic dignity, against the proposed imposition of a regular one-franc fee upon visitors to the public monuments and museums. The convent of St. Mark and the museum of the Bargello have already been made accessible on these terms, and it is now proposed similarly to tax the entrance of the Pitti and Uffizj galleries—a principle new in the great museums of Italy till it was adopted the other day by the "Museo Nazionale" of Naples.

The Archæological Institute at Rome celebrated as usual the foundation of the city on the 21st April. Helbig, discoursing on the landscapes from the Odyssee discovered on the Esquiline in 1849, and now in the Vatican, contrasted ancient with modern landscape. While giving the forms of the several objects excellently, the ancients bestow no pains on atmospheric effect; and this Helbig traces to a want of feeling for natural scenery, which has been often remarked in ancient authors. Henzen read an essay on the feast of the Fratres Arvales, which in the newly-found inscriptions occurs on the 27th, 29th, and 30th May in one year, on the 17th, 19th, and 20th the next, and so on alternately. Henzen identifies this feast with the Ambarvalia, which fell on the 29th May.

New Publications in Literature and Art.

Burns, Robert, the Life of. By J. G. Lockhart. New Edition, with some notes of the Poet's family. Tegg.

Chabot, C. Who was Junius? The Handwriting of Junius professionally investigated by: with Preface and Collateral Evidence by E. Twisleton. Murray.

Crowe, J., and G. B. Cavalcaselle. A History of Painting in North Italy from the 14th to the 16th Century. Murray.

Milton, J. Life of, by Prof. Masson. Vol. II. Macmillan.

Pope, A. Works of. Ed. by Elwin. Vol. VI., being Vol. I. of the Correspondence. Murray.

Tyndall, J. Hours of Exercise in the Alps. Longmans.

Music.

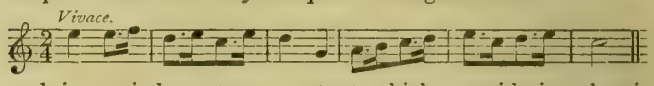
Chants Populaires du Pays Basque; Paroles et Musique originales, recueillies et publiées, avec Traduction française, par J. D. J. Sallaberry (De Mauléon), Avocat. Bayonne: 1870.

The progress of an art which addresses itself only to the ear is obviously far more difficult to trace than that of one which addresses itself to the eye. The architectural monuments, for example, of a people or a period may be few, but there is commonly little cause for question as to their genuineness. With what is called "national" music the case is altogether different. In few instances can it be shown to have been committed to writing till after a long series of passings from voice to voice and from hand to hand; and making the largest allowance for the strength of memory common among peoples ignorant of the use of writing, the transformations which certain tunes and passages of tunes can be shown to have undergone within comparatively short periods point inevitably to the conclusion that few melodies of any great antiquity can have come down to us in their original form, and that the majority of those extant would hardly now be recognised by their authors. Not to speak of the psychological causes which might bring about the so-called corruption of national melody, physical causes alone—the various qualities and registers of voices and instruments, their special excellencies and deficiencies—as they are sufficient to account for different "versions" of particular melodies, so they would lead us to believe that every so-called ancient melody has throughout its existence been the subject of slow but eventually serious modification, and that to nothing can the figure of "the new handle and the new blade" be more fitly applied than to an old tune. The musical scholar who has arrived at this conclusion is not likely to open a volume of national melodies with any serious expectation of adding to his knowledge of the history of his art, however hopefully he may look for an addition to his pleasure in its exercise. The vision of collectors of such is often so narrowed by the blinkers of national vanity as to render their judgment worthless, and even their evidence on matters of fact far from reliable. I know of no collection of so-called Scottish melodies which does not contain many which are obviously Irish, nor of Irish to some of which the Scotch might not, on internal evidence, as reasonably lay claim; while Mr. Chappell has proved irrefragably—to all but Welshmen—that a considerable number of "Welsh" melodies, the origin of which is—like everything Welsh—"lost in the darkness of ages," were quite unknown across the Hay (border) before the early part of the last century, and are of English origin. And again, supposing under some fortunate and exceptional conditions that a tune had come down, say to within a century, by tradition which there could be no just cause to impugn, we have rarely any satisfactory evidence of the musical competency of the person who first transcribed it. It is one thing to write from dictation a legend, in verse or in prose, another to put on record the intonation and rhythm of a melody made up perhaps of unaccustomed turns of both.

To what degree M. Sallaberry may possess that sympathy of eye and ear which would enable him to express in musical notation the musical utterances of his countrymen I have no means of ascertaining. The few words of thanks, recorded in a note to a "jeune musicien d'avenir, ancien élève du Conservatoire de Paris," who has placed accompaniments to some of the melodies he has collected, do not inspire much confidence in his (M. S.'s) musical acquirements; the said accompaniments arguing as ill for the young musician's future as of his past. His stay in the Conservatoire de Paris was, it may be hoped for the credit of his harmony professor, short. M. Sallaberry does not, however, lay claim to having himself collected anything like the whole of the melodies in his volume. Others have reaped the field before him; he is but a gleaner after the harvest, and he has of course availed himself of the labours of those who have borne the burden and heat of the day. This handsome volume may therefore, perhaps, be accepted as representing with approximate correctness and in sufficient quantity the music—*i.e.* the melody—of that strange people whose origin and language are historical and philological puzzles as yet unsolved.

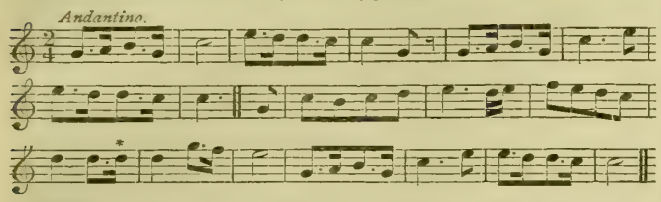
The Basque melodies—even those which lay claim to the highest antiquity—have little about them by which it would be possible to fix or even conjecture their date. In this they resemble the popular melodies of most other peoples. National—or for the sake of distinction we might say, natural—music has next to nothing common in its history with what is now understood by music—the tardy fruit of a very long course of cultivation. So far from moving *pari passu*, the latter in a certain sense may be said to have returned, after a long and painful *détour*, to the point whence the former has never moved. The laws of time and tune to which the anonymous maker of the oldest Basque melody unconsciously submitted himself are identical with those under which the Choral Symphony has been consciously elaborated. The approximate age of a piece of music properly so called, unless itself an anachronism, is as obvious to the student of musical history as that of a human being to the student of human nature. If its artificial rhythm do not betray it, its artificial tonality will. But to say at what epoch a tune pure and simple, in a rhythm and tonality which have equally a basis in nature, first met the outward ear is impossible. The antiquity therefore of national melody need not be questioned because of its apparent modernness. On the contrary, irregular rhythm and uncertain tonality are evidences rather of an advanced though (to us) comparatively ancient scholarship than of the untaught struggle after expression of an indefinitely remote age. The Basque melodies collected by M. Sallaberry, M. Francisque Michel, and others, thoroughly justify this assertion. With one or two exceptions they are referable to the modern major and minor scales—the majority to the former—as well as to the rhythmical principles resumed in the modern "time-table." They may be divided into three classes: (1) dance tunes; (2) tunes which, though self-sustaining, owe their character and existence to the words with which they are associated; and (3) tunes, or rather strains, of like origin, but which can hardly be said to exist dissociated from words.

The Basques are eminently a dancing people, and a large number of their melodies, even of those accompanied by poetry, obviously suggest an additional accompaniment—that of the "poetry of motion." One of the most striking and popular of these, indeed a typical melody, known as the "Saut Basque," is given in the appendix to M. Francisque Michel's *Le Pays basque*. It begins thus:—

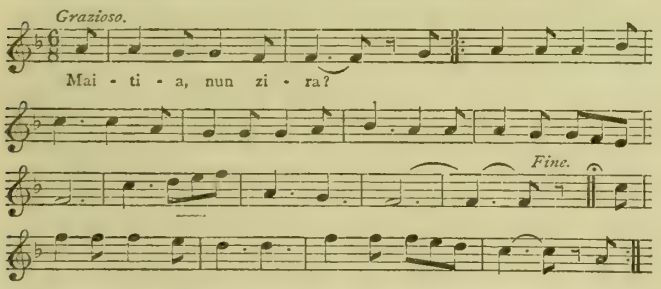


and is carried on to an extent which, considering that it never leaves the original key, shows considerable ingenuity and sustaining power. Like many popular tunes, it is in what the old masters called a *plagal* mode; *i.e.* its range is not from keynote to keynote, but from dominant to dominant; the former being, as it were, a central point about which the notes of melody move. Melodies of this kind were thought to possess less strength but more sweetness than those in "authentic modes," *i.e.* ranging from keynote to keynote. They probably owe their origin to a kind of pipe deficient in a "leading note," or rather of which, the

seventh being minor, the true leading note is the *third*. An example from the work before us (note the phrase of the two bars at *), over and above its individual interest, will further illustrate this form of melody. The keynote is of course C, the highest note G, and the lowest its octave. It bears the title "Prima Eijerra" ("*Jolie Héritière*").

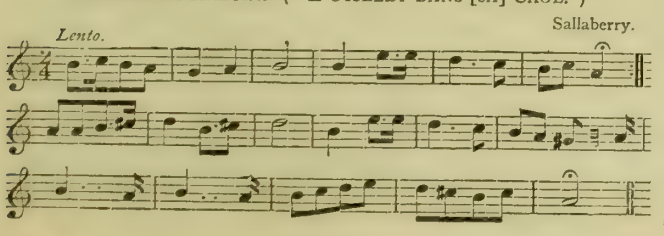


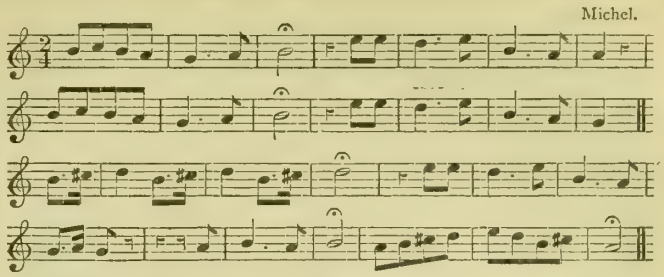
Of the second class of Basque melodies—those which owe their character and existence to the words with which they are associated—M. Sallaberry's collection presents many examples. To all of them he has appended the original words which, though of themselves unintelligible to the majority of his readers—myself among the number—without the French "crib" on the opposite page, by their number of syllables, emphases, and the extent to which they are susceptible of inversion or repetition, explain or account for a good many melodic peculiarities. Thus the non-repetition of the first phrase of the following beautiful melody—one of its best and most striking features—is explained by the words to which it is set, which form of themselves in each stanza an isolated and complete clause, *e.g.* "Maitia, nun zira?" rendered by the editor "*Bien-aimée, où êtes vous?*" and "Ohikua nüzü," "*Je suis la même qu'autrefois.*" Few things can be more certain from internal evidence than that the poet and musician in this instance were identical.



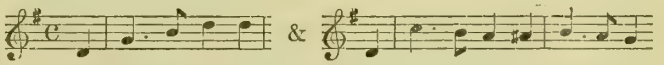
Tunes of this kind, as might have been expected, form the majority in the book before us. Of those of the third class, which are rather attempts to define the oratorical or poetical accent of the words than melodies proper, examples are more rare. Of these the following is said to be one of the most popular. I give two versions, that of M. Sallaberry, and that of M. Michel, by way of illustrating the uncertainty of musical tradition, or the difficulty of musical transcription—perhaps both. From the two, helped by a little speculation, is certainly to be gathered a melody unspeakably plaintive and quite individual. Can the untoward C sharp of the last phrase of both be an attempt to render a sound belonging to a musical "system" other than ours?—the Arabian, for example, the influence of which the Spanish Basques can hardly have escaped entirely.

CHORIÑUAK KALOIAN ("L'OISELET DANS [SA] CAGE.")





With these my extracts must come to an end. M. Sallaberry's book is a valuable contribution to our stock of materials for the study of national melody, and as such is worthy of the student's careful perusal. Its publication in so bulky and expensive a form—half the book must consist of blank paper—is much to be regretted. To those, however, into whose hands it may fall, I especially commend the melodies—disconnected always from the harmony appended to them—on the following pages:—20, 29 (a noble example), 109 (touching, from its vague tonality), 157, 163, 171 (perfect in its "form"), 189, 203, 211, 228 (which begins in the major and ends in the minor mode of the same key), 244, 269 (wonderful, if genuine), and 276 (introduced by the celebrated singer Garot, at the court of Marie-Antoinette) the initiatory phrases of both sections of which are nearly identical with those of the last German "national" song, "Die Wacht am Rhein."



It is not difficult (always with the help of M. Sallaberry's translation) to see that the words of the song at p. 356 have the same compactness, balance, repetition with a difference—in a word lyrical perfection—as the music. The editor tells us nothing about their date or history. Since how long can "sekülako" (for ever) have been a Basque word? But the poetry of the *Chants populaires du Pays basque*, studied even through the medium of the editor's "crib," is obviously hardly less interesting than the music, and deserving of more consideration than it has fallen within my province to give to it.

JOHN HULLAH.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—May I be allowed to make a few remarks about the *recitativi* in "Fidelio," *apropos* of the performance of this opera in Drury Lane Theatre last week. As is well known to musical readers, in the German opera of the elder school, and also in "Fidelio," the music is sometimes interrupted by spoken dialogue; which is to be explained by its growing gradually out of the "Singspiel," as the highest development of which we may consider Mozart's "Flauto Magico." From an aesthetical point of view, this way of introducing two different modes of expression into the same work of art is certainly highly objectionable, and was therefore rightly omitted by Wagner. The classic traditions of the Italian Opera also exclude the spoken dialogue; and the latter had therefore to be changed into recitative for the Italian stage. In such cases the dialogue, I think, ought to be shortened as much as possible, and the musical additions not to exceed the most urgent necessities. How much the dramatic economy of an opera is disturbed by long and monotonous *recitativi secchi* we have had but a too good opportunity of noticing at the performance of so many German operas in London. In the case of "Fidelio" the transformation of the dialogue becomes the more objectionable, because Beethoven has used the very change of spoken words and music for an effect of the highest dramatic beauty. In the second act, at the discovery of Leonora's sex, the musical climax has reached such a height, that after it everything must appear flat. Here Beethoven suddenly introduces, with a masterstroke of genius, a few simple words of love and happiness, exchanged between Leonora and her liberated husband: "O meine Leonore, was hast du für mich erduldet—Nichts, nichts mein Florestan;" which, by their contrast to the tremendous force of the musical expression preceding them, leave the deepest impression.

To begin instead of this the following scene with a commonplace accord and a dry recitative, shows indeed an enormous want of taste; and fortunately Sir Michael Costa had left out the whole of it; but this prejudiced the heavenly duet of Florestan and Leonora by its juxtaposition with the foregoing piece.

Of the performance as a whole we may say: Fidelio (Mdlle. Titiens) and Marcellina (Mdlle. Sinico), excellent; Florestan (Sig. Vizzani), bad—the high G at the beginning of his aria being a dead failure: male chorus in the first act detestable. FRANZ HÜFFER.

MUSIC AT THE INTERNATIONAL EXHIBITION.

THE ceremonial with which the International Exhibition was opened on the 1st instant, was brought to an end by a musical performance in the Royal Albert Hall, of, among other things, four works composed expressly for the occasion. Not one of these, it is true, was very characteristic of the "nationality" of its composer; indeed, they were, with one exception, singularly the reverse. Signor Pinsati "represented" Italian music by a "Chorale"; M. Gounod French by a "Psalm"; and Mr. Arthur Sullivan English by a "Cantata," the characteristic features of which were certain passages suggestive of Oriental melody. Dr. Ferdinand Hiller represented his country by a "March."

Signor Pinsati's music was of broad and simple character—for the most part in single counterpoint, with here and there an imitation—better adapted perhaps, from its gravity, to the "Chorale" than to the occasion. It was sung, without accompaniment, by a choir more remarkable for numbers than quality. M. Gounod's setting of parts of the Psalm "Quomodo sedet sola civitas" is grandly conceived, and carried through by the employment of many—indeed most—of those effects with which he has already made us so familiar. The greater part of the movement is in E minor; it is needless to say that it has a *coda* in E major, with wind instruments moving in triplets to each beat, and the emphasis reinforced by harps. Mr. Sullivan's "Cantata" is one of his most felicitous productions, worthy of a closer analysis than can be made of it now. The "Morescan" element—a minor scale with a sharpened fourth—is of itself interesting, and was introduced and treated with consummate skill. The orchestration is broad, as becomes the subject. Dr. Hiller's "March," trifle though it may be, is the trifle of a great musician; various in spite of the rhymical bonds of this kind of composition, and coherent with all its variety. A passage in B flat, wherein the flutes and clarionets double the first and second violins moving in octaves, is exquisite both in form and colour. Doubtless there are others as beautiful which may easily have passed unnoticed in a first hearing. The four new works were conducted by their respective composers.

The performance of Beethoven's *Missa Solemnis* and ninth symphony at the sixth Oratorio concert was highly creditable to Mr. Barnby and his band and chorus, although a certain fatigue became noticeable in the performers as well as the audience during the latter part of the concert. The tempi of the first movement and scherzo of the spmphony were wanting in rhythmical energy and liveliness.

Liszt's First Concerto in E Flat for Pianoforte and Orchestra, and "Die Symphonische Dichtung" (Les Préludes) will be performed at Mr. Bache's Concert on May 26, the latter composition for the first time in England.

A *Missa Solennis*, by Pergolese, has been recently discovered in the archives of San Fernando at Naples.

On the 28th of April Sigismund Thalberg died at Naples, after fifty-seven days of suffering, from inflammation of the lungs. He was born at Geneva in 1812, and was for some time a pupil of Sechter of Vienna.

An "International Mozart-Institute" has been founded at Salzburg. In connection with it, it is proposed to establish a musical High-school, to build a Mozart-house, and, by keeping yearly a Mozart-day, to afford composers and students an opportunity of propounding musical questions and exchanging interesting information.

Physical Science.

Natural History of the Azores, or Western Islands. By Frederick Du Cane Godman, F.L.S., F.Z.S. &c. London: Van Voorst, 1870.

A GROUP of islands in the Atlantic Ocean, about a thousand miles west of Europe and separated from it by a channel nearly 15,000 feet deep, has especial interest for the naturalist since Mr. Darwin has shown how valuable is the evidence such islands afford for the derivative origin of species. Mr. Godman has, therefore, done good service in visiting so remote and, as far as novelties are concerned, unproductive a locality; and in publishing the results of his researches in so compact and convenient a form. The book may be looked upon as, in many respects, a model of what such a work should be. The narrative part only occupies fifteen pages. Then follow lists of all the chief classes of animals and plants, exhibiting, not the author's collections only, but all that is yet known of the fauna and flora of the islands. The indigenous and introduced species are carefully distinguished, and their relations to other islands or to Europe pointed out; and to all the more important groups there is an introductory essay, on the relations, affinities, and distribution of the Azorean species. The Coleoptera have been worked out by Mr. Crotch, the land-shells by Mr. Tristram, the flowering plants and ferns by Mr. H. C. Watson, and the mosses and Hepaticæ by Mr. Mitten. At the conclusion Mr. Godman gives a summary of the whole, and points out the bearing of the evidence on the probable mode by which the islands have been peopled.

The most striking fact brought out by this work, is the wonderful amount of similarity between the productions of these remote islands and those of Europe; from 80 to 90 per cent. of the birds, butterflies, beetles, and plants, being absolutely identical with common European species, while from 1 to 4 per cent. only are American. This is the more remarkable when we turn to physical maps for information, and find that both the oceanic and aërial currents are from the westward, so that we should naturally expect the American element of the fauna and flora to be much better represented. The difficulty, however, is to a great extent cleared up by Mr. Godman's observation that the Azores lie in a region of storms from all points of the compass; and that every year these storms bring numbers of birds from Europe, and no doubt also numbers of insects, although these are not so easily observed. We can thus account for the enormous preponderance of European species; and this, taken in conjunction with the entire absence of indigenous Mammalia and Reptiles, causes our author to reject the theory of a former continental extension uniting these islands to Europe as the origin of their fauna and flora. Had this been so, and taking into consideration the vast time implied by the descent of a thousand miles of country to the depth of 15,000 feet, we should certainly have found the productions of the Azores to be far more endemic and peculiar than those of Madeira and the Canaries, instead of far less so.

The most curious and difficult problem is presented by the existence of a considerable number of wingless beetles, of genera peculiar to the Atlantic islands (Azores, Madeira, Canaries). These could not possibly, in their present condition, have been transported over the 600 miles of ocean that now intervene between these groups. Mr. Wollaston has, however, discovered that beetles have a tendency to become apterous in these islands; many which are winged in Europe, or belong to winged genera, being altogether wingless in Madeira and the Canaries. Some of these wing-

less species differ in no other respect from their European allies, so that we may be sure the change has been effected in a comparatively limited time; and the fact that some European species possess both winged and wingless individuals shows that the character is an unstable one, and therefore easily abolished or retained as one or the other state becomes advantageous to the species. We are thus at liberty to suppose that these wingless Atlantic groups are the descendants of very remote winged ancestors, who were among the earliest immigrants to all these islands; and these, being subjected to similar conditions, all became apterous. Another strange phenomenon is presented by the *Elastrus dolosus*, a beetle of the family Elateridæ, which belongs to a genus peculiar to Madagascar. A single plant, *Myrsine africana*, a native of tropical Africa and the Cape of Good Hope, is found in no other group but the Azores, where it seems to be common. As another beetle of the same family (Elateridæ) is allied to a Brazilian species, and is therefore probably the descendant of an ancestor who came over in a floating log, we are led to speculate on the possibility of this anomalous Madagascar beetle and S. African plant having been introduced by a similar process; since the currents round the southern extremity of Africa partially merge into the great equatorial current of the Atlantic which gives rise to the Gulf Stream, and this undoubtedly reaches the Azores.

Mr. Godman had previously visited the Galapagos Islands, which are only half as far from S. America as the Azores are from Europe; yet they contain hardly any identical species of birds, plants, or insects. This is well explained by the fact that these islands are situated in a region of calms instead of one of storms; and chance introductions being therefore a far rarer occurrence, the early immigrants have all become modified, and have so stocked the country with their peculiar and well adapted forms that new comers (if any do come) have little chance of establishing themselves.

We have now touched upon some of the more interesting questions which this work assists us in answering. It is a book which should form a part of every naturalist's library, and we are glad to notice the useful innovation of issuing it with cut edges. Alfred R. Wallace.

History and Literature of Lichenology. [*Geschichte und Litteratur der Lichenologie von den ältesten Zeiten bis zum Schlusse des Jahres* 1865. Zum ersten Male bearbeitet von A. v. Krempelhuber, Mitgliede mehrerer gelehrten Gesellschaften.] München: 1867-1869. (Im Selbstverlage des Verfassers.)

This is certainly one of the most marvellous examples of German industry which has ever issued from the press. We have here two volumes containing no less than 1392 pages on a subject which is of very limited interest even to botanists, and one which we should scarcely think would repay the author, at whose sole risk it seems to be published, for what must have been the labour of years. The literature of every country where information might be obtained has been thoroughly ransacked, and what is not always the case with continental writers, English sources, and those occasionally of less general circulation abroad, have been carefully explored and registered, and it must be allowed that a general measure of fairness exists throughout in the tone of criticism.* The important paper of Famintzin and Boranetzky to which we shall have to allude presently was not presented to the Academy of St. Petersburg till the 6th of June, 1867, and therefore did not come within our author's prescribed limits. Up to the end of 1865 it would be difficult to point out any paper of importance which has not passed under review.

Our author seems to lean more than is just to the minute details on which genera have been founded by more recent lichenologists. Tulasnes and Lindsay's memoirs, following the single observation of Itzigsohn, opened out quite a new field, and both entertained, as I believe, a just appreciation of the importance which is to be given to the contents of the asci, and the same may be said of Nylander, who has by no means neglected microscopical details. For my own part I do not think that lichenology has profited much by the excessive multiplication of genera resting often on mere modifications of the sporidia and sometimes even embracing chemical composition. These undoubtedly will often give good specific characters where proper attention is paid to the changes which the same sporidium may undergo in the course of its development, and assuredly the great Swedish fungologist and lichenologist Fries has sometimes allowed too little to such considerations. Attempts have been made to form generic distinctions amongst Fungi on characters derived mainly from the sporidia, amongst those which are most nearly related to Lichens, and which seem to me after years of consideration to be one great branch of an alliance comprising both; some genera indeed being so intimately allied that either in whole or in part it is impossible to find a single distinctive character. In the great genus Sphæria, some good genera or at least subgenera have been formed on consideration of their vegetative characters, but the moment it has been attempted to make further divisions from characters derived from the asci and their contents, we fall into illimitable confusion, and arrive at mere artificial arrangements. Take for example the naked or more simple Sphæriæ, and we shall find instances almost without number in which we can give no external distinctive character whatever, while their specific distinction rests almost entirely on the nature of the sporidia. For these reasons I cannot think that Massalongo, who on a large scale set the example of attributing so much importance to the sporidia, has deserved well of lichenologists, and I cannot help expressing a hope that Mr. Leighton will exercise in his promised work on British Lichens a due caution in this matter. Excessive subdivision is one of the greatest evils which can befall any branch of natural history, and indisposes many to the study who might otherwise be useful labourers, especially as it has a tendency to draw off attention from those general views which are after all of main importance.

The following observations of Nylander are well worthy of attention:—

"We reject the admission *à priori* of a single principle or a single character prevailing in the systematic arrangement, and we think that we may attach an identical value to the salient characters of all parts in Lichens; only in the different groups it is sometimes one, sometimes another character to which we ought to give the preference, whether we regard the classification properly so called of these vegetables or simply their specific distinction. The group of Phyllodeæ, for example, is distinguished from that of Placodeæ especially by a difference in the structure and form of the thallus, but these last differ only from the Pyrenodeæ in that of the fruit."

It would be unjust to our author to omit what he says towards the end of his second volume on this subject, where he allows that subdivision may go too far:—

"The results of the present tendency in this direction" (of comprehension) "give reason to fear that we shall very soon pass from the one extreme, which manifests itself by the proposition of too many imperfectly grounded genera and species, to the other extreme, which is characterised by a too widely extended comprehension of generic or specific forms; and we know not whether science will not run greater risk from the latter than from the former."

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* It is curious that the one which has met with the least justice is that which is due to the author of this notice. Happily it is not necessary to make any comment here, as it has already been done in the *Botanische Zeitung*, 1868, p. 288: "das Urtheil über Berkeley, welcher gar nicht beansprucht Lichenolog zu sein, viel zu hart erscheint."

There is no doubt that Fries in his *Lichenographia Europæa* has gone too far in his junction of forms which are really distinct, but the contrary practice of some recent authors is not less to be regretted.

The most important contribution to the knowledge of Lichens which has been made since 1865 is undoubtedly that to the Petersburg Academy* alluded to above. Mr. Thwaites, in his interesting memoir on the gonidia of Lichens in 1849, seemed almost to attribute an undue importance to these bodies, which, apart from the general habit of Lichens, form the main distinctive character between them and Fungi. Messrs. Famintzin and Boranetzky have shown, however, that in the absence of the proper fructification they form, as in the case of such fungal genera as Peronospora, a subsidiary mode of propagation by means of zoospores. Further observations on this very interesting matter are most desirable, though there is no reason to believe that the zoospores have any sexual value, the spermatia, according to the best authorities, seeming to exercise the necessary sexual functions.

It is not a matter of surprise that incidental notices of subjects connected with Lichenology in treatises not expressly connected with the subject should occasionally have been overlooked, but it is to be regretted that the curious genus Emericella, whose vegetative part accords so exactly with the gonidiiferous apparatus of Synalissa and Paulia, resembling so closely the structure of the palmelloid genus Coccochloris, should not have come under review. It seems to be a most curious connecting link between such Lichens as Coniocybe and Byssophyton with Myxogastres.†

It remains only to state that the work, which is absolutely indispensable to every student of this very difficult branch of Cryptogams, is divided into two main portions: the one comprising the history and literature of the subject, the other the exposition of the system and enumeration of species; in the latter case of course without specific characters, which must be looked for in the authors whose works have been so carefully registered. Ample details will be found as to the importance of Lichens in an economical point of view and their chemical constitution.

It would be a great boon to cryptogamists if the other branches of the lower Cryptogams could be treated with the same judicious criticism and fulness of detail.

M. J. Berkeley.

* See *Ann. d. Sci. Nat.* ser. v. vol. viii. p. 137.

† It should be looked for on the leaves of *Euphorbia neriifolia*, which is employed for the formation of fences in the Deccan and other parts of India. Unfortunately it has not been found a second time, and the specimens sent home were very few.

Scientific Notes.

Physiology, &c.

Researches upon Nervous Irritation induced by Electricity.—The over-maximal contraction of muscle so named by Fick, has been explained by Lamansky to be a consequence of a double excitation, his statement resting upon observation of the fact that such over-maximal contraction never occurs when the excitation is occasioned by a single opening or closure induction shock. Fick, in a recent essay, denies that this is the case, and refers to some tracings he has obtained with the myographion. In order to determine whether the higher elevation of the lever of this instrument was caused by the contraction of the muscle being of a more sudden nature in cases of over-maximal contraction, Fick made some experiments with the lighter lever of Mr. Marey's myographion, which would have less disposition to make a leap. The phenomenon noted, however, still occurred. From the curves of contraction obtained from M. Fick's pendulum-myographion, it would appear that with stronger irritation than was requisite to obtain a maximum contraction of a muscle, the only thing observable in the first instance is an increase in the duration of the contraction. Still stronger irritation was required to produce increased height of the curve of contraction. With the application of such increased strength of current he found that all these curves coincided at their commencement, whilst at their termination the tracings of the last coincided with those produced by irritation of medium strength.

Relations of Bacteria to Penicillium glaucum.—In a recent number of the *Centralblatt für die Medizinische Wissenchaften* (No. 12), Dr. Wjatscheslaw Manassein gives the results of a long series of researches he has undertaken to determine whether Bacteria have any genetic relation to the Penicillium glaucum, the outcome of which is that he feels himself justified in asserting that at present we have no satisfactory proof of such genetic relation between these two organisms.

Sensory Epithelium of Mollusks.—W. Flemming, in the *Archiv. für Microscop. Anatomie*, Band vi., continues his observations on this subject, and shows that in the feelers of the land-snails a peculiar form of epithelial cell exists, which terminates in a hair that does not, however, project beyond the general surface of the skin. These cells, like the brush-cells (Haarzellen and Pinselcellen) of aquatic mollusks, are the terminations of sensory nerves, and he has been able to trace a serial connection between the nerves and these cells. Such cells constitute the only nerve epithelium of aquatic mollusks; but the feelers of land Pulmonata present another peculiar and smaller form of cell, which is probably subservient to the sense of smell.

The Physiology of Mind in the Lower Animals.—A paper with the above title appears in the last number of the *Journal of Mental Science* (No. 41), written by Dr. W. Lauder Lindsay, and containing many points of interest. Dr. Lindsay remarks that comparative physiology, or the science of mind, in all classes of animals, including man, and in the lower animals specially, as contrasted with man, is almost entirely unknown and unstudied in this country. Physicians and metaphysicians, philosophers and others, who have studied the mind, have confined themselves to its phenomena as exhibited in man, or, in other words, to an analysis of the most complex form of mind; hence the belief held at the present day by many highly educated men, that the lower animals do not possess mind at all, all their mental phenomena being attributed to the operations of the convenient faculty termed instinct. He thinks that to bring about the substitution of a better state of things we must first become ashamed alike of our ignorance and our prejudice, unlearn much that we have already learned in human psychology, and begin our studies on mind with its genesis or rudiments in the simplest forms of animals, tracing its gradual progress from simplicity to complexity. He then proceeds to give a series of illustrations (well deserving of perusal) of the mental endowments of animals, including their natural disposition or character, their acquired disposition, their emotions, their self-control, their moral sense, memory, observation, imitation, stratagem, will, imagination, abstraction, understanding, reflection and reasoning, actuation and motive, adaptation of means to an end, skill, arts, wars, education, &c. The general result of his own investigations is the conviction that certain of the lower animals possess *mind of the same nature as that of man;* that there is no mental attribute peculiarly or characteristically human; and that there is, therefore, no essential mental distinction between man and other animals.

Linear Projection in its application to Microscopic Drawings.—In an important paper communicated to the *Monthly Microscopical Journal*, Mr. Cubitt, C.E., F.R.M.S., calls attention to the difficulty that all must have experienced in the endeavour to interpret many illustrations of objects "drawn under the microscope, owing to a want of coincidence in the representation of different views of the same subject, under the varying conditions imposed by a dorsal, a ventral, a lateral, or other view stated to have been drawn to the same scale. It has often been found," he says, "that it is impossible to interpret the details with sufficient perspicuity to enable me to arrange them in a consistent whole, and to construct a correct drawing therefrom, the one view having proved to be an incorrect representation of another in its altered position." He gives various illustrations of this want of agreement in recent and otherwise well-drawn figures, and proceeds to remark that in his own drawings he is accustomed to make hand-sketches of the object under observation, and with the micrometer inserted *measure up the work*, and then *set it out to scale.* The tools required are a good set of drawing-instruments, a carefully-made drawing-board, a T square provided with an adjusting stock for the purpose of producing a repetition of parallel straight lines at any other than a right angle, a couple of vulcanite set-squares, one at an angle of 45°, and another at 60°, which also affords its complement of 30°, to which may be added a few parabolic curves. As an exemplification of the application of this method, he selects the *Melicuta ruigens*, of the formation of the tube of which he gives an excellent account.

Zoology.

Reproductive Capsules.—In the *Annals and Magazine of Natural History* for May, 1871, Mr. John Hopkinson, F.G.S., records the discovery, for the first time in Britain, of true reproductive capsules,

associated with a species of Graptolites (*Diptograpsus pristis*); thus adding another link of connection between ancient Paleozoic groups with the existing Sertularian section of the Hydroid zoophytes. These capsular bodies he describes, though not agreeing exactly in minute detail, would appear to be fundamentally identical in function and structure with the "gonothecæ," or reproductive sacs of *Sertularia*, *Diphasia*, &c. The results of Mr. Hopkinson's researches are confirmatory of those arrived at by Professor Hall in America in his investigation of the Graptolites of the "Quebec group;" and at the same time opposed to those of Dr. Alleyne Nicholson, recorded in the pages of the *Geological Magazine*. As already shown by Mr. Carruthers, however, it seems more than probable that the bodies figured and described by the last-named writer as "grapto-gonophores" are independent and at present problematical bodies having no true connection whatever with the Graptolites with which he collates them. The only essential distinction now remaining between long extinct *Graptolitidæ* and the existing *Sertulariadæ* is the invariable presence in the former of a slender internal chitinous rod, extending through the whole length of the polypary; but while in this respect it would seem to present a more complex type of *Hydroidea*, it at the same time indicates a more generalized one, uniting the characters of the *Hydrozoa* with those of the *Actinozoa*, the internal rod being analogous, if not homologous, with the sclerobasic or axial skeleton of *Gorgonia*, *Pennatula*, or *Corallium*. The superficial resemblance indeed of Mr. Hopkinson's figure of *Diplograpsus* (excluding reproductive capsules) to various *Pennatulidæ* is most remarkable. The specimen forming the subject of Mr. Hopkinson's paper was obtained by the Geological Survey of Scotland, at Leadhills, Lanarkshire.

The **Zoological Collection of the British Museum** has been lately enriched by the purchase of a magnificent series of sponges from South Africa, the majority of which are likely to prove new to science. It is to be hoped that the group of the *Spongiadæ*, and other *Radiata* in general, now attracting so much attention in scientific circles, will receive a more liberal allotment of space in the new museum to be erected at Kensington. The utter unfitness of the present building to meet the daily increasing requirements of the national collection is evidenced by the fact that numerous groups of the *Invertebrata* are literally "crowded out," and entirely unrepresented in the series devoted to public exhibition, for want of the necessary space. This, and the inadequacy of the present slender staff of the Natural History department to effect the thorough and systematic arrangement of the extensive and valuable collection, and to elevate it to that high scientific status enjoyed in the leading continental museums, demand the most earnest and speedy attention.

Stone Implements in Cuba.—A very interesting account of the discovery of stone implements of great antiquity in the eastern part of Cuba, is given by Señor Rodriguez Ferrez in the last number of the *Revista de España*. They are called *pedras de rayo* in the country, and are of serpentine or diorite. He also describes a fossil human jaw-bone and some skulls of immense antiquity which he found on the same island some years ago, and which have now been examined and reported upon by a committee of *savans* in Madrid. Their report is dated March 24, 1871; and only one member, Dr. Graells, doubted that the jaw-bone was human. Dr. Graells hesitated because the jaw-bone is fossil, and was found in a position which would argue for greater antiquity for the human race than he was prepared to concede.

Pangenesis.—Mr. Francis Galton's ingenious experiments on this subject, by breeding from rabbits of a pure variety into whose circulation blood from other varieties had previously been largely transfused, and recorded at a recent meeting of the Royal Society, are published at some length in the *Annals and Magazine of Natural History* for May. These experiments, made on some twenty examples of an exceedingly pure stock, the "silver grey," tend in Mr. Galton's opinion to confute rather than to corroborate the brilliant theory of Mr. Darwin. In the usual mode of its interpretation, the cardinal points of this theory are: "1. That each of the myriad cells in every living body is to a great extent an independent organism. 2. That before it is developed, and in all stages of its development, it throws 'gemmules' into the circulation, which live there, and breed, each truly to its kind, by the process of self-division; and that consequently they swarm in the blood, in large numbers of each variety, and circulate freely with it. 3. That the sexual elements consist of organized groups of these gemmules. 4. That the development of certain of the gemmules in the offspring depends on their consecutive union, through their natural affinities, each attaching itself to its predecessor in regular order of growth. 5. That gemmules of innumerable varieties may be transmitted for an enormous number of generations without being developed into cells, but always ready to become so, as shown by the almost insuperable tendency to feral reversion in domesticated animals." It occurred to Mr. Galton, this "gemmule" theory being correct, that by the introduction into the circulation, of a pure breed of rabbits, of the blood and associated gemmules of other marked varieties, these gemmules would bear fruit in subsequent generations by producing offspring bred from the pure type, and having also the characters of the variety whose vital fluids had been introduced, just as though direct sexual communication had been effected. To attain this end no less than three ounces of blood (proportionally equivalent to more than six lbs. in the case of a man) were drawn off from some examples of the silver grey, and an equal quantity injected from yellow, black, or other varieties; while in other cases, to make the experiment still more perfect, a cross-circulation was established between two such varieties by the exposure and opposite connection of their carotid arteries, by means of canulæ and a delicately arranged apparatus. This last operation, though complicated, was exceedingly successful; and in one instance a fine buck, silver grey, was 37½ minutes in the most free condition of cross-circulation imaginable with his "blood-mate," a large yellow rabbit, the interchange of the circulation being most thorough, and the pulse throbbing and bounding between the finger and thumb with a rush of which the pulse at the human wrist, felt in the ordinary way, gave an imperfect conception. The progeny, however, of these animals to the second generation, the first being similarly experimented upon, have failed entirely to demonstrate the slightest tendency to taint or variation in breed; and Mr. Galton arrives at the conclusion "that the doctrine of Pangenesis, pure and simple," as he interprets it, "is incorrect." Strongly as the results of these experiments may similarly influence many minds, it must yet be questioned whether the time—but little more than a year, the experiments having been commenced "towards the end of 1869"—has been sufficient to warrant the return of a final verdict. The reproductive organs, with their secretions, are well known to be the slowest and latest to develop; and, the animals experimented upon having arrived at the adult condition, these organs in them were already fully formed, and had doubtless secreted their respective spermatic or ovarian contents to an extent rendering it almost impossible for foreign gemmules, if present in the blood introduced, to become incorporated with them. The case against Pangenesis is by no means proven by these experiments, even in the "pure and simple" acceptation of the doctrine quoted by Mr. Galton. Young animals, whose reproductive functions are still latent, should be submitted to a like series of experiments; and at the least four or five generations must be bred out before an impartial and trustworthy inference can be arrived at. The fifth clause of the doctrine cited at the commencement of Mr. Galton's paper, in itself, indeed, renders such a protracted trial absolutely necessary. In a paper in *Nature* for April 27, Mr. Darwin replies to Mr. Galton, and takes the opportunity of denying that he has ever stated, as Mr. Galton seems to imply, that "the gemmules in each individual must be looked on as entozoa of his blood." Mr. Darwin states that, in the chapter on "Pangenesis," in his *Variation of Animals and Plants under Domestication*, he had not said one word about the blood or about any fluid proper to any circulating system; and that it is obvious that the presence of gemmules in the blood can form no necessary part of his hypothesis. After referring to the experiments of Dr. Bence Jones and Mr. Paget, Mr. Darwin concludes by saying that although it does not appear to him that Pangenesis has received its death-blow, yet, from presenting so many vulnerable points, its life is always in jeopardy.

Physics.

On the Condensation of Aqueous Vapour from the Atmosphere.—Mell, Dufour, and Forel have made a long series of experiments on the condensation of the aqueous vapour of the atmosphere by glaciers. Their observations were carried out partly in a garden on the borders of Lake Geneva, partly at the hotel on the glacier of the Rhone at an altitude of 1760 metres, and partly on the same glacier at an altitude of about 1810 metres. The method adopted was to fill a copper pan, about 16 centimetres broad by 7 centimetres deep, to the edge with pounded ice (from 700 to 1000 grammes) or snow; to weigh the whole accurately; and then, after exposure for a definite period, to ascertain the increase or decrease in weight which it had undergone. The upper surface of the pan was about 200 square centimetres, and it was thus easy, by a simple calculation, to ascertain the amount of condensation or evaporation on every square metre or kilometre of surface, and also the thickness of the layer of water condensed or evaporated. The temperature and humidity of the air during the experiments were also carefully noted. The conclusions arrived at by the authors as to the hygrometric action of the glacier on the air, or of the air on the glacier, are as follows:—1. That when the tension of the aqueous vapour of the air is less than 4·6 mm. there may be either condensation or evaporation at the surface of the glacier. 2. Whenever the tension of the aqueous vapour exceeds 4·6 mm. there is always condensation on the surface of the glacier. 3. The total result of the condensation and evaporation at the surface of the glacier appears to be in favour of condensation, and that in a very notable degree. 4. The glacier tends to reduce, by condensation and evaporation, the tension of the aqueous vapour of the atmosphere to 4·6 mm. There is no exception to this law except in the case of condensation at temperatures below freezing point. Whereas in our climate and latitudes the mean tension of the aqueous vapour of the air exceeds 4·6 mm., the glacier exercises an extremely powerful desiccating action on the atmosphere. 5. The con-

densation of aqueous vapour tends, by reason of the latent heat disengaged, against the extension of the glacier. In conclusion, the authors draw attention to the importance of the phenomena studied by them. In the glacial epoch the immense surface of ice extending from the Alps far into the valleys of the Rhone and Rhine must have condensed the aqueous vapour with an enormous intensity, and consequently the desiccating action on the air must have reached a degree at the present time unknown. The influence of the desiccation of the air on the neighbouring flora and fauna is a question which ought not to be neglected by paleontologists and geologists.

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History.

History of the Œcumenical Councils. [*Concilien-Geschichte.* Nach den Quellen bearbeitet von Dr. C. J. Hefele. 7. Band: *Geschichte des Concils von Constanz.*]

The last volume published of Bishop Hefele's learned *History of the Œcumenical Councils* is devoted to the great Synod of Constance, the second and most important of the three reforming Councils which marked the anti-papal reaction of the first half of the fifteenth century. To those who were dependent for their information about it on the comparatively brief record contained in Fleury's *Ecclesiastical History*, or who have painfully waded through the dreary and voluminous pages of L'Enfant—neither of them very critical authorities—it will be a relief to turn to the full, clear, and luminous record of the illustrious scholar who is the chief ornament of the German episcopate. Dr. Hefele carries his readers with minute and conscientious accuracy—which, however, is never suffered to become tedious—through all the successive details of the history of the Council, referring in each case to original authorities. But the minor incidents naturally group themselves round the two leading points of interest in the proceedings, which have, for praise and dispraise, immortalised the name of Constance in later history: the condemnation and burning of Hus (we are specially cautioned against giving him a second *s*), and the deposition of John XXIII., with the accompanying vindication of the superiority of Councils over Popes. And to these two points we shall mainly confine ourselves here.

It is quite unnecessary to enter on the general question of religious persecution, about which there would be little difference of opinion among reasonable men of all creeds in the present day. In burning John Hus for a heretic the Council simply acted on principles universally recognised at the time and for some two centuries afterwards, and which were equally admitted and acted upon, when they had the opportunity, by religionists of every class; certainly not least by the Protestant Reformers. It must also be borne in mind that crimes of all kinds were then far more severely punished than in the milder legislation of our own age, and especially that the punishment of death was inflicted for comparatively light offences with a recklessness which to us must appear both cruel and iniquitous. We may well, indeed, as the author observes, keenly deplore so Draconian a legislation, and all the more so from the injury its application to spiritual causes entailed upon the Church. But we cannot justly measure the acts of the fifteenth century by the standard of the nineteenth. Nor is it precisely on that ground that so much indignation has been expended on what Coleridge calls with studied infelicity "the *Pope-wrought* perfidy, that made an empire's plighted faith a lie;" forgetting that no Pope had, or could have had, any hand in the burning of Hus, for the obvious reason that the Papacy was at the time in abeyance. He himself contested the justice of his sentence, not at all on the plea that it was wrong to burn heretics, but because it was a mistake to treat him as a heretic; and the alleged violation of the safe-conduct granted him by Sigismund constitutes the chief gravamen of the charge adduced by his later apologists. Neither plea will really bear investigation. It is very difficult to ascertain the exact nature of Hus's theological opinions from the various and sometimes conflicting accusations of his opponents, and the replies, not always consistent with each other, and apparently not always sincere, by which he met their charges. That he agreed with all the opinions of Wicliffe, and especially with his rejection of the Catholic doctrine of the Eucharist, is, to say the least, "not proven." Indeed, if we are to accept his own statements, he constantly and expressly affirmed the Real Presence; nor did he advocate communion under both kinds as necessary, which would indirectly involve a denial of Transubstantiation, but only as highly desirable, in which view he would find Catholic divines of eminence to agree with him. He received the sacraments when in prison, and on the eve of his death expressed his desire for a confessor, and, on learning that absolution would not be given without a retractation, fell back on the recognised Catholic principle that confession was not essential in his case, as he was not in mortal sin.

But there were other points, on which both the ecclesiastical and civil authorities were likely to be at least as sensitive, where his teaching came into manifest conflict with the doctrines of the Church. Such was the theory he enunciated in a variety of forms and with a persistency and emphasis which, notwithstanding occasional subterfuges, leaves his real meaning quite unmistakable, that priests, bishops, or popes, as also secular rulers, who were in mortal sin, or were not among the predestinate, forfeited all rights and powers appertaining to their office—a principle obviously subversive of all authority, which moreover Hus not only maintained, but systematically acted upon. This was no doubt the main cause of the extreme bitterness ultimately exhibited towards him by the Emperor Sigismund, who had at first appeared as his protector. Hus was a patriot before he was an heresiarch; and throughout his career his zeal for the national interests of Bohemia was to the full as conspicuous as his zeal for evangelical truth. It was for sedition even more than for heresy, for advocating a policy subversive of the empire rather than simply for assailing the orthodox faith, that he was brought to the stake by the rulers both of Church and State. The question of the safe-conduct may be more shortly dismissed. Hus came to Constance, as he himself repeatedly states, without any other safe-conduct than a verbal promise of protection on his journey from the emperor, which was faithfully kept. The written safe-conduct reached him after his arrival at Constance, and was undoubtedly violated by his imprisonment before the Council had given him a hearing, but it was not violated by his execution after he had been heard and condemned. It guaranteed him against all violence on the road to or from Constance, in the event of his return, but it did not and could not guarantee him against the sentence of the supreme

tribunal which he went there for the express purpose of appealing to, nor was it so understood at the time either by the emperor or by Hus and his friends. He had himself repeatedly declared his readiness to abide by the judgment of the Council; and if he anticipated, as he probably did, a favourable decision, that does not prove that an adverse sentence was unjust, still less that its execution was a breach of faith. The story of Sigismund blushing for his treachery is a mere invention of a later age; and the alleged decree that no faith should be kept with heretics, triumphantly quoted by Gieseler, and more recently, we are sorry to observe, reproduced without a word of caution by so generally impartial a writer as Mr. Reichel (*See of Rome*, p. 611), is only found in one codex, with no indication of when it was passed or by whom it was signed, and is in fact at best merely the draft of a motion brought forward by some member of the Council and never accepted. It would be well if all charges of injustice towards heretics could be as easily disposed of.

But the permanent importance of the Council of Constance hinges much more on its dealings with Popes than on its dealings with heresiarchs. As to the personal character of John XXIII.—who must have been, what L'Enfant makes him, a very monster of iniquity, if half the seventy-two articles of the indictment against him could be substantiated—Hefele inclines to a more lenient judgment than historians have usually adopted. We have no space to discuss the matter in detail here, but we think most impartial critics will be disposed to acquiesce in the description of Balthasar Cossa given by a contemporary, Leonardo of Arezzo, as substantially correct, "Vir in temporalibus quidem magnus, in spiritualibus vero nullus omnino atque ineptus." John was certainly a man of considerable attainments and great practical abilities, and had, as a soldier and administrator, done good service to the temporal interests of the Holy See. That he had few clerical qualifications, and that his morals were far from unimpeachable, seems equally certain; but we need not travel beyond the proceedings of the Council of Constance, or, it must be added, the personal conduct of too many of its members, to learn that the average standard of clerical morality of the period was deplorably low; and it may well be questioned whether the Pope was at all worse in this respect than the generality of contemporary prelates, while in natural and acquired gifts and energy of character he was decidedly their superior. It was at least as much for his breach of faith in deserting the Council, and from the urgent necessity of putting an end to the schism which for the last forty years had distracted the Church, as for his moral shortcomings that the Council determined on the extreme steps first of suspending and then of deposing him, as it also deposed Benedict XIV. and induced Gregory XII. to abdicate. The decree of deposition unanimously passed with the votes of all the four nations—the Spaniards had not yet arrived—in the twelfth session was a practical reassertion of the principle formally laid down in the famous decrees of the fourth and fifth sessions of the superiority of Councils to Popes. That those decrees were intended to be dogmatic, Hefele fully admits; but he disputes their authority on the ground that the Synod could not be regarded as œcumenical in the absence of any Pope, and holds that they were not included in the sanction afterwards given by Martin V. to all that had been decreed "conciliariter." The present volume appeared more than a twelvemonth ago, and it is only fair to say that the author's ideas are understood to have been seriously modified in many respects by later experiences. Taking the statement however as we find it, it must be observed that his interpretation of the word "conciliariter" is a very forced and arbitrary one. The decrees in question were passed without a single dissentient voice, and were universally accepted at the time as of binding force; while the restriction of Martin's confirmation to "conciliar" acts was supposed, as the author himself elsewhere admits, to exclude those only which had emanated from some one or more of the "nations" into which the Council was divided, and had not received the votes of all, nor did the Pope himself give any different interpretation of his words. To restrict the œcumenical claims of Constance to the period subsequent to the election of Martin V. would be to make a clean sweep of forty-two out of the forty-five sessions, and of every act of the slightest permanent importance.

There was a long and fierce contest on the question of whether the reformation of the Church or the election of a new Pope should take precedence, and at first the cardinals and the Italian nation were the sole advocates of the order finally adopted, which was of course clearly enough understood on both sides to mean the indefinite postponement to a more convenient season of the second and principal work for which the Council had been professedly convened. "The Liberal party," to use Hefele's words, "wished to restore the system of the Church from an absolute monarchy, which it had become, to a constitutional monarchy, where the chief authority would lie not with the Pope but with the assembled episcopate," while the Conservative party desired to retain as much as possible of the existing medieval system. The French, however, were gained over to the Italian side, and the death of Hallam, Bishop of Salisbury, who, with the Emperor Sigismund, had been the most strenuous champion of reform, led to the defection of the English, so that at last the Germans were left alone in their protest against a policy the results of which they too accurately predicted. Some reforming decrees were hurriedly passed to save appearances, and then followed the election of Martin V., who, within three days, after receiving deacon's orders, formally renewed some of the worst abuses, in the way of dispensations, reservations, indulgences, and the like, which the Council had only the day before electing him ordered to be reformed. The force of the opposition was skilfully parried by separate concordats with the different nations, which, however, were only intended to hold good for five years. Martin was elected on November 9, and on the 22nd April following the Council was dissolved, but not till the new Pope had taken occasion to put out a bull directly contravening the decrees he had formally sanctioned, and to which he owed his election, by forbidding, under pain of excommunication, all appeal from himself to a General Council. The deepening cry for "a reform of the Church in her head and in her members," which the proceedings at Constance had intensified, but had wholly failed to satisfy, soon again found corporate expression in the Council of Basle, for an account of which we await with much interest the appearance of Hefele's next volume. It is earnestly to be hoped that his recent elevation to the episcopate will not interfere with the leisure or the freedom of thought and speech indispensable to the adequate prosecution of his great work.

H. N. Oxenham.

I viaggi di Gio. da Mandavilla, volgarizzamento antico toscano, ora ridotto a buona lezione coll'aiuto di due testi a penna per cura di Fr. Zambrini. Vol. I. [Scelta di curiosità Letterarie inedite o rare.] Bologna: Romagnoli. Dispensa CXIII.

Mandeville's Travels, written in French about 1357, and soon afterwards translated into various languages, have been printed several times in Italian during the later part of the fifteenth century. Signor Zambrini has not merely re-

printed one of these editions: he has availed himself of two MSS. (one in the *Magliabechiana*, the other in the *Riccardiana*) in order to correct a very corrupt text. The learned editor has not prefixed to his edition an extensive introduction, such as some of the volumes of the same collection have received from the pen of Prof. Al. d'Ancona, or of Signor Wesselofsky; but has confined himself to a few preliminary remarks on the travels in Palestine previous to Mandeville, and on Mandeville himself. This scanty notice, however, taken as it is, is not correct in every point, as, for instance, when the "Romance language," in which the author professes to have written his book, is stated to have been either Provençal or French (p. xvi.), the latter only being meant; and when (at p. x.) Frater Odoricus is said to have composed his travels in the year 1318 (instead of 1330). Had Signor Zambrini been more acquainted with the literature of his subject; had he, for instance, read M. d'Avezac's *Introduction to Plan-Carpin*, or Mr. Th. Wright's *Early Travels in Palestine*, he would have been able, without even enlarging his plan, to compress into a limited space a better selection of more accurate facts. PAUL MEYER.

Le Storie di Tucidide, nuova traduzione, per Niccolo Camarda. 2 vol. Prato.

THE Sicilian Professor Camarda (at present at Palermo) has here given us a new translation of the author to whom we owe our first accounts of Sicilian history, and has made his translation a labour of love. Sometimes he inserts a "Sicilian" note; thus on II. 78, "the Greek custom still prevails in the interior of Sicily, where all bread-making is left to the women." There are ninety pages of introductory "studies" on Thucydides, which show the intense interest Italians are once again beginning to feel in political research. The translation reads very fairly, if a non-Italian may be allowed to judge in such a case; and the author, though leaning much on Poppo and Grote, shows an independent judgment on many passages. Thus on IV. 12 he translates (partly following one scholiast), "at that moment it enhanced the glory of the one to surpass warriors of the mainland in military prowess; of the other to beat a nation of sailors on the sea"—taking μάλιστα εἶναι as equivalent to πλεῖστον προέχειν and making them govern ἠπειρώταις and θαλασσίοις—but can μάλιστα εἶναι have this sense? The translation may fairly rival that which such a scholar as Peyron published at Turin. C. W. BOASE.

Selected Articles.

Götting. gel. Anzeigen, April 19.—A notice of Hirschfeld's "Tituli Statuariorum Sculptorumque Graecorum" points out its importance for the history of art. The family of Praxiteles affords a distinct instance of "hereditary genius." Not a few of the inscriptions are metrical. —April 26. Waitz criticizes Knochenhauer's "Early History of Thuringia" (1039–1247). The book was left incomplete at the author's death, and the constitutional chapter and accounts of the documents, &c., are therefore not forthcoming.

Literarisches Centralblatt, April 29. — Those who have been amused by Carlyle's account of Frederick the Great's father, may be interested by a criticism of the famous "Memoirs of the Margravine of Baireuth," on which so much of the account depends. In Droysen's new volume of "Prussian History" it is pointed out how untrustworthy the memoirs are.—May 6 contains a good account of Böhmer's "Acta Imperii Selecta," published by Ficker after his death. The collection was once intended to have formed a separate part of Pertz's great work; but Pertz adhered to his "large folio" plan, and Böhmer acted independently.

In the last No. of Fraser, Mr. Gardiner replies to Mr. Spedding's criticism on "Prince Charles and the Spanish Marriage." Mr. Spedding defends James, and has a much higher idea of his character than is usual. Mr. Gardiner, allowing his good intentions, sums up the result of his vacillating policy thus: "He chose Bacon and Digby for his advisers, and he wasted the genius of the one, and the practical sagacity of the other."

In the Allgemeine Zeitung for April 6, G. M. Thomas gives an account of Valentinelli's great work, "Bibliotheca Manuscripta ad S. Marci Venetiarum," of which three volumes have appeared. Valentinelli's knowledge of art makes his account of the MSS. specially valuable. The appearance of the new "Archivio Veneto" is also noticed.

Clouet, in his "Histoire de Verdun" (the enthusiastic man worked at the third volume throughout the late siege), gives an interesting coin of the Emperor Henry the Fowler (who united the three bishoprics, Toul, Metz, and Verdun, to the empire), with the inscription, "Henricus rex, Verduni." The annexation of Lorraine, says Clouet, greatly strengthened Henry's dynasty.

New Publications.

GÜNTHER, C. Die Chronik der Magdeburger Erzbischöfe. 1 Thl. 1142. (Inaugural dissertation.) Göttingen: Rente.

HÖFLER, C. Abhandlungen aus dem Gebiete der alten Geschichte V. Ueber den Auslauf der römischen Geschichte in die byzantinische u. die Gliederung beider. (Academy reprint.) Wien: Gerold's Sohn.

KRASSER, D. Gesch. der sächs. Dorfes Grosspold in Siebenbürgen. Aus urkundl. Quellen. Hermannstadt (1870).

MANDAVILLA. I viaggi, &c., per Cura F. Zambrini. Bologna: Romagnoli. (See *Acad.* p. 271.)

ROSA, G. Roma preistorica. Brescia: Apollonio.

RUSCH, J. B. Gesch. St. Gerolds d. Frommen u. seiner Propstee in Vorarlberg. Nach urkundl. u. literar. Quellen. (Academy reprint.) Wien: Gerold.

SALINAS, A. Le monete delle antiche città di Sicilia, descritte ed illustrate. Fasc. II. in 4 Tab. Palermo: Lao.

SCHULZ, Alf. Procopius de Bello Vandalico lib. i. 1–8. Eine hist. Untersuchung. Berlin: Calvary.

SICKEL, Th. Das Reformations-libell. d. kaisers Ferdinand I. vom Jahre 1562 bis zur Absendung nach Trent. (Aus dem *Archiv. f. österr. Gesch.*) Wien: Gerold's Sohn.

Philology.

On the Historical Succession of the Semitic Languages. [*Abhandlung über die geschichtliche Folge der semitischen Sprachen.*] By H. Ewald. In vol. xv. of the Dissertations of the Göttingen Royal Scientific Society. 1871.

PROFESSOR EWALD has condensed in this suggestive treatise the results of researches in a field peculiarly his own. His object is to discover the course of development taken by Semitic language in general, and the stage to be assigned to each Semitic language in particular. He distinguishes five kinds of linguistic formation—the Aramaic, the Early Æthiopic, the Early Hebrew, the Southern Semitic, and the Arabic. In the first or Aramaic stage Semitic was, he thinks, chiefly characterized by the substantival termination *â*. To this corresponds the so-called *status emphaticus*, the peculiarity of which is not sufficiently recognized by those who state that it fills the place of an article. About the same time, according to Ewald, an incipient variation became visible in this the earliest stage of Semitic language. By the side of that form of the imperfect tense which began with *n* (*e. g. nektub*), another one beginning with *j* appeared (*e. g.*, *jektûb*, as in Chaldee). Another usage which took its rise in this stage is that of the participle representing the present tense. The second, or Early Æthiopic, stage is said to be distinguished by a short vowel at the end of substantives, and which, in forms like *naffâqî*, is transformed into a clear, distinct, long vowel, owing to the operation of one of the phonetic laws of Semitic. The infinitival termination *û* in Aramaic is explained in the same manner. Next in order comes the Early Hebrew stage, the most obvious characteristic of which is the distinctive use of the article when prefixed to a noun. This idiom is shared by Phœnician, which, in spite of all its diversities, stands on the same level with Hebrew. The most prominent peculiarities of the Southern Semitic stage are, according to Ewald, on the one hand, the internal formation of the plural, and, on the other, the development of a special verbal stem to denote endeavour. This is the so-called third Arabic conjugation, or,

as Ewald calls it, the "Tendenz-stamm." In the latest, the Arabic, stage of Semitic language, our attention is chiefly attracted by the laws which regulate sentences, especially by the use of ان (corresponding to כי and אשר) to introduce dependent clauses, and by the designation of the nominative by an affixed *u*, and the consequent distinction of the oblique cases. In close connection with the latter is the formation of a chain or sequence of words by the *status constructus*.

The main object of the author is to infer the historical succession of the Semitic languages from their structural character. He does not forget, however, to confirm his results by referring to what we know from other sources as to the development of these languages and of the nations speaking them, and in conclusion he expresses the hope that his theories may be corroborated by the newly-discovered Assyrian language. This hope, we are able to state positively, is fully justified by facts. Space forbids us to go into detail, but we may at least mention the remarks on the plural termination *ân* (p. 31), and those on the designation of an independent noun by an affixed vowel (p. 16, &c.), as susceptible of illustration from Assyrian sources. Altogether the treatise is as brilliant and as instructive as any of the similar productions of its venerated author. That it will be found uniformly convincing is of course too much to be expected. In researches like these, which deal with the ultimate causes of intellectual phenomena, perfect harmony among critics is perhaps unattainable. For instance, the designation of the *status constructus* as an innovation belonging to the latest stage of Semitic, does not appear to us very probable. But we hasten to add that the points on which we dissent from the author are greatly outweighed by those on which we agree with him. We strongly recommend the reader to procure and study this treatise, and would refer him especially to the author's very suggestive exposition of his present theory on internal or "broken" plurals.

E. Schrader.

Mélanges de Littérature Grecque, contenant un grand nombre de textes inédits, par E. Miller, Membre de l'Institut. Paris: à l'Imprimerie impériale, 1868.

M. E. Miller, whose activity in the cause of Greek learning has been long known, and who many years ago brought to light a valuable MS. of the *Geographi Minores;* later, in 1843, some new fragments of Nicolas of Damascus; again, in 1851, a MS. of Origen's *Philosophumena*, published at Oxford, was commissioned by Napoleon III. to explore the libraries of the Greek monasteries in the East, particularly those on Mount Athos: he undertook the task with diffidence, but not without a presentiment of success, and with the enthusiasm of a scholar long practised in MSS. and assured that *lorsqu'il s'agit de l'antiquité grecque, rien n'est indifférent.* The result is the volume before us.

M. Miller, in a report to the Emperor dated February, 1865, gives a short sketch of his explorations. At Bucharest he found nothing. The libraries of the Patriarch of Jerusalem and the Patriarch of Constantinople were equally disappointing; the former contained, indeed, about four hundred Greek MSS., but they were nearly all theological. The library of the Seraglio was more interesting. About one hundred MSS., Greek and Latin, were placed in his hands; many of the latter once formed part of the famous collection of Matthias Corvinus, and were nearly all written in the fifteenth century. Among the Greek, M. Miller mentions three as specially deserving notice: a history of the events which immediately followed the fall of Constantinople, by an almost unkown author, Critobulus; the works of Heron of Alexandria, a very fine MS. of the eleventh century; a Ptolemy, written in the fifteenth century, with drawings. This MS. bears a close resemblance to the Ptolemy of Vatopede on Mount Athos. M. Miller's report of the Athos libraries is not consoling. The monasteries of Vatopede Lavra and Iveron are, in this point of view, the most important; then Coutloumoussi, Pantocratoras, Sphigmenou, Stavronikita. The whole number of Greek MSS. is about six thousand, but most of them are theological; and even when a palimpsest excites curiosity, the older writing generally reveals a Father or ecclesiastical work. It is a mistake to suppose that the parchment MSS. are always the most valuable; M. Miller considers that more is to be found in the cotton paper MSS. of the thirteenth and fourteenth centuries, which are more difficult to read and have therefore been less examined. The extreme reluctance which the monks are well known to show in producing their treasures makes it possible, in spite of the comparative scantiness of actually discovered material, that more persevering and prolonged residence in this neighbourhood may yet bring something of real importance to light. A gentleman of Salonika declared to M. Miller in 1854 that he had seen and had in his hands some fragments of Homer and others of a Greek tragic poet, both written on papyrus; the first belonging to Lavra, the second to Chiliandari: but all his enquiries failed to trace them. Yet the assertion of Curzon, "So thoroughly were these ancient libraries explored in the fifteenth century that no unknown classic author has been discovered" (*Visits to Monasteries in the Levant*, preface to edition of 1865), must be considered to be at least modified by the researches of M. Miller. The complete list of his discoveries is given on page x of the preface; it includes, besides some Biblical and ecclesiastical works, a paraphrase of Oppian's *Halieutica*, a metrical version of Aesop's Fables, some unedited works of Photius, a Chrestomathy of extracts from Homer, Sophocles, and Euripides, some new fragments of Aelian, a collection of grammatical explanations of a number of passages in ancient authors, many of them hitherto unknown; lastly, the matter published in the work before us, the *Mélanges*:—

1. A collection of Greek proverbs, supplementing those published by Leutsch and Schneidewin in the *Paroemiographi Graeci* (*Mélanges*, pp. 349-384).
2. A fragment from the Ζητούμενα of an otherwise unknown Claudius Casilon, explaining some words used by the Attic orators (pp. 397-398).
3. Fragments of a work by Didymus of Alexandria, on the ἀπορούμεναι λέξεις in Plato (pp. 399-406).
4. An extract or abridgment of a work by Zenodorus, in ten books, on the language of Homer (Ζηνοδώρου τῶν περὶ συνηθείας ἐπιτομή), pp. 407-412.
5. A tract by Suetonius, in Greek, on Greek words of abuse (pp. 413-426).
6. Short explanations of (*a*) words suspected of not being used by the ancients, *i.e.* the standard writers of Greece, (*b*) terms expressive of age or relationship; both ascribed to Aristophanes of Byzantium (pp. 427-434).
7. A fragment from a Greek treatise on games by Suetonius (pp. 435-436).

All these were found by M. Miller in a monastic house near Kariez. They are contained in a cotton paper MS. of forty-eight leaves, and are preceded by the conclusion of the *Eikones* of Philostratus, extracts from M. Aurelius, the Planudian Anthology, the *Encheiridion* of Epictetus, and the Greek version, by Planudes, of the Distichs of Cato. The most interesting of them is, perhaps, the Suetonian treatise on words of abuse; the greater part of them, it is true, were known already through Eustathius, whose quo-

tations agree almost verbally with these, and were probably taken direct from the work of Suetonius: next come the proverbs, which either give a fuller and more correct text of those already published in the *Paroemiographi Graeci*, or supplement them by new material.

I have still to mention the most important part of the *Mélanges:* a collation of a MS. of the *Etymologicon Magnum* in the Laurentian library at Florence. It is numbered 304 S. Marci. It seems incredible that Gaisford should have known of its existence and yet published an edition of the *Etymologicon* without having it collated; for it is probably the earliest MS. of that work. It was written in the tenth century; and as Photius, who is often quoted in the *Etymologicon*, belongs to the end of the ninth, the MS. would seem to be almost contemporaneous with the author. It consists of two hundred and seventy-three parchment leaves, of which the first and those containing the letters N and O are nearly illegible from damp, though M. Miller succeeded in decyphering most of them by the help of chemical applications. The alphabetical order is followed, but not exactly, and with considerable divergences from the printed edition. Some words are omitted, others expanded or abridged; on the other hand, it has many words either new or till now only known from other lexicographers. The citations of poets whose works have come down to us in the main entire, such as Homer, Hesiod, Apollonius Rhodius, Lycophron, Nicander, are much more numerous than in the editions hitherto published of the *Etymologicon;* the fragments, when they were known already, are fuller and more detailed; often adding the title of the work whence they are taken, or the name, hitherto uncertain, of the author. This is not all: the MS. contains, besides, a considerable number of fragments, slight indeed, but new, from the tragedians, from the comic poets, Epicharmus, Aristophanes, Menander, Cratinus, Eupolis, Alcaeus; from Archilochus, a commentary on his Epodes, and Hipponax; from the lyric poets, Alcman, Alcaeus, Anacreon, Simonides; besides Callimachus, Antimachus, Euphorion, the philosopher Chrysippus, the orators Isaeus and Hyperides, and others.

On folio 266 of the MS. begins a smaller Etymologicon, which is preserved as far as the end of N. It agrees nearly with the *Etymologicon Gudianum*, and a collation of it occupies pp. 319-340 of the *Mélanges*. M. Miller concludes his book with three new Orphic hymns, addressed to Hecate, to the Sun, to the Moon. Meineke has reprinted these in the *Hermes* (iv. pp. 57-68), where many passages are very plausibly emended.

As a supplement to what he has there done, I would propose in hymn i. 7, for σκυλακαγεν of the MS., σκυλακήγονε; in i. 16, ἀφετλεσθεθυτητον would seem to be ἀφέλεσθε θυτηρῶν; in i. 19, for εἰ δέ τιν ἄλλον ἔχοισ ἐν κολποῖσ κατακείται, for which Meineke proposes ἕλοιτ' ἐν κολποῖσιν κατακεῖσθαι, I would read simply ἔχουσ, "if clasping some other lover she lies in his bosom;" in ii. 12, after τοῦτον, where a word seems to have fallen out, which M. Miller replaces by ἀεὶ, I would propose ἄναξ, which, as Meineke has observed, is very probably the true reading in 21, ταῦτα γὰρ αὐτὸς ἔδωκας ἄναξ ἐν ἄνδρεσσι δαῆναι, against the reading of the other copy, ταᾶτα γὰρ αὐτος ἔταξας ἐν ἀνθρώποισι δαῆναι.

R. Ellis.

Notices of Sanskrit MSS. By Râjendralâla Mitra. Published under Orders of the Government of Bengal. No. II. Calcutta, 1870.

The second part of *Bâbû Râjendralâla Mitra's* Catalogue of Sanskrit Manuscripts, discovered during the recent search in the Bengal Presidency, contains accounts of about 160 MSS., drawn up on the same principle as those of the previous part noticed in a former number of the *Academy*. Among these manuscripts a comparatively small number will presumedly engage, at present, the attention of European scholars, a very considerable portion consisting of Tantrical works and modern sectarian treatises of various kinds. It is, however, not undesirable that we should at least have some positive account—in a great many cases probably as much as we shall ever require—of treatises of this kind, though it were only to give us an adequate idea of the extent of this branch of Hindu writings. Grammatical Literature is represented in this part by but a few works of secondary importance, also existing in manuscript in the collection of the India Office and other European libraries, viz.: *Vopadeva's Kâvyakâmadhenu*, or commentary to the same author's *Kavikalpadruma* (I. O. 346); *Kâśîśvara's Mugdhabodhapariśishṭa* (I. O. 803), and *Patidatta's Kâtantrapariśishṭa* (I. O. 1163). In *Śikshâ* there is a *Varṇabhairava*, on the origin, forms, and merits of the Sanskrit letters, by *Râmagopâla Panchânana*. In *Alankâra*, new commentaries on *Daṇḍin's Kâvyâdarśa* and *Mammaṭa's Kâvyaprakâśa*. Of Astronomical works, *Halâyudha Miśra's Jyotiḥsâra; Śrî Nivâsa's Śuddhidîpikâ* (the same as MSS. I. O. 967, 1578, 1626); a *Kâlanirṇaya* by *Gopâlanyâyapanchânana; Râjâ Kalyâṇavarman's Sârâvalî* (= I. O. 2508). Of *Smârta* treatises, *Vâchaspatimiśra's Dvaitanirṇaya* (identical with I. O. 41), *Râjâ Vallâlasena's Dânasâgara* (I. O. 719–20), *Sûryasena's Nirṇayâmrita* (I. O. 1430), and *Chandraśekhara Vâchaspati's Sârasangraha*. In Philosophy, a *Yogachandrikâ* (CCXIII.), which seems to be a different work from *Dattalakshmaṇa's Yogachandrikâ*, contained in MS. I. O. 1540; *Svâtmârâma's Haṭhadîpikâ* (CCL. *a*), identical with the *Haṭhapradîpikâ* (I. O. 355, 3101); *Âpadeva's Mîmânsânyâyaprakâśa; Râmaśarman's Vedântârthasangraha*, and *Madhusûdana Sarasvatî's Praśthânabheda*. Of works on Music, *Nârada's Panchamasârasanhitâ*, and the *Sangîtanârâyaṇa*, by *Purushottama Miśra*. The latter work is probably identical with that contained in MS. Wilson 303, of which an account is given in Aufrecht's Cat., No. 480, although there *Nârâyaṇadeva*, son of *Padmanâbha*, and pupil of *Purushottama Miśra*, is said to be the author of the treatise. Besides, there is the *Bâlabodhinî*, a commentary on the *Gîtagovinda*, the same as MS. I. O. 1184; a *Purâṇasarvasva* by *Purushottama* (compare a work bearing the same title, by *Halâyudha*, son of *Purushottama*, Aufrecht, p. 84), and a *Patrakaumudî*, or "Universal Letter-writer," by *Vararuchi*. An advantage, for the identification of works, of Bâbû Râjendra's method of quoting the beginning and end of manuscripts appears from No. CCXXIII. of the Catalogue, noticing a MS. of the "*Śabdabheda-Prakâśa*, a vocabulary of words having the same or nearly the same sounds, but very different meanings. Anonymous." In point of fact, the treatise noticed is the first supplement of *Maheśvara's Viśvaprakâśa* (see Aufr. Cat. p. 188 *b*), the genuineness of which seems somewhat doubtful, as is shown by Prof. Aufrecht and in this Record, 1871, p. 210. This MS., however, does not contain the whole of the chapter, as it occurs in the MSS. of the *Viśvakosha*, although the title at the end would seem to imply as much, and throws no new light on the nature of those supplements. The *Nânârthaśabda*, or "Dictionary of words having various meanings," noticed under No. CCCLIV., is the second or homonymous part of *Mathureśa's Śabdaratnâvalî*, contained in MSS. I. O. 1512 and 1585, in the former of which the first leaf of the *Anekârtha* is wanting, whilst the latter omits the first śloka quoted in the Catalogue, but agrees in those which follow. I cannot conclude these remarks without expressing a wish that the example set by Bâbû Râjendra may soon be followed in other parts of India, and that the fact of a work already existing in the MS. Collection of the Asiatic Society

will not prevent that scholar from occasionally registering MSS. of rare works he may meet with in his inquiries. Finally, I feel bound to correct an erroneous remark in my notice of the first part of the Catalogue, with regard to No. LXXVII. therein, as well as to MS. I. O. 959; as thereby I both did injustice to Bâbû Râjendra's Notices, and mis-stated the nature of the work in question. Govardhana's Saptaṣatî, by whose denomination of Kosha I was misled, is not indeed a vocabulary, but, as Bâbû Râjendra states, a collection of miscellaneous stanzas, and has nothing to do with the Kosha of Govardhana mentioned by Medinîkara.

J. EGGELING.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—There is one point of Latin pronunciation which I do not remember to have seen raised either in the report of the Oxford Committee or in the subsequent discussion. I mean the way in which *tenues* were sounded, or not sounded, before *s*.

Suetonius (*Vit. Octav.* c. 88) tells us that Augustus was inconsistent for superseding a consular legate for spelling badly, because he wrote *ixi* for *ipsi*, inasmuch as Augustus himself practised phonetic spelling. Therefore in the Augustan age *ipsi* and *ixi* sounded just alike. The natural meeting point is *issi*. This inference is confirmed to some extent by a passage in Martial, i. (cx.) 17–23:—

> "Hanc ne lux rapiat suprema totam,
> Picta Publius exprimit tabella,
> In qua tam similem videbis *Issam*,
> Ut sit tam similis sibi nec *ipsa*.
> *Issam* denique pone cum tabella:
> Aut utramque putabis esse veram,
> Aut utramque putabis esse fictam."

For if the three words italicised only differed on paper, the play upon them would suit the poem.

On the other hand it may be alleged that the substitution of *issus* and *issulus* for *ipse* in inscriptions (Fabretti, nn. 254, 255), in designed imitation of baby language, proves that a difference of some kind existed in adult pronunciation. Perhaps the only difference was that adults articulated *a* consonant at the end of the first syllable, while babies slurred it into the one which began the second.

On the whole this is more likely than the possible hypothesis that the ear of Suetonius confounded sounds which the ear of Augustus distinguished, because the phonetic corruption which we infer from Suetonius has become universal in Italian. *Scripsi* and *dixi* from *scribo* and *dico* are represented by *scrissi* from *scrivo*, and *dissi* from *dico*; and it is probable that *scripsi* for *scribsi* and *rexi* for *regsi* were the first stage of the same process.

G. A. SIMCOX.

INDIAN INSCRIPTIONS.

A PAMPHLET by Mr. A. C. Burnell has lately reached us from Madras, which bears the title of *A few Suggestions as to the best Way of making and utilizing Copies of Indian Inscriptions*, and, not having been printed for sale, may be presumed to be little known even in India. The suggestions it contains are all the more welcome at a time when a new era appears to be dawning on the collecting and deciphering of Indian inscriptions: they are specially valuable, too, as coming from a gentleman who has spent much time and labour on the subject, and has therefore every claim to be considered as an authority. Commencing with an historical *résumé* of what hitherto has been done, and been allowed to remain undone, in this branch of Indian archæology, the writer briefly states what he conceives to be the general character and relative value of Indian inscriptions, and gives his reasons for declaring the work in hand as urgent, inasmuch as "inscriptions are daily being destroyed during repairs of temples, and by the country people taking stones from ruins; copper śâsanas find their way to the melting-pot."

With regard to the first question—how to make the copies—Mr. Burnell recommends, for inscriptions on stone, "impressions on stout unsized paper, such as is now manufactured at Paris for the use of Egyptologists. The inscription must first of all be quite cleared of dust or mud or other obstructions, and this may be best done by a hard clothes-brush. The paper is then to be rapidly but uniformly wetted in a tub of water, and applied to the inscription and forced into the irregularities by repeated and forcible strokes with a hard brush; an ordinary clothes-brush is as good as any for the purpose. If the stone be clear of dust, the paper adheres, and when dry falls off, forming a perfect mould of the inscription."

The process he suggests as applicable to inscriptions on plates of metal is as follows:—"The plate or plates should be carefully cleaned with a dry brush, and the letters occasionally must be cleared out with a blunt graver. From the cleaned plate an impression (reverse) is to be next taken by passing a roller charged with ink over the plate, and then printing from it as from an ordinary copper plate. From this impression another may be taken by means of an ordinary copper plate press; and with a little practice a perfect facsimile may be thus obtained, the letters being white, and the rest of the plate appearing a dark grey." The pamphlet has also some excellent suggestions as to the arrangement of the copies, &c.

In conclusion, a good word may perhaps be put in for photography. Notwithstanding its shortcomings as to "the imperfections of the paper used, and the difficulty (or impossibility) of managing the light," it is certainly in many cases the only safe method of reproducing inscriptions, and offers, besides, such obvious and unique advantages that it should always be resorted to, wherever practicable, side by side with the two processes described above.

R. ROST.

Intelligence.

On March 28, Prof. Haug delivered a lecture on Brahma and the Brahmans before the Munich Academy, in honour of its 112th anniversary. It is well known that he rejects the opinion of some eminent Sanskritists, that the original meaning of Brahma was "devotion." In this lecture he indicates the stages by which the sense of "plant" or "sprout" developed into that of the creative force in nature, and finally the Supreme Being. Several notes are appended, which will be sure to interest the Vedic student. In one of these he expresses himself equally dissatisfied with the European interpreters of the Vedas and their Indian commentators. In another he gives a list of 101 Upanishads in his own possession. In another (the twelfth) he points out in the Zendavesta a distinct allusion to a verse of the Atharvaveda.

M. A. Ahlqvist has lately brought out a work in Swedish on *The Words relating to Civilization in the West-Finnish Languages*. In it the author seeks to draw a picture of the original state of civilization and industry among the West-Finns by an examination of their languages, and especially of the foreign words which they have taken from those of their neighbours belonging to the Teutonic, Slavonic, and Lettic families. The work is in many respects a pendant to Pictet's *Origines Indo-Européennes*, and has besides the merit of being the first in its own peculiar field.

The Rev. Peter Percival, Prof. of Sanskrit and vernacular literature in the Presidency College, Madras, is carrying through the press a new and expanded edition of his *Tamil Proverbs*, with English translation and explanatory notes. A new edition of Colebrooke's *Miscellaneous Essays* is also in the press at Madras.

Dr. H. Kern, Prof. of Sanskrit in the University of Leiden, is bringing out a volume of *Kawi-Studiën*, containing the transliterated and corrected text of parts 1 and 2 of the *Arjuna-Vivâha*, with a Dutch translation, introduction, and notes.

M. Valetta, a gentleman well known by his biography of Homer and his edition of the Letters of Photius, has just published a Greek translation of the late Dr. Donaldson's continuation and completion of O. Müller's History of Greek Literature. This translation is written in a kind of late Hellenic, which, we suppose, will be intelligible to any modern Greek of average cultivation. M. Valetta's style has the great advantage of being perspicuous, fluent, and pleasing, if not always correct; and that is more than can be said of many writers of modern Greece. His notes show much learning, but often also turn on points of orthodox theology which the translator delights to bring in on all occasions, and a discussion on which fills a considerable portion of the preface. We hope that the book will be useful to those for whom the translator intends it—the studious youth of his country.

The second edition of Zeuss's *Grammatica Celtica comparata*, cura H. Ebel, is just completed.

Messrs. Sargent and Dallin's *Materials and Models for Greek and Latin Composition* are entitled to special notice, the superiority of their work consisting in the classification of the passages selected according to their subjects; while a new feature is added in the selection of illustrative passages from classical authors, which, without rendering too much assistance, may give a clue to the student as to the style in which the several pieces should be rendered.

Contents of Journals and Selected Articles.

Journal of Royal Asiatic Society, Vol. V. Part 1.—I. Two Játahas; Pali text with Eng. translation, by V. Fausböll.—II. On an ancient Buddhist inscription at Kewyung kwan, in N. China, by A. Wylie.—III. The Brhat Sanhitâ, translated by Dr. H. Kern.—IV. The Pongo festival in S. India, by C. E. Gover.—V. The poetry of Mohamed Rabadan of Aragon, by Lord Stanley of Alderley.—VI. On the creed and customs of the Jangams, by C. P. Brown.—VII. On Malabar, Coromandel, Quilon, &c., by C. P. Brown.—VIII. On the treatment of the Nexus in the Neo-Aryan languages of India, by J. Beames.—IX. Some remarks on the Great Tope at Sânchi, by Rev. S. Beal.—X. Ancient inscriptions from Mathura, transl. by Prof. J. Dowson.—Note to the Mathura inscription, by Major-Ger. A. Cunningham.

Literar. Centralblatt, April 29.—On Fick's Vergleich. Wörterbuch der indo-germ. Sprachen. [Highly laudatory; Dr. F. shows that the vocabulary of the ancient Indo-germans was much smaller than would appear from Pictet.]—On Hahn's Die Sprache der Nama. [Dr. H. gives some specimens of native Hottentot composition; he rejects the idea of an affinity between the Hottentot and Egyptian languages.]

Zeitschrift für vergleichende Sprachforschung. xix. 6. Bugge: Zur etymologischen Wortforschung. [Continuation from the last published number: chiefly on words or roots which are found in the Scandinavian languages. The following may be mentioned among the etymologies discussed in this long and interesting article:—O. N. örðugr, Lat. arduus: O. N. örr, Gr. *αὖρος* = *ταχύς*, Scr. arvant, a horse: Swed. öna, to lamb, *ἀμνός* (*ἀϝ-νός*): Lat. p for original k, in poena and pius, from *chi*, *τίνω*, and in pellis, Sanscr. charman: Gr. *ποιεῖν*, from pu = ku. to strike, with many derivatives in Gr., Lat., and Germanic: Gr. δ from γ, in *δοχμός*, *διερός*, *δίδυμος*, *δάπτω*, &c.: O. N. kasta, Gr. *βαστάζω*, Lat. gero: O. N. kleiss, Lat. blaesus: Swed. vriða, Gr. *χρίω*, Engl. write: Lat. forum, outer court, connected with fores, &c. The development of meaning is well traced; so also in the roots budh, mar (to be clotted), prush, Lat. pruina, &c.]—M. Schmidt: Inschrift von Ostuni. [Messapian, probably containing the word Setimihi, gen. of Setimas, Lat. Septimius.]

Zeitschrift für die Oesterreichischen Gymnasien. Zweites und drittes Heft. H. Zeissberg: Erinnerungen an die Schlacht bei Wana (1444). [Account of the great defeat of the Christians by the Turks, in which Wladyslaw III. was killed. Appendix of three unpublished letters of Aeneas Sylvius, two anonymous Latin poems, and a letter of Johannes Hanyadi.]—Wecklein: Ars Sophocli emendandi, rev. by J. Kvičala. Concluded. [Sometimes successful in defending the text.]—Lucian Müller: Rutilius, &c.; by K. Schenkl. [Appreciative.]—K. E. Georges: Lateinisch-deutsches Handwörterbuch; by F. N. Ott. [Laudatory. Lists of words which might be added from Paulus and the Glosses, &c.]—K. Müllenhoff: Deutsche Alterthumskunde; by W. Hartel. [Deserves to be reckoned among the most conspicuous monuments of historical science. Important discussions of Homeric myths.]—R. Böckh: Statistics of German Population; by A. Ficker.—A. Klodič: Grammatica Graeca; by K. Schmidt. [By an Istrian professor. Has some advantage over Curtius in arrangement for purposes of teaching.]

Philologischer Anzeiger, Vol. III. Part 2. Fr. Schmalfeld: Lateinische Synonymik. [Useful.]—Chr. Cron: Beiträge zur Erklärung des platonischen Gorgias; rev. by I. [On the historical character of Callicles, the supposed place and date, the partition of the dialogue, with notes on many passages.]—Aristotelis Opera, ed. Academia Regia Borussica; rev. by E. v. L.—R. Peiper: Præfationis in Senecae tragoedias nuper editas supplementum; rev. by *pp*. [Miscellaneous, chiefly on the chronology of the plays with reference to the contemporary events.]—L. Kühnast: Die Hauptpunkte der Livianischen Syntax; rev. by V. [A valuable contribution to the historical syntax of Latin: refutes recent attempts to discover in what the supposed "Patavinity" consists.]—C. Czwalina: De epistolarum actorumque quae a scriptoribus historiae Augustae proferuntur fide atque auctoritate; rev. by St. [The first part of an important examination of these materials: shows the spuriousness of the letters in the *Vita Avidii Cassii*.]—Compte-rendu de la commission impériale archéologique pour l'année 1869. St. Petersbourg. [Account (1) of discoveries in the South of Russia, especially in the Crimea, the result of excavations carried on at the expense of the Russian government; and (2) description of two vases in the palace of the Hermitage. The accompanying treatises by Stephani are of the highest merit.]—Vol. III. Part 3. G. Benoist: Les Œuvres de Virgile, édition publiée d'après les travaux les plus récents; rev. by E. v. L. [The commentary is written with great industry and ability: the introduction, life of Virgil, &c., show careful study of previous works and monographs. The reviewer gives some ingenious discussion of the references in Ecl. IX. and Georg. II. 39 ff.]—Cl. Rutilii Numatiani de reditu suo libri duo. Accedunt Hadriani Flori . . . aliorumque saec. X. (A.V.C.) reliquiae: rec. L. Müller. Rev. by Zpt. [Disfigured by emendations.]—Æm. Baehrens: Lectiones latinae. [On passages of Florus, Minucius Felix, the Latin Anthology, the Ætna, and Seneca.]—C. Plinii Secundi naturalis historiae ll. xxxvii.; rec. Lud. Jan, vol. i.; rev. by Detlefsen. [The editor did not live even to revise the whole of this part of his new edition. His son, Carl von Jan, has given an account of the principles followed.]—J. Guillemand: Ventia et Solonion, étude sur la campagne du préteur Pomptinus. [Dion Cassius, xxxvii. 47, 48.]—H. Brunn: über Styl und Zeit des Harpyienmonumentes von Xanthos.—Büchsenschlütz: die Hauptstätten der Gewerbfleisses im Klassischen Alterthume.—Blümner: die Gewerbliche Thätigkeit der Völker des klassischen Alterthums. [Two valuable prize-essays.]

Zeitschrift für deutsche Philologie, von Höpfner and Zacher, vol. iii. part 1 and 2, contains: Über die Edda lieder Heimat, Alter, Charakter. By E. Jessen. [The author maintains (1) the Germanic origin of the sagas celebrated in the Eddas by the Norwegian form of the songs preserved to us. The article is very interesting.]—Die Nithard handschrift und die Eide von Strassburg. By Brakelmann. [This famous MS., which formerly belonged to the Vatican library, was retained in Paris after the Restoration, and kept out of sight till the last few years; it contains, besides Nithard's history, that of Flodoard, and a continuation down to the year 978, so that the MS. dates from the end of the tenth if not from the beginning of the eleventh century, and not from the ninth century, as was believed formerly. In the midst of Nithard's history we find the oaths of Strassburg in Old French and Old-High-German. This is the first known document of the French language. Brakelmann has collated both the French and German text.]—Bruchstücke aus dem Willehalm von Oranse des Ulrich von dem Türlin. By Haag. [They are taken from two vellum-leaves which came probably from the large collection of the Counts of Manderscheidht. Their contents are not to be met with in the imperfect edition made by Casparson Cassel 1781, but belong to the concluding part of the poem, contained in a Heidelberg Codex.]—Virgil und Heinrich von Veldeke. By Wörner. [The Æneid of the old German poet Heinrich von Veldeke had been much and unjustly blamed by Gervinus as being a deformed modernisation of the Latin original; but firstly the German poem is only a somewhat free translation of the Old-French Enéide supposed to be written by Benoit de Saint-Maure, and secondly there are certain beauties peculiar to the mediæval poems. The study is made with great accuracy of detail.]—Bericht über neuere deutsche mundartliche Litteratur. By Rückert. [Report on the more important studies on German dialects of the last few years.]

The new number of the *Journal of Philology* contains articles mainly bearing on subjects of Theology, which we shall analyze in our next.

New Publications.

Enderis, Dr. E. Versuch e. Formenlehre der oskischen Sprache m. den oskischen Inschriften u. Glossar. Zurich: Höhr.

Haug, M. Brahma u. die Brahmanen, München: Verlag der k. Akademie.

Heimreich, C. Die Telemachie u. der jüngere Nostos. Ein Beitrag zur Kritik der Composition der Odyssee v. A. Kirchhoff. Berlin: Calvary.

Levy, Prof. Dr. M. Das Mesa-Denkmal u. seine Schrift. Breslau: Schletter.

Ludwich, A. Varietas lectionis et scholia ad Batrachomyomachiam ex codice Veneto cum epimetro edita. Berlin: Calvary.

Müller, Prof. Dr. F. Armeniaca III. (Academy reprint.) Wien: Gerold's Sohn.

Phillips, H. G. Üb. das lateinische u. romanische Element in der baskischen Sprache. (Academy reprint.) Wien: Gerold's Sohn.

—— Erânica. (Academy reprint.) Wien: Gerold's Sohn.

Tassy, Garcin da. La langue et la littérature Hindustanies en 1870. Revue annuelle.

Tiraboschi, P. Vocobolario dei dialetti bergameschi antichi e moderni. Fasc. xiv. Bergamo: Bolis.

Zeuss, Prof. Dr. J. C. Grammatica celtica e monumentis vetustis tam Hibernicae linguae quam Britannicarum dialectorum Cambricae Cornicae Aremoricae comparatis Gallicae priscae reliquiis constr. Editio altera curavit Dr. H. Ebel. Fasc. II., hoch 4. Berlin: Weidmann.

ERRATA IN No. 23.

Page 241 (a), line 8, for "Beethovenfestspiels," read "Bühnenfestspiels."
,, 244 (b), ,, 30, ,, "plain," read "pain."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Thursday, June 15, and advertisements should be sent in by June 12.

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General Literature.

The Sources of Shakespeare in Novels, Tales, and Legends. [*Die Quellen des Shakespeare in Novellen, Märchen und Sagen, mit sagengeschichtlichen Nachweisungen.* Von Karl Simrock.] Zweite Auflage. Bonn: Adolf Marcus, 1870. Zwei Bände.

THE sources from which one of the greatest masters of poetical fiction derived the original materials for his creations, are always an interesting study—materials which, as Simrock remarks, it is his eternal distinction to have embellished with the highest possible brilliancy and polish which the originally rough jewels were capable of receiving. Some remarks which I have made elsewhere, upon the general subject of prose fiction, may be applied with equal appropriateness to the varieties of narrative and dramatic poetry derived from the same sources; but for these I must refer the reader to my German edition of Dunlop's *History of Fiction*, p. xvii, Introduction (Berlin, 1851). In Shakespeare we have to do with a yet greater mind than Boccaccio and Cervantes, but one which, now and then, comes in close contact with the former of those great masters of prose imagination. One of the chief merits of Shakespeare, as pointed out by Simrock, is to have recognized the intrinsic value of many valuable inventions even when disfigured by the coarse handling of novelists less skilful than Boccaccio, and to have evoked his fairest and mightiest creations out of such apparently unpromising materials. To ascertain the nature of these raw materials, to watch the transformation they undergo at the hands of the great dramatist, to penetrate into the laboratory of his genius, and to follow the secret processes of his mind, this is the end Simrock proposes to himself. With this view, he does not restrict himself to a mere juxtaposition of the sources to which the poet was directly or indirectly indebted for the matter of his plays (as for instance in the case of the *Merchant of Venice*, where he translates the story in the *Gesta Romanorum* as well as the novels of Giovanni Fiorentino and Boccaccio), but he also traces out and developes the connection between these sources and other legends, resting on mythology or on popular belief, which Shakespeare was in the habit of using to complete and enrich the outlines as they lay before him. This part of the undertaking, which constitutes the peculiar importance of Simrock's work, has been executed by him with extensive learning, and, what is still more important, with remarkable delicacy and penetration, so that we follow the author's exposition of the paths in which Shakespeare's creative instinct may or must have moved, with intense and continued interest. The value of this portion of Simrock's work led to its being translated long ago (1850) by Mr. Halliwell for the Shakespeare Society, but it appears now in a far more perfect form, and brought up to the level of the latest investigations. As I may assume that Halliwell's translation is familiar to all or nearly all students of Shakespeare, I shall restrict myself to noticing some of the most important additions, with the remarks they suggest.

To begin with, Simrock has discovered a new authority for *Romeo and Juliet*, in a novel by Luigi da Porto, which is earlier than the one of Bandello's previously given, as it appeared in 1524, while Bandello's collection was not published until 1554. Simrock shows that Luigi was the only precursor of Bandello, and that the latter sometimes copies him verbatim, though at other times he departs freely from his original. Thus Bandello is the first to introduce Juliet's nurse, while Luigi only speaks of a maid, and in various other points he clearly betrays the fact that he had no historical foundation for his story—a fact which Simrock confirms by a variety of circumstances. Though Luigi was the real inventor of that part of the story of *Romeo and Juliet* which depends upon the enmity of the Montecchi and Cappelletti of Verona, from the first meeting at the ball to the death-scene in the vault, Bandello must have the credit of some few additions worthy to be seized and utilized by Shakespeare, not to mention that his narrative is more circumstantial and animated than that of Luigi.

In the illustrations of *Hamlet*, Simrock had already pronounced in favour of the hypothesis that an old popular legend might perhaps underlie the story of Amleth's journey to England (in Saxo Grammaticus) as in the case of the journey of Brutus to Delphi. In the present work he carries this idea still further, and inclines to believe that this legend, like most others, was originally mythological, and referred to the life of the world in the annual revolution of the seasons, and from its great antiquity might have been known to the Romans. According to the Norse version, Odin, as the Sun God, descended into the lower regions, and tarried there seven years (by which we are to understand seven winter months) in order that Rinda, the frozen Earth, might, after the death of Baldur, the God of Light, give birth to another son (Vali), who should avenge the death of Baldur, and bring back the light of returning spring. During this absence of the God, his dark image, the wintry Uller (or as some say Mithodin) rules in Asgard and supplants him with his wife. This myth must have been strangely transformed before it could first become a saga, and finally be accepted as history. Nevertheless, the outlines of it are found to be repeated in the legends. Odin and his gloomy *double* have become in Saxo the hostile brothers Horwendill and Fengo. Fengo has murdered his brother Horwendill, married his widow, and thus secured the throne of Denmark. Amleth, who has taken the place of Wali, is called to avenge this crime, and he delays to execute vengeance upon Fengo, just as the Light God (of summer) delays his victory over the powers of darkness (and winter), as the days do not begin to lengthen gradually till after Christmas.

With regard to *Measure for Measure*, I had myself (in the *Heidelberger Jahrbücher*, 1869, No. 12) given several references to kindred materials, of which Simrock has availed himself; I will only here repeat one, which contains a very ancient and original version. It is to be found in Augustine *De Sermone Domini in Monte*, and runs thus:—

"A citizen of Antioch was thrown into prison by the Procurator Septimius Acindynus for a debt due to the state, and threatened with the gallows if he had not discharged it by a given day. As this was out of his power, he permitted his wife to pass a night with a rich man who was in love with her, and as the price of this favour had promised her the required sum. It was done accordingly, but before leaving her the man substituted a purse full of earth for the promised money. The betrayed wife complained to Acindynus, who first reviled his own severity, and paid the debt to the treasury out of his private means, and

then granted the woman the estate from which the earth that had been given her, was taken."

It may be observed that in most of the legends known to us, where the wife only receives her husband's corpse in return for the sacrifice of her honour, the deception turns upon her omission to stipulate expressly for his life as well as his release. The heroine of an old Spanish romance is more judicious. She is the sister of Don Alonso, who is imprisoned and condemned to death by his brother and hers, the Castilian King Don Sancho. She entreats Don Sancho to give Don Alonso to her, and the boon is granted, but she adds: "Thou must give him to me alive, living and not dead;" upon which Don Sancho exclaims: "Bad luck to thee, sister, and to him who gave thee this counsel; early on the morrow I had given thee him dead."*

The *Merchant of Venice* gives Simrock occasion to discuss a subject which has excited much attention lately; the question, namely, of the original birthplace of those stories, fairy tales, and fables, which we find current amongst the people of very different countries, with coincidences more or less close, but still too important to be accidental, and not of a character that can be accounted for by the common and indestructible tendencies of human relations. Fictions of this kind provoke the inquiry whence they can have originally proceeded. It has been maintained, particularly by Benfey, in his excellent work on the *Pantschatantra*, that nearly all the European fictions of this kind were first introduced in the Middle Ages through the agency of the Mahomedans and Mongols, and that not (in the case of the Mahomedans) until the tenth century; a view which Benfey has now so far modified as to allow that their introduction may have taken place some three centuries earlier; but he continues to regard India as the original source, and the Buddhists as the true parents, of these inventions. It is nevertheless impossible to deny that a certain number of these stories, even when related to other Indian versions, are really not derived from that country, but, to all appearance, should be referred to some more primitive home, from whence they were carried away by the different Aryan nations to their several settlements, and that their connection with India is to be explained in this way. (See my "Beitrag zur Geschichte der romantischen Poesie," in Ebert's *Jahrbuch*, ii. 121, iii. 74.) I have here left out of account the very interesting circumstance that many of the myths and fictions of the Aryan nations are to be met with amongst other races, in widely distant spots; as, for instance, not only amongst the Amazulu (who have a version of the myth of *Cupid and Psyche*), and in the islands of the Pacific Ocean, but also in America (see in Pfeiffer's *Germania*, xvi. 37, my "Germanische Mythen im alten Amerika"), a fact which points to some still more primitive connection between different races in the past. The connection, at any rate, of the fictions common to Europe and Asia is certainly in some cases primitive and not the result of later migrations; and Simrock, in his preface, undertakes the defence of this primitive portion against Benfey, by attributing a wider extent to it than is admitted by most other investigators. In the case of the legend which reappears in the *Merchant of Venice*, Simrock had, in his first edition, referred its origin to a legal myth growing out of the punishment of debtors by the Law of the Twelve Tables; he still maintains this view against Benfey, who had traced the story to the Buddhist doctrine of Self-sacrifice, according to which people cut a piece of flesh from their own body. Simrock, however, concedes that the tale need not have been invented specially in Rome:—

"It might have arisen anywhere, in the East or in any country where that precise degree of civilization prevailed which is indicated by the Law of the Twelve Tables that gave the creditor a claim on the life and limbs of his debtor; but I am the less inclined to abandon the idea of the legal character of the legend, inasmuch as the Buddhist stories alleged by Benfey themselves bear undoubted traces of a legal origin."

Simrock takes this opportunity to insist on the importance of studying the history of culture with special reference to questions of this kind, as the growth of many myths, legends, and fairy tales may be explained by their light. For the rest, that which now appears legend was once fact, and there is not the least doubt that the practice of cutting the flesh from the debtor's body did actually exist; as Niebuhr himself remarks (*Hist. of Rome*, vol. ii.), "Every attempt to explain away the inhumanity of the law rests on a misconception and perversion of meaning; the very spirit of the law was quite as revolting as its letter, and I should not even venture to say, with Gellius, that it was never put into execution, that a debtor was never killed or cut to pieces under cover of its text, but such cases must have been exceedingly rare." Not, however, quite so rare as Niebuhr was inclined to suppose; but for this see my article, "Eine alte Todesstrafe," in Benfey's *Orient und Occid.* vol. ii. Simrock's discussion of this point is equally instructive and attractive.

In connection with *All's Well that Ends Well*, which is generally referred to Boccaccio, iii. 9, Simrock adduces the opinion of a German scholar who thinks that Boccaccio had made use of Terence's *Hecyra* in his novel; for in that work Pamphilus takes a ring from a maiden he has dishonoured, and then gives it to his mistress. He then, at his parents' desire, marries the first girl, but without knowing that she is the same with the one whom he had robbed of ring and honour. Their relations after marriage resemble those of Beltram and Giletta in Boccaccio, with the additional circumstance that suspicion falls upon the wife. It is not until the ring is found in the possession of Bacchis that everything is explained and the reconciliation of husband and wife effected. I have myself previously (Dunlop, p. 539) referred to an old Spanish romance which tells how the lawful wife of King Pedro gave her husband an heir by a similar substitution (Romance del engaño que usó la reina doña Maria de Aragon, para qué el rey don Pedro su marido durmiese con ella).

In his remarks on *Macbeth*, Simrock says, amongst other things, that when Malcolm gave the order to his followers to advance covered with boughs, he knew nothing of the prophecy to Macbeth, and only intended an ordinary warlike stratagem. He then continues:—

"There is however the following remarkable passage in Joh. Weyer's *De Praestigiis Daemonum*, Frankfort, 1586, p. 329: 'If any one wishes to produce the appearance of being surrounded by a company of a thousand men or horses, let him take a branch of a willow that is a year old, cut off with a single blow, and use it with certain spells, the recitation of barbarous words, and rude signs.' The charm thus recommended would scarcely avail to give a single man the appearance of a whole army; but the inventor may very easily have started from a legend in which a brave army was supposed to have concealed its weakness from an enemy of superior strength by this stratagem."

From this it would seem that Simrock supposes the charm, referred to by Weyer, to have been the invention of some one particular person who composed it in imitation of a legend. On the other hand, we find in many places similar superstitions which have no connection at all with this stratagem. Thus it is related that Duke John Adolphus of Ploen, of whose magic arts many legends are told in Schleswig, possessed the power of calling up "blind warriors"

* "Mas pídoos á mi hermano,—que lo teneis en prision. Place me dijo, hermana,—mañana os lo daré yo. Vivo lo habeis de dar, vivo,—vivo que no muerto, nó. Mal hayas tu, mi hermana—y quien tal te aconsejó,—que mañana de mañana,—muerto te lo diera yo."

who marched in advance of his own soldiers, and if they were shot down, got up again immediately. But as soon as the enemy had exhausted all his ammunition, John Adolphus and his troops would press forward to certain victory. Another legend tells of a cavalry officer under Gustavus Adolphus, who, whenever he was sent upon an expedition, and fell in with superior forces, used to cause a few companies or a whole regiment to appear behind him, at whose aspect the enemy would take to flight. Scherertzius had heard the same of two commanding officers who, whenever they wanted to pillage a district, first scared the peasants away with a regiment of these phantom soldiers. But the belief is much older than this and more widely spread. The Syrian patriarch Dionysius, in his *Universal History* composed in the year 775, relates that the savage nations, Gog and Magog, before they go to war, dissolve the body of a new-born child in boiling water and then plunge their weapons therein. The effect of this charm is to make every warrior appear to his opponent like six hundred horsemen. The same magic rite was used in Pergamos, according to Theophanes and Cedrenus. But to return to Simrock: he next refers to his *Deutsche Mythologie*, where it is maintained that the legend of a walking wood has grown out of a Teutonic religious ceremony, viz. that of the May procession or the reception of the Summer. When the May-King or the Count of Flowers had been brought home from the wood, both he and all his followers were covered with green May and birch-boughs, so that it seemed as if a whole wood were moving along. For further details I must refer to Simrock, only noticing that, as he points out, Halliwell has discovered the same stratagem in an old English poem on Alexander, and adding one more kindred tradition from Arabia. A woman of the name of Sarka Aljemamah saw some enemies approaching in the distance, each one covering himself with a green bough, so that a wood seemed to be drawing near. She told her companions of this, but they did not believe her. Suddenly she perceived a wild ass in flight, and exclaimed: "This wild ass cares more for his blood than the shepherd for the blood of his flock!" And the saying became a proverb amongst the Arabians. It cannot be denied that a stratagem of this kind might occur to any imagination, and that an army covered with boughs would everywhere produce the effect of a wood in motion. There is therefore no necessary connection between the different legends which turn on this circumstance; nothing, that is to say, which needs to be accounted for by migration or direct imitation. But for this very reason Simrock's explanation of the origin of the myth might be dispensed with altogether.

In his first edition, Simrock had only given a few lines to the *Tempest*, in which he remarked that the drama could scarcely be founded on a novel, but, as Tieck had conjectured, in his German *Theater*, p. xxii, was most probably based upon an earlier English play now lost, which also supplied Ayrer with the foundation of his *Schöne Sidea*. This time Simrock has entered in detail upon the discussion of this piece of Ayrer's, from which it is possible to form some opinion as to the nature of the original, more or less remote, used by Shakespeare, and to conclude that, in all probability, this may be traced back to a popular fairy tale.

The conclusion of Simrock's work, from which the historical plays are naturally excluded, contains, besides an explanation of the name *Titania*, a dissertation to prove that *Midsummer Night's Dream* ought to be translated *Walpurgisnachtstraum*, instead of *Sommernachtstraum*. This passage appeared first as an appendix to Simrock's translation of the play (Hildburghausen, 1868), and was given again in the third edition of his *Mythologie* (1870); but, as some objections had been made to it, he took this opportunity of answering them, as I think, with success. At any rate, the whole discussion is in the highest degree attractive. In the preceding remarks I have only indicated a few of the principal additions which the author has made to his former work, leaving others unnoticed, as well as many slighter improvements and amplifications. I have hardly alluded to the main work, assuming the first edition to be familiar to the majority of readers. Perhaps my remarks may serve to induce any with whom this may not be the case, to seize the first opportunity of supplying an essential defect in their Shakespearian knowledge. Felix Liebrecht.

Clément Marot, and other Studies. By Henry Morley, Professor of English Literature, University College, London. London: Chapman and Hall. 1871.

A portion of these two volumes is filled out by two or three popular addresses, which have been publicly delivered, and some articles which have already appeared in *Fraser's Magazine* and the *Fortnightly Review*. The remaining space is devoted to a lengthy life of Clément Marot, and as regards this part of the work Mr. Morley excites the expectations of his readers by the announcement that he is going "to tell the truth" concerning him.

We know Marot almost wholly from his writings, many editions of which have appeared varying greatly in merit and completeness. The last, of which Mr. Morley seems to be ignorant, came out in 1869. It is a complete edition, of remarkable beauty, printed at Lyons, at the celebrated press of L. Perrin. This edition is without notes, but the editor, M. Philibert-Soupé, has prefixed to the first volume a fairly sufficient preface, in which he takes a broad just view of the character of the man, and shows considerable knowledge of the century in which he lived—just that knowledge in which Mr. Morley is lamentably deficient. His very conception of Marot, the court poet, as a man whose one object in life was the reform of the Catholic Church, is sufficient to betray him if more positive proof were wanting. But it is not. The extraordinary blunder made at p. 109 may be selected as an example: firstly, of the carelessness with which Mr. Morley has made the undigested note-book, the contents of which have been tumbled into the present volumes; secondly, as giving evidence of his want of clear perceptions as regards the nature of that very sixteenth century with which he so often parades his acquaintance. Clément Marot's chief patroness was Margaret, sister of Francis I., daughter of Louise of Savoy, the authoress of the *Heptameron*, of the *Miroir d'une âme pécheresse;* her letters are now in our hands; we know her as a woman subtly delicate in mental touch, of many accomplishments, tenderly emotional, full of natural religious sentiment, stimulated by a sad and troubled life. The grandmother of Brantome lived with her, and, from hearsay, Brantome has given us in his *Dames illustres* a brief life, told with some feeling. This life Mr. Morley has not read. But he has gone to Brantome, and there he has found, true enough, the life of a Margaret, who lived two generations later, the bride of the *noces vermeilles* of Saint Bartholomew, the beautiful daughter of Catharine de Medicis, divorced by Henri IV. on account of her debaucheries. From this life, as that of the patroness of Clément Marot, Mr. Morley has transferred passages to his pages. In the place of that strange Renaissance compound of mystical devotion and sentimental passion which is typified in Margaret d'Alençon, we have the characteristics of the luxurious sensual animal who was unworthy to be the wife even of Henri IV. This is not only

the confusion of two characters, but of two ages, the age of the mental turmoil of the Reformation, with the bloody Catholic reaction by physical force. Is it possible, that a man who had the slightest true knowledge of the century, could have confounded two persons who were as totally distinct as Elizabeth of Bohemia from Queen Elizabeth, or Queen Anne from Anne of Denmark?

Strung together by passages of contemporary history degraded into matter for mere personal gossip, these volumes are for the rest made up of dull paraphrases or duller translations of the writings of a poet who was never dull. In short, they are a specimen of bookmaking on the same plan, executed in the same style, as Mr. Morley's so-called *Life of Palissy*. E. F. S. Pattison.

LITERARY NOTES.

An article by Düntzer, "Arthur Schopenhauer and his Mother" (*Im Neuen Reich*, No. 16), is chiefly valuable for the portions of an unpublished letter of the latter which it contains. This letter was written in answer to one in which the philosopher, at that time a clerk in a merchant's office, declares that he feels thoroughly unhappy in his position, and longs for another sphere more suited to his talents and aspirations. His mother is evidently not much pleased with her son's extravagant plans, but says that if he insists she will yield to his wishes. In another letter she describes in lively colours the advantages of a merchant's position: if Arthur insists on going to the University he must choose between medicine and jurisprudence. Upon the whole, the letters quoted are written in a calmer style and display more motherly feeling than might be expected from what we know about the most unfortunate relations existing between her and her son.

At the meeting of the Hungarian Academy on May 17 M. Melchior Lónyay, Minister of Finance for the Austro-Hungarian Empire, was elected President in the place of the deceased Baron Eötvös, with M. Antony Esengery as Vice-President. Dr. Joseph Budenz was elected member for the philological department, and MM. Romer, Charles Szabó, and Francis Salamon members for the historical department. As foreign corresponding members for the philological department were elected MM. Ferdinand Wiedemann of St. Petersburg, and Friedrich Kreutzdorf of Esthonia.

From the *Zukunft* of Vienna we learn that M. Ivan Kostrencic has discovered in the *K. K. Staatsarchive*, among the documents relating to the trial in 1671 of the last of the Frangepans for high treason, a volume of poems composed by him in the Croatian language. They are written in the style of the Italian poetry of the sixteenth century. They have excited some surprise at Agram, as it was not known that Frangepan was so gifted a poet. The title of the volume is *Urtic*, or "Little Garden." It is edited by Ivan Kostrencic.

The most ambitious of the many volumes of verses inspired by the military triumphs of Germany (*Das Lied vom neuen Deutschen Reich*, a series of 500 sonnets by Oscar Redwitz) has been fortunate in calling forth letters of acknowledgment to the author from Bismarck and von Moltke, the principal themes of his muse. The former writes in a conventional and diplomatic style; but the aged general appears sincerely to envy the laurels of the great men in the past who owed nothing to these extraneous causes "chance, fortune, fate, or the divine ordinance," by the help of which the German army worked its miracles. It was on this ground he deprecates the excessive praise addressed to him, in a few sentences which may be read with more interest than the poem which suggested them. One sonnet or two on contemporary politics might pass muster, but 500 is too many.

A pamphlet containing eight more of Mendelssohn's charming letters has been published (for the benefit of the German Invalids), with the further attraction of a facsimile sketch, by the musician, of a basket of fruit with a motto from *Fidelio*.

Robert Heller, a well known novelist and newspaper writer, died on the 7th May: his critical judgments made "la pluie et le beau temps" in Hamburg.

Mons. H. Taine is giving at Oxford (Taylor Institution) a course of lectures on the Dramatic Literature of France during the seventeenth century. The lectures are delivered in French, and began on Friday, May 26.

Dr. Krebs, of Freiburg University, is elected Librarian of the Taylorian Library.

The most substantial article in the June number of the *Dark Blue* is an account of the Troubadour Peire Vidal by Franz Hüffer. Of Vidal's life we have satisfactory memorials, and the studies of Diez and Bartsch upon them are known to every Provençal scholar. The sketch before us does not pretend to advance anything like original research, but is simply intended to bring an unfamiliar subject in a popular way before English readers. We would especially commend the general introduction to the article on the spirit of the Troubadour poetry. An example of the author's power of translation is to be found on page 428.

Art and Archæology.

I Codici e le Arti Montecassino, per D. Andrea Caravita. 8vo. Montecassino pei tipi della Badia. 1869, 1870. Vols. I. and II.

The labours of the printer have superseded those of the scribe at Montecassino; and the Benedictines, who for centuries wrote and illuminated manuscripts, now furnish copy to the monks of their own order, who set, correct, pull, and perhaps even bind it.

A thousand diplomas, eight hundred MSS., forty thousand vellums, and numberless other records form the contents of the library at Montecassino; and it is not without pleasure that we see them even partially calendared. Such a work cannot be other than timely, when we are daily reminded of the state to which Italian monasteries are gradually being reduced; and as there is no telling whether Montecassino may not share the fate of San Francesco of Assisi, and be found some day rifled of its contents, it is as well that we should know exactly what Montecassino contains.

The volumes before us are not a mere calendar of manuscripts. They are interspersed with notices of considerable interest as to art and artists of various periods in Southern Italy; and amongst these notices we are inclined to consider as important those which illustrate the 11th century.

Modern criticism seems disinclined to preserve in its absolute form the distinction between Byzantine and Italian art, favoured by authors of this and previous ages; and the tendency of Don Andrea Caravita is to admit that the so-called Byzantine style might be common to artists who migrated from the East, and craftsmen bred exclusively under the influence of Italian tradition. On this point some slight additions have been made to the sum of evidence collected by earlier gleaners in the same field. It is stated in advance of previous writers, that though Desiderius, abbot of Montecassino, in the 11th century, sent to Constantinople for mosaists and workmen, with whose assistance the abbey church and religious edifices belonging to the Benedictines were adorned anew, the wall-paintings of the period at Sant' Angelo in Formis were produced by Italians ignorant of Greek letters, and probably not taught in eastern schools; and much weight is attached to the fact that Greek words introduced into the frescos are either incorrectly written, or written in the Roman alphabet; as for instance,—CX for "Christos," or "Ego sum Alfa et O" for "Alpha and Omega."

More curious, and possibly decisive as regards questions still considered debateable, is the testimony which connects the founder's craft and the carving and ornamenting of bronze with a caste of South Italians temporarily settled at Constantinople. Amongst the many orders given by agents from Montecassino in the east is one from Abbot Desiderius to a house in Constantinople, for the construction of bronze doors to close the high portal of the abbey church. These doors were finished in the year 1060, and bore the name of "Mauro de Pantaleo de Comite Maurone;" that is, they bore the name of one of a family but little less known than that of the Cosmati of Rome. "Pantaleo of Constantinople" had a share in designing and working the bronze gates swung in 1070 to the portal of San Paolo fuori le Mura at Rome. "Pantaleo, the son of Mauro" ordered the bronze gates which still cover the entrance to the cathedral of Amalphi. Finding these men resident at Constantinople, we are tempted to assume that their art was Oriental; yet it is more than doubtful whether this was really the case. The Mauros and Pantaleos are not natives of Constantinople; we gather from a careful reading of the inscriptions preserved in Tosti's *History of the Abbey of Montecassino*, and in Ciampini's *Monimenta*, that Mauro was "gentis Melfigene," an Amalphitan; that Pantaleo was consul for the republic of Amalphi, at Constantinople, in the year 1070. One of the older members of the same caste, "Pantaleo de Mauro," is noted early in the century (in a record read by Camera) as a wealthy citizen of Amalphi, and Mauro di Pantaleo is registered in a document of 1066 at Amalphi. All this leads to the presumption that there existed a clan of sculptors, carvers, and bronze founders in South Italy, and induces us to trace to the same school the Mauros and Pantaleos, and their successors, Barisano of Trani, who cast and chiselled the bronze gates of Ravello, Trani, and Monreale, in and about 1170; and the feebler Bonnanno, whose creations of the same kind, but on a lower scale of talent, are found at Monreale and Pisa. That the ranks of Pisan artists in the 12th century should be recruited from South Italy, renders it the more probable that the same system was pursued in the 13th, and this gives strength and consistence to the supposition that Niccola Pisano is really a sculptor of the South, and not a sculptor of Central Italy.

CROWE-CAVALCASELLE.

THE ROYAL ACADEMY EXHIBITION.

[SECOND NOTICE.]

IN our last notice we selected those painters distinguished by a certain elevation of sentiment and subject, and who most ably represented the poetic side of art. Several however still remain and are to be seen in these rooms, with more or less justice. P. F. Poole is the ablest of the elder men, those who have year after year been in fact the salt of our great annual show, in the opinion of a cultivated section of the public. "Guiderius and Arviragus lamenting the supposed Death of Imogene" (312) keeps up his traditional delicacy of form and lovely tone of colour; but Mr. Poole's admirers will rather go back to his Decameron picture, now to be seen in the International, for a full impression of his powers. Arthur Hughes's "Evening" (1025) is a very characteristic work, lovely in tone and true in the realization of the condition of things intended, although it is not one of his important productions. Neither is Mr. F. Walker a large exhibitor this year, his only picture being one that would have been rigorously excluded had he not been just made an associate. As it is, the committee of hangers, being bound to show it on the line, have placed it in the worst place they could find. The "Prisoner at the Bar" (1168) is nevertheless a terrible and interesting work. The prisoner is a woman, one who has been baited by the world, and who is accused, one is almost sure, of murder. Whether innocent or guilty is the question for the spectator as much as for the jury. Of Mr. J. C. Hook's four pictures, which are all as strong and fresh as ever, "A Thorn" (153) is perhaps the finest. The clearness of a sharp atmosphere was never better painted than by him, and his choice of Norway this year has yielded admirable results. "A Thorn" is not one of these, although it has the same bright clearness; the action of the shepherd extracting the thorn, and of the dog being operated upon, are equally good: the dog knows perfectly what its master is doing, and licks the hand that relieves it. Mr. Marshe's "Missing Boats" (166) is a picture of a subject (Women waiting by the shore) that has been frequently treated; so often, indeed, that we do not augur well for the new man who tries it again; and yet this work has such sterling qualities of painting as to lift it quite out of the mass, and warrant our placing it here. "The New Picture (Portraits)" by Mr. Calderon, is an extraordinary piece of character, as well as of painting ability; but the painter's other, and we suppose more important, work, "On her Way to the Throne," is one of the violent spasmodic attempts at finding a new subject, such as we see from time to time. Imagine the tiring women and the perruquier running after a lady and finishing her at the foot of the staircase, while the flunkeys open the drawing-room door for her! Mr. Elmore treats the story of Judith again (1120), and also Lenore (124), in which he has been unlucky in his model for the cavalier, and has altogether misinterpreted the ballad. Sir G. Harvey's "The School dismissing" is a splendid piece of painting, not only in character, but executively in imitation of the texture of surfaces. This picture by the veteran President of the Scottish Academy gives a key to the success of so many Scotchmen lately imported into London, and still coming. We do not mean Archer, who is admirable this year, nor Houston, but nearly all the others, who have taken the Academy by storm, and threaten to continue to keep it—Messrs. Faed, Nicol, Pettie, Orchardson; and now Mr. K. Halswelle, "Contadini in S. Peter's, Rome" (359); Macnab, "At the Fountain of St. Anne, Brittany" (100); Graham, "In the old Garden" (71); Ritchie, "A London Merchant fishing for Salmon off the Old Swan Stairs, 16th Cent.," (261); besides the landscape painters—all able executive artists without any mental power or purpose in particular. Mr. Halswelle's "Contadini" depends entirely on the imitation of the rough coats and brown bread, otherwise the vast canvas is vacuous, notwithstanding the inflated verses inserted in the catalogue. We do not mean to insinuate that Sir G. Harvey's picture is wanting in insight into nature and character or weak in dramatic ability—far from it, nor do we suppose every Scotch painter is a pupil of his; but the "School dismissing" certainly has the qualities that distinguish all these younger men.

Mr. Armitage's "Peace; a Battle-field of the Late War twenty Years hence" (19) is very ably worked out; an interesting incident unaffectedly rendered. This year he leaves more serious history to Yeames, Wynfield, and others: the first painting "Dr. Harvey and the Children of Charles I. at the Battle of Edgehill" (81), and the second "The Dead Buckingham" (114). But these are rather historical *genre* than the true metal itself, for which we must consult Mr. and Mrs. Ward, Mr. Stone, and several gentlemen who paint Mary Queen of Scots as a sweet innocent; Mr. Horsley indeed finding her to have been a sainted child, with a vocation for the cloister, feeding doves, after giving away her last silk gown to the maids in waiting.

Perhaps some of our readers think it high time to notice the most attractive picture of the year! Aaron and Hur may support the Arms of Moses in vain as far as public interest goes; Hercules may wrestle with Death, and the visitors pass him by; and the ghastly fear of Claudius receive no sympathy except from the pretorians; but Mr. Frith's "Salon d'Or, Homburg" (158) has always its crowd of living votaries as well as crowd of painted gamblers. And very reasonably so: many who drop into Burlington House would rather drop into the Kursaal of Homburg if it were within reach, and not being within reach they can't have a better substitute than this picture, which is full of action, capitally characterized, entirely free of caricature, painted with zeal and untiring interest in the subject in hand. The charm of delicate sharp bright handling possessed by the "Sea-beach at Ramsgate" and the "Race-course" is not here; but then the size is larger and the subject is so different, being an interior with the foreground figures but half-length. How different is the treatment here from that of Gustave Doré when he painted the same Salon! And we are bound to say Frith's is infinitely more true; the fact being that all the world goes to

Homburg, and all who go to Homburg visit the table of green cloth, and lose a few shillings or a few sovereigns without any great harm. There are a few who go back and succumb to the fascination, and there are the confidential few who benefit; but, after all, you might go every day for a whole year and never see a vivid moment of passion on any of the hundreds of faces. At the same time to the initiated there is a great deal to see, and we find very much interest in this picture of a scene whose days are numbered now.

The number of French works here is not so great as we were led to expect. Among these, Gerome's two pictures, with their somewhat brutal view of the sex, are the most important. Hanging near "A vendre" is another French picture of very different sentiment, admirable in several ways, "The Morning and the Evening of Life" (1157), by M. Hébert. "Spring" (453), by M. Heilbuth, attracts a good deal of attention. "The young man," however, whose "fancy lightly turns to thoughts of love," is so manifest a scoundrel that the admirers of the sentiment intended to be expressed feel a little disquieted, and pass on to something else, Mr. H. W. B. Davis's landscapes for example, which are among the finest things in the rooms. "The Pretorium at Neufchâtel, Pas de Calais" (562), in particular, is very impressive and beautiful, as also is his other contribution (562). As we said last notice, the landscapes this season form an important element of the success of the Exhibition. The more we see of Mr. Cole's "Autumn Gold," the more surprising it seems in power and splendour; and there are many landscapes and a few sea-pieces in several rooms of surpassing excellence besides those already mentioned. Hering's "Tormore" (568) is one of these; Miss Redgrave's "Glebe" (45) is another; "The Shore at Limehouse" (435) by C. N. Hemy also. "Evening near Cricerith, North Wales" (345) by G. Hall is, as far as it goes, a perfect success. H. Moore's two sea-pieces (1144-6) are very fresh and fine, and serve to show us how amply he has been imitated on the walls of the Dudley Gallery!

W. B. Scott.

ART NOTES.

It seems that the publication of the wall-paintings in the lately discovered sepulchral chambers near Corneto (the ancient Tarquinii) throws a new and pleasant light on the artistic genius of the Etruscans. An abstract, published in the *Cologne Gazette*, of Dr. Helbig's forthcoming essay on the subject, for the *Annals of the Archaeological Institute*, speaks of these frescoes as very interesting illustrations of the worship of the dead. There are three separate chambers, one known as the *tomba de' vasi dipinti*, another as the *tomba del vecchio*, and the third as the *tomba dell' Orco*. The subjects of the frescoes are all connected with ideas of the future life; and their style indicates a modification of native Etruscan under Hellenic influences; those of the *tomba dell' Orco* being pronounced the latest, and fixed as belonging to the Alexandrine epoch.

The distinguished Danish artist, Mme. Jerichau, has in preparation a volume for the English press, on the subject of her artistic and social experiences in the East.

Ernst Förster contributes to the supplement of the *Allgemeine Zeitung* for May 14th a very interesting account of the Cavour monument, nearly completed by the sculptor Dupré, and of Prof. de Fabris' detailed drawings for the restoration of the façade of the Duomo at Florence. It is a remarkable fact that Signor Dupré had been by personal prepossession a partisan of the grand-ducal régime, and an opponent of Italian unity. The composition of his monument is as follows: a square lower pedestal, with semicircular projections on two of its faces, and a polygonal upper pedestal surmounted by a sculptured group of Italy—an emblematical female figure—raised from the ground by Cavour. The lower pedestal is adorned with reliefs, scutcheons, and inscription, and sustains two colossal groups on the sides which have the projecting bay, and two colossal single figures on the plain sides. Of the groups, one is an allegory of "Politics," the other of "Independence;" the single figures are half reclining, and represent, one, "Strength," and the other "Duty." Herr Förster speaks warmly of the excellent modelling and lively realism of these figures. With regard to Prof. de Fabris and his architectural designs, Herr Förster considers that the new and developed plans are in many points a material improvement upon the first sketch approved by the international juries of selection in 1865 and 1867. There seems to be still much uncertainty about the provision of means for carrying out the work; but it is said that the present Syndic of Florence, the Cavalier Petruzzi, is bent upon putting it in hand without loss of time.

According to Dr. Hermann Rollett (in the *Allgemeine Zeitung*), the collection of gems formed by Herr Tobias Biehler, a private citizen of Vienna, must be one of the most important now in existence. The owner, it appears, has in preparation a complete catalogue of his collection, which contains more than eight hundred cameos and intaglios, almost all gold-mounted, of all styles and periods,—Egyptian, Babylonian, Persian, Etruscan, Greek, Roman, Greco-Roman, Early Christian, Byzantine, Italian cinquecento, and European of the last three centuries.

In the *Bullettino dell' Instituto archeol.* for April, Helbig criticises Brunn's important theory as to ancient vases, the use of the imperfect tense (εποιες, &c.) occurring only before the 60th and after the 150th Olympiad; between these dates the aorist (εποιησε, &c.) occurs. Many aorists hitherto assigned to early dates are thought by Brunn to belong to the later period, the use of the imperfect being merely one among many signs of an affected archaism; *e.g.*, in the midst of modern letters of the alphabet some old forms are often introduced, and the same is the case with the artistic representations. Helbig agrees with this view as to the native Etruscan vases, but not as to the imported Greek ones. It is evident how important the question is for the history of art. We want a good statistical account of all the vases hitherto found, where found, in company with what other objects, and in what tombs.

In the *Contemporary Review* for May, Dr. Mommsen gives a notice of "the Catacombs," pointing out that they are neither old quarries nor secret works of the early Christians, nor against the law. Burial clubs were especially favoured at Rome, and it was merely necessary for persons favourable to Christianity to obtain possession of the ground above. The oldest is the one now attributed (but not conclusively) to Domitilla. If hers, then a granddaughter of Vespasian founded a Christian cemetery in Rome before the year 95 of our era. The catacomb of Callistus, founded about 200, was the burial place of the Roman bishops during the greater part of the third century, the epitaphs being still all in Greek, showing who formed the preponderating element in the church; and in fact the early Latin fathers are all of Carthage, not of Rome. The earliest burials, like those of the heathen, had taken place in private ground. Even the Jewish burial places, at least in their own land, were but family graves. But the new idea of Christian union led to the united burial grounds, and these became places of devotion for the community; the grave became a cemetery, the cemetery a church. This system of burial ended with the siege of Rome by Alaric in 410.

At Holler, in the Grand-duchy of Luxemburg, a labourer has discovered a collection of Roman coins, 378 in number, buried at a considerable depth; amongst the coins are some of Vespasian, Domitian, Nerva, Trajan, Hadrian, Antoninus, Aurelius Commodus, Divus Verus, &c.

Music.

Mr. Bache's seventh Annual Concert was devoted chiefly to orchestral compositions of Liszt, and this feature makes it one of the most interesting performances of the season. Liszt's First Concerto in E♭ for pianoforte and orchestra consists of four different movements linked together into one uninterrupted piece of high musical beauty and variety. The pianoforte part is exceedingly difficult, but at the same time written with such knowledge of the nuances and shades of sound as only the most consummate master of this instrument could acquire. Mr. Bache, a pupil of the composer's, showed a thorough comprehension of

his author's intentions, and an unusual amount of technical skill in overcoming the immense difficulties of the work. The melodious construction of the concerto, although charming in effect, is not brilliant in the way of original invention. The theme of the quasi-adagio seems to show a little more than desirable affinity with Chopin's nocturnes; in other parts we gladly recognise successful approximations to national Hungarian colouring. The orchestral part is written with great skill and discretion, so as not to drown the pianoforte.

The second work of Liszt produced at this concert was his symphony in C, or, as he calls it himself, the *Poëme symphonique "Les Préludes."* This piece was suggested by a passage in Lamartine's *Méditations*, and Liszt uses this passage as a sort of programme to explain the different phases of his melodious progress. Whether the understanding or enjoyment of a piece of music is furthered by this stricter definition of its poetical meaning is a much ventilated question; in any case, it is of high psychological interest to watch, as it were, the development of musical ideas out of poetical or philosophical ones. In this case especially the explicit and verbal basis was extremely adapted for musical purposes; even the orthodox four movements of a symphony might to a certain extent be indicated by the gradual passing of the human mind through the stages of happy and disappointed love, consolation in solitude, and firm resolution to begin life in a higher sense. This climax Liszt has followed out in his music with a great depth of conception and subtlety of poetic feeling, combined with masterly instrumentation. What we said about the concerto applies to a certain extent to the motives of the symphony, which exhibit the powerful influence of German and French romanticism. Perhaps it may be desirable here to correct in a few words the erroneous notion about Liszt's position in the development of modern music, which is very common in England. It is generally believed that Liszt's music is closely connected with the ideas of Richard Wagner, which it is supposed to illustrate as well as the musical philosopher's own compositions. So far from this being the case, Liszt's theoretical notions about music as carried out in his works seem to show a much closer affinity with those of Berlioz or Schumann than of Wagner, whom he does not nearly equal, either in destructive or constructive power.

The concert on Friday was conducted by Messrs. Bache and Dannreuther, who, considering the difficulties and novelty of the works performed, managed their task admirably.

FRANZ HÜFFER.

On the evening of the *Dürer-Fest* (21st May), according to the Munich papers, a masterly performance of the last act of Wagner's *Master-singers* was preceded by the representation of a new historical drama on the subject of Albert Dürer's life, in which the painter himself, Kaiser Max, Agnes Dürer, and Perkheimer, all appear as characters. "The whole piece, redolent of historical atmosphere, kept all attentions strained by its dramatic development and original delineation of character until, at the fall of the curtain, the most prolonged storm of applause filled the house." The same play was performed on the same evening at Weimar. Its author is uncertain, but is said to be Julius Grosse.

New Publications.

CASTELLANI, A. Gems. Notes and Extracts, transl. by Brogden. Bell and Daldy.

DEMATTIO, F. Le lettere in Italia prima di Dante. Con un' appendice sui varii accidenti subiti dalle diverse forme del verbo italiano. Innsbruck: Wagner.

GOTTSCHALL, R. Portraits u. Studien. 3ter u. 4ter Bd. Paris unter dem zweiten Kaiserreich. Leipzig: Brockhaus.

HACKLÄNDER, F. W. Sorgenlose Stunden. Stuttgart: Krabbe.

HOLLAND, Dr. W. L. Briefe der Herzogin Elis. Char. von Orleans, 1707–1715. Published by the literar. Verein in Stuttgart.

LEMCKE, C. Geschichte der deutschen Dichtung neuerer Zeit. 3 Bde. 1. Bd. Von Opitz bis Klopstock.

LOWELL, J. R. My Study Windows. Sampson Low.

MARCO POLO, Ser, The Book of. A new English version, illustrated by the light of Oriental Writers and modern Travels, by Col. Henry Yule. 2 vols. Murray.

RUSHTON, W. L. Shakespeare's Euphuism. Longmans.

SHAKESPEARE. A new variorum edition. E. H. Turners. Vol. I. Philadelphia: Lippincott.

Theology.

The Authenticity of John's Gospel, deduced from Internal Evidence, with Answers to Objections. By James Orr. London: Williams and Norgate. 1870.

The Witness of St. John to Christ; being the Boyle Lectures for 1870. With an Appendix on the Authorship and Integrity of St. John's Gospel and the Verity of the Johannine Writings. By the Rev. Stanley Leathes, M.A., &c. London: Rivingtons. 1870.

THE Essay of Mr. Orr and the Lectures of Mr. Leathes, which differ very widely in their general tone and character are alike in this, that they are designed to treat some of the questions commonly raised about the fourth Gospel on principles of "common sense." Mr. Orr deals chiefly with the authorship of the Gospel; Mr. Leathes deals chiefly with the intrinsic value of the contents of the Gospel; but both touch upon the principal points which have been controverted as to the origin, teaching, and acceptance of the Book.

"The question [of the authenticity of the fourth Gospel] is one not for the learned exclusively," writes Mr. Orr, "but which [I] would submit to the calm good sense and discriminating judgment of the British public" (*Pref.* p. viii.). "I have tried," writes Mr. Leathes, "in these Lectures to take a common-sense view of the most extreme position in which a school of modern criticism has endeavoured to place the Gospel of St. John. . . . . If the fourth Gospel were written A.D. 150, then it must be a romance; but it is a supposition of high antecedent improbability that it was written so late as the middle of the second century. . . . . If it is even a romance, it is a romance that was written for a purpose—a very evident and declared purpose; and so being written, the issue turns wholly upon the truth or falsehood of the conception embodied—the justice or injustice of the purpose aimed at. . . . . The Gospel comes with its own independent message to every individual reader. . . . . The message comes with its own witness to the truth; and all who will believe shall *know* that it is true" (*Pref.* pp. vii. xiii. xvii. xviii.).

Mr. Orr traverses well-trodden ground, and the value of his Essay lies rather in his evident sincerity than in the novelty of his arguments. Obvious imperfections of style and information (see pp. 20, 38, 41, 43, 77, 99) only place in a clearer light the freshness and reality of the observations which present themselves to his mind; and though he is wholly without sympathy with the theology of St. John, and so utterly devoid of all sense of the "poetic" symmetry of St. John's style as to argue that the repetitions in his first epistle "unmistakably betray the tautology and infirmity of extreme old age" (p. 114), he concludes that the first three Gospels and the fourth "in some points so incidentally dovetail" one into the other as to prove that "there is the soul of truth in both" (p. 36). At the same time he does not attribute the actual writing of the fourth Gospel to St. John. His theory is that the apostle "required the eyes and hands of others to aid him in writing down these records of his Master's life" (p. 89); and he considers that xix. 35 and xxi. 24 evidently show that he received such assistance. But though Mr. Orr has been anticipated in most of the details which he brings forward, the independence of his research and judgment gives substantial weight to his criticisms; and there is strong good sense in what he says of the "self-assertion" of Christ as shown in his discussions with the Scribes and Pharisees recorded by all the Evangelists, and not in St. John's Gospel only (pp. 82 ff.); of the contrasted styles of the Apocalypse and Gospel (pp. 85 ff.; compare *Academy*, Oct. 22, 1870, p. 9); and to indicate one point specially, he brings out with considerable skill the manifold evidence which the Synoptists preserve of the teaching of Christ in Judæa and Jerusalem prior to the Galilean teaching which they themselves record at length (pp. 13 ff.).*

* It is singular that those who deal with this question neglect the remarkable and unquestionably true reading in Luke iv. 44, Ἰουδαίας, for which Γαλιλαίας is an early Western substitution.

The Lectures of Mr. Leathes exhibit far greater originality, and are inspired with a profound feeling for the teaching of St. John. It is perhaps to be regretted that his argument from the internal character of the Gospel has been in some measure entangled with an indefinite and incomplete discussion of its authenticity. Mr. Leathes points out very forcibly and justly that "the question of Johannine authorship and the question of intrinsic worth and verity in reference to the fourth Gospel" ought to be kept "separate and distinct," but the practical effect of his actual treatment of the subject is, that what appears to be inadequate or indecisive in his exposition of the argument from the outward authority of the book, detracts from the weight of his argument based on its inward truthfulness and power. This is the more noticeable because Mr. Leathes' strength lies in theological and ethical reasoning, and not in historical or textual criticism. No one can be really influenced by the simple consideration that it is more likely than not that St. John wrote the Gospel; and it is hopelessly confusing for a reader to find the pericope of the adulteress (7, 53–8, 11) and the last chapter of the Gospel classed together and dismissed with the same judgment that "on internal grounds, which are those mainly relied on by critics, there is not sufficient reason for rejecting either of the passages" (p. 351; comp. p. 46). On no principles of criticism can the two passages be placed in the same category. They really have nothing in common. The story of the adulteress is omitted by the oldest and best representatives of every group of authorities, so that there is no sure evidence that it formed part of the Gospel of St. John till late in the fourth century; and then, so far as existing documents show, it was confined to a single group characteristically marked by interpolations. On the other hand the last chapter (with the doubtful exception of the final verse) is not omitted or known to have been omitted by any authority whatever.

But when once Mr. Leathes leaves the field of criticism and examines "the characteristics of St. John's teaching" (Lect. 2), "St John's appeal to the inward witness" (Lect. 4), "St. John's message to the age" (Lect. 7), "St. John's place in Holy Scripture" (Lect. 8), his argument is vigorous, subtle, original, and above all marked everywhere by a deep personal conviction of the divine truth of the writings attributed to the Apostle. Apart from some details of readings and interpretation (pp. 42, 78, 83), the argument in which he shows that the "object of the writer of the fourth Gospel is to draw out the identity of the Word made flesh with an invisible and ever-present Being who is the fountain of life and light and truth" (pp. 45 ff.), is full of beauty and power; and the paragraphs in which he unfolds the bearings of St. John's revelation of Christ as "the Word who was God," as "that Man who is the Root of every man," as "the eternal Life" (pp. 232 ff.), in relation to the revelation in the Old Testament and to the religions of the world, are full of striking and just thoughts.

Arguments of this kind, which appeal directly to the spiritual instinct, are indeed more fitted for popular treatment than historical problems, which presuppose a familiar acquaintance with the general characteristics of a distant age, and at the same time call for a constant adjustment and balancing of details, a nice calculation of what was natural or strange in the contemporary treatment of current documents, a cautious reserve in affirming conclusions, which leave on the unpractised reader an impression of vagueness and uncertainty. At the same time there are some general features in the history of St. John's Gospel which admit of being presented in a more simple and exact form than that in which they commonly appear. It seems, for example, to be commonly admitted that "this Gospel was generally known much later than the others" (Leathes, *Lectures*, p. 29), but the admission is certainly unwarranted. The substance of the Synoptic Gospels, as coinciding in the main with the public oral teaching of the Apostles, was early and widely known; but though the composition of the Gospel of St. John was considerably later than the composition of the other Gospels, its use and authorship are established by evidence exactly similar in kind and date to that which attests the use and authorship of the Synoptic Gospels; and in each case the evidence is limited and fragmentary only in consequence of the essential character of the sources from which it is drawn, and the relation in which written records stood to the living tradition of the first age. Thus, practically, the evidence for the authenticity of St. John's Gospel is earlier and more complete than the evidence for the authenticity of the other Gospels. It is impossible to establish this conclusion in detail here; but anyone who will weigh the evangelic references in the sub-apostolic writings, in Papias, in the Elders quoted by Irenæus, in the fragments given in the Treatise [of Hippolytus] against Heresies, in the letter to Diognetus, in the Clementine Homilies, in the Testaments of the xii Patriarchs, in Justin, in Irenæus, with a view to the comparison indicated, will be able to see that the supposed difference in the historic evidence for the separate books of the Synoptists and St. John is imaginary, and owes its semblance of truth only to the difference in their subject-matter.

It is still more important that the Gospels, and especially the Gospel of St. John, should not be isolated from the Christian Life of which they are the partial reflection, both in their contents and in their shape. Yet it frequently happens that they are treated simply as books, without regard to the facts to which they owe their origin, while the evidence of their use which is supplied by modifications of Christian thought and practice is almost unconsciously set aside. Slight and subtle coincidences between the Gospels of St. Luke and St. John, to take one signal and instructive instance of the first error, are explained by the supposition that the author of the fourth Gospel adapted in his composition minute fragments from the earlier record, when in fact nothing less than a common background of truth, which neither Evangelist exhibits completely, can explain the manifold agreement and difference of the two narratives. On the other hand, the progress of Christian speculation in the first half of the second century is intelligible as a result of St. John's Gospel, and not intelligible as the cause of it.

The Life of Christ, to place these considerations in the clearest light, as presented to us by St. Paul in his unquestioned Epistles, necessarily includes the two aspects of it which are separately drawn by the Synoptists and in the fourth Gospel; and the scanty remains of Christian literature—catholic and heretical—exhibit from the beginning of the second century distinct traces of thoughts characteristic of the writings of St. John.

Yet once again: the peculiarities in the composition of St. John's Gospel, the latent references to other facts, the suggested answers to difficulties, the reiteration of a witness solemnly given, become so many confirmations of its historic truth, if they are placed in connection with the earliest tradition of its origin given imperfectly in the Muratorian fragment. When once the idea is presented to us, we can feel that the book preserves the lessons which the last Apostle had repeated through long years in familiar intercourse to his circle of disciples. These had been first trained, some in the school of the Baptist, some in the school of Apollos, some in the school of St. Paul, and their several requirements indicated what was yet wanting in the evangelic memoirs. In this sense a later and more mature

experience determined the contents of the fourth Gospel, as an earlier and more general experience had determined the contents of the first three; and St. John, on the eve of his departure, gathered up, at the request of those who had heard him, the teachings which had proved to be a spring of life (xx. 31). B. F. Westcott.

Onomastica Sacra. Paulus de Lagarde edidit, Gottingae, 1870, prostat in aedibus Adalberti Rente. Pars I., pp. 304; II., pp. 160.

St. Jerome, as it is well known, devoted himself, with the assistance of a learned Jew, to a careful study of Hebrew and Chaldee, in order to make himself a master of the Old Testament Scriptures in the original. His labours were not in vain. Of all the patristic Commentaries which have come down to us, his are among the most valuable, though at times the influence of his Agadic teacher is too plainly perceptible. In addition to these works, he composed a treatise on Hebrew names that occur in the Bible, derived from various Greek and Latin authorities, and known under the title of "Hieronymi liber interpretationis Hebraicorum nominum." Of whatever value this may once have been, at present it can only be looked upon in the light of a literary curiosity. When, for instance, we find Ashkenaz (Gen. x. 7) explained by "ignis sic adspersus" (אש כן ז, ז standing for the root of נזה), we can only regard the writer as a fanatic Agadist. Still more strange are his interpretations of the New Testament, where pure Greek words are explained from the Hebrew. Thus *Cæsar* (Luke ii. 1) is said to signify "possessio principalis" (קי ? ישר, from קנה?), *Erodes* (i. 5) "pellicus gloriosus" (עור הד), *Cappadocia* (Acts ii. 19) "manus redemptu domino" (כף פדה יה). The readings slightly vary in the MS. copied in Italy by F. Delaunay; the arrangement also is alphabetical instead of following the order of the books of the Bible. In it we find *Cappadocia* explained by "manus tortoris, vel manus exploratoris, seu manus domino redimens vel manus redempto domino." *Herodes* (not Erodes) signifies "pellibus glorians vel pelliceus gloriosus." Such interpretations were continued after St. Jerome's time, and carried to even more extravagant lengths. Several editions of the present treatise of St. Jerome have already appeared, and are enumerated by Prof. Lagarde in his preface; the one before us has been augmented by readings gathered from various MSS.—Pages 82–160 contain "Hieronymi de Situ et nominibus locorum Hebraicorum;" the translation of Eusebius περὶ τῶν τοπικῶν ὀνομάτων τῶν ἐν τῇ θείᾳ γραφῇ, to be found between pages 207–304. It is unnecessary to speak of the value of this treatise on Biblical geography; suffice it to say that it is indispensable for anyone who attempts to write on Biblical subjects. Larsow and Parthey edited it at Berlin in 1862, according to the alphabetical order. Prof. Lagarde preserves it in its original form, which follows the order of the Biblical books.—Pages 161–207 contain an anonymous Greek treatise on the explanation of Biblical words, published first by Hohlenberg in 1836. Prof. Lagarde mentions in his preface the various editions which have already appeared, and the different MSS. of which he made use. Biblical references and variations of the text are supplied throughout, either at the foot of the page (161–304), or in a succeeding part (1–160). It is superfluous to say that the work is carried out in an accurate and scholarly manner; nothing of a different character could be expected from the pen of Prof. Lagarde. In the second part (pages 95, 96) Prof. Lagarde suggests some emendations for the text of the Pentateuch. Others have already appeared in a former number of the *Academy* (No. 15, p. 65). Of the present ones, which are nine in number, the most happy, in our opinion, is that of Gen. xxiv. 62, where Prof. Lagarde suggests בא מבאר לחי ראי, instead of בא מבוא (מבא) באר לחי, adding, "librarius negligens duas litteras repetivit." Perhaps we should read בא מבאר באר לחי ראי, as in Gen. xvi. 14, קרא לבאר באר לחי ראי. Three indices, viz. of Latin and Greek words, and of Biblical passages, complete this work, and will be found of great value to the reader. Ad. Neubauer.

Contents of the Journals.

The **Journal of Philology**, vol. iii. No. 6, contains six papers bearing on Biblical or early Christian literature. Prof. Lightfoot writes on the Epistle to the Romans, in reply to a criticism on his former paper by Mr. Hort. Prof. Cowell traces the ethical distinction "thought, word, and deed," in the later Vedic and the Buddhist literature, in the Zendavesta, among the Manicheans, in Plato, the LXX., and Christian liturgies. Mr. E. H. Palmer advocates the theory that the Christian pseudepigraphic writings are "portions of a cyclic narrative of the events of sacred history." Mr. Wratislaw discusses the meaning of Acts xxi. 37, 38, Rom. iii. 30, and Titus iii. 8, 14; and Mr. C. Taylor that of nine difficult passages in Genesis. The notes on the latter are frequently original, but seldom convincing—that on *çohar*, Gen. vi. 16, seems the most important; it is shown that Gesenius was hasty in rejecting Schultens' rendering, "dorsum, *i. e.* tectum." On *b'shaggām*, Gen. vi. 3, it should have been noticed that the correct reading has a Pathach. Mr. Vansittart attempts to show how the triple variations in the Greek of 2 Pet. iii. 10 and Heb. xi. 13 may have arisen.

In the **Zeitschrift für wissensch. Theologie**, 1871, No. 3, Prof. Hilgenfeld defends the genuineness of the Epistle to the Philippians, and translates the Psalms of Solomon, with criticisms on E. E. Geiger's recent edition. Prof. Holtzmann examines the relation of Barnabas to the Gospel of St. John, and concludes that our first Gospel is the only work of the kind known to the writer.

In Geiger's **Jüdische Zeitschrift**, 1871, No. 2, we find a paper on Onkelos, designed to show that the Targum, so called, is based on an older work, and in its present form is not older than the fourth century. Dr. Zunz writes on attempts to fix the date of the redemption of the Jews. An anonymous writer (the editor?) accepts Prof. Lagarde's explanation of Isa. x. 4, in the *Academy* of Dec. 4, but takes Beltis as a symbol of Babylon, and Osiris of Egypt. He omits, however, to discuss the philological side of the question. If the former of the two divinities has an Assyrian name, it should perhaps be read בלתי, as the case-endings were carefully distinguished in Assyrian; if Phœnician, ought there to be a ' at all? Cf. Schröder's *Die Phönizische Sprache*, p. 145.

In the **Studien und Kritiken**, 1871, No. 3, Prof. Riehm discusses the origin of the Cherub; he connects it with "the cloud of Jehovah," which the fancy of the Hebrews in a prehistoric age pictured as a being like a bird. In the same number M. Oppert refutes the identification of Chedorlaomer with Kudur-mabug.

In the (Rom. Cath.) **Theolog. Literaturblatt**, the principal article is Prof. Langen's review of vols. 2 and 3 of the Vienna edition of Cyprian. He proposes many important corrections of the text. Another writer gives a remarkably fair account of Strauss's Life of Voltaire.

In **Im Neuen Reich**, No. 14, Prof. Nöldeke attempts to show the mythical origin of the patriarchal narratives. The Essay is rich in bold hypotheses and ingenious combinations.

New Publications.

Ewald, Prof. H. Die drei ersten Evangelien u. die Apostelgeschichte übersetzt u. erklärt. 2te vollständige Ausgabe. Erste Hälfte. Göttingen: Dieterich. [Forms the first part of a complete edition of the author's published works on the N. T., with the addition of a translation and commentary on the Acts.]

Lightfoot, J. B. On a fresh revision of the English New Testament. London: Macmillan. [Contains a valuable appendix on the words ἐπιούσιος, περιούσιος, with an almost exhaustive collection of the traditional evidence. The conclusion arrived at is that the rendering "daily bread" need not be disturbed. Comp. review in *Athenæum*, May 6.]

Pusey, E. B. The Minor Prophets; with a Commentary and Introductions. Part IV. Micah i. 13 to Nahum. Oxford and London: J. Parker and Co.

Williams, R. The Hebrew Prophets. Vol. II. London: Williams and Norgate.

Physical Science.

New Problems of Comparative Geography. [*Neue Probleme der vergleichenden Erdkunde.* Von Oscar Peschel.] Leipzig: Duncker and Humblot, 1870.

Anatomists have taught us to observe that, by a gentle and easy scale of little transitions and deviations from one species of animals to another, the same formation may be traced throughout a series, the extreme individuals of which appear to be wholly different.

The philologer also, following back step by step the gradual changes in sound and shape which the names of things have undergone, link by link forms a chain which not only binds together the words of living languages, but connects these with tongues long since unused.

Dr. Peschel, it is believed, is the first to have systematically applied this comparative process to the varieties of mould and outline which the forces of nature have so curiously wrought in the materials composing the outward surface of the earth; and just as comparison in anatomy leads the way to arguments on the origin of species, as philology aids in proving the unity of the great branches of the human family, and compels the very words to unfold the story of the peoples by whom they are spoken, so here the author seeks to show how the form of each particular portion of the outer world, each landscape, bears in itself a record of the contests and changes which it has suffered, and how, from a survey of the distribution of resembling forms, some light may be thrown upon the causes by which these have been originated.

The term "Comparative Geography" is, indeed, not new, but it appears to have been applied to a great work which deserved a higher title. Carl Ritter's "Geography in Relation to the Nature and History of Men, or General Comparative Geography," treating as it does of the subtle union that exists as between body and soul, so also between nature and history, homes and peoples, should much rather, observes Peschel, have been named a "Geographical Theology," or an attempt to penetrate the design of the Creator from a study of His works.

The Thirteen Essays which compose Dr. Peschel's book have appeared in substance from time to time in the journal *Ausland*, but have been written with the evident design of illustrating this new application of the powerful instrument of comparison. It may perhaps best show how the author has accomplished this, to follow the salient points of his reasoning on one or two of the subjects which he has chosen.

The essay which forms the second chapter treats of the formation of Fjords. These are deep and precipitous cuttings, generally at a high angle, into a steep coast, and are distinguished from all other forms of coast-land by their local aggregation. Only on the coasts of Europe and America, and of some islands, are fjords to be found, and there generally on westward or northward coasts. It is also observed that they are confined to the higher latitudes; in Europe, to northward of the 51st parallel; on the east coast of America to 44°, and on the west coast to above 48° of north latitude. In the opposite hemisphere no fjords occur within a limit of 41° from the equator. Examining these fjord belts still more closely it is seen that their bounds agree with the winter isothermal lines, and that no fjord is to be found in any warmer zone than that shut off by a yearly temperature of 50° F.; yet within this space these cuttings never fail to appear where a steep coast-line and a heavy rainfall, such as would suffice under a different climate to produce an extensive glacier system, are seen to exist together. These fjords are either actually the channels through which glaciers find their way to the sea, or give proofs that they are the empty paths of former ice-streams. How inviting it is, from their coexistence, to leap to the conclusion that the glaciers, taking advantage of some previously existing depression, have hollowed out the fjords into the form in which we see them, is shown in the acceptance of this supposed cause by men who have explored such inlets in many parts of the earth. But is this their true origin? The comparative survey leads to the very different conclusion, that the fjords now seen on the globe mark the outlines of a former, now retreating, glacial covering which has protected these remains of still earlier upheavals from the weathering and degradation which has befallen any such raised and broken surfaces in warmer regions.

A masterly review of each island group and islet of the globe leads Dr. Peschel, in his next chapter, to refute the old established belief in the existence of mountains and valleys in the sea-bed, similar to the rugged ups and downs of the land, since every island proves itself to be either the unsubmerged height of a sinking portion of the continent nearest to which it lies, identifiable as a former part of the mainland through its geological formation, its fauna or flora; or to have been independently raised by volcanic force or by the labour of the coral insect. There is no island whatever to be found in the high seas whose origin is not traceable to one or other of the latter causes. In no one case does the sea-bed rise above the waters of the open ocean to form such a little earth-spot as an island.

If viewed from the level plains which lie beneath the seas, the continents of the world are the tops of vast table-lands which possess a remarkable unity and connexion one with another. The great heights (chapter vii.) which rise on the edges of these plateaux, if compared, exhibit an unmistakeable parallelism of direction, and, disregarding the chains of volcanic cones, no crossing of any two great mountain ranges is to be found. If these heights had been formed by the outbursting of incandescent lava, as the school of volcanists have thought, rents and outbreaks might have happened in the direction of any great circle of the earth. But the mountains appear on the contrary to be compelled in their shape by the form of the coast-land in the continent to which they belong. The Alps, the Himalaya, Andes, and Rocky Mountains, all rose during the tertiary period or towards its close; and if the view to which this appears to lead be true, that all mountains have been raised in the neighbourhood of the sea, then the ranges, such as the Ural, whose direction is no longer in harmony with the form of the present dry land, must have arisen before the tertiary period, at a time when the land and sea had another arrangement than the present. But how is this coastal elevation to be explained, and to what natural forces is it to be ascribed? Crystallization, observes Dr. Peschel, cannot be the power we seek for; in the changing of bedded stone to crystalline anhydrous rock it is but natural that a reduction in volume would result. The supposition of the American geologist Dana, of a folding or crumpling of the earth's crust in consequence of its decrease in diameter through loss of internal heat, must also be dismissed, and with it the force of earthquakes or volcanic power, since it can be shown that some of the presently rising portions of the land are entirely free from shocks of earthquake, and that there is no instance of any great mass of land having been elevated by volcanic outbreak. Chemistry reveals a more probable cause. Gustav Bischof has demonstrated that when carbonic acid and silica meet, a chemical change takes place, and that the altered product, losing in specific gravity, increases in volume to a very considerable extent. Here at length appears to be a

power adequate to produce the phenomena of mountain elevation for which comparative geography seeks to find an explanation.

The eighth essay is devoted to an examination of the evidences of rising and sinking in the separate coast-lands of the globe, and, from the laborious research which it displays, lends confidence to the acceptance of the results which the author has drawn from comparison. Space does not admit of an examination of this chapter, but the conclusions from it in the next essay are too curious to be overlooked. Dr. Peschel finds that since the tertiary period the continents have tended to add to their extent to north and westward, whilst to south and east of the present dry land there lie only the submerged and sinking portions; yet that though the northern hemisphere has gained more land than it has lost, and the southern lost more than it has gained, the proportion of land and water surface has remained exactly the same.

Passing over the chapters which treat of the formation of deltas and the comparison and classification of streams and rivers, we come to the final essay, on the distribution of deserts, steppes, and woods, which touches upon several points of universal interest. These terms Dr. Peschel shows are but expressions for areas unequally supplied with moisture—rainless, to well watered; and since this is the case, it is hopeless to attempt plantation of those countries in which woods have not naturally flourished in historic times. As an inference from this, the author characterizes as a popular fallacy the supposition that the destruction of forests reduces the rainfall on the land. This conclusion however appears to be a hasty one; and reliable data are yet required to show that forests, by maintaining a lower, or more equal, temperature over the lands on which they grow, do not tend to condense the vapours of the rain-bringing winds over these districts and thus increase their rainfall; and that conversely when the forests, and with them the condensing cause, are removed, the more easily heated land allows that vapour to pass which it previously had drawn down upon itself as rain.*

In the sixth essay, which examines the relation of the bulk of the land to the average depth of the sea, Dr. Peschel adopts, as the mean depth of the North Atlantic Ocean, from the depth-chart of Maury, the sum of 12,500 feet. More elaborate measurements have reduced this average depth to 9900 feet, and it seems probable that this also is greater than the ultimate result will prove to be. Again, in reviewing the theories which have been promulgated to account for the irregularities of form on the continents, the author says, "No one has ever thought that the powers of light, electricity, or magnetism have anything to do with raising the earth's surface." But here the opinion of the brothers Mallet, which should have great weight, has evidently been overlooked, since, to quote from their essay accompanying the British Association Earthquake Catalogue, ". . . . it is much more probable that all volcanic phenomena are due to the conversion of electrical, or magnetic, or thermic forces into heat."

Before the present time, when our topographical knowledge of the remoter parts of the earth was vague and uncertain, such a comparative method as that which Dr. Peschel has introduced would have had but little value. Speculation on the causes of the varied features of the landscape, drawn from the study of one region or of one continent alone, could at best have been guesses at truth; it is only now that the plan and fashion of the material world are sufficiently known to allow a general comparison of its parts to bear fruit in some trustworthy deductions as to the causes of their appearance. But the system has a progressively increasing value in this, that, as the exploration of the globe proceeds year by year, new subjects will become ripe for the application of the comparative method, and greater knowledge will complete or further establish the conclusions already arrived at.

Keith Johnston, Jun.

* See Bidie, on the Effects of Forest Destruction in Coorg, *R. G. S. Journal*, vol. xxxix.

Scientific Notes.

Geography and Geology.

Spitzbergen and East Greenland.—In the fifth part of Petermann's *Mittheilungen* for this year there appears an original map of East Spitzbergen, based on the astronomical observations of the Swedish expedition under Nordenskjöld and Dunér, but amplified and extended by the surveys made by Thomas von Heuglin during his journey in the months of July, August, and September of 1870. Barento and Edge Island, or Stans Foreland, assume a completely new aspect upon this map, as does also the mountainous unvisited land in the East, named King Charles Land, after his Majesty the King of Würtemberg, seen by Heuglin from Spitzbergen. The map is accompanied by a complete description of the topography of the newly-explored coasts. This part also contains the completion of an essay by Lieut. Julius Payer, who accompanied the second German polar expedition, on the orography of the interior of Greenland and its glaciers, on the sledge journey northward to the 77th parallel, the most northerly point ever reached on this side of Greenland, and the discovery of the great Franz Josef fjord. A provisional map shows the extent of the new coast-line. The most complete account of the second German voyage is that published by the Bremen North Polar Committee, which comprises a number of papers by the different members of the expedition on the additions made to the physical geography of the region, the nature of the sea bed between the 73rd and 75th parallels of north latitude, and on the climate, vegetation, and animal life of East Greenland. Among the discoveries made by the Germans is the fact that the same musk oxen which are so plentiful in Arctic North America appear also in East Greenland, though they are unknown on the west coast; and great interest is raised by the report of numerous dwellings, implements, and graves, the signs of a former native population in these far northern regions.

Discovery of Actual Glaciers on the Mountains of Northern California. (*Silliman's Journal*, 3rd series, vol. i. No. 3, March 1871.) The recent geological surveys instituted by the United States Government have added greatly to our knowledge of the Central and Western States, both as to their physical geography and geology. Prof. Whitney and his assistants have developed in the Sierra Nevada a glacier system as extensive and vast as that of the Alps; but no traces of existing glaciers were seen, only one or two rudimentary masses of ice and fields of perpetual névé. In an expedition to Mount Shasta, Northern California, in September last, Mr. Clarence King, United States geologist, discovered between the main mass of Shasta and the lesser Shasta a deep gorge through which flows a glacier about 4000 feet in width and above three miles in length. It commences almost at the crest of the main mountain, which is 14,440 feet above the sea. From this crest three glaciers were seen, one being four miles and a half in length and from two to three miles broad. No glaciers or snow were seen on the south side, the northern snowy and the southern snowless slopes being divided by an east and west line. On the snowless side of the mountain, at a height of 8000 feet, a great terrace occurs nearly 3000 feet in width, entirely composed of moraine matter. The glaciers of Mount Tachoma or Rainier (an extinct volcanic cone) form the sources of four rivers in Washington Territory. The sides for 2000 feet are covered with an immense sheet of white granular ice, broken by crevasses; lower still the ice-sheet is divided by rock-masses into ice-cascades for 3000 feet, some of which nearly approach the perpendicular; from the foot flow true glaciers. Many of these glaciers are almost hidden beneath the masses of moraine matter which are heaped upon their backs. The largest glacier of all is that of the White River, which flows out of the crater of Tachoma, extending at least ten miles, being five broad on the mountain, and a mile and a half at its lower extremity. The thickness of rock removed by the action of this glacier is not less than a mile, or about one third of the entire mass of the mountain. It has two principal moraines with ridges and peaks nearly 100 feet high. Another extinct crater, that of Mount Hood, supplies from its snow and ice basin, which is half a mile in width, matter for three distinct glaciers, one of which descends 500 feet below the level of timber trees upon the slopes of the mountain. Great as are these existing glaciers they are but the remnants of a far mightier system which has carved and fashioned this great backbone of the

American continent from a very remote period, and once extended, like that of the Swiss Alps, far and wide into the valleys themselves, carving out there as in Switzerland the great lake-basins which form so striking a feature in the physical geography of both regions. The Alpine Club may now seek in the Rocky Mountains new laurels amid its peaks, passes, and glaciers.

On the Organization of Trilobites.—Last year Mr. E. Billings of Montreal communicated to the Geological Society of London the interesting fact, that he had observed in a Trilobite named *Asaphus platycephalus*, from the Lower Silurian of Ottawa City, what appeared to be good evidence of legs. His specimen was carefully and critically examined by Professors Jones, Morris, Etheridge, and many other palæontologists here in England, who assented to Mr. Billings's conclusions. Mr. Henry Woodward, who has paid especial attention to the fossil Crustacea, fully confirmed Mr. Billings's opinion, and showed how closely the Trilobites must have resembled the modern Isopoda in their organization. Professors Dana and Verrill, of Yale College, Connecticut, have quite lately re-examined the specimen, and they announce in the *Annals and Magazine of Natural History* for May (p. 366) their conclusion, which is, that the so-called legs are "the semicalcified arches in the membrane of the ventral surface to which the foliaceous appendages or legs were attached. Just such arches exist in the ventral surface of the abdomen of the Macroura, and to them the abdominal appendages are articulated." We may add, such semicalcified arches also exist in the Isopoda; but the objection to referring the so-called (and as we think *correctly called*) legs to these semicalcified arches is, that, instead of following the curve of each segment and expanding and uniting with it on their lateral borders, they are given off in pairs from either side of a median line, and are directed forwards and outwards, crossing several of the segments (as is well shown in the plate, see the *Quart. Journ. Geol. Soc. Lond.* 1870, vol. xxvi., pl. xxxi., fig. 1). They, moreover, present all the appearance of being *jointed*, a structure not reconcileable with the idea now put forth that they are "semicalcified arches in the membrane of the ventral surface." Not doubting the probable existence of such arches on the ventral surface of the Trilobites, we would only point out the improbability of the so-called legs in Mr. Billings's specimen being referable to this structure, and the strong probability of their being ambulatory appendages. We fail to see why their interpretation as legs militates in any way against the ability of the Trilobita to roll or coil themselves up—a habit by no means common to all the genera of this old-world group any more than to the modern Isopoda, only a few of which roll themselves into a ball. Among modern Crustacea we find that all those genera possessing these membranaceous feet have an exceedingly thin and delicate covering to their bodies, the weight of which is in proportion to the organs of locomotion. If the Trilobita had only delicate membranaceous feet, it seems difficult to understand how they were able, with such feeble organs, to carry such solid plates as covered the whole dorsal surface of their bodies.

Recent Important Additions to the Geological Department of the British Museum.—The palæontological collections of the British Museum have been lately enriched by a very fine and remarkably varied series of fossils, obtained from the museum of the late Professor Van Breda of Haarlem, who for more than fifty years occupied the position of secretary to the Royal Society of Sciences in Haarlem. The nucleus of the collection was formed by Van Breda's grandfather, the celebrated anatomist, Petrus Camper, and contained a remarkably fine series of remains of the great Meuse lizard, *Mosasaurus Hoffmanni*, a gigantic chelonian, and other reptilian and fish-remains from the Maestricht chalk; a very fine series of mammalia, salamanders, fishes, &c., from the miocene freshwater of Oeningen; pterodactyles from Solenhofen; two skulls from two species of *Belodon*, from the Trias of Stuttgardt; and a very large series of Belgian and other fossils, especially those belonging to the invertebrate classes. The collection is particularly rich in figured specimens.

The Pliocene Mammalia of the Thames Valley.—Sir Antonio Brady, F.G.S., &c., of Maryland Point, Stratford, has for many years devoted his attention to the collection and preservation of the rich and abundant but very perishable relics of the old mammalian fauna to be found in the brick-earth of Ilford, Essex. His museum contains an enormous series of elephantine, bovine, cervine, ursine, feline, and rhinocerine remains. He has quite lately added another skull of rhinoceros, and several more skulls of *Bos primigenius*, to his already superb collection, which, it is to be hoped, will, at no distant day, form part of one of our public museums, where they may be seen and studied by the palæontologist and comparative anatomist.

Anthropology, Zoology, and Botany.

New Skull Measurements.—In the first number of the new Italian journal, the *Archivio per l'Antropologia e la Etnologia*, which promises to be a publication of much interest and value, is a contribution by Prof. Mantegazza, in which he gives an account of a new relation which he has discovered between different measurements of the skull in different races of men and various species of animals, and of the methods by which he arrived at the discovery. Prof. Mantegazza institutes a comparison between the size of the occipital foramen and capacity of the interior of the skull, taking, in the first instance, the *circumference* of the foramen, and afterwards its *area*, as the subject of comparison. It is the expression in figure of the latter relation—that, namely, between the area of the occipital foramen and the total internal capacity of the skull—which is entitled by Prof. Mantegazza the "cephalo-spinal index," a term parallel to that of cephalic index, previously in use among ethnologists as expressing the relation between the longitudinal and transverse diameters of the cranium. For the methods by which Prof. Mantegazza proposes to get an accurate measurement of the circumference and area of the occipital foramen, we must refer our readers to the paper itself. The conclusions which he draws from trials of his methods we may however present here. It is only right to remark that these conclusions are brought forward by Prof. Mantegazza avowedly as tentative and provisional only, and requiring much further trial before their scientific value can be established. In regard to the first relation he concludes that there is no correspondence whatever between it and the cephalic index of the same skull, so that a particular skull may be remarkably dolichocephalic or the reverse, while the relation in question may be only an average one. Secondly, he finds that this index of the occipital foramen is less variable than the cephalic index. Thirdly, in extending his investigation to the lower animals, which he does with all possible caution, he points out that the conclusion suggested so far is, that while this relation may not improbably turn out to be a very constant specific character, it also corresponds very accurately with the degree of intelligence of the different species to which it has been applied, though he warns us repeatedly that no comparison in this particular can reasonably be instituted between man and the lower creatures. Passing on to the cephalo-spinal index, which Prof. Mantegazza regards as the more important of the two relations, he has measured and calculated it out in the case of eight anthropomorphic apes and 100 human skulls. The main object of the whole paper may be defined to be the discovery of one or more methods whereby to determine the relation subsisting between the size of the brain and the size of the medulla oblongata, in order further to show whether the relation is a constant one, either as between different sexes, ages, or races among mankind, or between mankind and the lower animals, or, lastly, between different species of the latter.

Freshwater Bathybius.—As much as three years ago, Dr. R. Greeff published a notice in Max Schultze's *Archiv für mikroskopische Anatomie* (vol. iii. p. 396) of a new shell-less freshwater rhizopod, remarkable for its gigantic size in comparison with all previously known organisms of the kind. At a recent meeting of the Natural History and Medical Society of the Lower Rhine, the same well-known zoologist gives further details* of this remarkable structure, to which he gives the provisional name of *Pelobius*, and which he considers closely allied to the celebrated deep-sea *Bathybius Haeckelii* of Huxley. Dr. Greeff states that the *Pelobius* is found in many standing waters with muddy bottoms; thus, near Bonn, the bottom of the Poppelsdorf fish-pond is found to be almost entirely covered with masses of this substance, to such an extent that sometimes a glass vessel brought up from the bottom contains almost more of it than of particles of mud. In their external form, in both the living and the contracted state, these organisms present the appearance of more or less spherical lumps, varying from one or two millimetres in diameter down to the most minute points, scarcely perceptible by the naked eye. The fundamental substance of the body consists of a hyaline protoplasm of irregular frothy or vesicular consistency, containing a great number of very peculiar elementary particles. Among these may be distinguished round or roundish oval nucleiform bodies and fine bacilliform structures. In spite of its great simplicity in other respects, *Pelobius* represents a pluricellular organism, and is not to be referred to the so-called *Monera*, like *Bathybius Haeckelii*. A more detailed account of this interesting structure is promised in the *Archiv für mikroskopische Anatomie*.

German Darwinian Literature.—In *Ausland* and the *Allgemeine Zeitung* (Nos. 118–125, April 29 to May 5) there has appeared simultaneously an exhaustive anonymous review of the 1st volume of Dr. Carus's translation of Mr. Darwin's *Descent of Man* (the only one yet published). Although expressing a general concurrence with the views of the author, the reviewer contents himself mainly with giving an epitome of the arguments of the work itself; and in the fairness and appreciation with which this is done offers a striking contrast to reviews of the English work which have appeared in some of our own leading papers, and affording another instance of the hold which Mr. Darwin's teachings have taken on the scientific mind of Germany. In *Ausland* for May 1 is another article by Dr. H. Eisig on "The Type and its Signification in System," the object of which is to show that the now generally accepted doctrine of the theory of development must greatly modify the idea of a type, since the theory necessitates the abandonment of any absolute essential lines of demarcation between even such great classes as the *Vertebrata* and *Invertebrata*.

* Translated in *Nature* for May 18, 1871.

Graft-hybridization.—In the current number of the *Popular Science Review* (No. 39) Dr. M. T. Masters has a very interesting article, entitled "Grafting: its Consequences and Effects." After referring to a number of instances of union in growth of distinct individuals—as between roots of different varieties of beet, between the stems of trees of different kinds, &c.—he proceeds to a consideration of the influence of grafting on both the stock and the scion. Every gardener is familiar with the fact that the scion is physiologically influenced by the nature of the stock on which it is grafted, the time of producing leaves or flowers, or the size and flavour of the fruit, being changed. On the other hand, it is indisputable that the scion may also influence the stock. Instances have been known of the grafting of a healthy scion on a weakly stock restoring it to health, and of shoots analogous in structure to the scion springing from beneath the place of grafting. Equally well established are the instances of variegation being communicated from the scion to the stock; though it is a remarkable circumstance, that if the variegated scion be removed, the branches from the stock will then revert to their normal condition. In a few cases the results of the grafting of one species on another has been the apparent production of a true hybrid, as in the case of *Cytisus Adami* from *C. purpureus* and *C. laburnum*, though this phenomenon has been attempted to be explained in other ways. On the whole, Dr. Masters considers that although the existence of true graft-hybridization is not proved, the evidence in its favour is gradually getting stronger and stronger.

Chemistry.

The Hydrocarbons of the Marsh Gas Series.—The relations existing between the boiling point and constitution of the members of this group have been investigated by C. Schorlemmer (*Berichte der Deutsch. Chem. Gesellsch. zu Berlin*, 1871, No. 7, 395). The hydrocarbon C_8H_{18}, formed from methylhexyl-carbinol, which has hitherto not been regarded as of this class, is found to be identical with dibutyl and with the hydrocarbon obtained by Zinke from the primary octyl alcohol. Zinke has also made dioctyl, which belongs to this series also, and the author considers it highly probable that the dihexyl which Brazier and Gosleth produced during the electrolysis of œnanthylic acid, should also find a place among them. Of the normal hydrocarbons of the series C_nH_{2n+2}, there are therefore at present known:

	Boiling Point. Found.	Calculated.	Difference.
CH_4			
C_2H_6			
C_3H_8			
C_4H_{10}	1°	1°	
C_5H_{12}	38°	38°	37°
C_6H_{14}	70°	71°	33° = 37° − 4
C_7H_{16}	99°	100°	29° = 33° − 4
C_8H_{18}	124°	125°	25° = 29° − 4
$C_{12}H_{26}$	202°	201°	4 × 19°
$C_{16}H_{34}$	278°	278°	4 × 19°

The differences of temperature decrease regularly by 4° till the well-known interval of 19° is reached.

The Franklin Meteorite.—On the 5th of December, 1868, a stone fell about four miles from Frankfort, in Franklin County, Alabama. It weighed 1 lb. 9½ oz., and had a mean specific gravity of 3·31. The analysis by G. Brush (*Jahrbuch für Mineralogie*, 1871, No. 2, 178) shows it to have the following constitution:—

Silica	51·33
Alumina...	8·05
Iron oxide	13·70
Chromium oxide ...	0·42
Magnesia	17·59
Lime	7·03
Potash	0·22
Soda	0·45
Sulphur	0·23
	—— 99·02

And, in addition, a trace of nickeliferous iron. In its physical character it bears a great resemblance to the meteorites which fell at Petersburg, Lincoln County, Tennessee, on the 5th of August, 1855, and which have been examined by Dr. Laurence Smith.

The Action of Cyanogen on Alcoholic Hydrogen Chloride.—On conducting cyanogen gas into absolute alcohol which had previously been saturated with hydrogen chloride, Volhard (*Ann. der Chemie und Pharm.*, April, 1871, p. 118) remarked a rise of temperature in the solution, which at the same time became cloudy, and so speedy a deposition of a white crystalline powder that the liquid soon became semi-solid. The body which separates is easily soluble in water, and, provided the alcohol had been completely saturated with acid, consists for the most part of ammonium chloride. If the alcoholic acid be mixed with alcohol, more or less oxamide accompanies the chloride. The liquid extracted from the crystalline mass by absolute alcohol gives on dilution with water no precipitate with those reagents that detect the presence of oxalic acid. Ammonia water produces a gradual precipitation of oxamide.

Water from the Coal Measures of Westville, Nova Scotia.—In his paper (*Journal of Chem. Soc.*, May, 1871, 176) Prof. How, of University of King's College, Windsor, N.S., states that he found this water to have an acid reaction on litmus, the paper regaining its blue colour on drying. It gave off a considerable quantity of carbonic acid, and deposited calcium and magnesium carbonates when boiled. The water by further evaporation acquired an alkaline reaction, coloured turmeric deep brown, and effervesced with acids. In two specimens he found 3·55 grains and 3·35 grains respectively of sodium carbonate in the imperial gallon.

Thallium.—This metal has hitherto been found only in iron pyrites, cupriferous pyrites, and the selenide of copper (Crookesite) of Skrikerum in Sweden, which contains as much as 18 per cent. of the new element. Von Kobell (*Journal für prakt. Chemie*, 1871, No. 4, 176) has examined zinc blende from a great number of localities for thallium, and in the majority found none. A compact variety from Geroldseck in Breisgau, however, gave a very distinct reaction, and another specimen from Herbesthal in Westphalia also contained this metal, but apparently to only a slight amount.

Nitroglycerine.—In the *Chemical News* of 5th May, 1871, there is an account of the effects of an explosion of ten drops of nitroglycerine, which took place in the laboratory of Dr. von Gorup-Besanez. This quantity was poured into a small iron saucepan by one of his pupils, and then heated with a Bunsen burner. Forty-six panes of glass of the laboratory windows were broken to atoms, the saucepan was hurled through a brick wall, the stout iron stand on which the vessel had rested was partly split, partly spirally twisted, and the tube of the Bunsen burner flattened outwards. Fortunately no one of the three persons present was injured. It has been noticed by E. Kopp that nitroglycerine, when allowed to drop on a bright red hot iron plate, burns away as gunpowder would do under like conditions; if, however, the iron be heated not to redness, but hot enough to cause the nitroglycerine to boil suddenly, an explosion is the result.

New Books.

BUFF, Dr. H. Lehrbuch der physikalischen Mechanik. 1er Theil. Braunschweig: Vieweg.
DIETERICI, F. Die Anthropologie der Araber im 10. Jahrh. n. Chr. Leipzig: Hinrichs.
HOFFMANN, Prof. H. Mykologische Berichte. Giessen: Ricker.
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History.

Records of the Reformation. The Divorce, 1527–33, mostly now for the first time printed from MSS. in the British Museum, the Public Record Office, the Venetian Archives, &c. Collected and arranged by Nicholas Pocock, M.A. 2 vols. Oxford: Clarendon Press.

MR. POCOCK, well known as the editor of Burnet's *History of the Reformation*, has rendered fresh and signal service to students of the subject, by collecting in these volumes the most important documents relating to the divorce of Henry VIII. from Catharine of Arragon. It is not a pleasant task to analyze the elements of transactions which brought out into strong relief the mean side of all the men who were mixed up in them. Yet, sordid, grotesque and revolting as the history presents itself in detail, it is none the less as a whole of vital importance, as forming one single act in the great and momentous drama of the English Reformation. The papers selected by Mr. Pocock—about four hundred in number—include pieces in English, French, and Spanish, but the greater part are in Latin. The various sources from which these materials have been drawn, and the principles which determined their selection, are fully indicated in the preface. The several articles consist of pieces hitherto unpublished, of reproductions from original manuscripts of others which have been incorrectly printed, and also—either on the score of rarity or great importance—of some letters and tracts long existing in print. Among the last-named we find the scarce anonymous pamphlet, entitled *A litel Treatise ageynste the Mutterynge of some Papistis in Corners*,

printed by Berthelet in 1534; the book compiled under Henry's personal supervision—*A Glasse of the Truthe*—reprinted from a copy in the Bodleian Library; and three pieces from the extremely rare treatise published in answer to it at Luneberg, in 1533. This is the small volume in the Grenville Collection, called *Philalethes Hyperboreus*, hitherto unknown to historians. In Mr. Pocock's work, as originally planned, the period under review extended from 1527 to 1533; but as it went on, a few papers earlier in date than the opening of the divorce question were admitted, and also others falling later than the marriage with Anne Boleyn, and illustrating the secret dislike felt throughout the country to that event, and the measures which were taken to make it acceptable to the common people, as well as to propitiate foreign powers. The formal documents included in these *Records* are always dreary and very often disgusting. Enough to say of them, that amidst the complicated web of political intrigue and legal hair-splitting which make up their least displeasing features, some important points can be clearly ascertained: firstly, the divorce was considered as a political and dynastic necessity, and admitted to be so by the pope himself; secondly, from the outset of the negotiations Henry fairly warned Clement of the momentous consequences to the Apostolic See which a refusal of his demands would involve; thirdly, neither the king nor the emperor were requiring from the pope a fair trial of the dispute between them, but each insisted on a verdict in his favour for which the juridical forms to be observed were to serve merely as a cloak. Conspicuous among the articles of general interest in this collection is the series of letters from Gardiner and Foxe, who had been despatched by Wolsey early in 1528, for the purpose of obtaining a Decretal Commission from Clement VII.; in other words, to wring from the pontiff his personal sanction of the divorce. Rome was at that juncture held by the Imperial army, and Clement, having newly made his escape from the castle of S. Angelo, had taken refuge in Orvieto, an old city of the Romagna. Gardiner's description of the journey thither, and the subsequent negotiations with the pope, is extremely interesting. Setting out on February 14th to cross from Dover to Calais, violent gales caught the envoys in the Channel, swept their ship out into the high seas, and well-nigh drove it on the Flemish coast. Although the journey was made with all possible despatch, yet not until the 20th of March did the jaded travellers draw bridle at Orvieto, drenched to the skin with mud and water from fording a river outside the town, "wherein," writes Gardiner to Wolsey, "we rode so deep as the water came almost to our girdelsced" [girdelsted ?]. And too, he adds that, riding post, they had left their baggage at Calais, and were without even a change of clothes. Fortunately for an embassy in such ill plight, the English ambassador, Sir Gregory Cassali—familiarly called Master Gregory in Foxe's letters—had already followed the papal court to Orvieto. He supplied their wants and entertained them hospitably at his own comfortable quarters. The envoys found the pope housed in a ruinous episcopal palace. Passing through its naked and roofless chambers, they reached a meanly furnished bed-room which did duty as presence-chamber, where they presented their credentials. The particulars of several conferences with Clement are minutely given, and not only illustrate the question in its earlier stages, but afford much insight into the personal character of that pontiff. By a series of graphic touches he is set plainly before us as acute-minded, yet weak and irresolute—a man cursed with the foresight of all contingent evils; unblest with the political genius which might have stayed or disarmed them. Gardiner's report leaves no room for doubt that Clement, had he been a free agent, would, at that time, have settled the question in Henry's favour. The pressing exigencies of the succession were fully admitted by him, his sympathies were with the king as opposed to Charles, and his mind was thoroughly open to all the consequences of refusal. But, lacking the spirit of the great mediæval popes, he was miserably cowed by the strait in which he was set between the two sovereigns, and knew himself unequal to the crisis. Day by day, disputations and councils, equally fruitless in results, followed each other, until at last the Englishmen, finding that the pope and cardinals were merely trifling with them to gain time, lost all patience. They exhorted, warned, and threatened by turns with a boldness which seems to mark the inevitable influence of circumstances and belongings. For it becomes evident that Clement, then under the emperor's clutch, a fugitive, and meanly-lodged—"his holiness sitting upon a form covered with a piece of an old coverlet not worth 20*d*."—had, under such aspects, lost somewhat of pontifical prestige, and was forced to listen to plainer truths than he might have heard had he still reigned an independent sovereign, giving audience amid the imposing splendours of the Vatican. Gardiner was spokesman in chief for the trio, Cassali, Foxe, and himself, and the following may serve as a specimen both of the attitude he took and of Clement's behaviour:—

"I then, *converso sermone ad Papam*, said that his holiness handled the king's highness as though he had been the most ingrate man, and of mean sort, that could be minding in his requests to requite the same. The said holiness said nothing, but sithed and wiped his eyes; and thereupon Staphileus, turning himself to us, said that he took it as God's will that we should have come hither, or else the difficulty here should not have been believed. I said that I thought it God's will indeed, to the intent that, relation made by us of what condition men be here towards them, *qui optima promeruerunt*, the favour of that prince who now only favoureth them should be withdrawn and taken away, *ut inclinata jam sedes Apostolica tota corrueret, communi consensu atque applausu omnium*. At these words the pope's holiness, casting his arms abroad, bade us put in the words we varied for, and therewith walked up and down the chamber, casting now and then his arms abroad, we standing in great silence."

During the above negotiations, Sir Gregory Cassali, acting under instructions, had offered the pope's chief adviser, Cardinal Santi Quatri, a *douceur* of two thousand crowns. The bid—probably not thought high enough—was refused on that occasion, but the instructions issued to Brian and Vannes, and also to Burnet (Nos. 69, 249), fully exhibit the means by which members of the Sacred College were to be won over to the king's "great cause." Nos. 272, 274, 287, 302, furnish the particulars, hitherto unpublished, respecting the notorious bribery of the cardinals of Ancona and Ravenna. The former holds out for preferment abroad to the yearly value of six or seven thousand crowns—over and above the small matter of an English bishopric—haggling over his bargain with a crafty caution which at least equals his unscrupulous greed. The volume in the British Museum (*Vitellius*, b. 13) from which the above papers are drawn, has also furnished Croke's very curious account of expenses during his errand to Italy 1530, and other details of his proceedings, which, added to his correspondence—taken from a single volume in the Record Office—will throw full light on the wholesale bribery, by Henry's agents, of the universities and individual canonists and theologians of Northern Italy. The scheme for endeavouring to obtain a consensus of learned opinion in the king's favour was an appropriate stroke of Cranmer's genius, and with him accordingly we find Croke in active correspondence. Burnet appears to have overlooked Croke's diaries altogether, and to have printed but one paper in full from the volume containing the letters; but the fact that the historian's mind was labouring to meet the charges against Henry of corrupting the foreign universities by money, and of coercing the

English ones by threats, may perhaps account for his being "troubled with obliviousness" in respect of such evidence. As regards our own universities, no fresh light is thrown upon the proceedings at Cambridge by Mr. Pocock's *Records*. At Oxford, as in the sister university, the king—finding it impossible to obtain a favourable verdict from the whole voting body—transferred its function to a packed committee, upon the result of whose deliberations he could rely—a stroke of arbitrary power which, as it seems to us, no ingenuity of special pleading can justify. Archbishop Warham's letters (No. 101), with the documents numbered 102, 176, sufficiently illustrate the transactions at Oxford: poor old Warham's conscience-saving clause anent the forestalled decision of the University of Paris strongly reminds one of the Duke of Wellington's formula, on occasions when George IV. expected him to back a royal falsehood.

From the contemplation of foreign and domestic policy of this sort, it is refreshing to turn to the correspondence, hitherto unknown, of a first-rate letter-writer on general topics. The despatches of Augustine—who was Wolsey's physician at the time of his arrest—although not touching upon the divorce, are of value, apart from their intrinsic merit, as throwing light on the history of the English statesmen concerned in it. Early in 1532 Augustine was sent into Germany on public business, part of his errand being to seize Tyndale, who, however, wisely kept out of the way, "hearing of the king's diligence in the apprehension of him." Tyndale must at that time have made himself deeply obnoxious to Henry by the publication of his *Practyse of Prelates;* a bitter invective against the divorce, in which he accuses Wolsey of sowing the first seeds of the matter in his sovereign's mind through the agency of the Bishop of Lincoln, Henry's confessor. Noteworthy details of social life, as well as of current political events, will be found in Augustine's correspondence; but the main point of interest is the Turkish invasion; fresh particulars are afforded respecting the advance of Solyman against Vienna, and the movements of the Imperial army to check him. Cranmer's letter to the king, written at Villach (Oct. 20, 1532), is also included on the same topic—one which at that time filled men's minds throughout Europe. In strong contrast with the purely objective character of the foregoing despatches, we find one other letter touching also on the Turkish invasion, but full of pathetic interest through its intense subjectiveness—the utterance of a deeply injured woman, whose mind, strained towards one issue, could see, in the terrible scourge of eastern Christendom, only the image of her personal wrongs. Seizing the moment of a victory gained over Solyman, Catharine writes to her nephew (Nov. 5, 1532). She draws a parallel between the misfortunes of Hungary and her own, and says that of the two great evils she knows not which is the greater. But she trusts in God, that Charles, as he has now driven back the Infidel, will also find means to quell "the second Turk," during the approaching conference with the pope at Bologna. Poor Catharine! the meeting on which her hopes were set took place in December, but for all that, the early year was to see the ground cut from under the feet of the hapless queen by her husband's marriage with her yet more hapless rival.

At the conclusion of his preface Mr. Pocock reviews the historical difficulties which he considers to have been cleared up by the publication of these *Records*. First in order comes the important point relating to Catharine's first marriage, which we think may be reckoned as fully established, if—keeping in view the queen's personal character—we add to the evidence of legal documents the far more certain testimony of her own protestations, steadily repeated during her life, and renewed in her last hours. The evidence on the next question—what may be called the Mary Boleyn scandal—seems hardly so clear. The story is perfectly credible; it was believed at the time, and if believed by Wolsey may partly account for his blindness with regard to the king's intentions towards Anne. But that the point still remains to be proved has been, we think, successfully argued by Mr. Froude, *Fraser*, July, 1870. Upon the vexed question of the Breve which was produced by the queen in 1528, no strongly conclusive evidence is brought forward, but the documents bearing on the subject tend to show that the king and Wolsey at first believed it genuine, and also to meet the arguments for its spuriousness based upon its date. Another point of curiosity is the proposal made by Clement VII., that Henry should have two wives at once. The proposition was neither suggested in good faith by the pope nor seriously entertained by the king, and the documents connected with it exactly illustrate the tortuous policy pursued by both. The acute-minded Bennet, with whom Clement discussed this project, wrote (Oct. 27, 1530) warning Henry that the scheme was either a device to gain time, or brought forward only to place him in a dilemma; if Clement could lawfully issue a dispensation for bigamy, Julius could, *à fortiori*, sanction a marriage with a brother's widow. And after all, the plan of two wives was not originated by the pope; it first occurs—coupled, however, with the proviso that Catharine should embrace a religious life—in the heads of instructions drawn up for Brian and Vannes when they were sent to Rome in December 1528—a document which exists corrected by Wolsey's own hand.

The editorial work of these volumes has been admirably executed in all its details. Only we could wish that the old spelling, bating abbreviations, of its English portion had been preserved. The chronological index is so useful as to suggest what a boon the historical student would find a similar index extended to the vast mass of papers relating to the divorce which exists in print in the published State papers, in the works of Burnet, Strype, and others, in Le Grand's *Histoire* and Theiner's *Monumenta*. The present collection, although it has overflowed its first limits, has by no means exhausted the unpublished archives of these seven years; and we note with great satisfaction the editor's promise of a supplementary volume of despatches, and also of a connected narrative of the period, condensed from the large body of materials which have been lately brought to light. The history of the Reformation, as a whole, still remains to be written, as Mr. Pocock tells us; and it will be no small gain to have one of its most important sections thoroughly handled by so able, just-minded, and conscientious an investigator.

George Waring.

The Primeval Monuments of Peru compared with those in other Parts of the World, by E. G. Squier, M.A., Fellow of the Society of Antiquaries of London, &c. From the *American Naturalist*, Vol. IV., 1870.

All sciences of recent foundation, such as American archæology is, have always some surprise in store for the man who *will* try them cautiously and conscientiously. At first one feels inclined to think them dry and unfruitful; but after a while they disclose suddenly unknown treasures, and reward their students with unexpected discoveries. The monuments Mr. Squier describes form a somewhat conspicuous part in Peruvian landscapes, since their height varies from one to forty feet above the ground; but the various travellers who have visited Peru since Pizarro's days did not care to inquire into the motives of their construction. This Mr. Squier has done, and, by comparing their style and character with those of the stone structures

in the old world, he has discovered that they belong to the early monumental period of American history, and that they are the exact counterparts of the so-called cromlechs, dolmens, "Sun," or "Druidical" circles, of West Europe and Central Asia.

The simplest and most numerous of these monuments are, of course, the *chulpas*, in which the Andean tribes of yore buried their dead. There are, according to Mr. Squier's statement, several sorts of *chulpas*.

1. The first kind consists of flat, unhewn stones, projecting from one to two feet above the ground, so as to form a circle about three feet in diameter. The inner space sometimes remains uncovered, and sometimes is roofed by a few flat slabs laid across the upright ones.

2. The stones rise from four to six feet above the ground; the diameter of the circle varies from six to sixteen feet. The upper stones, instead of lying flat across the upright ones, overlap each other inwardly, thus describing a kind of primitive vault. The entrance is provided for by omitting one of the upright stones.

3. Around the burial chamber a tower is built, varying in height from ten to thirty feet. The tower walls are often narrower at their base than at their summit. "The exterior stones are usually broken to conform to the outer curve of the tower, and the whole is more or less cemented together with a very tenacious clay."

4. The towers, round or square, are built of square blocks of limestone, and stand on a platform regularly shaped. The inner parts, vaulted after the fashion described in No. 2, have each four niches, placed at right angles to each other. The sides of the *chulpas*, whether round or square, are perfectly vertical, and have a projecting cornice near the summit. In the square ones the top is flat; in the round ones there is a sort of rude cupola.

5. The towers are built of great blocks of trachyte, and other hard stones, accurately fitted together. A few are formed of rough stones, plastered and stuccoed, and painted all over, with inner chambers also painted and stuccoed. Some have double vaults in them, one above the other; the single-vaulted ones have a double row of mitres in a single chamber.

Mr. Squier inclines to the opinion that these various forms of the *chulpa* point to different eras. "I believe that anciently, as now, the common Indian, the patient servant of the chief or *curaca* of old, as of the *gobernador* of our age, received few burial honours. His grave was unmarked by stone or symbol. The *chulpa* probably marks the graves of distinguished individuals, upon which contemporaneous skill and effort were expended. If the monument was rude, it was because the people who raised it were also rude. . . . . I am convinced, speaking for the present only in reference to sepulchral monuments, that their development in Peru may be traced from their first and rudest form up to that which prevailed at the time of the Conquest, and that it preserved throughout the same essential features."

Side by side with the *chulpas* we find remains of religious monuments which have also escaped the notice of travellers. The *Intihuatanas* (I think *Intip-huatan* would be in stricter conformity with the tradition of the classical Guichua language), or *Sun-circles*, stretch in many places their long lines, "defined by rude upright stones, and surrounding one or more larger upright stones placed sometimes in the centre of the circle, but oftener at one-third of the diameter of the circle apart, and on a line at right angles to another line that might be drawn through the centre of the gateway or entrance on the east." From this, and the examination of the *Pucaras* or præ-Incasic strongholds, Mr. Squier feels justified in inferring that "there exists in Peru and Bolivia, high up among the snowy Andes, the oldest forms of monuments, sepulchral and otherwise, known to mankind, exact counterparts in character of those of the old world, pervaded by a common design, and illustrating similar conceptions. All of these are the work of the same peoples, found in occupation of the country at the time of the Conquest, whose later monuments are mainly, if not wholly, the developed forms of those raised by their ancestors; they seem to have been the spontaneous productions of the primitive man in all parts of the world, and they are not necessarily, nor even probably, derivative."

We find in this paper no forced suppositions, no ambitious theories; nothing but facts, and such conclusions as can be with probability, and almost certainty, deduced from well-observed facts. If all other archæologists, instead of indulging their imaginative powers, and trying to conjure up by divination the general features of American history, had devoted themselves, like Mr. Squier, to the collection and study of the original monuments,—there might indeed have been no Abraham living on the banks of the Amazons, no Moses leading the Jews from Mexico to Palestine, no Hebrew tribes wandering from Babylon to Palenque, no Mongolians sailing from China to Peru, with a number of equally romantic and astonishing inventions that cast daily discredit upon American archæology; but there would have been a little more certainty, and *quien sabe?* a little more history.

G. Maspero.

Zachariae Episcopi Mitylenes aliorumque scripta historica graece plerumque deperdita. Syriace edidit J. P. N. Land. [*Anecdota Syriaca.* Collegit edidit explicuit J. P. N. Land. Tom. III.] Lugduni Batavorum apud Brill, 1870.

Among those who worked and work *now* at the evaluation of the Nitrian mines of the British Museum the editor of the present volume, Dr. Land, holds a prominent place. Being chiefly devoted to historical researches, he made a collection of the works of Syrian historians, of which he already published two volumes (*Anecdota Syriaca*, vols. i. ii.). These, however, are far surpassed in intrinsic value by vol. iii., edited from Add. 17,202, which is in our opinion one of the most precious gems of the whole Nitrian Collection.

The title does not very accurately represent the nature of the book; it is a chronicle, a historical compilation by an unknown author. According to his own statement on p. 5, ll. 24, 25, his work comprises a period of 129 years, *i. e.* from the 32nd year of Theodosius II. (408–450) till A. gr. 880 (A.D. 569) in the reign of Justinus II. He describes the fate of the Byzantine empire under the emperors Theodosius II., Marcianus, Leo, Zeno, Anastasius, Justinus I., Justinian, and Justinus II., a period the manifold events of which proved to be of lasting influence on all the following centuries down to our age; they are, at the same time, closely connected with the fate of Syriac literature. It is the Ciceronian age of Syriac style, the time of Xenaias, who carried Syriac prose to a degree of perfection which was never attained before or afterwards—the time when Paul of Callinicum made the first translation of the works of Severus. Both Xenaias and Severus will by their energy and talents gain the admiration even of those, who smile at the principles for which they fought, and for which they perished. Their numerous works among the Nitrian manuscripts (the Greek originals of Severus are mostly lost) have hitherto been scarcely touched; but we receive much light from the reports of this chronicle, and they are *vice versa* a vivid and most copious commentary on the history of the period which it comprises.

In conformity with the character of those times this his-

tory is chiefly ecclesiastical, church-matters being the party-cries, dogmatic questions regarding the different natures in Christ agitating the nations and dissolving the Byzantine empire, acting in fact with even more vehemence than now-a-days the question of nationalities.

In the present form the book is not complete, several portions towards and at the end being lost. Books i.–ix. are in complete preservation. Of book x. there remain: ch. i. in a very fragmentary state, ch. iv. imperfect at the beginning, and ch. v. imperfect at the end. The whole of book xi. is wanting. Of book xii. we have the end of ch. iv., ch. v. vi., and ch. vii. imperfect at the end. Here we must call the attention of the reader to a passage in the preface of book iii. (beginning of the translation of Zacharias). The author after enumerating the contents of book iii. (the history of the council of Chalcedon and the events connected with it during the reign of Marcianus) says, p. 117, ll. 5, sqq.: "all this is here written down accurately in the *following twelve books* and in the chapters into which they are divided," whilst in reality it is described in *one* book (the third) of twelve chapters. If this passage is not corrupt, as we suspect, we must conclude that, if our chronicle be referred to, it must have contained originally fourteen books; that therefore books xiii. and xiv. are also lost; that, on the other hand, if it refers to the work of Zacharias, this originally contained twelve books.

This chronicle, like most chronicles of those times specially of the East, is a compilation transcribed from different sources; its value depends upon the nature of these sources. On this subject the author expresses himself on pp. 4, 5: "We see pictures of various men in various places, and we find hypomnemata on various events which happened in the world, and statues erected for the commemoration and praise of the deceased. How much more does it befit intelligent and industrious men, that the events happening in various times, subsequent to the periods described by Eusebius, Socrates and Theodoret—being scattered and not collected in one book, should be collected as much as possible either from *letters* (documents) or *books* or *true hearsay*, and should be written down for the benefit of good Christians, who care for the probity and virtue of their soul," &c. According to more minute indications in the book itself we must divide it in the following parts:—

(1) Book i. containing nine loosely connected chapters is a sort of introduction, leading down to the time of the beginning of the chronicle, *i. e.* A.D. 440. It rests on the authority of Eusebius, Socrates, and Theodoret, as the author states himself on p. 84 in the beginning of book ii.

(2) Book ii. records the events of the last ten years of Theodosius II., *i. e.* 440-450. It is the author's own compilation, as he states on p. 85, ll. 5-10.

(3) Books iii.–vi. are translated from the Greek chronicle of Zacharias Scholasticus (מלילא), bishop of Mitylene, who addressed it to an officer of the imperial court, אופרכם. The exact statement to this effect is repeated by the compiler at the beginning and end of every book (pp. 116, 133, 165, 188, 199, 200). In the latter place, at the end of the sixth book, the compiler says: "In this (vi.) and the preceding (v.) book is contained what in a summary way is hurriedly translated into condensed language, for the understanding of the Syrian reader, from the Greek chronicle of Zacharias Scholasticus, who wrote, *as far as this point*, in copious language, according to the custom of most (?) Greeks, alone regarding the time of seventeen years of the life of the Emperor Zeno," viz. A.D. 474–491. From this note we infer, 1. that here is the end of the chronicle of Zacharias, which from book iii. till book vi. comprises the reign of Marcianus, Leo, and Zeno, A.D. 450–491; 2. that the compiler does not give a complete translation of the Greek original, but that he *abbreviated* in translating, as he confronts the "condensed language" of his translation with the "copious language" of the original, stating besides that he translated "in a summary way" and "hurriedly." His art of translating is of an inferior description; and his own Syriac prose stands on the same level. In the rest of the book the name of Zacharias is not mentioned anywhere.

(4) Books vii.–xiii. are apparently taken from very different sources, but the author does not specify them.

The author of the whole compilation is totally unknown. As to Zacharias, we know that he became Bishop of Mitylene, A.D. 536, whilst as soon after as A.D. 553 Palladius appears in the same office; he belonged to the Monophysite party. In literary history his place is between Socrates, Theodoret, and Euagrius, by whom he is quoted as Zacharias Rhetor. The Greek original of his chronicle is lost. Whether anything more than books iii.-vi. in this compilation is taken from Zacharias, is possible, but requires proof. It seems that the whole was quoted as a work of Zacharias, the real author being unknown, whilst the quoted numbers of books and chapters agree with those of this compilation, the division of which is certainly different from that of the chronicle of Zacharias (preface, p. xiii, ad Add. 12,154). We have to add that one portion of the book was already edited in text and Latin translation by A. Mai in *Scriptorum veterum nova collectio*, tom. x.

There is no doubt that a more minute examination of the book will furnish valuable results regarding the question of its origin and tendencies, the time of its composition, in fact of the critical use which the historian will have to make of these rich materials; as the author did not, like Tacitus, record "sine ira et studio."

The manuscript from which Dr. Land has made his edition (see the facsimile between pp. 252, 253), though of a considerable antiquity, is not very correct and reliable; it betrays some carelessness, and a great deal of ignorance on the part of the copyist. It is particularly stupid to add a *yud* at the end of a word without any reason; and more than most copyists he blunders in writing, for instance, גדש, instead of גדשו or גדשי. Dr. Land closely adheres to the authority of the manuscript, with more fidelity, we should think, than was desirable. To reproduce the mistakes of the scribe, of the kind just referred to, is exactly as bad as if a foreign editor of a French book would write "il parle, ils *parle*." Besides many a well-known word is distorted which might have been corrected without any difficulty. It would have been highly useful if the proof sheets, before being printed off, had been, or could have been, once more collated with the manuscript; many a form, which seems embarrassing on first sight, would have disappeared. Without this it seems almost impossible to edit a text in Syriac, or any other Eastern language, as accurately as an *editio princeps* is expected to be done in the present state of philology.

Between the text of the Nitrian and that of the Roman manuscript there is a considerable *varietas lectionis;* and the latter, though likewise not free from mistakes, seems by far preferable to the former. P. 212, 16: describing the famine of the Persians beleaguered in Amid, the author says "they ate" ܡܢܥܠܐܢ, &c. There is no such word as this: the editor ought to have adopted the reading of R (Roman MS.), ܡܢܥܠܐܢ, "they ate their shoe-leather." P. 207, 18: A Persian commander discovers an unguarded part of the fortifications of Amid, and sends immediately for "ladders" and for his soldiers. If ܡܢܥܠܐ is really the reading of L (London MS.), it ought to have been altered into the read-

ing of R, ܩܕܪܐ, "ladders." P. 205, 8: The reading ܐܢܕܐ is just as bad as that of Bruns ܐܢܕܐ. Again the reading of R, ܐܢܕܐ, ought to have been adopted. The passage is correctly explained by Payne Smith in the *Thesaurus Syriacus*, p. 357. P. 4, 22: Methodius, bishop of Olympos, mentions in a book, *De Resurrectione Mortuorum*, that Pheidias made a beautiful statue of ܐܝܬܐ. The author meant "of ivory," ܐܝܬܐ. P 165, 22: instead of ܐܘܡܐ, write, ܐܘܡܐ; p. 203, 26, ܐܘܡܐ for ܐܘܡܐ. P. 289, 10: Sergius of Rasain was well versed in Greek literature; he read and spoke Syriac, and knew "the books on medicine." According to my copy the MS. has ܐܘܡܐ ܕܩܕܡ, "et *βιβλία* medicinae." Dr. Land's ܩܕܡ is not a Syriac word. P. 301, 2: The form ܕܩܕܡ looks as un-Syriac as possible. Should not the MS. have ܕܩܕܡ? P. 302, 10: For ܐܝܬܐ read ܐܝܬܐ, "thronus vester evangelicus," as p. 304, 25. Such and similar emendations offer themselves in numerous places; whilst there are other passages, the purification of which will be a task of considerable difficulty. On the whole, the interpretation of the Syriac translation of a Greek text, which is not extant, if it is not as slavish as the first translations of Aristotle, demands the highest philological skill and a thorough knowledge of both Greek and Syriac; it is necessary to discover, often by guessing, the Greek forms under an uncouth Syrian veil.

Dr. Land promises a Latin translation of the whole; we hope it may follow very soon. By this edition of the text he has made a most valuable and long wished for addition to our knowledge of Syriac literature; by the translation he will win the thanks of the much larger circle of those who take an interest in historical and theological subjects.

Ed. Sachau.

Contents of the Journals.

Nuova Antologia, May 18.—Amari has an affectionate notice of Huillard-Bréholles, who has just died at Paris. He did much for the Italian history of the thirteenth century by his Historia Diplomatica Frederici Secundi, and by his Life of Pietro della Vigna, Frederic's minister. We should not forget that he published an excellent translation of our English historian Matthew Paris, the monk of St. Albans.

Preussische Jahrbücher, May.—Maurenbrecher characterises the policy of Frederic the Great in the Silesian Wars, and shows that Frederic's object was to depress Austria without letting France become supreme in Germany—the French plan having been to divide the Austrian dominions into parts which she could easily control. The fair and honourable conduct of England is conspicuous throughout. —H. Grimm concludes his Voltaire and France with a general characterisation of Voltaire's literary activity as the outcome of the "Latin race" when at its highest, before the Celtic understratum of population once more got the upper hand. The account of his relation to Frederic the Great is well given. But the theory of race seems to be now a sort of theory of destiny; and it is curious to see how thoroughly it is being worked on the German side. The failure of Thierry's great theory, which explained all English history by a supposed continuous struggle of Normans and Saxon, may make us cautious in accepting any such view as that of the inevitable decadence of the Latin race.—Ernst Curtius gives a touching account of Adolf Schottmüller's life. He became blind at an early age, but is well known for his enthusiastic writings on behalf of the Reformation and its leaders, especially in connection with Prussia, whose future prosperity was in his eyes bound up with the Protestant cause.

Literarisches Centralblat, May 20.—A review of Schaefer's History of the Seven Years' War, shows how the new material does but confirm in the main the received view as to the conduct of Louis XV. and his mistress in bringing on the war under Maria Theresa's eager impulse of revenge, and as to the heroic joint action of Frederic and Pitt against the coalition.

New Publications.

Carrière, Pasteur P., dit Corteis. Mémoires. Histoire des misères d'autrefois 1685-1730. Publiés pour la première fois par Prof. et Past. J. G. Baum. Strasburg. Basel: Georg.

Dörr, Dr. F. Der deutsche Krieg gegen Frankreich im J. 1870. 15. u. 16. Lfg. Berlin: A. Duncker.

Egger, Dr. J. Geschichte Tirols von den ältesten Zeiten bis in die Neuzeit. 1. Bd. 2. u. 3. Lfg. Innsbruck: Wagner.

Huber, Dr. A. Untersuchungen üb. die Münzgeschichte Oesterreich's im 13. u. 14. Jahrh. (Acad. reprint.) Wien: Gerold's Sohn.

Juste, T. Les fondateurs de la monarchie belge. Sylvain van de Weyer, ministre d'état, d'après des documents inédits. 2 vols. Bruxelles: Muquardt.

Kitt, H. Die Entstehung der Altaicher Annalen. (Aus *Untersuch. zur mittlern Geschichte.*) Leipzig: Teubner.

Mayer, O. Die Justa Causa bei Tradition u. Usukapion. Erlangen: Berold.

Mussafia, A. Sulla visione di Tundalo. (Academy reprint.) Wien: Gerold's Sohn.

Soltav, G. De fontibus Plutarchi in secundo bello punico enarrando. Bonn: Weber.

Urkunden, Russisch-livländische, gesammelt v. K. E. Napiersky. Hrsg. v. der archäolog. Commission. St. Petersburg. Leipzig: Voss.

Zürcher, Cand. J. Gersons Stellung auf dem Concile v. Constanz. Studien zur Katastrophe desselben. [Aus *Untersuch. zur mittlern Geschichte.*) Leipzig: Teubner.

Philology.

On Early English Pronunciation, with especial reference to the pronunciation of Shakespere and Chaucer, by A. J. Ellis, Esq. Parts I. and II. London: published for the Chaucer Society, by Trübner and Co. 1869.

The want of a definite system of notation is acknowledged to be the greatest obstacle to an intelligible discussion of speech-sounds, their formation and changes. Two methods of remedying the evil have been proposed, which we may distinguish as the traditional and the physiological. The former has, for reasons of convenience, been adopted by Mr. Ellis. In his "Palæotype" the ordinary letters, either singly or combined, are used to express definite and fixed sounds, shades of difference being denoted by the use of italics and capitals, and other modifications. The following are the values of the more important palæotypic symbols:—(a, e, i, o, u) as in Italian, (y, œ) as German *ü*, *ö*, (æ, A, ə, ɔ) as in h*a*t, *a*ll, h*u*t, h*o*t, (*a*) is the broad Scotch (often the German) *a*, (e) and (*e*) and (o) and (*o*) denote the open and close pronunciation of the respective letters, (*i*) and (*u*) as in English b*i*t, f*u*ll, (i) and (u) as in b*ea*t, f*oo*l. (H, J, W, q) as in *h*ay, *y*ea, *w*ay, si*ng*; (h, j, *w*) are always diacritics; their principal combinations are: (kh, gh, *k*h) as in German na*ch*, sa*g*en, ni*ch*t, (th, dh) as in *th*ink, *th*en, (sh, zh) as in *sh*e, a*z*ure, (bh) as in South German *w*as, (ɲh, mh, nh, rh, wh) are the surd or voiceless sounds of each simple letter; the last is the sound of *wh*ich. The other consonants are pronounced as in English. Compound sounds are expressed by the junction of their elements. Long vowels are doubled. Stress is marked by an inverted period after the accented syllable. Isolated palæotypic writing is enclosed in parentheses, to prevent confusion.

Without some such system as this, comparative or historical phonetics are impossible. What basis of comparison does the combination *ch* afford, which suggests to Englishmen, Frenchmen, Germans, and Italians, such distinct sounds as (tsh, sh, kh, k)? Thus far the value of palæotype is unquestionable: for those who are acquainted with the pronunciation of the key-words, a system is provided equally available for learning the sounds of others, and recording their own. This necessity for the employment of key-words is, however, a radical defect of the system, as the key-words are not always generally known, nor is their pronunciation always uniform. On the other hand, in a physiological alphabet such as the "Visible Speech" of Mr.

Bell, the traditional letters are entirely rejected, and a regular system of symbolizing the physiological formation of each sound is employed; the reader only has to follow the directions given by the shape of the letter itself, and he will accurately reproduce the sound, even if it be one he has never heard before. Mr. Ellis has therefore done well in adding a tabular comparison of his and Mr. Bell's symbols, so that the pronunciation of his letters can be acquired independently of key-words.

Mr. Ellis then proceeds to the discussion of the general laws of sound-change, the most important of which are: changes take place not by insensible degrees, but *per saltum*, in passing from one generation to another; and a series of sounds acquired in childhood and youth, remain fixed in the individual during the remainder of his life. The influence of these two laws on the actual history of a language is, however, liable to considerable modification by social, literary, and political circumstances. The same influences affect the orthography also. When writing is an art practised by the few, and literature is handed down orally, the scribes are hardly influenced at all by orthographic traditions. In highly-civilized communities again, where writing is universal, and literature is represented almost entirely by printed books, the visible symbol of the word gradually acquires an independent value, and it suggests an idea without any reference to the sound it originally represented.

Under these circumstances Mr. Ellis rejects our orthography entirely as a guide to the history of English pronunciation in the last four centuries, and bases his investigations on a series of treatises on various branches of language, which throw light, either directly or indirectly, on questions of pronunciation, beginning with Palsgrave's French Grammar (1530). These authorities are numerous and of the most varied character: grammars of foreign languages for Englishmen, English grammars for foreigners, treatises on spelling and pronunciation, some of which attempt to reform the current orthography and introduce purely phonetic alphabets, and treatises on the formation of speech-sounds. They are, however, of very various degrees of value. Many of the writers indulge in vague metaphorical descriptions, such as hard, soft, thick, thin, which convey no real information, and are employed differently by each writer. Even when numerous key-words from various languages are used, the uncertain pronunciation of the key-word, and the imperfect appreciation of the citer, often make the results of the investigation doubtful. Mr. Ellis himself says:—

"Let any one begin by studying Sir T. Smith, Hart, Bullokar, Gill, and Butler, and he will soon either find himself in the same slough of despond in which I struggled, or will get out of his difficulties only by a freer use of hypothesis than I considered justifiable, when I endeavoured to discover, not to invent—to establish by evidence, not to propound theoretically—the English pronunciation of the 16th century."

The first satisfactory results were obtained from an unexpected quarter, Salesbury's *Welsh and English Dictionary*, 1547. Prefixed to this work is an account of English pronunciation written in Welsh, in which about 150 typical English words are transcribed in Welsh letters, to show the pronunciation, thus *flax*, *thine*, are written *fflacs*, *ddein*.

"Now the Welsh alphabet of the present day is remarkably phonetic, having only one ambiguous letter, *y*, which is sometimes (ə), or (ɜ), and at others (*y*). Did Salesbury pronounce these letters as they are now pronounced in North Wales? Most fortunately he has answered the question himself in a tract upon Welsh pronunciation written in English, and referring to many other languages to assist the English reader. The result was that, with the exception of *y*, the sounds had remained the same for the last 300 years."

The 16th-century pronunciation being determined on this solid foundation, the accurate phonetic treatises of Wallis and others fully established that of the following centuries, up to the fully-developed 18th-century pronunciation, which differed only in isolated instances from that now in use. Some of the more striking of Mr. Ellis's results are given in the following table.

Modern Spelling.	Chaucer. XIV.	Spenser. XVI.	Dryden. XVII.
hand	Hand	Hand	Hænd
tale	taale	taal	tæal
rain	rain	rain	ræein
knight	kn*ik*ht	kn*ik*ht	nəit
now	nuu	nou	nəu
muse	myyze	myyz	miuz

Our limits will not allow us to criticise minutely these results. No unprejudiced student of Mr. Ellis's work can doubt their general correctness, but the exact determination of each sound will probably be a subject of dispute for many years to come. Thus we question the accuracy of (əi) and (əu) for the 17th century, as these sounds seem rather to be very modern weakenings of (ai) and (au), which latter are still heard from careful speakers. The identification of the first element of the *i* in *bite* with the *u* in *cut* would however rather point to (ɜi), as the pronunciation (ɜ) of the latter vowel (which is still very common) is more antiquated than that with (ə). Hence we may assume three stages (ɜi), (ai), and lastly (əi), or perhaps more correctly (ahi).

The pronunciation of Chaucer is deduced partly from the known pronunciation of the 16th century and the general laws of change observed in tracing the history of the various sounds through the two following centuries, partly from his rhymes, which are proved to have been in all cases rhymes for the *ear*, not, as in modern times, for the *eye* also. Therefore when *madame : blame*, *same* are found rhyming together there can be no doubt that all three words were pronounced with (aa) in the root syllable, as the word *madame* has preserved its original French sound down to the present day, and the pronunciation thus inferred is confirmed by the evidence of the 16th century.

The general result of the investigation of Chaucer's sounds is the important law that the scribe always intended his orthography to indicate his own pronunciation, so that every variation of spelling generally indicates a variation of sound. This law is of great importance in the investigation of the Early English period, through which Mr. Ellis ascends gradually to Anglo-Saxon.

Direct evidence of the pronunciation of many of the A.-S. vowels is furnished by an old MS. of part of the Septuagint in A.-S. letters, not a mere transliteration of the original, but evidently intended to represent the Byzantine pronunciation, which nearly resembled the modern Romaic.

Mr. Ellis's analysis of these transcripts is the most valuable part of his A.-S. section. Otherwise he has not added much to what might previously have been conjectured on A.-S. pronunciation: he does not give a satisfactory account of the *ea* and *eo*, whose origin and pronunciation have never yet been properly explained.

The history of Icelandic sounds is an interesting subject for investigation, which Mr. Ellis has greatly facilitated by his elaborate account of the pronunciation of the modern language, to which he has added an abstract of the conflicting views of various authorities on the sounds of Old Icelandic.

Finally, to make the account of the Teutonic sources of English as complete as possible, he has added an account of Gothic pronunciation, with a tabular comparison of the views of the principal German scholars.

The rest of the second part is taken up by summaries of the results scattered through the preceding pages, each letter and each sound being briefly traced through the whole of its history, and some general remarks on the relations of ortho-

graphy and pronunciation. Mr. Ellis remarks on the possibility of combining the historical and phonetic principle in one alphabet, and the desirability of such a system. It is needless to give the details of the system he has contrived for this purpose, as he has since superseded it by a less clumsy one, called "Glossic," which he proposes to use not only in writing English dialects, but also for general purposes, alongside of the ordinary orthography. We cannot, however, agree with Mr. Ellis in his estimate of the value of these modifications of the current alphabet. In the first place, from a purely scientific point of view, the real difficulty the philologist has to face in studying the English, or any other living dialects, is not so much the want of a system of sound-notation available for those who write down the dialects from the mouth of the people, but the utter want not only of phonetic training but even of any sense of the necessity of accuracy and intelligibility in distinguishing and recording sounds among dialectologists themselves. Until there are a few more really competent dialectologists, the phonetic tools supplied by Mr. Ellis seem likely to rust away from want of work, or else to be blunted by unskilful hands. There are other objections founded on the nature of the systems themselves, which tell against their successful use by the most skilled phoneticians: even Palæotype, the most perfect of them, is not, strictly speaking, a *phonetic system*, for its symbols are either traditional, borrowed from the current alphabet, such as (k) and (p), which letters are quite as unambiguous in the ordinary orthography as in palæotype, or arbitrary, as (c), (x), which convey no idea to any but Mr. Ellis himself and those who may happen to know his key-words and pronounce them in the same way.

Similar objections apply to a general use of glossic. If used by people ignorant of phonetics, it would soon be regarded as a purely orthographic scheme, which people would acquire without regarding their own varieties of pronunciation; the system would then become fixed, so that a constant succession of patchings would be necessary every two or three generations to keep up its phonetic character. The result of using the old and the new spelling concurrently would probably be an endless confusion between the two systems, which would be mixed together at random, and a final return to the old orthography.

We have little doubt that the real alphabet of the future is Mr. Bell's "Visible Speech": it has all the good qualities of Palæotype and Glossic without any of their insuperable drawbacks; could be learnt by an ordinary child in a few weeks; is self-interpreting, independent of key-words, and of universal applicability. The only advantage Palæotype has over it at present is the want of means for printing it—a difficulty which is merely a temporary one, and could soon be remedied. That something must soon be done in the way of orthographic reform is certain, or as Franklin said: "our writing will become the same with the Chinese as to the difficulty of learning and using it."

The third part of the work, which we shall notice in our next, and the fourth, which is not yet out, contain specimens of pronunciation from Chaucer, Wiclif, Shakespere and Dryden, reprints of Salesbury on Welsh and English, and of Barcley on French pronunciation, specimens of phonetic writing, beginning with Hart (1569), pronouncing vocabularies of each period and specimens of 19th-century pronunciation and of dialectic varieties both English and Lowland Scotch.

Here we must close this imperfect estimate of a work, which for boldness and breadth of plan and laboriously scientific execution stands alone in English philological literature. If we had a few more books of this kind, we should not now be dependent on foreigners for the merest rudiments of the history of our language. Let us hope that the work so worthily begun by Mr. Ellis will not be allowed to fall to the ground, and that the example of Mr. Murray—whose treatise on the southern dialects of Scotland, now in course of publication by the Philological Society, contains the soundest dialectic work that has yet been turned out—may incite others to do likewise, and thus found a truly national school of philology.

To appreciate fully the value of Mr. Ellis's investigations we have only to imagine ourselves, after being accustomed to read French and German in complete ignorance of their real pronunciation, discovering their living sounds, and gradually applying them in reading. What the result would be is also the result of Mr. Ellis's determination of Chaucer's and Shakespere's pronunciation: the language of these poets is no longer dead, it lives, and has an individuality of its own.

H. Sweet.

Études sur les Tchinghianés; ou, Bohémiens de l'Empire Ottoman. Alexandre Paspati. Constantinople: Koroméla, 1870. 8vo.; x. 652 pp.

Dr. A. Paspati has made one notable contribution to our knowledge of the language of Gypsies in the treatise which appeared (in 1857 in the Greek journal *Pandore*) under the title Μελέτη περὶ τῶν Ἀστιγγάνων καὶ τῆς γλώσσης αὐτῶν; for the dialects of the Turkish Gypsies, which he there described, were previously very imperfectly known. This article was translated, on account of its importance, by the missionary Hamlin, and printed in the second volume of the *Journal of the American Oriental Society* (1861) under the title, "A Memoir on the Language of the Gypsies as now used in the Turkish Empire." On this paper Professor Ascoli of Milan founded his book *Zigeunerisches*, a supplement to Pott's great work on the Gypsies (Halle, 1865), in which he explains most of the forms given by Paspati, and corrects many of the latter's explanations.

The work before us is for the most part an enlarged reproduction of the above treatise; that is to say, after an introduction on the most essential works which have appeared on the subject since Pott, we have a complete grammar of the dialect of the Turkish Gypsies, with a copious, not to say prolix, Gypsy-French Lexicon, followed by six original narratives, with a French translation and a short French-Gypsy Vocabulary. The author appears, by the introduction to his Gypsy-French Dictionary, to believe that the stories given by him (which are undoubtedly valuable) are the first original texts ever published. He can therefore not have seen my *Beiträge zur Kenntniss der Rom. Sprache*, published two years ago at Vienna; which is to be regretted, as he might have learnt from it how such texts ought to be transcribed in Roman characters in order to facilitate their accurate comprehension by the reader. Paspati's work is of great value as bringing together a mass of new materials relating to the Turkish Gypsies and their language, and so far science owes the author a debt of gratitude. But after this general acknowledgment, we will take leave, without dwelling in detail on his services, to pass to those points on which we wish briefly to express our dissent.

In the first place—and this remark applies not only to Paspati's work, but to those of his predecessors as well—we miss an accurate phonology of the parent stem, *i.e.* the Indian portion of the Gypsy language. And as that language is only a late Indian dialect, its phonology ought not, as is usually the case, to be treated in connection with Sanskrit, but on the contrary compared with modern Indian languages and the Prakrit dialect. Our own experience leads to the firm conviction that it is only by searching investigations of this character that we can hope to obtain

an adequate solution of the question either of the closer connection between any one of the *new Indian dialects* and that of the Gypsies, or of the date at which the latter migrated from India. Concerning the last point, it may be observed that all Indian expressions used by the Gypsies, with the exception of some half-dozen, can be traced to the linguistic stock of the new Indian popular dialects, while that half-dozen appears to be derived from Sanskrit. Hence the migration of the Gypsies out of India must have taken place at a time when the new Indian literature, through which Sanskrit elements began to be introduced into speech, was only in process of creation. The date thus obtained would, on the whole, harmonize with that fixed by tradition.

For the rest, we have no right to complain of the author for his neglect of phonology, as he is not a philologist by profession, and in most cases, as appears from his work, depends entirely upon Pott. Thus most of his explanations are either identical with those of Pott or vary very slightly from them. Dr. Paspati also resembles Pott in seeking his parallels very often in Sanskrit, more seldom in Urdu, and scarcely ever in the remaining new Indian dialects, although the latter are incomparably the more important for the study of the Gypsy tongue. If Dr. Paspati had consulted them with greater diligence, he would certainly not have overlooked the remarkable conformity of the genitive suffix *kero* (p. 52) with the Bhojpuri suffix *kar*, *karâ* (vide Beames in the *Journal of the Royal Asiatic Society*, N. S., iii. p. 489).

We should also have been glad if Dr. Paspati had exercised a little more moderation in the use of the linguistic lore which he parades rather ostentatiously in the Lexicon, but which often wanders off into the mere citation of remotely kindred words. According to our view, the only word which should be given is the one by which the Gypsy word under discussion can be best explained; everything else which does not bear directly on the subject is superfluous, and betrays a want of critical perception. Thus in the case of *báv*, "foot" (p. 166), it seems nothing less than perverse to quote first the Sanskrit *pâda*, and the Urdu *pânw* only in the second place, when the latter would have been quite sufficient by itself, and the Gypsy word can be traced back to it. The same may be said of *gáv*, "village" (p. 237), where the author gives first the Sanskrit form *grâma* and then the Urdu *gânw*, and again of *rováva*, "I weep" (p. 264), the Sanskrit *rud* being quoted from the Urdu *rônâ*.

Dr. Paspati's spelling (except, happily, that of the Gypsy words) must also be condemned. He writes Sanskrit, as a rule, according to German pronunciation; but in Urdu, which for comparative purposes has to be referred to much oftener, he follows the English pronunciation. Thus in p. 138 he writes, quite correctly, *anguli*, *angushta;* but on the other hand *ungootha*, *ungoosht*, *ungooshturee;* similarly, p. 140, he has correctly *arakháva* ("I shelter, or protect"), Sanskrit *raksh*, but incorrectly Urdu *rukhnâ;* p. 144 *asáva*, "I laugh," Sanskrit *has*, but Urdu *hunsnâ!* We can understand that with languages that have no character of their own the orthography may vary with the nationality of every European *savant* who has written about it, but a variegated orthography like that here presented should at least be avoided in the case of languages which have a writing and a literature of their own.

In spite of the opportunities afforded by his residence at Constantinople, Dr. Paspati has failed to discover any Armenian elements in the Gypsy language. We notice on p. 295 *kotor*, which is erroneously compared with the Sanskrit *krt*, Zend *keret*, whilst it is simply the Armenian *kotor; vus* (p. 584), which is identified with Sanskrit *vusa*, *busha* (*busa*, "wheat chaff"?) is nothing but the Armenian *vush*, and so on.

F. Müller.

Lilja (The Lily). By Eystein Asgrimsson. Edited by Eirikr Magnusson. London: Williams and Norgate. 1870. 8vo.

Lilja is the name of an old Icelandic poem on the Virgin Mary. The author, Eystein Asgrimsson, was an Augustinian friar, who died 1361. It contains 100 eight-line stanzas, and is the longest existing example of the eulogistic poems, with a refrain, or burden, known as stefjadrápur. The annalist Espolin, to show how great the fame of the work was in his time, quotes a saying as common in Iceland, "All bards would fain have sung the Lily" (i. 88); but he complains elsewhere that later generations, in the attempt to beautify the text, have in many places distorted and disfigured it. The first circumstance lends the poem its importance in literary history, and warrants the publication of a new edition at once more accessible and more on a level with present demands than those of 1612, 1748, 1773, and 1858; the last adds indeed to the difficulty of the editor's task, but also disposes us to look with leniency on the manner in which he discharges it.

The earliest and best version of the *Lilja* is that contained in the so-called *Bergsbók*, a parchment of the fifteenth century, in the Royal Library at Stockholm; the readings of this MS., referred to as M in Finn Jónsson's edition (*Hist. Eccles.*, ii. 398), were placed at Mr. Magnusson's service in Jón Sigurdsson's careful collation. Besides this (B), Mr. Magnusson gives the variants from a parchment in the British Museum, not before collated, belonging to the end of the sixteenth century (A). Mr. Magnusson has, of course, taken B as the foundation for his text, using A and the earlier editions to supplement it. In several places he suggests emendations, as in stanza 1, line 3; st. 2, l. 2; st. 3, ll. 6, 7; st. 48, l. 4; st. 49, l. 6; st. 57, l. 4; st. 62, l. 4; st. 66, l. 3; st. 85, l. 7; st. 90, l. 4. His critical method, his treatment of B in connection with the other manuscripts, and many of his emendations, leave nothing to be desired; but particular points may be excepted against. *e. g.*, in st. 3, l. 6, vorðin = orðin τὰ ἔπη; st. 34, l. 4, the dative *Mann ok Guð* (the mistake seems to lie in *þvi* rather than *trúan*); st. 41, l. 6, the neuter *manni;* st. 56, l. 5, *sviddu* from *svíða*, instead of from sv*i*ða; in st. 33, l. 3, we should prefer to retain the reading of B *þar*, *i. e.*, þá'r; st. 33, l. 6, joðit instead of joðer (but altering the punctuation); in st. 57, l. 4, föðr (instead of Magnusson's syni), for the Son is meant by Guð lifandi; st. 60, l. 8, króki (instead of his krossi), with reference to agn-svelgjandi; st. 92, l. 8, fúss (instead of fús because of húsi) cf. fúss—vísir in Geisli 18; st. 94, l. 4, jurðir, instead of ítur (why íturr?). In st. 66, l. 3, Mr. Magnusson writes, to our thinking correctly, bannsettur allar ættir (instead of, as the MSS., bannsettr um allar ættir); but why defend the epenthetic *u*, as he does in a note, when such a use for it had already been clearly proved to be common in the period generally and in the *Lilja* particularly, by such instances as lengur, 29, 6; klæddur, 42, 4; ykkur, 16, 3; liggur, 99, 6? We cannot share his hesitation about the anacoluthon in 66, nor agree with him about the œ, which, though etymologically correct, is not so historically, *i. e.*, for the middle of the fourteenth century, as appears from the assonances in 3, 4; 6, 6; 7, 8, &c. &c. *Tæki*, in 22, 7, and *þætti*, in 97, 4, are, no doubt, only misprints; and so are *glœsilig*, in 25, 3; *bœri*, in 30, 2; *klœddi*, in 55, 4; *lœkning*, in 86, 4; and *kvœdi*, in 98, 2. In 64, 4, we find Aðám for Adam, and in 16, 2, dróttinn for drottinn. For the assistance of students of the poem Mr. Magnusson has provided a nearly exhaustive glossary, and a very readable and faithful English translation, in rhymed trochaic couplets. An introduction of fifty-four pages gives an account of the poet's life and of the metrical form, date, sources, and position in Icelandic literature of his work. His explanation of drápa (as drápa-kvida), slaughter-song, cantus præliaris, cannot easily be reconciled with the meaning

of *drepa*. But while differing from the meritorious editor on the few points instanced above, we cannot refrain from expressing our recognition of the fact that his work has been done *con amore*, and recommend it warmly to all who are interested in Icelandic literature and mediæval religious poetry.

Th. Möbius.

THE PRONUNCIATION OF LATIN.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—I shall endeavour, in the following paper, to make a brief reply to the arguments brought against my view of the Latin *v* in the *Academy* of May 1.

1. As my arguments were drawn from Priscian, the point to be established is what Priscian really thought. Prof. Munro allows that "he cannot rid himself of the notion that F, in consequence of its form, besides its proper sound, represented amongst the ancient Latins the digamma as well." If Priscian could not rid himself of the notion, it is probable that it was based on something more than a mere resemblance of form; in fact, on a *v* pronunciation of the digamma. The *two* ideas, similarity of form *and* similarity of sound, seem to present themselves to his mind together. After reading the letters in the *Academy* of May 1, I went carefully through Priscian's first book. It will hardly be asserted that any passage in that is *inconsistent* with a *v*, not a *w*, pronunciation of the digamma, though some passages may be explained on either hypothesis. The general character of his view I think is to regard *u* when a consonant as quite distinct from *u* when a vowel (i. 17). In default of any positive evidence of his pronunciation of the digamma, the MS. identification of it with Φ (on which see below) seems to me of some weight: that *af* did not represent *aw*, but *av*, is *prima facie* more probable, and is confirmed by the parallel instance of *sifilum* for *sibilum*, which he quotes immediately afterwards.

2. Prof. Munro seems here to differ not only from me but also from Mr. Roby. We both argue that Priscian points to a *representation* in a different form of the original sound. If *v* and the digamma were both used *as a substitute* for an aspirate in *vespera*, &c., I maintain, as I said before, that the substituted sound is more likely than not to have borne palpable traces of affinity to the original sound,—that consequently ἕσπερος is more likely to have been changed to *vesper* than to a sound which, like *wesper*, bears no trace of aspiration. And this appears to be confirmed by Priscian himself; for in the second place where he mentions the fact that the ancient Romans substituted F for the aspirate (i. 46 compared with i. 22), thus identifying it with the digamma, and the later *u consonans*, whence *af* for *ab*; he adds "'*sifilum*' *quoque pro* '*sibilum*' *teste Nonio Marcello de doctorum indagine dicebant*." What appropriateness could this illustration have if the digamma and *u consonans* were pronounced as *w*? Surely Prof. Munro will not maintain that the old Romans said *siwilum*. Nor will he, I think, maintain that Priscian is merely introducing *another* but different use of antiquity; one, that is, in which *f* represented not the *b*, into which the digamma passed, but one which was either original, or, at any rate, had no connexion with the digamma. I am convinced that most unbiassed readers of the passage would explain *af* = *ab*, *sifilum* = *sibilum*, as two parallel cases, and would conclude that to Priscian at any rate the sound of the digamma as of *u consonans* was a soft spirant. Mr. Nettleship objects, that if the Romans had the sound of our *v*, it is strange they do not dwell on the difference between this sound and the other spirants *f* and *ph*. Assuming that they do not, the reason of this may be that later Roman F was so violently explosive, that the solicitude of the grammarians was mainly directed to pointing out the differences between it and the Greek φ. At any rate, negative objections drawn from the silence of the grammarians have no great weight. We might as well complain of their leaving undetermined another principal point of the question before us, the resemblance of *u consonans* to *b*, β.

3. If the interposed *v* in *Davus Argivus*, &c., was in sound a *w*, its vowel or semi-vowel character would have too nearly approximated to the actual vowels on either side of it to have allowed Priscian to place it on the same footing, as a bar against hiatus, with the *d* of *prodest*, the *b* of *comburo*, the κ of μηκέτι (i. 22; cf. i. 38, and i. 45). Mr. Roby actually uses this very argument, the facility with which *u* consonans *did* fall out in Latin forms like *amasse*, *cautum*, *iunior*, *prudens*, &c., in support of the *w* pronunciation. That it did fall out constantly is a fact: that a *w* pronunciation is the only way of explaining that fact is an open question; what I am concerned to prove is that *Priscian* placed the latter on the same footing, as regards hiatus, with consonants undeniably *distinct* in their pronunciation, and not with one approximating so closely to vowel sounds as often to be indistinguishable from them. Nor can I agree with Prof. Munro's statements about the MSS. Hertz considers his best MS. to be one which he designates *R* (Paris 7496, written in the IXth. cent.); and *R* has ΔΑΦΙΟΝ, ΛΛαΦΕΚαFΟΝ: after *R*, *B* and *P* he places four designated by him *L K G A*; of these *A* has ΛαΦΙΟΝ ΛΗΜΟΦΛΦΟΝ, ΛαΦοΚαΦΟΝ, *G* ophaFONzaΦα ΚαFΟΝ; again *A* has ΦΕΛΕΝΑΝ for FΕΛΕΝΑΝ, i. 20; and if any further proof is required of the traditional sound of the digamma in Priscian, it is supplied by vi. 69 to which Hertz refers. There the Φ is written in the same two words by nearly all the MSS. quoted in the apparatus; it is in no sense true that none but late or inferior MSS. support it.

4. If Priscian meant to make, as Prof. Munro asserts, a purely metrical remark, I cannot think he would have used as an illustration of his meaning words which were so ill adapted to the purpose as *quis quoniam*. How easy to have brought up instances like *equos aqua metuo*, which would have at once made the matter intelligible. But the fact is that the *in metro* of i. 15, *Quero propter nihil aliud scribenda videtur esse nisi ut ostendat sequens u ante alteram uocalem in eadem syllaba positam perdere uim literae in metro* is added there because metre is the only test to which Priscian could bring his assertion. "As for *q* the only purpose it answers is to show a peculiar affection of *u*; preceded by *c* and followed by a vowel, it becomes a nondescript letter, neither vowel nor consonant, as may be seen in metre." It is probably for this reason that in i. 37, when Priscian again speaks of the *u* after *q* and *g*, he omits *in metro*. He was not discussing a question of metre, but a question of sound, as any one may see who takes the trouble to examine the passage; and having amongst other powers of *u* to mention this nondescript one when it follows *q* or *g* and is followed by a vowel, he refers to his former exposition of the sound, omitting the *in metro*, as he is not writing about metre, though the actual test of the particular power of the letter happens to be a metrical one. It is no disproof of this that he immediately adds, *Quod apud Aeolis quoque* υ *saepe patitur et amittit uim literae in metro, ut* Σάπφω 'Αλλὰ τῦιδ ἔλθ', &c., for the same power of υ could only be tested in the same way, metrically; and in this case he has not introduced the metrical test before. As to my assertion that the delicate sound of an *i* like Greek υ was more likely to associate itself with a *v* than a *w* (*vi*, *fi* not *wi*), I would ask my opponents to pronounce *quare*, *qui*, *quis* in this order; if I mistake not the progress is not only from a coarser to a more delicate sound, but from a *w* to a *v*.

5. I do not see what is gained by dwelling on the confessedly less original forms of the perfect such as *docui*. If Umbr. *efust* = *iuerit*, Umbrian *ambrefurent* = *ambiuerint*, *ambrefur* = *ambiuerit*, the idea that *-ui* in *audiui* represents *fui* has at least a good deal to say for itself. I am not disposed to allow that so definite a sound as *f* or *bh* passed away without leaving some palpable traces of its existence; in many words, as Corssen shows at large, it survives in the form of *b*, *e. g.* in the suffixes *-bam -bas -bat -bo -ber -bro -bulo -bili -bi -be -bis* (*tibi*, *nobis*, &c.); is it not a reasonable conclusion that in forms like *poseiuei* the *u* is still a distinctly pronounced consonant, not far removed from *bh* or *f*; and that the change to *posui* was produced not by a *w* sound of the *v*, but by a *v* in which the lips instead of touching the teeth were arrested just before reaching them, producing a sound which, from its delicacy on the one hand and its approximation to a vowel sound on the other, was easily lost. If I understand Mr. A. J. Ellis rightly, this would be something like the sound which he expresses by *v'*.

6. Since writing my first article, I have read Mr. Roby's discussion on the Greek equivalents for *u consonans*. It is interesting, and, so far as it goes, careful; but the author does not profess to reach more than a rough general result. Indeed, without a more exact collation of the MSS. of most of the authors examined, a really satisfactory statement of the *facts* is unattainable; and I shall, I hope, be pardoned if even on this ground I profess myself unsatisfied. But, accepting Mr. Roby's statistics as valuable so far as they go, I demur to his conclusions. For (1) if in Plutarch for 50 names written with ου, there are 43 with β; if for a total of 323 with ου, there is a total of 180 with β; this fact is alone sufficient to show how very nearly equivalent as expressions of a common sound ου and β must have been. (2) If they *were* so nearly equivalent, and *Vesuvius* could be expressed either by Βέσβιος or Οὐεσουούιος, *Flavius* by Φλάβιος or Φλαούιος, the meeting-point of the two expressions cannot have been a broad sound like *w*; it must have been a thinner sound like *v*. And such a sound *will* suit both expres-

sions; for, as I have said above, *v* has two powers—a more purely consonantic when the lips touch the teeth; a less distinct, more inward character when the lips move towards the teeth in the effort to express a full *v*, but are arrested on the way. Mr. Roby pronounces *wesuwius;* I would suggest that the sound was *vesuw'ius*, the latter *v* not touching the teeth and thus naturally falling out, *vesvius*. As to the passage of Nigidius Figulus I do not quite catch Prof. Munro's meaning. I cannot imagine how two words, which like *uos*, *nos*, only differ in their first letter, can be adduced as illustrating the *contrast* of external and internal sounds, if the difference do not lie *in* that letter. When we say *vos* we speak outwardly—why? Because *v*, and *v* only, is an outward letter; when we say *nos* we speak inwardly, because *n*, and *n* only, is an inward letter. Mr. Roby calls upon me to test the pronunciation of *vos* by uttering it before a mirror. I did so before writing my first article, and I also watched the movement of the lips in two other people pronouncing the same word as *vos* and *wos* alternately. I have also repeated the experiment since. As regards the projection of the word from the lips, and the distinctness with which the breath is directed outwardly, the experiment is in favour of *vos;* the former part of the description is left, I think, undetermined by the experiment, and cannot be appealed to as decisive either way.

7. This is not the place to discuss the by no means settled question of the comparative weight of MSS. and Inscriptions. But it was from Prof. Munro himself, as well as from Lachmann and Ritschl, that I learnt to consider manuscripts, in particular cases, not merely trustworthy, but decisive guides in matters of orthography. The number of words which *can* occur in inscriptions is necessarily limited; the number of inscriptions which have descended to us within the last 200 years of the Republic and the first century of the Empire is not in itself large—is, if we put out of mind single words and lines, still smaller; in the inscriptions which we have, much, in spite of all the care of transcribers, is not beyond doubt: in many cases the date is not ascertainable. Important, therefore, as inscriptions are as a means of testing the assertions of grammarians and the value of MSS., they are not, in my judgment, final. Let it be granted that no assertion can be of any authority which is made independently of them; this does not prove that either historically or linguistically they alone are true. The MSS. of Virgil are amongst the most ancient and the most careful which have descended to us from antiquity; their authority is considered by Prof. Munro to be pretty generally conclusive in orthography; no one who carefully studies the apparatus of Ribbeck's Virgil, can, I think, fail to gather from it a feeling that here, if anywhere, we see what the most refined Romans wrote in the age of Augustus. Now these MSS. abound with interchanges of *v* and *b;* and I maintain, that if we follow them in accepting as Augustan other spellings which, till the last few years, would have been thought strange or impossible, we act inconsistently if we deny that *this* peculiarity also found a place in the spelling, and therefore in the pronunciation, of the Augustan age. Inscriptions, it will be said, do not exhibit this fluctuation. They do not, *ascertainably*, in the same degree; and I am ready to accept this fact as proving that the two letters were substantially distinct, and in a considerable number of words were not sounded like each other, and therefore not written for each other. But then what a very small proportion of the words composing the Roman language could, by the nature of the case, come into inscriptions at all; how many of such as could were shortened to gain space; how few inscriptions are of any great length; in such as are, what a tendency to repeat the same word over and over again! Still the indications of the MSS. are not wholly unsupported by inscriptions; even in the first volume of Mommsen's *Corpus*, containing only the inscriptions of the Republic, there is at least one instance of the interchange of *v*, *b;* in the subsequent volumes they are comparatively numerous, though anything like certainty as to the date of many of them must be considered out of our reach. One set of inscriptions, indeed, comes to us with a definite limitation of time—those on the walls of Pompeii, Herculanum, and Stabiæ cannot be later than 79 A.D. Most of these are very short and, from the great variety of characters, difficult to read, but if Zangemeister may be trusted, they contain several examples of this confusion:—thus *Bibius*, 3145; *Viui*, 2953; Βειβίῳ, four times, 2837–2840: again, *Benni* (1848) is probably the same name as *Venni* (2496); *Vesbinus* occurs six times, *Vesbino* twice, *Vesbius* twice, *Vesbi(um)* once,—quite enough proportionably to carry out my assertion.

I add a few remarks suggested to me by the reperusal of Priscian's first book.

8. Mr. Nettleship and Mr. Roby both dwell on the fact that *i* and *u* only become consonantic by preceding vowels, and argue from the fact of no other letter being used to represent them as consonants, that they were respectively only a new power of *i*, *u*. Not so thought Priscian. If, he says, we think of making a strict catalogue of letters according to their powers, *i* and *u* consonans ought to be added to the alphabet; for as *k*, *c*, *q*, are only different expressions of one power, so *i*, *u* express as consonants *diuersum sonum et diuersam uim* both in metre and pronunciation, and ought therefore as such not to be reckoned among the other letters (i. 17).

9. An aspirate can never precede *i* or *u* consonans (i. 19); would this be true if *u* consonans were a *w?* To us, at any rate, nothing is more familiar than an aspirate in connexion with *w*, in *which*, *whose*, &c.

10. *V*, like the digamma, is sometimes a double letter, as in *cupiveram*, for when *v* is dropt, the *i* is shortened—*cupieram* (i. 21); *i. e.* tested metrically, the effect of *v* upon a preceding *i*, in perfects and pluperfects of the 3rd and 4th conjugations, is that of a letter pronounced twice over. Priscian seems to mean that as the *i* in *majus* was heard twice (*may-yus*), so the *u* in *cupiueram* extended to the *i* and *e* equally. Would this be possible if the *v* were a *w?* *Cupiw-weram* is to me an impossibility: *cupiv-veram* would explain his meaning.

11. Much use is made of the resolutions of *v* in *siliŭac*, *solŭit*, &c., as a proof that the *u* before its resolution was a *w*. Priscian, however, speaks of these as quite exceptional cases, introduced on purely metrical grounds; in fact they are by no means common, and belong rather to the artificial and learned, than to the freer and more natural, period of Roman poetry. Corssen therefore considers them to have nothing to do with the language of the people (i. 313); and it is quite as plausible a theory that they point to a considerably different, as to a closely connected, sound; or, rather, we might say that the probability of the adoption of the resolved *u*, as an artifice of learned poetry, is in inverse proportion to the facility with which the mouth naturally passed into it in pronunciation.

R. ELLIS.

THE NEW UMBRIAN INSCRIPTION.

IN the spring of 1869, in the Umbrian Apennines, at Forsato di Vico, belonging to the district of Foligno, the following inscription was found, with a number of human bones, fragments of vessels of coloured glass and burnt clay, and pieces of white travertine columns, all in a Greek style of art. The inscription is on a copper-plate attached to the upper edge of a burnt clay vessel of cylindrical form. The Italian savant Ariodante Fabretti published it with observations at Turin, 1869; and it has recently been explained (*Zeitsch. f. vergl. Sprachf.*, xx. pp. 81–95), by Corssen, to whom Fabretti sent a copy, requesting an interpretation. The inscription is Umbrian, and is as follows:—

Cubrar . matrer . bio . eso
Oseto . cisterno . n c . ↓v
Su. Maronato IIII
V. L. Varie T.C. Fulonie.

From the form of the letters A, E, F, L, its date is ascertained to be early, probably before the Syrian and Macedonian wars, early in the second century B.C. This is confirmed by the consonant not being doubled in *oseto*, *Fulonie*, compared with *ossuarium*, *fullonii*. *Cubrar matrer* = *Cuprae matris*, in which name may be recognized the *Cupra dea* of the Etruscans and Picentes; whilst etymologically the fact mentioned by Varro L.L. V. 159, that *Cuprum* was Sabine for *bonum*, points to a connexion with the Roman Bona Dea. *Oseto* is, probably, a formation like *fruticetum rosetum*, &c., *eso* the nomin. sing. neut. of the demonstrative pronoun of which *eso esu eso-c* are other forms in Oscan. *Bio* is explained by Fabretti = *pio*, cf. *burrus*, *buxus;* *cisterno* = *cisterna*, in the general sense of a receptacle; *su* = *sub*, *maronato* = *maronatum*, a word which Corssen connects with μέρμηρα, &c., and the whole is explained thus:—

Cuprae matris pium (i.e. *sacrum est*) *hoc ossuarium et haec cisterna* (i.e. *olla conditiua*) *n(ummis) c(ollatis) LVIIII sub curatura V(ibii) L(ucii) fil. Varii* [*et*] *T(iti) C(aii) fil. Fullonii.*

If Corssen is right in his interpretation of *maronatu*, the original meaning of *marone* in Propertius ii. 32, 14, may be the *guardian* god of the fountain, the proper Latin name for the more usual *silanus* of Lucret. vi. 1264.

Intelligence.

Mr. A. Burnell writes to us from Tanjore (April 9th) that he has been directed by Lord Napier to proceed thither to arrange and catalogue the Sanskrit MSS. in the library of the former Rājās of that

place, and has already commenced the work. There are, according to repute, about 18,000 distinct books and parts of books in this collection, but sometimes ten copies are found of the same work, so that the actual number of distinct works may amount to 3,000 or 4,000. He had already found some new and interesting works, among them Kumārila Bhaṭṭā's Kārikās to the Āçvalāyanagṛihya sūtra. The Rājās here for the last two hundred years were Mahrattas, but they followed Telugu Nāyaks, who also had a library of Sanskrit MSS. on palm leaves; and as the late Rājā purchased many books at Benares, the collection is a very complete one except in a few particulars. Vyākarana seems to be very poor. It is, however, impossible to say what the library contains at present. Though carefully preserved, many of the MSS. have wrong titles on the covers, and are often in great disorder. Mr. Burnell hopes to be able at least to describe fully all new or interesting works.

Dr. Balfour has half finished his *Encyclopædia of India* (2nd edition). It is a vast digest of all that has ever been written about India, and contains also much original matter.

Major Carr's publications have unfortunately been stopped by his death. He was drowned in the "General Outram" steamer, which sank in the cyclone of last January, near Goa. His chief work was a very valuable collection of Telugu proverbs. His death causes a severe loss to Oriental studies, which seem doomed never to prosper in this part of India.

Contents of Journals and Selected Articles.

Literar. Centralblatt.—On Weber üb. das Râmâyana, May 6. [Weber shows that the imitation of Greek legends (*e.g.*, that of Helen), and the manifest hostility of the poet to Buddhism, compel the critic to deny the antiquity of the Ramayana.]—Ludwig's Der Infinitiv im Veda, rev. by J. May 13. [Maintains that the terminations of Aryan nouns and verbs were not originally flexional, but belonged to distinct linguistic forms, and shows the connection of the Vedic infinitives with the verbal flexions; contains also valuable contributions to Vedic grammar.]

De Gids for May.—Herwerden's Animadversiones ad Theognidem, rev. by van der Mey. [The work of an old pupil of Cobet, reviewed in detail. Comp. the notice in *Philol. Anzeiger*.]

Göttingische gelehrte Anzeigen, 1871, No. 18.—C. Wachsmuth reviews H. Diels' *de Galeni historia philosopha* (Bonn, 1870), a monograph which seems to be a real contribution to our knowledge of literary history. The common text, where it diverges from that of the Aldine edition and the codex Laurentianus, is shown to rest on no better ground than the version of Julius Martianus Rota, a learned Venetian physician of the 16th cent.: the reviewer however points out that, besides the Laurentianus, we have a medieval version dating from 1341, which has all the authority of a MS., and which has been unaccountably overlooked by Herr Diels. The result of the monograph is that the *historia* of the pseudo-Galen is directly derived from Plutarch's *Placita*, and not from the great original work from which Plutarch (or the pseudo-Plutarch) made his compilation.

Rheinisches Museum, vol. xxvi. pt. ii.—M. Schmidt: Suggestions on difficult places in Greek prose writers. [Emends the text of the Homeric Hymns, Callimachus, Theocritus, Theognis, Archilochus, Simonides, Babrias, Aeschylus, Sophocles, Euripides, Aristotle (Poetics), Aristoxenus, &c.]—F. Bücheler: Court poetry under Nero. [A short but very interesting examination of poems 725 and 726 in Riese's Anthology.]—H. Nissen: The history of Polybius. [Shows that the symmetrical arrangement of the work being detected, it is possible to place the fragments in a more satisfactory order. A life of Polybius is given as throwing light on the composition of the work.]—K. Dilthey: Archeological Raids iii. [On the passage in Pliny, *N. H.* xxxv. 99, describing certain pictures of Aristides. A sharp reply to an article by Uhrlichs in the previous vol. of the *Rhein. Mus.*]—J. P. Binsfeld: Contributions to the criticism and elucidation of Latin prose authors. [Cicero (several places), Sallust, Tacitus, Tertullian.]—J. Steup: On the Latin Grammarians. [Additions to the writer's essay *de Probis grammaticis*, suggested by Hagen's *Anecdota Helvetica*.]—J. Sommerbrodt: The Lucian MSS. in the library of S. Mark's at Venice.—[Continued from previous vol. of the *Rhein. Mus.*: a specimen collation of the text of the *Juppiter tragoedus* of Lucian.]—A. Riese: A prosodial Florilegium. [Describes a Paris MS. containing a collection of 166 lines extracted from Vergil, Martial, and others, and designed apparently to fix the prosody of certain of the rarer Latin words. We do not see why Mr. Riese should class suffŏcat with such barbarisms as servitŭs and muliērum; and we may remark that some of his difficulties admit of an easy solution; *e.g.* the line which he prints thus:—pȳrămĭdes claudant dignaque māūsŏlĕa, is obviously from Lucan, viii. 697, and becomes a respectable hexameter as soon as we substitute *indigna* for *digna*.]—F. Susemihl: On Diogenes Laertius—W. Teuffel: Vespae iudicium coci et pistoris iudice Vulcano. [The poem in Riese, i. p. 140-3.]—W. Schmitz: *Iodocus Lips.* [A document illustrating the University career of Lipsius.]—The Same: The Bern Notae. [On *inceps*, *palumbes*, *sirena*.]—J. M. Stahl: On Thucyd. ii. 53, and iii. 26—L. Müller: On Ennius. [Ap. Non. 385, 17, and 134, 18.]—W. Teuffel: On Hor. Od. i. 20—E. Bährens: On Phaedrus—H. Müller: On Florus—The Nennig Inscription, [Attention is drawn to a recent publication as settling the question of this celebrated forgery.]

Journal of Philology, No. 6.—T. Maguire: Prof. Munro's Notes on Juvenal, i. 13 and Aetna 590. [Discusses the use of the ablative in expressions like adsidus ruptae *lectore* columnae and extinctosque *suo* Phrygas *Hectore*.]—T. H. Dyer: The Roman Capitol, as laid down in Mr. Burn's Rome and the Campagna. [Mr. Dyer's only new argument against the German views as to the position of the Capitoline Temple is, that the foundations of a small temple have been lately found on the S.W. hill, in such a position as makes it improbable that the great Temple also can have been on that height. The question will never be settled till full liberty of excavation is allowed.]—R. Ellis: On Lucretius, Book vi. [Defends certain views on the text given in a former number of the journal against the strictures of Prof. Munro.]—T. Maguire: A passage in Oedipus Rex. [Κοῖλα κλῆθρα in 1260.]—The same: Two passages in Vergil. [Ecl. i. 68–72 and Aen. vii. 117–120.]—E. Abbott: Westphal's Methodische Grammatik der Griechischen Sprache. [Criticizes the work on the whole favourably, but expresses dissent from the author on several points, and complains of a tendency, running throughout the volume, to group together words of identical termination without sufficient regard to the stems.]—J. B. Mayor: Peile's Introduction to Greek and Latin Etymology. [Seeks to expose some of the contradictions and other weak points in the book and in the school of philology which it represents.]—The same: *Decadence.* [A barbarism, in lieu of which we are to say *decidence*.]—H. A. J. Munro: On Hor. Carm. i. 20. [A careful discussion of the difficult passage *tu bibes uvam*, where the writer suggests *vides* for *bibes*, which is at any rate infinitely better than Doederlein's *tum bibes*.]—J. E. Yonge: On Hor. Carm. ii. 13, 14. [Proposes *pronus* for *Poenus perhorrescit*—an emendation of which we cannot approve.]—The same: On Hor. Sat. i. 3, 25. [Defends Bentley's *pracvideas* for *pervideas*, on the hypothesis that it may mean to "overlook."]

New Books.

Beal, S. Catena of Buddhist Scriptures, from the Chinese. Trübner.

Böhtlingk, O. und R. Sanskrit-Wörterbuch, hrsg. v. der kaiserl. Akademie der Wissenschaften. 45. Lfg. 6. Thl. St. Petersburg. Leipzig: Voss.

Dindorf, G. Lexicon Sophocleum. Fasc. V. Leipzig: Teubner.

Goldziher, T. Beiträge zur Geschichte der Sprachgelehrsamkeit bei den Arabern. I. (Academy reprint.) Wien: Gerold's Sohn.

Hart, A. De Dionysii Thracis grammaticae epitoma partim inedita, quae est in codice Veneto Marciano DXXXI. Berlin: Weber.

Hartmann v. Aue. Sechs Lieder u. der arme Friedrich. Herausgeg. u. mit Anmerk. u. Glossar versehen von B. Schulz. Leipzig: Teubner.

Homeri Jlias. Recensuit J. La Roche. Pars II. Rhapsodia XIII.–XXIV. Berlin: Ebeling and Plahn.

—— —— Für den Schulgebrauch erklärt v. Prof. J. La Roche. 5. u. 6. Thl. Berlin: Ebeling and Plahn.

Jagić, V. Das Leben der Wurzel Dê in den slavischen Sprachen. Wien: Gerold's Sohn.

Leskien, Prof. A. Handbuch der altbulgarischen Sprachen. Weimar: Böhlau.

Miklosisch, F. Albanische Forschungen. II. and III. Wien: Gerold's Sohn.

Müller, Fr. Beiträge zur Morphologie u. Entwicklungsgeschichte der Sprachen. (Academy reprint.) Wien: Gerold's Sohn.

Orelli, C. v. Die hebräische Synonyma der Zeit und Ewigkeit. Leipzig: Fritzsche.

Pauli, C. Ueber Familiennamen. Münden: Augustin.

Salîl-ibn-Razik. History of the Imâms and Seyyids of 'Omân from A.D. 661–1856. Translated from the Arabic, with notes, appendices, and an introduction, by G. P. Badger, F.R.G.S. London: printed for the Hakluyt Soc.

Sauppii, H., Commentatio de arte critica in Flori bellis recte facienda. Göttingen: Dieterich.

Soltau, Dr. G. De fontibus Plutarchi in secundo bello punico enarrando. Bonn: Weber, 1870.

Vergil's Gedichte. Erklärt v. Th. Ladewig. 3. Bdchn. Aeneid. Buch 7–12. Berlin: Weidmann.

Wieseler, F. Ueb. den delphischen Dreifuss. (Academy reprint.) Göttingen: Dieterich.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, July 1, and advertisements should be sent in by June 26.

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General Literature.

Songs of the Sierras. By Joaquin Miller. Longmans and Co.

This is a truly remarkable book. To glance through its pages is to observe a number of picturesque things picturesquely put, expressed in a vivid flowing form and melodious words, and indicating strange, outlandish, and romantic experiences. The reader requires no great persuasion to leave off mere skimming and set-to at regular perusal; and, when he does so, he finds the pleasurable impression confirmed and intensified.

Mr. Miller is a Californian, domiciled between the Pacific and the Sierra Nevada, who has lived and written "on the rough edges of the frontier." Last winter he published, or at least printed, in London, a small volume named *Pacific Poems*, consisting of two of the compositions now republished—one of them in a considerably modified form. San Francisco and the city of Mexico were known to him; but it is only in the summer of 1870 that he for the first time saw and detested New York, and soon afterwards reached London. Thus much he gives us to know in a few nervous, modest, and at the same time resolute words of preface—reproduced here, with a postscript, from his former volume. He is prepared to be told and to believe that there are crudities in his book; but he adds significantly, "poetry with me is a passion that defies reason." Mr. Miller's preface would command sympathetic respect even if his verses did not. We feel at once that we have to deal with a man, not with a mere vendor of literary wares. To argue with him would be no use, and to abuse him no satisfaction. Luckily we are not called upon to do either; but, while responding to his invitation to point out without reticence what shows as faulty, we have emphatically to pronounce him an excellent and fascinating poet, qualified, by these his first works, to take rank among the distinguished poets of the time, and to greet them as peers.

The volume, of some 300 pages, contains only seven poems. The last of these—a tribute to the glorious memories of Burns and Byron—is comparatively short: all the rest are compositions of some substantial length, and of a narrative character, though *Ina*—considerably the longest of all—assumes a very loose form of dramatic dialogue. Mr. Miller treats of the scenes and personages and the aspects of life that he knows—knows intimately and feels intensely; and very novel scenes, strange personages, and startling aspects these are. This fact alone would lend to his book a singular interest, which is amply sustained by the author's contagious ardour for what he writes about, and his rich and indeed splendid powers of poetic presentment. A poet whose domestic hearth is a hut in an unfathomable cañon, whose forest has been a quinine wood, permeated by monkeys,

> "Like shuttles hurried through and through
> The threads a hasty weaver weaves,"

and whose song-bird is a cockatoo, and to whom these things, and not the converse of them, are all the genuine formative experiences and typical realities or images of a life, is sure to tell us something which we shall be both curious and interested to think over. There is an impassable gap between the alien *couleur locale* of even so great a poet as Victor Hugo in such a work as *Les Orientales*, and the native recipiency of one like our Californian author, whose very blood and bones are related to the things he describes, and from whom a perception and a knowledge so extremely unlike our own are no more separable than his eyes and his brain. Such being the exceptional nature of Mr. Miller's subject-matter, the best way of obtaining some specific idea of his work, both in its beauties and in its defects—which latter no doubt are neither few nor insignificant—may be to give a brief account of his stories.

The first poem, named *Arazonian*, is the life-experience of a gold-washer from Arazona, which he relates to a friendly-disposed farmer. The gold-washer had in his youth been in love with a bright-haired Annette Macleod. He then went off to the gold region, and for about twenty-one years saw and heard nothing about Annette, but still cherished the thought of her with fervid affection. An Indian woman became his companion in gold ventures, and, it might be inferred, his concubine, were we not told that she was "as pure as a nun." One day she challenges him with his undying love for the beautiful blonde: he returns a short answer, and takes no very definite measures for shielding her from a raging storm which comes on over the cañon on the instant. She, excited to a semi-suicidal frenzy, dies in the storm. The gold-washer, fencing with the horrid remorse at his heart, and keeping a vision of beautiful blonde hair before his mental eye, goes off to rediscover Annette Macleod. He sees the very image of her at a town-pump; but, when he calls her name, it turns out that this blooming damsel is but the daughter of the Annette of olden days, long since married. The gold-washer, thus drinking the dregs of bitterness from both his *affaires de cœur*, returns to his gold-finding, resolved to make of this the gorgeous and miserable work of his remaining years. He is a splendid personage in Mr. Miller's brilliant and bounding verses, and only "less than Archangel ruined." The second poem, *With Walker in Nicaragua*, appears to relate the author's own youthful experiences. Walker, whom we English have so frequently stigmatized as "the filibuster," is presented as a magnificent hero of the class to whom human laws form no obstacle. Mr. Miller is as loyal to his memory as was ever Jacobite to that of a Charles Edward, and probably with better reason. There is a wild, mysterious, exploratory spendour in this poem, a daring sense of adventure, and a glorious richness of passion both for brown-skinned Montezuman maidenhood and for the intrepid military chief, which place the work very high indeed both among Mr. Miller's writings (we think it clearly the best of all, with the possible exception of *Arazonian*) and in the poetry of our time generally. Walker, of course, is seized and shot before the poem closes; and the Montezuman damsel comes to as deplorable an end as the gold-adventuress of the preceding poem. After a courtship the raptures of which are only paralleled by its purity, she makes frantic efforts to reach her lover, now retreating by sea, along with his fellows, after a military disaster. She follows in a canoe; brandishes in the eye of the steersman a dagger which her

lover had given her as a token sure to be recognized; but somehow (we are not told why) no recognition ensues, the lover himself being lulled in uneasy slumbers, and the maiden topples over and is drowned. *Californian*, the next poem in the series, has very little story amid lavish tracts of description—or we might rather say of picture-writing, for Mr. Miller executes his work of this kind more by vivid flashes of portrayal and of imagery than by consecutive defining. A votary of the ancient Indian or Montezuman faith does any amount of confused miscellaneous fighting, and is slain: the woman who loves him casts herself into the beacon-fire. *The Last Taschastas* is another story of native valour and turmoil. An Indian chief of advanced age makes a raid upon the settlers: he is vanquished, seized, and put in a boat, to be transported, with his beautiful daughter, to some remote region. While on the boat he darts a poisoned arrow at his principal adversary, and kills him: he is then shot down, and no further account of the fate of his daughter is vouchsafed. *The Tale of the Tall Alcalde*, which follows, has something which, according to Mr. Miller's standard, almost simulates a plot. We are first introduced to an Alcalde in the town of Renalda, of abnormal stature, and of a dignified virtue equally abnormal. At a symposium in honour of the Annunciation, the Alcalde is induced—by a concerted and insidious plot, as it may be gathered, between an advocate and a priest—to narrate his early adventures. These prove to have been of a sort by no means consonant to the Olympian calm of his mature years. In youth, with an Indian girl whom he loved, he had joined a band of Indians, had fought in their cause, and had been imprisoned. The girl seeks him out in his durance, but cannot obtain access to him save at the price of her chastity. Loathing the wretch who demands this sacrifice, she nevertheless consents, but with a firm resolve not to survive the desired moment when her lover shall be liberated. This result is eventually obtained; and the Indian heroine, revealing her shame and her self-devotion, stabs herself to the heart. The future Alcalde, after this catastrophe, vows revenge; and prowls about with a vigorous and successful intent to murder which would have done credit to the Southern chivalry enrolled in the Ku-Klux Klan. At length, however, a scene of rural domestic bliss promotes milder thoughts. The outlaw returns within the pale of civilization, and enters on the career which has at last made him an Alcalde. When the enlightened but too confiding jurist has revealed thus much, the wily advocate starts up, denounces him, and orders his instant seizure: but to no avail. The Alcalde, who at the moment "seemed taller than a church's spire," declines to be handled, and grinds his drinking-glass to powder; and then

> "He turned on his heel, he strode through the hall,
> Grand as a god, so grandly tall,
> And white and cold as a chiselled stone.
> He passed him out the adobé door
> Into the night, and he passed alone,
> And never was known or heard of more."

We now come to the last of the poems—the semi-dramatic composition named *Ina*. It is a curious *guazzabuglio* (to use an expressive Italian term) of picturesque perceptions both of external nature and of the human heart, along with a chaos of the constructive or regulative powers of the understanding. Every now and then there is a sort of titanic and intrinsically poetical utterance in it which reminds one of Marlowe; a like splendour and far reach of words, with a like—or indeed a greater—contempt of quiet common sense, and overstraining of the framework. Ina is a passionate young woman, in love with Don Carlos, but resolved upon marrying, in faithful espousals, a suitor of heavy purse and advanced age; with the scarcely disguised motive, however, of afterwards enjoying, in the arms of the ardent Carlos, a youthful widowhood which is distinctly forecast as a very early contingency. Carlos does not quite "see it," and goes off in disgust to lead a wild hunting-life in the mountains—rough good-fellowship mellowed by misogyny. Ina soon realizes the summit of her ambition. Her aged bridegroom dies; she joins the hunting party in the disguise of a young mountaineer; and, after hearing from her companions various salvoes of story-telling to the dishonour of the serpent woman, she reveals and proposes herself to Don Carlos. The Don tells her that he cannot think of demeaning himself to a lady who comes to him second-hand; and the Donna, plucking up her spirit, as well as a vigorous modicum of good sense which has from the first endeared her to the reader athwart the coarseness of her own plans and the fantasticalities of her surroundings, informs him that he may make himself easy without her, once and for all.

Such, reduced to a *caput mortuum*, are the materials of this striking book, through whose veins (if we may prolong the figure) the blood pulsates with an abounding rush, while gorgeous sub-tropical suns, resplendent moons, and abashing majesties of mountain-form, ring round the gladiatorial human life. The reader will hardly need, after our summary, to be told that Byron is the poet whose spirit most visibly sways and overshadows that of Joaquin Miller. The latter is indeed a writer of original mind and style; and there is a weighty difference between a Californian who has really engaged in, or at least had lifelong cognizance of, all sorts of wild semi-civilized adventure, and a noble lord to whom the like range of experience forms the distraction of a season or the zest of a tour. Still, the poetic analogy is strikingly visible, and has a very mixed influence upon Mr. Miller's work. On one side, taking interest as he does, like Byron, in adventurous picturesque personages, with the virtues and vices of the life of defiance, full of passion and resource (for Mr. Miller has the art of making us respect the intellectual calibre of all his characters, whatever they may do, and however closely they may approximate to savages), he is lifted at once above the mild and mediocre or the merely photographic levels of work: on the other hand, he exhibits life not only under the rudimentary and incomplete conditions which his subject-matter suggests, but with an effect of abortiveness and gloom due partly, no doubt, to the Byronic tradition, and so extreme as to be almost morbid. His interest in life seems to be very much that of a gambler, who plays a stake, conscious that the chances are against him; or, one might rather say, of a man who watches a game played with loaded dice, and who sees his friend ruined by an undenounceable conspiracy. In *Ina*, for instance, gratuitous misery is poured forth, as from a bucket, with a liberally cruel hand. It is intensely unsatisfactory to be told of a lovely, girlish, and wealthy widow, steeped in amorous grace, constancy, and spirit, making love to the hot-blooded youth who has adored her all his life, and whom she has confessedly adored—only to be repulsed with a stolid obtuse *morgue*, and then to wrap herself round in her dignity, and close the last avenue to a right mutual understanding. We see Love assassinated before our eyes by two lovers, who can find no better employment than persistently carving the death's-head and marrow-bones over his head-stone. In this tale the very *motif* has a twist of dislocation: in some others, as our summary will have shown, the conception, though mainly monotonous, is interesting in a high degree, but the poet shows little gift for constructing a story. In *Arazonian*, for example—an excellent and truly engrossing poem—the reader is unable to credit the central fact; namely, that the gold-washer, having for twenty-one

years lost sight of his early love so entirely as not to know that she has been married for a long series of years, travels in good faith to search her out and wed her, and accepts at first sight her daughter as being her authentic self. It might perhaps be added, without cynicism, that the daughter, who so absolutely realizes to the many-laboured gold-washer the person of his long-lost love, should really have stood to his feelings in that relation; and that his natural and compensatory course would have been to court her on the spot.

Excitement and ambition may be called the twin geniuses of Mr. Miller's poetical character. Everything is to him both vital and suggestive; and some curious specimens might be culled of the fervid interfusion of external nature and the human soul in his descriptive passages. The great factors of the natural world—the sea, the mountains, the sun, moon, and stars—become personalities, animated with an intense life and a dominant possession. He loves the beasts and birds, and finds them kin to him: a snake has its claim of blood-relationship. At times he runs riot in overcharged fancies, which, in *Ina* especially, recall something of the manner of Alexander Smith, whether in characterizing the objects of nature, or in the frenzied aspirations of the human spirit. It should be understood, however, that the only poet to whom he bears a considerable or essential analogy is Byron. In *Arazonian* indeed the resemblance of diction and versification is rather to Browning, and some passages might seem to be directly founded on the *Flight of the Duchess:* but I learn that this resemblance is merely fortuitous. As such, it is an interesting reciprocal confirmation of the value of the peculiarities of narrative form belonging to both poems. At times also there is a recognizable ring of Swinburne, especially as regards alliteration, and a vigorous elastic assonance, not only in the syllables but in the collocation of words and phrases.

There is little space, and not much occasion, for dwelling on verbal or other minute defects. The swing and melody of the verse are abundant: yet many faulty lines or rhymes, with some decided perversities in this way, could be cited; along with platitudes of phrase, or odd and inadmissible words. All these are minor matters. Mr. Miller has realized his poetic identity under very exceptional conditions, highly favourable to spirit and originality, but the contrary so far as nitid completion or the accepted rules of composition are concerned. He is a poet, and an admirable poet. His first works prove it to demonstration, and superabundantly; and no doubt his future writings will reinforce the proof with some added maturity and charm. He is not the sort of man to be abashed or hurt by criticism. Let me add that the less attention he pays to objections, even if well-founded, and the more he continues to write out of the fulness of his own natural gifts, the better it will probably be for both himself and his readers. America may be proud of him.

W. M. Rossetti.

Canti e Racconti del Popolo Italiano. Pubblicati per cura di Domenico Comparetti ed Alessandro D'Ancona. Vol. I. Canti popolari Monferrini. Raccolti ed annotati dal Dr. Giuseppe Ferraro. Torino: Firenze, 1870.

In a review of an excellent work of Professor Comparetti's (*Academy* No. xi. 1870), I have already called attention to the mastery of his subject which he has displayed in that and other contributions to the study of Folk-lore in its most comprehensive sense. It is therefore with the greatest pleasure that we see him, in company with a colleague who has distinguished himself in the same field of research, at the head of a really national undertaking, such as the publication of the popular songs and fairy tales collected from all parts of Italy, by which treasures hitherto almost unknown will be brought to light and preserved. As the powers of the learned editors could not suffice alone for so extensive a task, they have, as is explained in the preface, entered into communication with friends and fellow-labourers in various provinces, from many of whom they have already received contributions and assistance. The published text undertakes to give the songs and tales exactly as they are taken down from the mouth of the people, without alteration and without the addition of aesthetic reflections, with the sole accompaniment of historical and comparative or philological illustrations. The present volume, which contains the popular songs of Montferrat, offers a very favourable specimen of the manner in which the whole undertaking will be conducted. Dr. Ferraro, a pupil of Comparetti and D'Ancona, has performed his task as collector and editor in a satisfactory manner. He expressly assures us that the songs have been given with conscientious accuracy, and that, even where they are unintelligible or incomplete, no attempt has been made to correct or supplement the original. This method can only meet with approbation, though perhaps it would have been as well to indicate with asterisks the passages where something is apparently missing. Difficult words and expressions are explained in the notes, but this might have been done more completely and with fewer repetitions by the addition of a glossary. The collection offers very little matter for historical illustration; and the comparative references to kindred songs are limited to those of the remaining Italian provinces, the editor being apparently unacquainted with the languages of northern nations; what he does contribute is, however, very welcome. The principal thing was to supply a faithful collection of the songs of his native province with verbal explanations; and this part of the undertaking, as we have already said, has been satisfactorily accomplished. He gives 115 ballads in all, of which No. 21, *Cecilia*, is connected with the legendary cycle to which Shakespeare's *Measure for Measure* belongs. Ferraro refers to poems of similar tenor in A. Wolf's *Volkslieder aus Venetien*, Vienna, 1864, p. 64, *La Povera Cecilia;* in G. B. Bolza's *Canzoni popolari comasche*, Vienna, 1867, p. 671, *Cecilia;* in Pelay Briz, &c., *Cansons de la terra—Cants populars catalans*, Barcelona, 1866, i. 129, *La Dama de Tolosa;* and in Mila y Fontanal's *Observaciones sobre la poesia popular con muestras de romances catalanes ineditos*, Barcelona, 1853, p. 143, *La Dama de Reus.* Both the last parallels, as well as the Montferrat version, should be added in the new edition of Simrock's *Quellen des Shakespeare* to those given in vol. i. p. 159. The last song given by Ferraro bears the title *Dopo la guerra di Russia*, 1844. After this come 112 *strambotti*, a kind of song containing generally four lines of eight syllables, with arbitrary rhymes, and for the most part of an amatory character. They are obviously improvised and contain little poetry; the following will serve as a specimen of the dialect:—

> "Fáti a lo barcun, desideraja,
> Ti sei pì bela che ant ir mund u sia;
> Da titte ir part dir mund sei numinaja,
> Sei numinaja pr'ina bela fija."

"Come to the window, desire of my heart. You are prettier than anything in the world; in all parts of the world they talk of you; they talk of you as a pretty girl."

The next volume is to contain a rich collection of popular tales, and will be the more welcome that the harvest to be gathered in this direction has hitherto been much neglected (see *Academy* Vol. I. p. 176). The trifling price of the single volumes (two lire for 158 pages well got up) will also contribute to give them a wide circulation. Each special collection, whether in one volume or more, will be accessible to the public as an independent work.

Felix Liebrecht.

LITERARY NOTES.

A series of articles which have appeared in the last three numbers of *Fraser's Magazine* on "Chinese Statesmen and State Papers," possess at the present time more than ordinary interest. The writer is evidently well acquainted with his subject; and although he abstains from pointing out any means of overcoming the innumerable difficulties which surround our path in China, he has done much by plainly recording the opinions of leading Chinese politicians on foreign relations to throw light on our present very unsatisfactory position in the "Flowery Land." The State Papers to which he refers bear principally on the Missionary difficulty, which, without doubt, is the question of the day; for in it is involved the disputed right of residing in the interior. On this point the views of the statesmen quoted by the writer admit of no doubtful interpretation. With the exception of Tseng Kwo-fan, who expresses supreme contempt for the vitality of the mushroom religions of the West compared with Confucianism which "has not suffered by attrition through myriads of ages," and which "has regenerated China in government, morals, manners, and doctrines," they one and all condemn in unqualified terms the proposal to grant further privileges to the preachers of Christianity. The unfortunate propensity of the Jesuits to catch at power has mainly influenced the governing classes in taking up this hostile attitude; and the work, which has been recently translated into English under the title of "A Death-blow to Corrupt Doctrine," shows plainly to what lengths these latter are prepared to go in order to stir up an organised opposition to the foreign missionaries. This work deserves particular mention from the fact that it contains some of the most scurrilous and indecent libels on foreigners, and on foreign missionaries in particular, that have ever been published in any language, and also on account of its having been printed under the auspices of the Literati class, and been freely circulated throughout the empire through official channels. After noticing this publication, the writer asks how it will be possible to combine the maintenance of friendly relations with China, and the continued prosecution of missionary labours. If the telegram lately received from Shanghae conveys a correct idea of the contents of the despatch which has been addressed by the Chinese Government to the Foreign Ministers at Peking, they have determined to cut the Gordian knot. They have given notice that for the future missionaries residing in the interior will be treated as Chinese subjects, and that all preaching against the doctrines of Confucius will be strictly prohibited. It remains to be seen how the European Governments will view this very summary mode of dealing with the question. The insight into foreign politics displayed by some of the Chinese statesmen in their memorials to the throne on the subject of the revision of the treaties is, when we consider the difficulties in their way of acquiring knowledge of Western countries, extraordinary. In speaking of Prussia in 1867, the governor of the Province of Kiangsu says, "On the borders of Prussia are the several small German States which it is her present object gradually to absorb, as the silkworm gnaws or the whale swallows (*i.e.* by craft or force). She wishes but to show her power beyond the sea; she is not really anxious for intercourse with distant parts; aggression at home is her *rôle*, and to show herself strong before the kingdoms of the West." Great perspicuity in estimating the relative position and importance of foreign states is possessed by many officials of the class to which the writer of the above belongs; but their wisdom is turned into foolishness when they are called upon to compare the pretensions and resources of China with those of Western nations. Their hatred of the barbarian almost amounts to madness, and is all the more dangerous because it is concealed.

The *Grenzboten* of May 26 contains an article on the University Libraries of Germany, and points out the defects of management owing to the head librarian being usually selected from the professors. He is only bound to give a small part of his time to library work, and he naturally orders books belonging to his own department, so that other branches of knowledge (and especially physical science) are neglected. The author might have profitably given some account of English university libraries. A translation of "The Battle of Dorking," in current numbers of this periodical, may count as a sign of the times.

The work on which Mr. Browning is now engaged will, we hear, shortly appear in print. It is understood that the subject claims the special interest of scholars, the basis of the poem being a translation of the *Alcestis* of Euripides. Mr. Browning's comments, his readings between the lines, are placed in the mouth of a girl who figures from the commencement of the piece, while the transcript from the Greek is introduced towards the middle as a play. Hitherto Mr. Browning's great successes have not been identified with classical modes of thought, and it would seem as if the treatment of the choruses must present peculiar difficulties to one whose lyric verse often appears to bear the trace of unfulfilled effort, but it remains to be seen to what point of achievement his great force and insight may be stirred by the inspiration of the present theme.

An elaborate and, of course, not too partial critique on Gervinus, by Julian Schmidt, in the *Allgemeine Zeitung*, traces the success of his *Literary History* to its dogmatic tone and superabundant erudition, which carried away with it the generation contemporary with its first appearance. While showing the connection between different periods of German literature, he failed to explain the rationale of their succession; and while his judgments on isolated writers deserve respect, he had not the gift of picturesqueness which atones, for instance, in Sainte-Beuve, for inferior scientific accuracy.

It is not easy to find unpublished fragments by Goethe, but a new work, *Goethe zu Strassburg*, offers as next best some lines by Frederika, written in an album in 1785; they are no worse than others of the kind, and run—

> "Verfolge ihn zärtlich, o Freude,
> O Unschuld, o Liebe, ihr drey!
> Doch bringt ihm in lachendem Kleide
> Die göttliche Tugend dabey.
> Wer eifrig wünschet, hat, was er will.
> Dies aus treuestem Herzen von Ihrer Freundin Frid. Brion."

M. Michelet is ill at Florence with congestion of the brain, and his recovery is doubtful; it is said that he was overwhelmed by the recent events in France.

The *Revue des deux Mondes*, instead of the usual "Bulletin bibliographique," inquires—"Est il besoin de dire que rien n'a paru pendant cet effroyable ouragan qui a bouleversé Paris, incendié le palais de Philibert Delorme et détruit même de fond en comble l'Hôtel de Ville, le palais du peuple?" Accordingly, like most of the recent numbers, that for June 1 is principally political. M. Caro reminds his readers that Republic means "la chose publique," and George Sand concludes a novelette—as melancholy a production as ever signalised the decadence of a nation or a writer.

A new controversy has arisen about the three lines in the ninth canto of the *Paradiso*:

> "Ma tosto fia che Padova al palude
> Cangerà l' acqua che Vicenza bagna,
> Per esser al dover le genti crude."

As different learned professions have claimed Shakespeare for a member, it is said that in Dante's lines engineers naturally see water, while poets and physicians discover blood. According to the ingenious interpretation of Professor Gloria, the allusion is to "the substitution of the waters of the Brenta for those of the Bacchiglione by the enlargement and continuation of the Brentella, effected by the Paduans in 1314 in the district known as *Palude*, near Padua; the bed of the Bacchiglione being then dry, and the water drawn off by the Vicenzans, according to their regular practice when at enmity with the Paduans."

Belli, a Roman, and Neri Tanfucio (Renato Fucini), a Florentine, who writes in the Pisan dialect, are two satirical sonnetteers, with claims to be considered the popular poets of Italy. P. Fanfani, in *Nuova Antologia* for May, gives the preference to Fucini, but his jests are of the ephemeral sort, which would enliven a comic paper.

Mr. E. J. Poynter contributes to the *Fortnightly Review* for June a valuable but incomplete essay headed "Beauty and

Realism." The style is ragged at times, from the essay standing as it was composed for public delivery. All that Mr. Poynter has to say about the mechanical ugliness of so-called decorative work in the nineteenth century is thoroughly sound, luminous, and practical, and the subsequent argument about the relations of realism and idealism in art contains the germs of much that is just in theory. In calling imitation and design the two constituents of art, and in defining realism as the preponderance of imitation, and idealism of design, in a work of art, the writer adopts a good enough working analysis, if not a final or very penetrating one. In conclusion, contending that the grandest power of design is much more closely dependent on perfect power of imitation, and therefore that idealism is much more closely allied to realism, than is commonly supposed, Mr. Poynter is led to a passage of detailed criticism on Michelangelo, which is the most telling part of his paper.

We are authorised to contradict the rumour mentioned in the *Allgemeine Zeitung* for June 5, that Mr. Thomas Carlyle is engaged in collecting materials for his autobiography.

Art and Archæology.

CHURCH OF S. CLEMENTE AT ROME.

Cav. de Rossi, in the number of his *Bullettino de Archeologia Christiana* for December 1870, has corrected some of the mistakes into which the excellent Father Mullooly of San Clemente has been led by his enthusiasm. Probably his corrections may be carried somewhat further. Thus he assumes that the small chamber of the time of the Emperor Hadrian, which has been called by the worthy father "the private oratory of S. Clement," really is so, although the excavations made in 1870 clearly prove that it is the vestibule of the cave of Mithras, into which the original staircase descends; and although it is clearly shown by Father Mullooly himself that there was originally no communication between this so-called oratory and the church. The opening through the wall at that level was made by Father Mullooly himself within the last few years, since he began his excavations, and is only a hole knocked through the wall of the time of Hadrian. The other doorway at the top of the flight of steps, and on the level of the lower church, has an arch over it also of the time of Hadrian; but this doorway had probably been walled up in the time of Constantine, when the church was built, and when the use of the cave of Mithras was abandoned. The doorway was plastered over, and on the plaster was a painting of the ninth century; *possibly* it was not walled up until that time.

Between Father Mullooly and Signor de Rossi the real history of the church comes out clearly enough. The earliest date we have is an inscription found on the spot (perhaps a tombstone) of Rufinus and Lupercilla, who lived in the time of the Emperor Antoninus Caracalla, A.D. 211–217. This is probably also the date of the *Mithraeum;* although the walls are of the time of Hadrian, that place of heathen worship seems to have been made in a building not erected for the purpose. But this could not have been the house of Clement, if we admit that the church was made in the basilica or great hall of that house, which is probable though not an ascertained fact. This house seems to have stood in the great fosse of the city, eastward of the wall of Servius Tullius, which passes outside of the original altar end of the church; the *Mithraeum* stands in the inner fosse within the great wall of the city. There was no original communication between the one and the other. There is no reason to believe that any church was built on that spot before the "Peace of the Church" in the time of Constantine, or about A.D. 320. The earliest mention of it is by S. Jerome, in A.D. 382, and no other notice of it occurs until the first Roman synod in 499. After that we have an inscription on an altar of Hormisdas (A.D. 514–523), of which the inscription and two rich pilasters and capitals are preserved. The lower church appears to have been rebuilt by John VIII. (872–882), who fitted it up with a low marble screen to enclose the raised platform of the choir, according to the custom of that period, and added the apse of the lower church, which passes over the remains of the wall of Servius Tullius. The upper part of this had been carried away for building purposes, perhaps for the foundation of the church itself, in the fourth century; and this apse of the ninth century is accidentally over the vestibule of the *Mithraeum*, called the oratory of S. Clement.

The raised platform for the choir remains in the lower church, but is not so large as that in the upper church. The low marble screen, with the monogram of Johannes VIII. (872–882) upon it, was carried to the upper church when it was rebuilt in the beginning of the twelfth century, and the *ambones*, or reading-desks, on each side were then added. They do not belong to the original work of the screen, and the marble is different. There are several other *ambones* of that material in work of the twelfth century in Rome. The lower church, rebuilt in the ninth century, was decorated in the eleventh by Leo IX. (1048–1052). A few of the paintings of his time remain, including the "Ascension" (?) or the "Assumption" (?). The decoration was carried on by Beno di Rapizia, a painter of that period, who has painted another apse on the Palatine in the small church of S. Sebastiano in Palatio; he was evidently proud of his work, and probably was the donor of it, as portraits of himself and his family are given under the legendary pictures, and inscriptions recording their names as benefactors. De Rossi has found the signature of Beno di Rapizia to a deed of the date of 1080.

Just after the paintings were completed came the raid of Robert Guiscard and his brave Normans in 1084. They burnt the roof of the church, and damaged it so much that it was thought better to rebuild it entirely on the higher level, the road having then been raised five yards (after the original church was built), as in many other parts of Rome. The present church is mainly the work of Cardinal John Anastasius, whose name is inscribed on the *cathedra* behind the altar; it was begun in 1099, and finished about 1125, under Honorius II. Anastasius became pope with that title, and Ciaconius (who is generally an accurate historian) considers the monogram of Johannes on the marble screen to belong to him, but it is evident that he only raised it from the lower church, which was then abandoned and filled up with earth, and on this earth was laid the beautiful pavement of the kind in use about the twelfth century in Rome, called *opus Alexandrinum.* The earth preserved the pictures of the lower church while quite fresh, but it settled unevenly, and left the soil under the pavement in wavy lines. It was to remedy this evil that Father Mullooly began his excavations, which led to all the recent discoveries.

There are remains of the construction of each of the periods indicated. To the fourth century belong the outer walls of the lower church, which was considerably larger than the upper church. The wide nave of the lower church has had an aisle taken out of it in the upper one, and square brick piers were introduced below to support the marble columns between the nave and aisle of the upper church. All the marble columns are antique, both in the upper and lower church, taken from other buildings of the early Empire. Some rude heads in fresco on the wall of the fourth century are said to be of the same period. The walls of the lower church rest on a foundation of large blocks of tufa of the style of the kings, probably taken from the upper part of the wall of Servius Tullius, as has been said. The walls of the lower church, in some parts, continue above the floor of the upper church, as was shown when a chapel near the door was being repaired in 1868. The fine marble columns of the lower church are cased in brick piers.

J. H. Parker.

ARCHÆOLOGICAL PROCEEDINGS IN ROME.

Rome, May 9.

At the opening of a new season it may be as well to pass in review the undertakings of antiquarian interest, and the public works carried out and projected by the new government in Rome.

Visiting Ostia a few days ago, I found the *scavi* on this coast recently resumed after the winter, and close to the left bank of the Tiber, a newly discovered building, supposed to be one of the many *Thermae* among the long buried ruins of the city: an extent of low walls, in this instance, being brought to light at no great depth below the surrounding surface, and a court, once adorned with colonnades, opened in front of what seems to be the main building; some columns (one of the beautiful rosy-veined breccia called *corallina*) being seen prostrate

within that area. The main object of the works now in progress, but to be continued for only a few weeks before the summer heats render it necessary to suspend all labours on this fever-stricken coast, is the preservation, and where advisable the repair, of ruins already discovered. For such precaution, some of the Ostian ruins that are interesting, and adorned with mosaics on their pavement, have been covered with earth—so that there is less to be seen at Ostia now than during the winter of last year; but I am glad to hear that these *scavi* are to be recommenced, with the promised labour of about 100 men, early in the next winter season. The works for reducing the Forum to its original level continue, but have not yet led to any great results, nothing indeed noticeable except the uncovering of some pavement of the Vicus Tuscus near the Julian Basilica, and of the remains of massive buttress walls between the southern extremity of that building (or rather of the area occupied by its ruins), and the beautiful columns under the Palatine identified by Canina as the portico of the Curia Julia, or Senate house. Visiting the Thermae of Antoninus (Caracalla) yesterday, I found that usually silent and solemn scene animated by the activity and re-echoing with the noises of some dozens of workmen, busily engaged in removing soil and reducing the vast chambers and courts to their original level, heaping up and carting off the masses of broken masonry already fallen, to be used (as I understand) for new buildings, and also, what I regretted to see, uprooting and cutting down the trees and trailing plants which form a crown or tapestry along the jagged summits and high-hung terraces of these stupendous ruins. Much of the mosaic pavement, in coloured marbles, has thus been unburied; coins, painted stucco, fragments of rich marble and glass, are offered for sale to the visitors by the workmen, allowed thus to dispose of their treasure-trove; the complete disencumbering of the *Thermae*, now in progress, may certainly be commended albeit at some sacrifice of the picturesque. Still more promising is the project for reducing the entire Palatine Hill to its original level. In the Stadium of Domitian, or that part of the Imperial Mount where the Papal government had been carrying on works, this undertaking has been prosecuted with good results, and the discovery of remains of the stately colonnades round that area now enables us to form an idea of the scene here presented in antiquity.

Curiosity has been awakened by another discovery, of mortal and not mural remains, under the level of that stadium: several skeletons, laid in the ground apparently without regular sepulture or constructed tombs. It is conjectured that they may be the relics of retainers of the Frangipani, and perhaps of members of that family whose principal fortresses were in the environs of the Palatine, and that the dead here buried with so little honour may have fallen in some civil combat.

Within the demesne formerly possessed by the Emperor Napoleon, and purchased from him by the Italian government, nothing of much importance has been added lately to the range of unburied antiquities, and the estate of the Visitandine nuns, extending over the central part of the hill, has not yet been purchased or made accessible for visitors. When that territory has been thrown open, and included within the area of works, the whole will be placed under the direction of Signor Rosa, and the *scavi* on the Palatine pursued with more largeness of range and purpose. The public are now admitted on two days of the week to these enclosed grounds, the Sunday being added to the Thursday for this privilege. Signor Rosa is at present sole responsible director, owing to delay in the appointment of two of the six assessors to form the full Committee of Archæology, whose accordant counsels he will have to adapt himself to after all the members have been nominated.

A Building Company has purchased a wide extent of ground, now covered with gardens and vineyards on the eastern side of Rome, and in the course of time this now almost tenantless region may become a populous quarter of the revived Italian capital. The villa of Maecenas was probably the largest estate in olden time upon this land; and here stands the picturesque ruin probably miscalled "Temple of Minerva Medica." The specus of the Marcian Aqueduct, at some depth below the surface, and to some extent explorable, has been opened in one of these gardens by the British Archæological Society. In other works, preparatory to the building of the streets and squares on this ground, have been discovered so many epitaphs and fragments of tombs, as well as broken sculptures, that it seems probable some great public cemetery existed here, extending along the higher part of the Esquiline Hill.

The monks of the extramural S. Agnese basilica and convent have been enabled to resume the works, suspended owing to want of funds, in the Catacombs immediately below the tribune of that church—which was no doubt the principal ingress in former times, and has been thus reopened; but no objects of much interest have been found here, and the name of Bosio, inscribed in one place, leads to the conclusion that this part of the S. Agnes hypogeum was not only explored, but rifled of some of its contents by that celebrated discoverer. At S. Clemente, a new undertaking by the Father Prior of the Irish Dominicans has led to the discovery of some ancient constructions, different in character and obviously of various dates, at considerable depth below the convent-garden; the most massive specimens of masonry here found may have belonged to the Golden House of Nero, or to some fortress of still more remote antiquity; some arches of brickwork, one with a mosaic incrustation, may be mediæval, perhaps pertaining to the atrium of the ancient church. I was sorry to learn, when I saw these excavations the other day, that Father Mullooly, after spending nearly 600 francs upon them, has been obliged to have the whole area filled up with the soil removed from it, owing to the danger of a sinking of the garden-ground, perilous to the lives of the workmen, and only to be obviated by the erecting of buttress-walls which the enterprising Prior had not means to accomplish. Lamentable that an undertaking like this should be frustrated, and all its hitherto results lost, for want of a comparatively trifling sum!

One other work, carried out by official authorities, must be added to my list and commended: the cleansing and disencumbering of the Arch of Janus Quadrifrons and of the adjacent arch called "Arcus Argentarius," raised by the silversmiths in honour of Septimius Severus, his wife Julia Pia, and their two sons. The Janus Arch, generally referred to the time of the same emperor, was in a disgraceful state of defilement, as left neglected for centuries. That which forms an imperial monument was in part concealed by and imbedded in the fine old tower of *S. Giorgio in Velabro*, the contiguous church. By removing some masonry at the angle of that tower, without danger to its structure, the works here have succeeded in bringing to light part of a frieze with graceful foliate ornato, and the mutilated relievo of a deity (perhaps Bacchus?), corresponding to that of Hercules on the other side, and alike occupying the space above the ornate of a frieze.

The works undertaken by the British Archæological Society, with the fund at the disposal of Mr. Parker, have been actively prosecuted, and rewarded by not a few interesting results during the past season. In a vineyard outside of the Porta Portese, on the right bank of the Tiber, have been found remains of the Aurelian walls, little of which exists—but that little highly picturesque—on the transtiberine side of Rome. A more important centre of operations is the *vigna* of Signor Brocard between the Antonine Thermae and the Appian Way. Here have been disencumbered two of the arched chambers, 40 in all, which form a kind of outwork of the vast Thermae, and are more clearly shown to have been, not lodgings for soldiery there on duty (as Canina and others supposed), but bath-rooms of the humbler description, and no doubt gratuitous. In the two chambers thus efficiently explored, and one entered beyond the other, the baths, along two sides of the inner, on one side of the outer chamber, and the flues for hot air along the walls, render such appropriation apparent. Other rooms, at some depth below the vineyard, may have belonged to a residence older than the Antonine buildings, and perhaps (though this is not evident) to the palace, whose extensive ruins were discovered about six years ago, below the contiguous vineyard entered from the Appian Way, and at the southern end of the Thermae. The latter ruins, which display the traces of wealth and luxury, have been called "Villa of Asinius Pollio"—the friend of Augustus; but from the character of the paintings on their walls, the mosaic groups on their floors, it seems more likely that the Antonine period—perhaps a palace of Hadrian—is represented in these ruins. Behind the church of SS. Nereo and Achilleo, and also within the *vigna* Brocard, are to be seen other recently uncovered walls, and fragments of marble decorations, that may be referred to another ancient mansion of patrician style.

I have mentioned the *scavi* in the northern slope of the

Viminal Hill, opposite S. Pilate, and that singular cavern, supposed identical with the *spelaeum* of Mithras, the discovery of which on this same hillside, in the sixteenth century, is mentioned by Flaminio Vacca. It is entirely hewn in the living rock; on one side are thrown low arched recesses, probably for sculpture, on the other opens a cavity, or dry well, corresponding in width to the length of the cavern itself. Three fusts of marble columns, which may have supported either statues or lamps, were found lying on the floor, but have since disappeared, those responsible having taken no means to guard the entrance, left open to despoilers ever since the works were undertaken by the British Society (or rather by Mr. Parker) on this spot. No trace of altars, no recess for the usual Mithraic group of the mystic sacrifice (the slaying of the ox by the god), is seen in this cavern. Visconti advances the conjecture that it is not a sanctuary for that Oriental worship, but the tomb of an ancient king, and therefore one of the extant memorials of the first successors of Romulus. I cannot agree with the learned gentleman—observing the absence of massive and simple features, the evidence of former ornamentation, and the supposable style of such ornaments as had their place here. Some vestiges of a gateway of the Servian walls, and of a fortress near the church of S. Prisca, alike on the height of the Aventine, must be added to the list of discoveries due to British exploration; and I may complete the catalogue (with reference to the late season) by mentioning the supposed remnant of the Porta Capena in a vineyard under the Cœlian Hill, for the second time brought to light recently, but again to be consigned to oblivion, as the owner, who rents that *vigna* from the S. Gregorio monastery, demands an exorbitant indemnity for keeping the excavated space open. But little is to be seen here; and the gateway in question, admitting that it be the Capena, must be that rebuilt in travertine by Domitian, not that of primitive construction. The clearing out of the dark corridor entered from the lower of the Mamertine prisons (which I described in my last) is still in progress; and this, according to Mr. Parker's theory, will prove to be the communication between the dreadful dungeon called "prison of S. Peter" and the other vaulted and subterranean chambers, at some distance below the Capitoline Hill, assumed to pertain to the same Mamertine buildings. The above-named British Society closed its season on the 28th April, on the evening of which day Mr. Parker read an interesting and succinct report on all antiquarian discoveries and *scavi* in Rome since the change of government. The same gentleman read, on the Friday evening previous, a paper on the course and sources of the Almo and Acqua Crabra (or Marrana) streams—which in fact resolved itself into a study on the fortifications and aqueducts of Rome. Another paper, read the same evening, by the Rev. Mr. Shadwell (our chaplain here), was on the monument of Quintus Sulpicius Maximus, discovered in the demolition of the Salarian Gate: a subject he treated with much learning, and illustrated by a translation into blank verse, composed with graceful facility, from the Greek hexameters (chiselled in that work) by the young poet, who died in his twelfth year, and who by that performance won the poetic crown against fifty-one competitors in the lustral games—on occasion of the poetic contest, so rewarded by decree of Domitian, A.D. 94. The prescribed theme of the Greek composition was in the interrogatory form: "What words were used by Zeus when reproving the Sun for lending his chariot to Phaeton?"

Among the several translated lectures (from the Italian) read at the Society's meetings this season, I may distinguish as praiseworthy: the Public Works of Trajan by Signor Lanciani, the Mediæval Towers of Rome (a paper divided over two evenings) by Signor Pellegrini, the Gothic Sieges of Rome by Signor Gori. The excursions arranged by the Society, more popular perhaps than the lectures, have taken place (weather permitting) twice every week, one within the walls, the other to more or less distant spots in the Campagna, and in all but an exceptional few of these pleasant explorings, Mr. Parker has been the guide and interpreter. I am sorry to add that the condition of the Society is depressed, its finances embarrassed at present. The comparative fewness of the stranger population in Rome, and obstacles to travel in this eventful year, have acted injuriously on the interests of the archæologic as well as other bodies, on art and commerce in this city. Never had the Society in question so few members and associates—but fifty-eight; never were its funds so low as in the winter of 1870-71. Its library, which affords the advantage of taking books for reading at home, has been augmented, mainly through the handsome donation of 100*l.* from Miss Felsom, a lady who bestowed that sum in memory of the interest taken in the Society, and the pleasure enjoyed through its means, by her late father, an estimable gentleman, during the last year of his life, spent at Rome.

Some recent publications in this city excite interest, and some—for instance an *exposé* of false relics, and the mode of fabricating them—cause alarm in ecclesiastical quarters. Spithöver has just brought out the third volume of the *Bibliorum Sacrorum Graecus Codex Vaticanus*, a facsimile of the famous Vatican MS., known as *Cardinal Mai's Bible*, because edited several years ago with the missing books and chapters supplied from the common text by that distinguished Cardinal, who, however, did not live to see his compilation in print. The facsimile from the codex is to extend over five volumes, and is edited by Padre Carlo Vercelloni, a Barnabite, and Padre Giuseppe Cozza, a Basilian monk; P. Vercelloni having been the collaborator of Mai, and finished what was left to be done after his death, for this edition produced with the usual facilities for readers of the original Greek. From the beginning the expense of this undertaking was defrayed by the Pope, whose bounty, I understand, will be secured for the yet forthcoming volumes. The text is in three columns; and the resemblance to the MS., still shown in one of the glazed cabinets of illuminated and other codes at the Vatican Library, is (as I need scarcely add) perfect; the price of each volume, 125 francs. Another of Spithöver's publications, *Il Sepolcro del fanciullo Quinto Sulpicio Massimo*, by Visconti, with chromolithographic illustrations, is the fullest report yet supplied on that subject, and the amplification of what was more briefly given in Mr. Shadwell's above-noticed lecture.

Another Roman press has printed Mr. Parker's brochure *On the Abbreviation SPE in the Treatise of Frontinus de Aqueductibus*. Whether "spes" or "specus," is the question on which the writer's argument revolves; his decision being for the latter sense, and in support of his theory he supplies facsimiles from the earliest MS. of Frontinus extant, that, namely, at Monte Cassino—eight texts, with the Latin as it stands in modern editions, and four extracts from Livy, in which the name "specus" occurs (l. ii. 51; xxiv. 47; xxv. 7; xl. 51), with Baker's translation. Mr. Parker points out the error of the Roman antiquaries who assumed that Livy (ii. 51) describes a battle, or skirmish, at the temple of Spes on the *eastern* side of Rome, whereas all the passages in which that temple is mentioned refer to the fane on the *north-western* side, under the Capitol, within the Campus Martius; and in one case the historian (xxv. 7) distinctly states that the temple was outside of the Porta Carmentalis, precisely so situated between the Capitol and the Tiber. Canina supposed that some vague ruins near the Porta Maggiore were no other than the temple of Hope; consequently that topographers should place such a temple near the city's south-eastern limits. But a few years afterwards those ruins being pulled down to make room for a modern guard-house, an inscription came to light, now in the Vatican Museum, importing their dedication to Hercules. In the eight texts from the Monte Cassino codex, the reading "specus" seems in all instances admissible; in some, much better than "spes"—*e.g.* "Quibus nunc plures aquae et in primis Marcia reddita amplo opere a Spe? (speco?) in Aventinum usque producitur" (ii. 87). Mr. Parker's conclusions are certainly supported on this point, as well as in regard to the site of the temple. He is wrong in the statement, too hastily made, that "the word *specus* in the Roman technical sense of a conduit of water does not occur in any Latin dictionary." It is precisely so explained in the Latin-German, which I happen to possess, of Ernst Georges (Leipzig, 1837) —"Specus—ein bedeckter Wassergang." I see in the *Academy* of the 1st May that your readers are made acquainted with the contents of De Rossi's last *Bulletino;* I need not therefore dwell on this publication farther than to commend the unfailing vigour and fulness which distinguish it. Periodical literature has run into excess under the new *régime* here, and its redundance has, from time to time, been checked only by the natural deaths of things scarcely deserving to live. We may hope for intelligence and suitability in our new addition to this class, a monthly periodical announced by the German

bookseller Loescher, settled here soon after the change of government, who promises *Roma artistica*, with engravings, and the co-operation of well-known artists.

The 21st April has long been celebrated as the "Natale di Roma," or anniversary of the foundation of the Urbs. In this last instance, the authorities ordered, for the first time, a quasi political observance of that day; and the opening of the Capitoline Museum, of the Palatine Gardens, and the area where other *scavi* are progressing in the Forum, was a well counselled novelty, of which multitudes, especially the artisan class, availed themselves. At night was given the *girandola*, with the other fire-works *not* displayed at Easter, on the Pincian Hill, the three national colours of course conspicuous; the great representative buildings of Italian cities grouped together in fiery architecture; the whole a decided success of Roman pyrotechny.

C. I. Hemans.

May 10.

Postscript.—I add this to state that an epigraph lately found among the above mentioned ruins at Ostia, close to the left bank of the Tiber, has supplied proof that they are not one of the Thermae, but an imperial palace of the second century of our era. Among public works not connected with antiquarian interests, which have lately attracted attention in Rome, I may notice—a few words will suffice—the renovation in a style of much splendour, and entirely at the expense of the Pope, of the already magnificent chapel at S. Maria Maggiore, founded by Sixtus V., 1586, with the architecture of Domenico Fontana, and containing the sculptured monuments of the same Sixtus and of Pius V.

For some time that chapel had been the property of the Cesarini family, and the duke now head of that house presented it to his Holiness a few years ago. Hence was Pius IX. induced to order a complete restoration, with decorative details of the richest character, which work was finished for the occasion of the festival of S. Pius V., the 5th inst. On that day a multitude streamed to the basilica for visiting this renewed chapel. The prevalent taste for the extreme of sumptuosity in modern ecclesiastical architecture here is shown, through this example, to be still at its height in Rome.

C. I. Hemans.

THE ROYAL ACADEMY EXHIBITION.

[Third Notice.]

An exhaustive review, a review such as the large number of ably executed works contained in our principal London exhibition may be properly considered to demand, would require a series of articles such as a daily or at least a weekly publication only could give with effect. This fact struck us forcibly the other day as we passed through the rooms intent upon the miscellaneous art, the works *not* pictures in oils. Take any one room, number X for example, not one of the principal, by the way, we shall find a great many productions deserving especial notice, besides those we have hitherto mentioned. There is "Gold!" (1096), by A. H. Tourrier, capitally imagined and painted with a clear decisive touch—the subject is James I., or some other royal Solomon, convinced by the sight of the gold in the broken crucible that the alchemist is a true magician; and a "Family Group" (1093), by A. M. Rossi; and "A Foreign Invasion" (1087), by H. H. Emerson. This last is a couple of Calabrian boys dancing and playing in a Northumbrian fishing village, the audience being the rough but stalwart and genial natives. A young fisherman seated looking on, a child leaning back against its grandmother, the old woman herself, the Italian boys, are all charmingly and unaffectedly characterized, and the painting is broad and strong in manner. There is also "Black to move" (1074), by J. D. Watson; and "Alma Quies" (1064), by W. Maclaren, another of the limited younger painters who affect purism, but having very remarkable powers; and "Come back" (1049), by B. Riviere, and Princeps' "Gossips" (1030), "Winter," by F. Holl, and "Among our Ancestors" (1036), by G. G. Kilburne, a lady looking at a portrait of her grandfather seven times removed. It is curious the same poor subject is treated in two instances in the Exhibition, the one now under notice, and again in "A Hundred Years Ago" (196, by Orchardson), in which a demented young person in light yellow hair, twists herself round to look at the portrait of an old Elizabethan worthy who seems to be blind—a very skilfully manipulated picture. If we found some difficulty in arriving at the understanding of Mr. Orchardson's work, here in Room X is one by Mr. Topham (1069) much more puzzling. It is called "Home and Victory," and represents a festive day, with a youth, evidently a harmless imbecile, whom his sisters are humouring by pretending to crown. Behind are the parents sitting decently together examining a sword, the father perhaps a little puzzled as to where the helpless young man may have got it. "Yes or No?" (1055), being by Millais, has delightful qualities in painting, and more it is not necessary to say; but the great picture, which we keep to the end of the enumeration of the figure-subjects in the room, is Josef Israel's "How Bereft!" (1038), a painful subject rendered with true sympathy and emotional value.

In Landscape, we have a glorious evening sky in "Evening on the Thames" (1024), by C. J. Lewis; "Moonrise" (1052), equally fine, by H. W. B. Davis; "On the Thames at Erith Reach" (1085), by R. Leslie; "Spring" (1051), by J. Peel; "Rest by the Way" (1031), by W. Linnell; "The Breakwater at Gorleston, Great Yarmouth" (1039); "The Moon is up" (1040), by J. T. Linnell; "The Hayfield" (1037), a delightful English field by J. C. Adams.

Passing on to the Lecture Room, we find Miss E. M. Edwards putting in an appearance in "The Knight's Guerdon," and it is rare that so accomplished a work as this by a lady is visible, even now when so many are enlisted in the army of artists; Miss Starr this year exhibits only two portraits, but both so very good we gladly take this irregular chance of mentioning them. No. 1113 is a "Scene from the School for Scandal," by C. Calthrop, showing considerable powers and design such as to promise good results—we speak of the picture in this way because we have not previously remarked the name of the artist. "Cleobulus instructing his Daughter Cleobuline" (1118) we have been told in confidence by some wise friends is Mr. Leighton's best picture. It is not this, but is very fine indeed; the figure of Cleobuline archly listening to her father's wise counsel, and perhaps inwardly devising the favourite nursery riddle of ancient Greek children about the patriarch with twelve daughters, is admirable, and the colour is truly beautiful. "An Arab Patriarch" (1160), by J. E. Hodgson, is one of the excellent results of the painter's journey to the East. "Circe and the Friends of Ulysses" (1156), by B. Riviere, although not specially classic either in invention or in painting, is really a production of great ability and of many good qualities; the swine, true swine, yet helpless and sneaking transformed lovers, are very perfect in their way. "A Disputed Text" (1151), by J. A. Houston, and "The Guide" (1172), by A. H. Tourrier, both deserve attention, and "The Summit of Calvary" (1177), by P. R. Morris, is a work excellent in motive and invention, worked out with adequate power, reminding us of the artist's picture of a former year, "Where They Crucified Him." The same, with a difference indeed, may be said of H. C. Selous' "Betting Ring, A.D. 68," full of figures and action, representing the crowd collected under the arches of the Coliseum on the morning of a gladiatorial contest in the reign of Nero. Were it not for certain defects of realisation patent to everyone, such as the whiteness of the skin of the young barbarian, as if he had never been five minutes without clothing in the course of his life, and the inadequate conception of what a female gladiator must have been (!), this elaborate work would have been notable in an extraordinary degree.

The Sculpture this year we cannot think as good as usual, the number of commemorative and monumental statues being small, and the poetic inventions very few indeed. Of the first class, though indeed it is only alto-relievo, the most conspicuously placed is E. B. Stephens' "In Memoriam;" the dead soldier lying out below is simple and impressive, but the Christ raising the widow's son above is extraordinarily vacuous and inadequate, both in design and modelling, so much so, indeed, that it seems to require some explanation coming from the hand of so good an artist. There is no monumental group here like that of the "Earl and Countess of Cardigan," by J. E. Boehm, in the International; nothing in its kind at all like the "Short-horned Bull and Herdsman" by the same artist; no ideal figure equal to Jerichau's "Denmark," or several other works, so that it would seem that in this division of art the International is telling on the Academy. In other respects also it has had an influence, the circular sent to the exhibitors being a new observance, and, we have been told, the porters this year seem not to have received their usual instructions to treat with discourtesy every

man who looks like an artist. The accommodation in the building at Kensington Gore is much more ample and favourable to sculpture; it is quite natural to find it most resorted to.

"Virgilia bewailing the Banishment of Coriolanus" (1277), by T. Woolner, is the chief work in marble to be seen here this season. The wife of the hero, left in Rome after his banishment, has had a bas-relief carved representing her husband's single-handed achievement at Corioli, and contemplating it she has thrown herself against the wall in an agony of despair. The expression of Virgilia is very fine and pathetic, the form large and full, and the modelling of both nude and drapery perfectly carried out in the marble. The bas-relief, however, seems to us to stand in the way of a complete realization of the story. The figure of Coriolanus is strained in action, but that is not the objection preventing the spectator understanding the work. The whole line of figures should certainly suggest only sculpture, not life, which their present elevation and vigorous detail within the outline leaves so doubtful. The two busts by the same sculptor here are distinguishable without the catalogue by the completeness of their realization; they are "Sir Hope Grant" (1303), and "The Bishop of Exeter" (1282). The "Daughter of Pharaoh" (1279), by C. Vinoelst, is admirable in the realization of the Egyptian character, and "Zingari" (1283), by E. B. Stephens, skilful, possessing originality and thoroughness in the workmanship; and D'Epinay's "David" also. This is, indeed, a most accomplished and admirable piece of skilful drawing and finished modelling, were it not that the head of Goliath is but a poor convention, and the expression on the face of David is rather that immediately before his deed than after his success. In this place are two very attractive and clever works, "La Jeune Fille à la Coquille," and "Le Pêcheur Napolitain," by J. B. Carpeaux. From other works by the same hand we find he has a specialty in the bright laughing expression of the face here exhibited, very charming certainly at first. By the same artist is a small bronze, "Ugolino and Family in Prison" (1232), full of masterly drawing, although showing the overpowering tradition of the Laocoon. "Helios" (1180), by J. M. ApGriffith, an attempt to reproduce the famous Colossus of Rhodes, is a small figure with the arm raised to hold a light, full of verve and perfect in form; a mistake, however, we fear, as far as the Colossus of Rhodes may be intended, as it would be surely impossible to ascend the raised arm to light the beacon. "Psyche" (1185) is another single figure we must point out as admirable in action and distinct in characterization. This is by G. A. Lawson, a name we do not remember before, but have no doubt we shall meet again. Among the busts we find a sufficient variety; what for example can be much more false, as passing itself off for refined detail, than "Henry McCormac" (1223), in marble, by Shakspeare Wood? or what can be a greater contrast to that than Mr. C. Summers' numerous busts, wherein the soft roundness of the flesh is so judiciously contrasted with the infinite multitude of slightly chiselled folds on the drapery? "Mrs. Verdon" (1255) and "Lady Brook Middleton" are charming examples of Summers' peculiar handling, but the best of all is, perhaps, "Mrs. C. William Siemens" (1199). As to Mr. Shakspeare Wood, he is not content with busts, but must give us "Elaine," a marble statue (1289), apparently with the benevolent intention of showing to what depths of degradation the sentimental can be sunk.

The Water Colours are numerous this season, without any very notable work, but with many excellent small ones. "Schwerterliebe" (741), by W. C. T. Dobson, is a little *Fräulein* in his best manner; "Mending the Nets" (740), C. N. Hemy, is a honest, strongly rendered study from nature; "Old Chelsea Church" (633), by C. E. Holloway, and "An Old House in Somerset" (672), by E. G. Dalziel, are both very good, as are others, more strictly landscape, by W. P. Burton and J. J. Ballantyne.

In the room appropriated to Crayon Drawings, Engravings, and Etchings, what a difference there is since the old days before photography! Then miniature painting was great—Thorburn and Richmond doing good things—now driven into uncertain and precarious apparitions. The most notable productions in this division of the exhibition at present are the etchings, by amateurs mostly, but very artistic and sometimes astonishingly clever. "The Breaking up of the Agamemnon," for example, by F. S. Haden, in which the old ship is not being broken up; said to be etched from nature, only the sun is on the horizon! The ship, indeed, seems to have been done at a different time, as the sun setting behind it does not throw it in shade; but we confess we don't see much virtue in etching from nature when the biting-in has to be done at home, and, after all, the appearance of the work, when printed, depends very much on the printer: there is so much slurr and smudge in imitation of Rembrandt, who printed his own plates. Why our amateur etchers content themselves with such slight sketches, we can't understand, unless it be that they can't draw sufficiently well to finish. Some of Mr. Hasletine's are, however, very charming; (827-830) and (825, 826), by E. Edwards, are very forcible and well understood in a rough way.

In Architecture, there is much to occupy the critic by G. E. Street, A. Waterhouse, J. P. Seddon, and many other eminent men, were it possible here to give them the attention they deserve.

BURLINGTON FINE ARTS CLUB: EXHIBITION OF EARLY ENGLISH WATER-COLOUR PICTURES.

The Burlington has exhibitions of a specific character every now and then, for the pleasure and profit of its members and the cultivated public who have the privilege of admission. The present collection is the most important by far yet made by the Club, which has but lately indeed acquired a permanent abode with ample means for exhibition. A few months ago there was a large number of oil pictures by the old masters on their walls, including many pictures of infinitely more enduring importance than those now exhibited, but the majority had been previously seen by the public at the Royal Academy's display of Old Masters at the beginning of the season. The present collection of water-colour works has been brought together with considerable difficulty, principally by the exertions of Mr. Mitchell, and has for its object to show the progress of the peculiarly English art of painting in water colours, from the period that may be called its beginning—that of Paul Sandby and his contemporaries—to the last deceased artists in that manner, born before the end of last century; a most interesting object, resulting in a very interesting exhibition.

Many of the men here seen in their works are for the first time brought to light, that is to say, in our generation, and the present collection affords the historian of art in England a chance of seeing the succession of men who have developed water-colour painting, especially in landscape, as its facility for sketching renders the medium peculiarly fitted for that class of subject, at one view, and side by side. To make the best use of many of these last-century works, which are not so interesting in themselves as in relation to their date, and the men who produced them, they should have been arranged chronologically, and we think the overpowering influence of Turner might, with advantage to simple, honest, old-fashioned painters, have been made a separate exhibition. Perhaps this could not have been attained; at all events, the usual way of hanging pictures by size and shape has been mainly followed; and Turner, in his own practice shows half a century of change, beginning as he does with the bluish grey and brown washes then current, and seemingly considered the full scale of the art, and ending with the evanescent prismatic excesses of his last period, when he strove to outdo nature, and whose demoralising effect (especially when written up as the only supreme and perfect thing) resulted in the depressed state of our landscape art for a number of years past.

The interest of this exhibition is not artistic only, it is historical: the works illustrating not only the change in the scale of colour and technical power, but the utter change in our views of scenery and the picturesque since the day recorded by Macaulay in his account of Glencoe, when the highlands of Scotland and all hill country, at least in our island, were looked upon with horror, and a tourist was unknown. In another point of view also it is instructive, showing how many men may do good service in their day, and yet leave little name behind them. In this respect, however, the examples are not completely satisfactory. Old T. M. Richardson, of Newcastle, for instance, can only be seen in his native town, the view of Tynemouth hung in the council-chamber of the Townhall being sufficient to give him a high standing as a painter of that time; and H. W. Williams, who travelled in Greece, and published both travels and views of the ancient localities, is a great man in his

works in the National Gallery of Edinburgh, but here is scarcely noticeable. In the provinces, a second-rate genius leaves his mark; it is in London, the grave of little reputations, where he is lost.

The first place on the walls, always excepting Turner, who stands alone, is due to Prout, Robson of Durham, Copley Fielding, and David Cox, and in figures to Blake and Rowlandson—the figure painters being very few before the beginning of the century. However, when the catalogue appears, we propose to supplement these general remarks with some few details.

INSTITUTE OF PAINTERS IN WATER COLOURS.

Having omitted to notice this exhibition at first, we must only glance at its contents now in an apologetic way, which is the greater pity, there being so many successful works. A considerable change of subject, and manner too, is visible in some of the members. Mr. Augustus Bouvier has thrown himself entirely into antique life, giving us in "First Arrivals" (9) the lady spectators in a Pompeian theatre, taking their places on the marble seats; and Mr. Small and Mr. J. D. Linton, we are sorry to see, giving in their adhesion to the fine, thin, highly coloured tin-foil manner we noticed in the old Society. The most curious example of this is Mr. Small's "Potatoes" (156), a very complete work, too, in its way. Mr. Linton's "Lover's Disguise" is one of the best productions in the room, and absolutely good, done with much insight, yet the singular plague of imitation we have mentioned invades it. Not only does Mr. Bouvier illustrate Roman times in his various pictures, but Louis Haghe, and others, have also adopted the same period with good effect. Number 47 is the "Tepidarium of the Thermae at Pompeii," by Haghe, with the loungers and bathers about, and Fulvius about to read his latest ode. The white marble, light draperies, and warm flesh-colour give excellent opportunity in this and the other antique subjects to produce bright and pleasurable effects of colour. In "The Hemicyle" (122) Mr. Bouvier has adopted a subject of Tadema's, probably unwittingly, as we believe the picture we refer to, though begun a long time since, has never been exhibited. "The Hemicycle" is the curved seat by the wayside (in the street of tombs at Pompeii we remember one), frequented by nursery maids and loungers in Roman times, as the benches in the parks are at the present day, and Mr. Bouvier has filled it with beauties gossiping over passing events. J. D. Linton's other pictures are "The Reproof" (120), and "Bad News" (1795), both of them able works. Henry Tidey, in the "Flowers of the Forest" (199), and "Sea Weeds" (97), is exceedingly vivid and attractive this year; but we miss Mr. Corbould, Mr. Warren, and Mr. Bach, in any great force. To make up for these, J. M. Mole has been prolific, and in several of his drawings exceedingly successful. The landscape painters, as usual in this society, are very strong. "An old Chalk-pit, Eastbourne" (32), and "On the Sands" (104), by M. G. Hine, are admirable pieces of nature; "King Arthur's Castle, Tintagel" (24), by John Mogford; "Near Dossie, Ross-shire" (38), by Edward Hargitt; "Ypres" (67), by Skinner Prout; "The New Place, Pulborough" (103), by E. H. Fahey; and "In the Land of Lorne—Kilchurn Castle" (70), by Henry Johnston, are all worthy of attentive study by the visitor.

OLD BOND STREET GALLERY EXHIBITION.

This gallery and series of rooms at 25, Old Bond Street, is a rather surprising and anomalous exhibition. We find upwards of five hundred pictures, of all kinds, good, bad, and indifferent, thrown pell-mell together, with a portrait of the President of the Royal Academy—heaven help us!—as the central work in the place of honour: and yet, on examination, there are many fair works here and there on the walls by artists of some repute, and many others of remarkable value by men unknown to fame. Let us mark a few of the pictures as we pass on, taking them as they occur in the catalogue.

"Ten Minutes' Rest" (17), by Edward J. Humphrey, has sterling qualities in painting, and is very good in feeling. "Worn-out: View on the Tamar, near Keyham," by H. T. Dawson, Jun. We presume this is the son of the painter of the "Port of London" and other pictures of extraordinary power and mastery, one of the men in English art compared to whom such artists as we could name, however much they may be before the public in the Royal Academy, are simply mechanics. The junior is not equal to the senior in the work under review, nor perhaps in any other of his works—it would be remarkable if he were, so seldom do we find exactly the same power transmitted—still the "Worn-out" is noteworthy and able in a very considerable degree. "Work and Play" (53), by G. E. Hicks, "Pell Molly" (248), and "Pat-a-cake" (245), by the same, although trivial, are worked out with ability, and are very pleasing indeed. "A Study" (57), by L. Alma Tadema, is not of much importance, still it has something of the master that renders it interesting.

The next picture, we should particularly notice, is by an artist who has exhibited, we find, on looking into the catalogues, very largely this year, particularly in the Academy and in the Suffolk Street Gallery, but whose works, although we had invariably marked them, have as yet escaped mention. The pictures he now exhibits in this gallery are, however, perhaps, the best he has anywhere: these are, "Our Old Line-of-Battle Ships" (107), "Beaching through the Surf" (68), and the "New Moon with the Old Moon in its Arms." These are by Mr. W. L. Wyllie, with whose name we have not been hitherto acquainted. It may be that Mr. Wyllie has painted for many years and done all under a love of the sea and an enthusiasm, without the mastering refinement of the true artist; but if it is otherwise, if he be a true artist, retaining a sense of art as superior to nature (a dangerous proposition, but one necessary to sustain him in doing his best), he ought to be the first master we have yet seen in painting ships on their "native element." In "Our Old Line-of-Battle Ships," the prows (a line of them), lit up by the sun, is the most inspiring and lovely thing in its way. We know it is very dangerous to say so much as this without knowing the painter, or at least something of him, but if he never does again anything half so good, we shall justify ourselves with the belief that he is unable to estimate his own vocation, and is perhaps more a sailor than a painter.

"Moonlight in the Trossachs" (80), by T. O. Hume, has very considerable beauty. "Day Dreams" (104), by J. Archer, is an admirable piece of work, very simple and pure. In "Golden Autumn" (194), by J. Ingle Lee, we have a picture of some consequence, to a large degree imitative: it will be ignored and anathematized by those who consider themselves original, but who are only imitative of something more recondite and less known: for our own parts we acknowledge very considerable merit in the work. Miss Alice Thornycroft, in her "Antigone going to bury the Body of her Brother," takes the correct view of the story as employed by the Greek dramatists, but the faces of Antigone and her sister are not sufficiently expressed; they are poor in drawing and also in colour and tone. "Lieder ohne Worte" (218), by Lionel Smythe, is a very excellent work, elevated in tone and adequately executed. "Sheep in a Narrow Lane" (222), by J. Thorpe, is a crowd of sheep coming right forward against the foreground, a difficult composition, exceedingly well managed.

"Boats off the Lido, Venice" (291) is a water-colour by Charles Robertson, of valuable quality. The pictures in this medium, however, are not of so high a character as to require lengthened examination, the most noticeable being, perhaps, "Caught Rehearsing" (431), by C. J. Staniland, wherein the humour is conveyed with tact and taste. The same painter exhibits "Grubs and Butterflies," in which, also, the humorous element predominates, though, like the last, kept in its place. A few still-life pictures also require mention, particularly Miss Coleman's "Nuts and Berries" (475), and "Christmas Roses" (489), and "Moss and Fungi" (447), by Miss E. Heaton, a careful and beautiful little transcript from nature.

MR. F. MADOX BROWN'S PICTURES.

Mr. F. Madox Brown is one of the few painters who does not send his works to any of the public galleries, but prefers to make his friends and the intelligent public acquainted with them at home, and there is certainly much to be said for the practice, when the artist's works are subtle, and independent of popular standards. In all promiscuous collections of pictures it must be that the *ad captandum* and the most talented carry the day, the annual products of the studios of those who watch the changes of public taste, and who have the power of combining what they call "the right thing," with the attractive qualities understood

by the million. Madox Brown's works are the results of a profoundly perceptive nature, educating itself through life, and an accumulated knowledge of art, and restricting itself to a noble and powerful expression of the dramatic idea. He avoids no peculiarity; in this resembling the Belgian Henri Leys, but he has not, like that extraordinarily able man, been in any degree overruled by a past age, nor taken any part in reproducing an earlier aspect of Art: his peculiarities are those he finds in Nature. On the other hand, there is certainly no other man in our school who can so well recreate the aspect and conditions of ages far from us in history, who can abstract himself from his nineteenth-century surroundings, and, looking into the dark water of the brazen divining cup, see the distant time, the twilight of civilisation of King Lear for example, which he has realised in several pictures not easily forgotten. We mention these, having a peculiar love for the subject, but his illustrations of Patriarchal Bible History are quite equal examples of the power we indicate. One of the pictures he is now exhibiting is a small replica of the "Coat of many Colours," the brethren of Joseph bringing that garment to their father, a striking example of the artist's powers.

The two principal works now to be seen at his studio are the "Entombment," and "Romeo and Juliet." In the latter Romeo is leaving the chamber of Juliet in the early morning, stepping from the balcony, and yet still burying his face in Juliet's neck, so loathe to leave her, and she so loathe to let him go, oblivious of everything else in the world. The painting of the head and shoulders of Juliet, though she is not so youthful as Shakespeare's heroine, are splendid in expression and fulness of tone, and the whole picture is gorgeous in colour. These two pictures, standing together, and painted in different media ("The Entombment" being water-colour), so distinct in sentiment, and equally powerful in technical qualities, show the versatile disposition of the painter; and this is still more apparent by the small picture from Byron's *Corsair*, and the large one now in progress of "Haidee finding Don Juan after the Shipwreck," which promises to be a very fine work. "The Entombment" is very impressive, and the symbolism that informs the background and secondary elements of the work is admirably felt.

W. B. Scott.

ART NOTES.

Hans Makart, the painter of the celebrated "Plague of Florence," which was considered too audacious for the Parisian taste, has completed two large oval compositions emblematic of "Abundantia," and destined for the dining-hall of a Hungarian nobleman. Critics at Berlin, where these works are now on view, differ widely as to their merit. Karl Gützkow, in the *Allgemeine Zeitung*, speaks of them as the mere extravagance of violent and fantastical colour, making no appeal to the mind, and bewildering the senses with profusion of glitter and contrast; and says that to see good painting here is the same heresy as to see "harmonious and legitimate music in Wagner's *Master-singers*." A correspondent of the *Cologne Gazette*, on the other hand, while acknowledging that the art of Makart is mainly sensuous, is in raptures over the richness and splendour of the compositions in question, and describes at great length, as an exploit of colour almost without precedent, the riot of male and female figures among the heaped-up produce of the sea in the one oval, and of the earth in the other.

The Cavaliere Antonio Ciseri, a large historical piece by whom is now in the International Exhibition, has opened an exhibition at Florence of more than thirty of his portraits of contemporaries. The *Gazzetta ufficiale* speaks of these as showing admirable powers both of likeness and style.

The antiquarian Gaetano de Minicis, deceased on the 27th of March last at Fermo, had been vice-president of the commission entrusted with the editing of that valuable series of the historical chronicles of Tuscany, Umbria, and the Marches, called *Documenti di Storia Patria*. The fourth part of these *Documenti* consists of a quarto volume of "Chronicles of the City of Fermo," published in the course of last year, and compiled by de Minicis himself. Several other compilations and monographs remain as evidence of the life-long industry which he devoted to the antiquities and history of his native district.

M. Durand-Ruel's exhibition, at the "Society of French Artists" in Bond Street, has lately been enriched with Meissonnier's famous picture of the "Retreat from Moscow," as well as with the private collection of M. Laurent Richard, a collection particularly rich in well-chosen examples of Decamps, Troyon, Rousseau, Dupré, Corot, and comprising also some slight examples of the earlier masters Prud'hon and Fragonard.

The *Opinione* relates the discovery and exploration by Prof. Gaetano Chierici of two sepulchral wells of curious construction at S. Polo d' Enza, near Reggio. The wells are described as being of cylindrical form, and of about a metre and a half diameter; the one twelve and the other sixteen feet deep, and both containing a variety of funereal objects, vases of white clay with black stripes, bronze swing-lamps, stamped pieces of *aes grave*, *fibulae*, terracottas, besides bones of dogs, boars, deer, and fowl.

In *Im Neuen Reich* for May 26, Mr. J. A. Crowe gives an excellent account of the feud which arose between Titian and Pordenone, when the authorities at Venice, worn out by Titian's endless delays in completing the frescoes he had undertaken, employed his rival instead. That Pordenone thenceforth had to work with his sword by his side lest Titian should murder him, if true, illustrates Pordenone's suspicious character, but nothing in Titian's life authorises such a suspicion. Probably it is only one of those anecdotes which are commoner in the history of Art than in other histories, and against which modern enquiry has to maintain a ceaseless struggle.

In the *Bullettino dell' Instituto di Corrispondenza archeologica* for May, Henzen gives a full account of the discoveries at the Salarian Gate, and prints the Greek hexameters of the boy Q. Sulpicius Maximus, described in Mr. Hemans' letter on p. 307 of the present number. No doubt there were people in Rome who thought composing Greek verses of this sort the best possible means of education.

Music.

UNPUBLISHED LETTERS OF ROBERT SCHUMANN.

[Conclusion.]

The most important event mentioned in the remaining letters is Schumann's trip to Vienna, whither he went with great expectations, only to return a disappointed man. The way in which the censorship (extending its unlimited sway under the Metternich *régime* not less to music and the drama than to politics) interfered with his plans appears to us more in the light of bygone days than as an historical fact of the immediate past. However unsatisfactory Schumann's stay at Vienna may have been for his private purposes, it was not the same in regard to the literature of his art, for which he regained one of its finest treasures—Schubert's Symphony in C, as we have mentioned on a former occasion.

(12)

"*Leipzig, August* 8, 1838.

"My dearest Friend,—I have to tell you an important piece of news to-day, but you must not let any one else hear about it. I should have preferred to communicate it to you personally, but now there is some uncertainty whether you will find me still here when you come in October. The thing is that the *Zeitschrift* will appear from the 1st of January, 1839, at Vienna, where I am going myself at the end of September. I hope to get much good by this change—a new round of life, new work, and new ideas. I think I can do a great deal where people enjoy themselves in a concert-room 'like flies in buttermilk,' as Jetter (?) says. But now, my dear Wedel, give me your hand and promise me not to leave me in the lurch in my new place. I shall

have many troubles to get over; and we shall have to go on rather gently, as the censorship is strict and will suppress freely.

"First of all, you would oblige me by sending for the first time as much MS. as you possibly can. From October till December my "vocal" minister, Oswald Lorenz, is going to look after the editing of the journal, and I must not leave him in want of stuff.

"In the second place, I want you to think about a paper on the new arrangement, its consequences, &c., to grace the first number that appears in Vienna. You know how to manage this so delicately that I always like to let you have the first word, and I am sure to be prevented by business from undertaking work at any great length for the next time. Your introductory essay ought to be with me in Vienna by the end of November at latest. Further details about its publication I shall let you have before long. I am getting continually deeper and deeper in your debt, and I must ask you to think about settling accounts. Many thanks for all you have sent me lately; it is all going to be published by and by. Some of the musical quotations of Elsner's *Passion Music* had to be left out, as they would have taken up too much room. But I thought whether the march, which is a whole in itself, and which I also like extremely, might not be published in one of the next musical supplements. You would oblige by a line about that. Ernemann's songs smiled at me out of a heap of music like blossoms, especially some of them; they will be noticed in the *Zeitschrift*. Perhaps Ernemann has something (for four voices) in store for the supplements.

"Many thanks also for the *Popular Songs*, although I must confess that I have not always been pleased with the accompaniment. At times it does not seem to be natural enough. But then of course I listen with the ears of a musician, and even in a popular song I can't stand fifths and octaves, although one sometimes meets with them in such pieces. Gottschalk will find his name on *Kinderscenen*, which are going to appear under my own. He is sure to find some little pleasure in them, for they come from the bottom of my heart.

"A Nuremberg merchant brought me your letter and account. I gave him what I had—not much, I am sorry to say. Good-bye for to-day; I recommend my plans to your consideration, and hope to hear from you, or better to see you soon.

"Yours,

"R. Schumann."

(13)

"*Vienna, October* 19, 1838.

"My dear Friend,—I regret to hear that you have been in Leipzig without my being there to receive you, an event to which I have always looked forward with so much pleasure. But you are sure to have found a trusty companion in the excellent G——. I am sorry you did not find *Idomeneo*, but you must not blame me for that. I had written to my brother immediately, but he was on his way to Leipzig, so the letter missed him, and this accounts for the delay. Have you not got it yet? I have reminded him again from here.

"Now, I should like to hear about yourself—how you are, and if you still remember me and the *Zeitschrift*. I have not heard from Leipzig that you left anything for my paper. Have you forgotten all about the *Baurede?* or have you anything else fit for the first numbers of the new volume, which is to come out in Vienna? The Viennese would like best something cheerful—story-like, not by any means Catilinarian, which they don't understand.

"At the same time the publication of the *Zeitschrift* in Vienna is not yet a settled affair. You can't believe how many difficulties the censorship makes, and also the publishers, who are frightened for the glory of their Strauss, Proch, and others. Still I hope to arrange it before the new year, and therefore ask you to send me your contributions for the next volume direct by post to *Vienna*. I long for a letter from you.

"Heuser the singer is here; he has a most complete collection of Bach's compositions, especially many unpublished pieces, and is glad to place at disposal what he is asked for. If you want anything that Mr. Ernemann does not possess, I'll have it copied out for you.

"About Vienna itself I have my own ideas; I don't think I am suited for this kind of people; their flippancy is really sometimes too much for me. Still a closer acquaintance with single individuals will, I am sure, modify my opinions in many respects.

"Keep me in kind remembrance. I now want my Wedel more than ever. Seyfried asked after you with the greatest interest. Now you know all I have to ask you; let me soon have a kind word from you.

"Yours truly,

"R. Schumann."

(14)

"*Vienna, March* 10, 1839.

"My dear Sir and Friend,—Although I have not written to you for a long time, I have been constantly in intellectual intercourse with you. I always waited in order to tell you definitely about the settling down here both of myself and my paper. Now I am able to do so. Neither I nor my paper are to remain in this city, which I find is not the right place for either of them. After careful consideration, I came to the conclusion that the thing couldn't be done advantageously. The chief impediment was the censorship. At the end of April, at the latest, I shall be back in Leipzig, with renewed strength to carry on my journal, which it must be confessed has suffered during my absence. Everything remains as it was; and I also hope to find your friendship unaltered. Your last letter, together with your Warsaw friend's contributions, I received some time ago; many thanks. The *Ave Maria* and *Jagdlied* by Ernemann I like very much, but of D'Alquen I am not able to say the same; he seems even wanting in technical skill. The essay *Erste Töne* is exquisite. Next first of May I intend to constitute our 'Davidsbund' by means of an article in the *Zeitschrift*. I should like you to read it first, were it not for the long distance which divides us. May I hope to find a letter from you in Leipzig? How are you, and what are you working at? The Stuttgart *Nationalzeitung* is going to become a highly respectable bully, against which we must be on our guard. The writer is very weak as a musician, but he knows how to puff. But enough for this time, and don't forget

"Yours truly,

"Schumann."

(15)

"*Leipzig, April* 27, 1839.

"My dearest Sir and Friend,—I have returned safely, although the first thing I learned was the news of a death in our family. You will also understand that after the last half-year I had many arrears to get through; and that is why I have not answered your kind letter before now. The absence from my paper I believe has been to some advantage. It now smiles on me as young and fresh as when we first started it; and just now diligence and perseverance are more necessary than ever. The Stuttgart "Universalist" begins to "wax fat;" and notwithstanding his being an arch humbug, without, as I think, *the vaguest idea of music*, yet he knows how to manipulate words and titles, and therefore must be checked somehow. I can't understand how those old gentlemen, like Spohr, Schneider, and others, can let themselves be imposed upon by such a windy braggart.

"Perhaps he will make you also his corresponding member, as he did me without my knowledge. An impertinent fellow, with whom it is better to have nothing to do. I am glad to hear about the news which Mr. Ernemann has brought from Petersburg. I hope you'll think of me. Some time ago I received a note from Warsaw, signed Wahrlich, who complains of several things in your letters, &c. It did not seem important enough to send it on to you. I'll keep it for you in case you come to Leipzig. I hope you will come; I shall stay here in any case during the summer. I hope that something of the [*word illegible*] will please you, especially if I play it myself on the piano, and am in a happy mood. I wish you would look at the *Kinderscenen*, and say something about it with your genial Wedelian vein. My note-paper has come to an end. Only let me add my kindest regards.

"R. Schumann."

(16)

"*Leipzig, Dec.* 31, 1840.

"My dear Sir and Friend,—First of all I have to thank you for your ready assistance. You have recalled Thibaut's image to my mind in the most lively manner. Your paper adorns the first number of the new volume of the *Zeitschrift*, for which I hope you will preserve your further kind sympathy.

"I am sorry I don't know R. at all; but even if I did, it would be of no great use for your purposes. Every one describes him as an obstinate, stiff-necked fellow, who won't listen to advice. None of my friends is acquainted with him. The best thing for you is to send him your MS. to read. Have you no connections at Dresden? I think that would be the best place for your work. Our comedy and tragedy are less than middling.

"I send you the *Myrthen* and three little songs. Perhaps you will find an opportunity of having the songs sung to you by beautiful lips: they sound very nice; I heard them the day before yesterday. The *Myrthen* of course give a deeper insight into the secret of my musical work. I wish I could have added my cycle of Heine's Songs; but I

have no copy left. Several other things have also appeared lately about which I hope to converse with you before long. Music is sure to absorb me entirely; I always have to tear myself from it by force. But enough. Everything else I must tell you personally.

"I have still another question and favour to ask you. A certain Dr. v. Kaiserlingk of Berlin offers me his services as correspondent, on the introduction by the publisher. Do you know him at all? Hard experience has made me cautious. Perhaps you can tell me about him.

"I should wish to know your address: I don't like to get at you always through the medium of third persons. Also tell me when you are really coming to Leipzig.

"Please write to me soon, and keep me in kind remembrance.

"Yours truly, "Rob. Schumann.

"Hiller writes from Milan to say that he is engaged to the Polish lady we wot of. Did I tell you that he sent you a letter to Warsaw, addressed 'Gottschalk Wedel,' which you of course did not get?"

(17)

"*Leipzig, January* 23, 1844.

"My dearest Friend,—I have owed you an answer for a long time, and even now I can only send you a short note. I stand with one foot in the carriage to start for a long pilgrimage to Petersburg and Moscow. Before I was prevented from writing by my indecision about the opera-text, and also by the performances of my *Peri* here and at Dresden. On both occasions I got much pleasure, and perhaps some honour. Now I should like to begin an opera soon; but for the present this northward journey compels me to abandon all plans and preparations of this kind. But how excellent it will be if I find some work to go on with on my return at the beginning of May. For this I hope you will give me your kind assistance. In spite of your objections, I have not yet abandoned *Mohanna*. But it is from the same book as the *Peri*, and the scene also Oriental; therefore I think I'll keep it for *a later period*. Best of all, I like your plan of the 'Invasion of Spain by the Moors.' Please think about it. I should be but too happy to find the drama finished for my return in May. This I wanted to ask you.

"Please don't forget the *Zeitschrift* during my absence, and favour it with frequent contributions. I shall resign the editorship before long, but always take the greatest interest in its welfare.

"My kindest regards to you. "Yours truly,

"Robert Schumann."

Here ends the series of Schumann's letters in my possession, which I believe afford some valuable material for the great composer's life and artistic development. They will gain in interest if read in connection with the biographical facts, and with a sufficient knowledge of the works which they allude to. I may refer the reader for this purpose to Wasilewski's valuable work on Schumann. The letters, in comparison with those of Mendelssohn, may seem to some deficient in expression and in the lively touches which characterize the latter. But it must be borne in mind that Schumann's reserved nature was wont to discover its higher aspirations and deeper feelings rarely and only to those nearest to him. Franz Hüffer.

ANNIVERSARY MEETING OF THE CHARITY CHILDREN AT ST. PAUL'S.

I had not attended one of these meetings, till that of Thursday, the 8th inst., for many years past. They are interesting musically as indices of the progress of the national ear; and as such they are, on the whole, satisfactory. On the occasion of my first and only other attendance at one of them, as far back as during the reign of the late Thomas Attwood—the Attwood who "had seen" Mozart—that great musician and judicious organist was, I well remember, under the necessity of holding on the last note of the melody of every line of "The Old Hundredth Psalm" during several seconds, in order that the juvenile choristers might recover the pitch from which they had generally departed—downwards, of course—to the extent of a semitone, more or less. Little or nothing of this kind was observable on Thursday. The intonation was, if not throughout faultless, as little faulty as we often find it with choristers of greater experience and more pretension; and this in passages the extent of which upwards is considerable, *e.g.* in the "Hallelujah Chorus" and the "Coronation Anthem" of Handel. The *timbre*, too, or quality of the vocal mass was agreeable, in spite of the large element of cockney pronunciation—surely the meanest and most odious in the three kingdoms. But in all other respects, regarded as a musical performance—for the moment my sole consideration—the meeting of Thursday was anything but satisfactory. If the *tune* was good, the *time* was quite the reverse. It would no doubt be difficult to keep together a body of musical performers even of far greater skill than those who constitute the choir at this anniversary, scattered as they are over so large an area. But the singing of these children is of a kind indicative, not of difficulty arising from the locality or any special circumstance connected with it, but of their having had no training whatever in the elements of music. For this there is no necessity whatever; and the difficulty arising from it is altogether gratuitous. There are children enough in London, fairly acquainted with musical notation and with the relations, melodic and rhythmic, of musical sounds, to fill every corner of St. Paul's—with Westminster Abbey and a dozen other of our largest public buildings to boot. Not only so. In the majority of schools of the class from which these children are taken there is at least one teacher with musical skill and science enough to prepare a contingent who would come ready to take part in music incomparably more difficult than any performed on Thursday—even without a general rehearsal. Music no doubt is not as extensively or as thoroughly taught in schools of whatever class as it might be; but, under circumstances always of difficuity, generally even of discouragement, it is taught more extensively and more thoroughly than is commonly believed. The "Anniversary Meeting of the Charity Children" might be made an evidence of this, instead of remaining as it does an evidence to the contrary—with those who judge only from what they hear on that occasion. John Hullah.

NOTES ON MUSIC.

One of the most noteworthy of recent musical proceedings in London has been the first performance of a Mass, for principals, chorus, and orchestra, by an English musician, Mr. W. C. Alwyn, who, though remarkable and remarked as a student of the Royal Academy of Music, which he has only recently left, is as yet too young to have made any impression on the public at large. The public at its largest, however, will ere long know more of Mr. Alwyn, unless—such things have happened—his first work prove his last. To Mr. Alwyn's Mass we shall probably return. For the moment it must suffice that no composition by composer of so little experience—for musical experience comes not merely of writing, but of hearing what has been written—at once so fresh and so well constructed, has come under our notice for a long time. Like every work of similar extent and difficulty, on a first occasion it was very indifferently performed, notwithstanding the skill and pains manifested in the performance of many portions of it—certain solo parts especially. It will, however, it is to hoped, be done again, and no doubt done better.

Our two Italian Opera Houses open their doors three, four, and five nights a week each, generally to considerable, sometimes to enormous audiences; the latter mostly on occasions when what are called "classical" works have been announced. The sudden popularity of *Le Nozze di Figaro*—as unattractive for many years past *as an opera*, as the music of which it is made up, has of itself been the reverse—is a pleasant and hopeful sign of the times. The performance, already repeated, of the first opera of Meyerbeer's second period *Robert le Diable*, at Drury Lane, is of great excellence. The chorus, orchestra, and *mise en scène* are admirable, and probably the two principal female parts have never been acted and sung, in the same performance, as by Madlle. Titiens, and Ilma de Murska. Signor Nicolini (Robert) sings better than he acts, and M. Benoal (Bertram) acts better than he sings. John Hullah.

The Selections from Wagner's *Lohengrin*, as performed at Signor Arditi's Concert, was what we should call a Potpourri in as bad a style and taste as has ever been arranged from the worst of Donizetti's operas by any military band conductor in the United Kingdom. The torture of having to listen to bits of

the "Bridal Chorus," interrupted by "Lohengrin's Farewell to the Swan," and to the grand introductory Recitative "Hört Grafen Freie Edle von Brabant," delivered by the solo ophicleide, only those of our readers can fully realise who have been impressed by the noble and intensely spiritual beauties of this music, in one of the great opera-houses of the continent. The only complete piece performed was the introduction, but the execution of this was so utterly wanting in taste that the fine shades of instrumentation, and the development of the poetical idea as displayed therein, were entirely lost. The tempo for one thing was much too quick, and the brass instruments were used throughout without the discretion more necessary in Wagner's than in any other composer's works. From the intelligent way in which Signor Arditi had conducted the *Flying Dutchman*, we had expected something much better; but then between this forlorn sailor to the noble Chevalier du St. Graal there is a great interval, and to understand the latter the celebrated composer of "St. Baccio" will have to enter a little more deeply into his German confrère's poetical intentions and musical finesses. The *Lohengrin* selection was preceded and followed by a long and motley series of all sorts of musical performances, such as seems to be required for the amusement of an English fashionable audience, and which none but such an audience could stand. The only oasis in this sounding desert was Liszt's Hungarian Rhapsody (C Minor), rendered with skill and grace by Miss Anna Hollaender. FRANZ HÜFFER.

New Publications.

AEBI, Chorherr J. L. Die Buchdruckerei zu Beromünster im 15. Jahrh. Einsiedeln: Benziger.

ALABASTER, H. The Wheel of the Law. Buddhism illustrated from Siamese Sources. Trübner.

BOOTH, A. J. Saint Simon and Saint Simonism. Longmans and Co.

CANTU. Portafoglio di un Operajo. Milan: Agnelli.

CAROLINE. Briefe an ihre Geschwister, ihre Tochter Auguste, die Familie Gotter, F. L. W. Meyer, A. W. und Fr. Schlegel, J. Schelling u. A. Nebst Briefen von A. W. und Fr. Schlegel u. A. Herausg. von G. Waitz. 1ster Bd. mit Portrait. Hirzel: Leipzig.

GRAHAM, J. M. An Historical View of Literature and Art in Great Britain from the Accession of the House of Hanover to the Reign of Queen Victoria. London: Longmans.

HÜBNER, Julius. Helldunkel; aus dem poetischen Tagebuch eines Malers. Sonette und Lieder. Brunswick.

MARSTON, P. J. Songtide and other Poems. Ellis and Green.

PAOLI, C., and E. PICCOLOMINI. Lettere volgari del sec. xii, scritte da Senesi. Bologna: Romagnoli.

SCHLECHT, R. Geschichte der Kirchenmusik etc. Zur Beantwortung der Frage: Was ist eigentlich Kirchenmusik? Regensburg.

SERDONATI, F. Proverbi fiorentini. Padua: Salmin.

TEN BRINK, B. Der Prolog zu den Canterbury Tales. Versuch einer kritischen Ausgabe. Marburg: Elwert.

WHISTLER, J. A Series of Sixteen Etchings of Scenes on the Thames and other subjects. London: Ellis and Green.

WEDMORE, F. A Snapt Gold Ring. Smith and Elder.

Physical Science.

The People of India, a series of Photographic Illustrations, with descriptive Letterpress, of the Races and Tribes of Hindustan. Edited by J. Forbes Watson and John William Kaye. Vols. i.-iv. London, India Museum, 1868-9: W. H. Allen and Co.

ETHNOLOGY is at present in that critical stage of transition through which all the inductive sciences, some earlier, some later, have passed in modern times. When Boyle wrote his *Chemista Scepticus*, and demolished the four elements of Aristotle as inexorably as he did the three elements of the Alchemists, it seemed as if chemistry would be thrown into a state of helpless confusion. But although the catalogue of elements has since then steadily increased, and is still being enlarged by fresh discoveries, they have been arranged in a much clearer and more simple system, by means of the mere insight into law which has come with observation, than could ever have been devised by philosophical sagacity.

Ethnology seems at the present moment to be surrounded by analogous difficulties. All its old supports are beginning to give way; the ground is being cut away from its old systems; and axioms accounted to be the firmest, surest, and most immovable, have to be relinquished, because new facts give the lie to the inferences drawn from them. Craniology and philology will always form two valuable auxiliaries to ethnology; but neither skull nor language will of itself suffice completely to characterise the different races of man. To do this, a broader survey is necessary, embracing the whole physical *habitus*, and, above all, that totality of psychical life which is manifested in the intellectual and moral creations of every people. Ethnology still awaits its Jussieu to replace its artificial classifications by a natural one. The natural system becomes an indispensable necessity in every science, so soon as it is clearly seen that the question is not of classification, but of observation of, and insight into, law. Classification was long held to be the sole end, instead of being merely or mainly the means, of study. As in this respect systematic botany gave place to vegetable physiology, so, in like manner, ethnology will have to look upon its classification of race—with which the school-books hitherto have been almost exclusively occupied—as merely a preliminary step towards a physiology of mankind, and to a science of the laws which govern its spiritual growth.

In the helpless condition of modern ethnology—deprived of its old principles before being able to create new ones—India presents a problem of extreme difficulty; for it may be said, without any hesitation, that that country presents more difficult and complex relations than any other ethnological area on the face of the globe. So much the more encouraging is the zeal with which this investigation is now being carried on in India, for the solution of the Indian ethnological problem would furnish the key to all the rest. It is an undertaking worthy of this enterprising age to measure strength with the most redoubtable antagonist first; and the number and fitness of the combatants who have lately been swarming in from all sides, lead us to hope for a speedy result. Materials of every kind already exist to their hand in the publications of the Asiatic Society of Bengal, an inexhaustible storehouse for ethnological research. Hitherto it was only among the little band which held its sittings in Park Street, Calcutta, that these treasures were estimated at their full value. In the libraries of Europe, if they existed at all, they used to lie on the shelves untouched and covered with dust, until the Ethnological and Anthropological Societies of London (for to them the credit belongs) directed general attention to them. Since that time investigation has been progressing vigorously, and comprehensive plans are being formed for the systematic collection of all the requisites for the foundation of a scientific ethnology.

The *People of India* is one of the first-fruits of these efforts. It consists of a large number of photographs of the most widely-differing races and classes of society in India, and furnishes an important addition to the material already at hand, although the four volumes so far published comprise only a certain number of districts, and leave the *vagina gentium* of the Deccan entirely untouched. This splendid work owes its origin to some extent, as appears from the preface, to an accident; and this circumstance may partly serve to explain the want of uniformity apparent in its treatment. Many gaps will doubtless be filled up as the work advances, and we can only wish it a speedy progress.

The hill-tribes are represented by a few characteristic portraits; but the descriptions in their case, especially in the two first volumes, are written in too general terms, and give little or no explanation to the accompanying figures. In

Nos. 100-105, 125, 126, 127 *ff.* (locality Allyghur), and Nos. 148-156, 169-173, more exact details are to be found respecting the individuals represented. The text is in some places borrowed from excellent authorities, such as Campbell, Wilson, Hodgson, Ward, &c.; whilst in others it is often vague and even misleading. At 119 and 120 the reference is misplaced; Nos. 142 and 143 are interesting from a mythological, Nos. 118 and 122 from a political, 183, 186-188, 191, 223 from a technological point of view; and all of them will be highly useful to the ethnologist. At the same time the claims of anthropology pure and simple, which require the body to be undraped, have been sacrificed in these photographs to ethnological considerations which require the dress to be represented. In reproductions of this kind, where much depends upon accident and the willingness of the object, the desired uncovering of the body is a matter of some difficulty, though the examination of the head is in many, if not in all, cases more easily attainable. For perfect representation two portraits have to be taken—one full-face, and one in exact profile. If these terms are fulfilled, and the photographs well executed, it is even possible to take measurements from them, and when opportunity is afforded for the employment of Lambert's method of measurement, or Huxley's more simple mode, it should never be lost.

Philological observations should also be added, as well on the languages of common intercourse as upon dialectical differences. A tableau of Indian ethnology must, in face of the manifold divisions there prevailing, comprise all the districts in which peculiarities are discoverable. Then again we have not only to take into account the differences of race, but also those of caste and religious sect. These three groupings often intermingle, and are perpetually changing. There are some few castes which coincide exactly with particular races; most of them however have absorbed heterogeneous elements into themselves, and through the union of these into one and the same caste have called a new type into existence. In cases where religious differences arise within one of these distinct groups, the preponderance of the caste may sometimes, notwithstanding, preserve its uniformity — as is found amongst the Ranghur-Rajputs, whether Hindu or Mohammedan. Religious fanaticism too may rapidly create a type of its own, which, as in the case of the Sikhs, preponderates over the earlier one, and which (according to Sax) may also be observed in the Mohammedan Bosnians, as distinguished from the Rayah.

Amid these complications arising from the very nature of things, anything like a generalised statement is only attainable by an adherence to the firm ground of topography, and the juxtaposition, in every clearly circumscribed locality, of the types appearing from any cause whatever within its limits. This arrangement is followed by the work before us, without indeed in any way exhausting the mass of material at hand, and without always choosing the most suggestive form. It remains, however, a matter for congratulation that a beginning has been made, and in the case of a science which has to be erected upon induction, like modern ethnology, the want of system in the preliminary gathering together of the material for observation seems a much less important defect than compression of the facts within the four corners of an *à priori* theory would have been.

The especial difficulties presented by Indian ethnology arise from the geographical position of the peninsula, and from the circumstance that its historical processes have been directly or indirectly influenced thereby. Situated at the foot of the Himalayas at the southern extremity of Asia, India has ever been the spot on which the representatives of the multifarious races of the largest of all the continents have met together. Every historical movement which has taken place in Asia has re-acted on the Indian peninsula. On the disruption of one of the vast Asiatic monarchies, the scattered and fugitive remnants would fly to India, and seek refuge behind its snow-covered mountain-walls; and the ferocious conqueror would be sure to follow them to deck his glittering crown with the diamonds of India. Thus, people after people thronged into the country, and within this triangle, hemmed in on every side by the dark sea of the Kali, they were caught as in a *cul de sac.* The nomad tribes, for whose wanderings in Upper Asia new prairies and fresh pastures continually opened themselves in all directions, found their progress suddenly stopped at Cape Comorin; and it was seldom possible to return in the face of warlike nations lying in wait in the mountain-strongholds of Afghanistan and in the defiles of Beloochistan, who found it an easy task to hurl back into the burning valleys their kindred become effeminate under the Capuan influences of India.

The mingling of the peoples of India was rendered more complicated from the fact that this peninsula formed a point of union for the two halves of Asia otherwise historically separated. A sharp line of demarcation, in the meridian of the Pamir and the Hindukush, divides the historical development of the western part of the continent bordering upon Europe from that of the eastern or Chinese half; but in India the two become merged. Geographically speaking, India would belong, from the Upper Indus in Iskander to the eastern boundaries of Assam, to the last-mentioned half; and indeed as far as Kali the whole southern border of the lofty mountain-chain is fringed with peoples of the Bootan race. But on the other hand, the inaccessible nature of this mountain-chain placed great obstacles in the way of eastern immigration, whilst the hindrances in the west, although likewise considerable, were more easily overcome; and two highways stood open in the grazing-lands of Quettah through the Bolan- or the Gomal-pass, and in the valley of the Kabul through the Kyber-pass, by means of which India early joined hands with Europe, as philology distinctly proves.

Amidst the multifarious crossed and mingled races which from immigration and various historical vicissitudes have been gathered together upon the soil of India—from Tibet and the plateau of Laos, from Iran and Turan, from Kabul, Sogdiana, Tangut, and Khorassan, from Arabia, Ethiopia, the Malay archipelago, Pegu, &c., &c.—a sifting analysis is necessary in order to separate the traces which might lead to the reconstruction of the indigenous race, that one, namely, in which the type of the ethnological province is visible in its purest form.

India, so soon as we come to details whether of botany or zoology, by no means forms a single united geographical province—in the matter of climate and sea-level it clearly does not—and would therefore have to be divided into a number of ethnological provinces. The Indian view identified the extent of Arya Varta with the district of the black antelope; and as far as the yellow æona blooms, Mewar claimed the land for her own.

Another original type of population may be presumed to have existed in the Marousthala Desert; another on the highlands of Carnata; another in the valleys of the Vindhya, of the eastern or western ghauts, on the Aravalli chain; another on the middle and lower course of the Ganges, on the stormy Coromandel coast, in the swamps of the Runn (the *paludes Macoticae* of the Khatti), &c. &c.

The discovery of these ancient elements is by no means such an easy matter as many Indian ethnologists seem to

suppose. The hill-tribes scattered through remote forests, which are often on the slightest indication proclaimed to be aboriginal, can only in extremely rare cases approach this primitive character in a country like India, oppressed as it has been by over-population and rent in every direction by political revolutions.

This notion of the pure descent of the hill-tribes is one of the illusions which ethnology cannot too soon discard; so far is this from being the case that the hill-countries lying bounded by the historical river are the rendezvous of the descendants of men of all countries, a fact of which Radde, on his last journey in Suanetia, found striking confirmation.

The careful analysis of the Kolapoor District in Graham marks off as the types most necessary for ethnological investigations in that district, the Brahmans (in their threefold distinction), the Sirdars, the Gurkurees, the Shepherds, and (for the character-physiognomies called forth by religious community) the Hainas and the Lingayets. From the agricultural population, which numerically preponderates over all the other inhabitants of the district, many representatives would have to be taken. Of the thirty-eight nomad races of the same district, portraits of the Lumanee, the Matee Wud, the Dowree Gowsavee, the Doorgi Moorgi Walley, are especially desirable, on account of the points of resemblance to their kinsfolk in Guzerat, Telingana, Conkan, and the Carnatic.

Oude is treated of in the work before us in Nos. 78–89, and gives as Rajputs (without direct reference to the actual portrait) the Bais and their Mohammedan kinsmen Bali Sultan, the Chohan with the Bujgotee and Rajkumar, and the Gurgbunsee; then, as older natives, the Bhur (with a valuable notice from Sleeman), the Teehur, and Pasi; the Pathan, the Syud, and the Hanuman-worshipping Bairagee and Geypur from Hunooman-gurhee. The Brahmans, on the other hand, are entirely absent here, and would have to be represented by Missur (No. 105[a] from Allahabad), Shukul, Tewarry, Dube, Phathak, Pande, Upudhya, Choube (cf. Forsyth); while the remaining 115 divisions, by reason of their slight differences, may perhaps be disregarded. Among the lower classes of peasantry, the Pasee (Pasi) appear more than any to preserve the native element. Besides the representation No. 86, the Lodhis, Koormees, Kachis, should be noticed; and further, the Tharoo in the Terai (which resemble the Boksas, No. 108 from Moradabad), of whom, on No. 117, specimens from Rohilcund are given. The portions relating to Nepal are distinguished rather by the successful representations than by the descriptions; in the case of Delhi, however, the latter are fuller and more explicit.

In the Cawnpore district, by the side of Brahmans and Rajputs, representations of the Ahir, Lodha, Bunneeah, Mullah, Koormee, Tumalee, &c., &c., are greatly to be desired, and would prove especially instructive when compared with Buneeah (Baniah), Ahir (with the Gwallas, in Bengal, Dhangur, and Mahratta, the Idayan or Yadava, in Tamul, &c.), Rajputs, Brahmans, &c., &c., taken from other districts, and again, in particular, the Guhloot and Bais-Rajputs, as distinct from the Goor-Rajputs (in Russoolabad, Deramungulpoor, and Ukburpoor), which perhaps, along with the Rohillas, may mark another connecting-link between Pathan and Rajputs. Like the Chatree or Katree in Behar (cf. Campbell), the Gaddee as a caste pass for the old Xatriya; the Wokuls or Oculagas are identified by Dubois with Tamulish Vellallas; the Jat appear in Scinde as Moslems, as Sikhs in the Punjaub, as Hindus near Bhurtpore.

In the official report of the Anglo-Indian Civil Service a beginning is already made, which promises to lead to an exact acquaintance with the whole of Lower India. A work embracing every district and bringing together in a summarized form all the results obtained, would furnish a wide base on which ethnology could confidently begin to build; and after the long neglect which this most important of all sciences has hitherto experienced, extraordinary efforts should certainly be put forth to make up arrears. India to a certain extent is a microcosm of the rest of the world, at any rate it is a microcosm of the whole of Asia, in which are repeated, in a narrower compass and on a reduced scale, all the phenomena of that continent; so that, if profoundly studied here, where a general survey is comparatively easy, the results might be applied without difficulty to the same facts in their larger natural proportions.

It is, besides (as Hunter remarks), a question of life and death for the rule of the English in India, that they should with all speed make up for their long-neglected study of the non-Aryan populations of this peninsula. Every friend of civilization must wish for the continuance of the Anglo-Saxon domination in the East; but its future will only be guaranteed when, by finding a sure and certain pillar of support in the indigenous races which have struck root into their mother soil, it can feel itself secure against the fanatical hatred of the Mohammedan and the bigoted deceit of the Hindu.

A. Bastian.

Scientific Notes.

Physiology and Botany.

Influence of Temperature on the Muscular Electric Current.—Pflüger's *Archiv für gesammte Physiologie*, Heft iv. and v., 1871, contains an elaborate paper by L. Herrmann on the influence of temperature upon the electro-motor force of the muscular current. The experiments are too long and complicated to be given here, but he shows that the effect of changes of temperature is marked and considerable, the force of the muscular current increasing with elevation of temperature, and diminishing with its depression. In one series of experiments almond oil was used as the heating and cooling agent.—A second paper is written by Mr. E. Walker, corroborating the statement of Schmulewitsch that in the rigor mortis of muscle produced by heat there is a diminution in the volume of muscle. He shows also from another series of experiments that the force of contraction in rigor mortis may equal, or even exceed, that excited in the living contraction of the muscle. In experiments in which muscle was frozen and thawed, sometimes quickly and sometimes slowly, he found that when slowly frozen and slowly thawed it long preserved its contractility, but when these operations were quickly conducted it soon lost its contractility. In no instance did the mere act of freezing cause the muscle to possess an acid reaction. Rigor mortis will take place even at a temperature of 32° Fahr.—Another paper is contributed by Mr. Grimm showing that emetics exert a primary action on the respiratory centres. The remaining articles are by Valentin, on the dependence of the form of the muscle-curves induced by Woorara upon the duration of the closure of the current, and by Schiff who contributes a few physiological notes.

Prototaxites Logani.—In the *American Naturalist* for June, Prof. Dawson, of Montreal, refers to the paragraph which appeared in our columns on the above subject, under date Oct. 22, 1870 (vol. ii. p. 16), to the effect that Mr. Carruthers had discovered, from microscopical investigation, that the fossil trunks, described under this name by Prof. Dawson, at the Bakerian Lecture before the Royal Society, as the oldest known coniferous wood, are in reality the stems of huge *Algæ*. Prof. Dawson repeats his assertion that *Prototaxites Logani* is an exogenous tree, with bark, rings of growth, medullary rays, and well-developed, though peculiar, woody tissue; and states that Carruthers' assertion to the contrary "can only be excused by defective observations or imperfect specimens."

Geology.

Crinoids.—"Notes on the Crinoidea, by John Rofe, F.G.S." published in the *Geological Magazine* for this month, is the heading of an important article. Impressed by Dr. Carpenter's description last year of a deep-sea Echinidan, whose test was composed of plates separated by flexible membrane, instead of being united rigidly by sutures, the author has carried out a long series of experiments and investigations as

to the mode of articulation of the calcareous joints and plates of the Crinoidea both recent and fossil, and the results he has arrived at tend to confirm his long entertained opinion, that they, like the aberrant Echinidan just mentioned, possessed an equal amount of flexibility throughout their joints. Experimenting with dilute acid first upon a specimen of the recent *Pentacrinus Caput-medusae*, Mr. Rofe finds that each joint of the column is separated from its neighbour by a "cushion" of flexible membrane, while each plate is itself pierced by small tubes through which fibres pass connecting the superposed cushions with one another; the external surface of each joint is also invested by a delicate membranous layer, and the side arms of the column the rays and pinnulæ gave similar results to those obtained by the decalcification of the column, and thus the envelopment of the whole structure by an elastic membrane allowing a certain latitude of motion seems fairly proved. Proceeding to the fossil forms, Mr. Rofe considers there is abundant evidence to justify the belief that their stems, calices, and appendages were similarly invested and flexible. In the familiar "screw-stones" of the mountain limestone deposits he is of the opinion that we have an exact counterpart in silica of the connected membranous cushions of the recent *Pentacrinus*, the calcareous matter of the plates having been dissolved away, while calices of *Actinocrinus*, *Rhodocrinus*, and others, often furnish examples of a silicious pseudomorph which must have formerly been represented by membrane, enclosing plates within which have been similarly dissolved, subsequently we may presume to the replacement of the membrane by silica. The concluding paragraphs of Mr. Rofe's article are the more interesting, since he therein seeks to establish a connection between the Crinoidea and the Tunicata.

Scales of Lepidoptera.—Dr. Maddox's recent contribution to the Royal Microscopical Society, "On the Construction of the Scales of some of the Lepidoptera, as bearing on the structure of the 'Test Scale' of *Lepidocyrtus curvicollis*," occupies some twenty pages of the *Monthly Microscopical Journal* for June. The paper is a highly important one; and the views recorded by the author appear calculated to aid materially the solution of the long-vexed question of the true nature of the markings on the scales of this tiny Thysanurid. Dr. Maddox's interpretations are opposed to those of all former writers on the subject, and more particularly to the "beaded" one recently arrived at by Dr. Royston Pigott. Reasoning from his practical experiments on the larger scales of numerous Lepidoptera, he expresses his opinion that the minuter ones of *Lepidocyrtus* are, like the former, constructed of an outer and inner membrane, having between them an internal framework connecting the two with one another, and partitioning the interspace off into more or less minute areas; within these areas fine granular pigmentary matter is usually stored. The supporting internal framework in the "Test-scales" here particularly alluded to would seem to consist of somewhat sinuous longitudinal ribs, connected with one another laterally by obliquely directed ones of equal size; and again by minuter directly transverse bars, which together map out the interval between the ribs into rhomboidal areas or bends, according to the degree of obliquity of illumination made use of to display them. The evidence here adduced, if confirmed by future investigators, entirely overthrows the theory of the beaded or other reputed raised surface markings of the scales of *Lepidocyrtus* and its allies; among the latter, more especially the existence of the note-of-exclamation-like prominences (!!) which opticians and amateur microscopists have hitherto prided themselves so much upon displaying. These, according to Dr. Maddox, are merely the illusory optical images of the rhomboidal interspaces between the larger meshes of the internal framework, while assumed "beads" indicate their subdivision into smaller areas. The author's remarks on the scales of the Insecta in general, included in this communication, are highly interesting in a physiological as well as structural point of view, and are likely considerably to modify the theories most widely current concerning them. Three plates of figures accompany his article.

Post-pliocene Mammalia.—In the *American Journal of Science and Arts* for April, a new cave is reported to have been discovered near Port Kennedy, Eastern Pennsylvania, containing remains of the Mastodon, Tapir, Megalonyx, Mylodon, and other post-pliocene fossils. The cave is in the "Amoral Limestone" of Rogers, regarded as the equivalent of the Black River and Chizy Limestones of New York. Traces of a large artiodactyle, an equine animal, a bear as large as the grizzly, and numerous remains of rodents, reptiles, birds, and batrachians, have been likewise discovered.

Fossil Sponges.—The *Paleontographica*, or *Beiträge zur Naturgeschichte der Vorwelt*, is enriched in this last May issue by the first portion of a monograph by Dr. Geinitz, descriptive of the fossil remains of the Elbe-valley mountains of Saxony. This first part embraces a description of the fossil Spongiadæ of the lower cretaceous deposits, and is accompanied by ten quarto plates in illustration of the numerous species. These last, though not altogether new to science, are well described and figured, and are grouped in accordance with the system of classification adopted by Oscar Schmidt and other writers on the recent species.

Physics.

On some Forms of the Galvanic Battery.—Dr. Gibbs having observed that nitrous acid was instantly oxidized by an acid solution of potassic bichromate, S. Sharples, at his suggestion, tried the effect of using a mixture of nitric and sulphuric acids, with potassic bichromate as the absorbing liquid, in the porous cell of a Bunsen battery; it was to be expected that the evolution of nitrous acid would be thereby prevented, and thus one of the chief objections to this battery removed. At the same time, the nitric acid would prevent the polarization continually occurring in the ordinary bichromate battery, and would also be constantly renewed. His experiments, which met with complete success, are described in the *American Journal of Science* for April. The porous cell of an ordinary Bunsen's element was charged with a mixture of a concentrated solution of potassic bichromate in nitric acid, with one-third its volume of strong sulphuric acid, and enough water to redissolve the precipitated chromic acid; the battery thus formed was perfectly constant during twelve hours; its internal resistance was about one and a half times that of an ordinary Bunsen cell of the same construction, and the electromotive force of the two the same. No odour whatever could be perceived. As exciting liquid, sulphuric acid of sp. gr. 1·84, diluted with nine times its volume of water, was used. To prepare the absorbing fluid, commercial nitric acid is saturated with bichromate in a warm room, and then mixed with the sulphuric acid and sufficient water. If the internal and external cells are properly proportioned the battery will run until the exciting fluid is exhausted, without giving off any nitrous fumes. A solution of chromic acid in nitric acid, used as absorbing liquid, also gave a very constant element. It will be seen that this battery is very similar to Bunsen's latest modification, which the author, and we believe others have made the same observation, finds is, although very powerful, by no means constant and soon exhausted.

On Fixing the Magnetic Spectra.—The following neat method of fixing the magnetic spectra, or figures produced in iron filings, when these are set in momentary vibration on a surface placed over a magnet, is described by A. Mage, in the *American Journal of Science* for April. A clean plate of thin glass is coated with a firm film of shellac, by flowing over it a solution of this substance in alcohol, in the same manner as a photographic plate is coated with collodion. After the plate has remained a day or two in a dry atmosphere, it is placed over the magnet or magnets with its end resting on slips of wood, so that the under surface of the plate just touches the magnet. Fine iron filings are now sifted uniformly over the film of lac by means of a fine sieve. The spectrum is then produced on vibrating the plate, by letting fall vertically upon it, at different points, a light piece of copper-wire. The plate is now cautiously lifted vertically off the magnet and placed on the end of a cylinder of pasteboard, which serves as a support in bringing it quite close to the under surface of a cast-iron plate (1 ft. diam., ½ in. thick), which has been heated over a large Bunsen flame. Thus the shellac is uniformly heated, and the iron filings absorbing the radiation sink into the softened film and are "fixed." The figures thus fixed may serve for the purpose of measurement; or for photographic positives; or as slides for the projection of the images on a screen, if it be required to exhibit the figures formed to an audience.

On the Connection between Optical and Chemical Absorption of Light.—C. Schultz-Sellack, in No. 4 of *Berliner chemische Berichte*, finds that, in the case of the haloid compounds of silver, optical and chemical absorption of light exactly coincide: that all the colours which are optically appreciably absorbed by the haloid salts of silver in a thickness of a few millimetres, effect chemical decomposition; the absorption of light by these substances being always attended by chemical action. Iodide, bromide, and chloride of silver are all sensitive to the ultra-violet of the solar spectrum, but in different degrees to the visible portion of the spectrum. Chloride of silver collodion is only sensitive to the ultra-violet to about midway between Fraunhofer's lines H and G. Iodide of silver collodion is sensitive to beyond the line G. Bromide of silver collodion is sensitive almost to the line F. Mixed iodide and bromide of silver collodion is sensitive to the line E, as is also mixed iodide and chloride of silver. This remarkably greater sensitiveness of mixtures of bromide and iodide has long been practically made use of in photography. Spectroscopic examination of transparent plates of these substances shows the optical absorption to be entirely confined within the above limits of chemical action. This is especially the case with mixtures of iodide and bromide; whilst chloride of silver is colourless, iodide light yellow, and bromide somewhat darker yellow, the mixture obtained by fusing the two latter together is orange-yellow. The author had previously shown that the ultra-red heat-rays, which have no photographic action, are scarcely absorbed by the haloid silver salts, so that, including the heat rays, it may be generally stated that the haloid silver compounds are chemically altered by all those rays which are appreciably absorbed by them.

New Books.

Bastian, H. C. The Modes of Origin of Lowest Organisms. London: Macmillan and Co.

Bernstein, J. Untersuchungen über den Erregungsvorgang im Nerven- und Muskelsysteme. Heidelberg: Winter.

Gorup-Besanez, Dr. E. Anleitung zur qualitativen u. quantitativen zoochemischen Analyse. (Schluss.) Braunschweig: Vieweg.

Heer, Prof. O. Flora fossilis Alaskana. Leipzig: Brockhaus.

Kopp, H. Die Entwickelung der Chemie in der neueren Zeit. 1ste Abth.: Vor und nach Lavoisier. München: Oldenbourg.

Physiologischen Anstalt zu Leipzig, Arbeiten aus der, 1870. Mitgeth. v. C. Ludwig. Hirzel: Leipzig.

Secchi, A. Le Soleil. Exposé des principales Découvertes modernes etc. Paris: Gauthier-Villars.

History.

A Digest of Moohummudan Law on the Subjects to which it is usually applied by British Courts of Justice in India. Compiled and translated from authorities in the original Arabic. Part II., containing the Doctrines of the Imameea Code of Jurisprudence on the most important of the same Subjects. By Neil B. E. Baillie, M.R.A.S. London: Smith, Elder, and Co., 15, Waterloo Place. 1869.

The administration of justice according to the special laws of the natives of India goes back as far as 1772, when the East India Company, in conformity with Warren Hastings' proposal, "reserved the rights of the natives, and provided that Moulavies or Brahmins should respectively attend the courts, to expound the law, and assist in passing the decree." This fact is the starting-point of a series of publications on Muhammadan and Hindu Law. As to the former, an effectual beginning was made by Hamilton with the translation of the *Hedaya*, Calcutta, 1791, and this work is still at the present time the authoritative text-book for Hanafite law, being "adopted as a text-book by the Council of Legal Education for the examination of the students of the Inns of Court, who are qualifying themselves for the English Bar with a view to practise in India." A second edition of the book has been published by S. G. Grady, London, 1870, with the omission however of several portions which are no longer of any practical use. On casting a retrospective glance at the history of this branch of literature, we cannot but say that, in comparison with the vast importance of the subject, progress has been very slow, and that the number of publications, the produce of nearly a century, though in several instances they display admirable abilities and learning on the part of the authors, is undeniably very scanty. Mr. Neil B. E. Baillie holds an eminent place in this department, and the latest progress is mainly due to his efforts. We hope that the rarity of similar publications, as well as the intrinsic value of the present book on the doctrines of the Imameea Code of Jurisprudence, will be our excuse for introducing it at present to the reader, though it was published as far back as 1869.

The bulk of Indian Muhammadans belongs, as we may say, to the orthodox church, and under the Moghul empire the orthodox faith was the state-religion of India. In some parts, however, for instance in Oudh, in Dekhan at Haidarabad, Golconda, and Bîjâpûr, the Shîahs outnumber the orthodox. From the time of Alî, the son-in-law of Muhammad, the whole Islamite world has been split into two parties, Sunnites and Shiites, to such an extent as will never admit of reconciliation, though the subject of the dispute seems to us rather futile, consisting as it does in dynastic claims on the throne of the Khalifs which has vanished for centuries. This difference of view extends much further than that of Protestantism and Catholicism, as religion and law are in Islam more closely connected, and are even in one sense identical, both being derived from the same divine inspiration promulgated by the prophet. European religion, if I may use this term, has only one home, and that is Jerusalem; European law is of an entirely different origin, being derived partly from Rome and partly from the earliest institutions of the Teutonic tribes. On the contrary, in Islam both law and religion have the same home, viz. Mekka, and the same development. A difference of creed must of necessity be followed by a difference in law. The literature on Shîah law was inaugurated by the *Digest of Mohummudan Law, according to the Tenets of the Twelve Imams*, compiled under the superintendence of Sir William Jones, &c., by Captain John Baillie, Calcutta, 1805. The *Moslemisches Recht*, by N. v. Tornauw, refers chiefly to the Shîah law as it is practised in the Russian Caucasus. The present *Digest* does not contain the entirety of subjects treated of in Shîah law-books, but it exhibits "the doctrines of the Sheeah sect on the most important of the subjects to which the Muhammadan law is applied by British courts of justice in India" (Introduction, p. xxvi). The author discusses in eight books the following subjects: marriage, divorce, pre-emption, gifts, appropriations and alms, wills, inheritance (law books). The first seven books are translated from *Sharâi-alislâm*, the most esteemed standard-work of Shîah jurisprudence in India, composed by Najm-aldîn Ja'far b. Mu'ayyad Alhillî, who died A.H. 676 (A.D. 1277), and edited Calcutta, 1839. From a scientific point of view it would have been desirable to show from whom Shaikh Mu'ayyad received his tradition, and to whom as the last and earliest authority it is to be traced; in fact, to give a review of the sources of the book in the same way as Hamilton did in his *Preliminary Discourse*, p. xxviii (2nd edition), though with many mistakes. We are quite aware that here the difficulty of such researches is much greater than in the Hanafite literature, as manuscripts of Shîah law-books and biographical materials on their authors are of rare occurrence in European libraries, whilst it is comparatively easy to find the mutual connection of the different standard works on Hanafite law.

The eighth book, on Inheritance, is compiled by Lieut.-Colonel J. Baillie, and translated from *Alkâfi* (by Muhammad b. Murtaḍâ Hâdî?), a commentary on *Almafâtîh* by Muhammad b. Murtaḍâ Muhsan, and from *Sharâi-alislâm*. Originally it seems to have been destined to form part iv. of the above-mentioned *Digest of Mohummudan Law*, of which only the first volume was published. It is now edited from a manuscript which came into the possession of Mr. N. Baillie as one of the executors of the will of the original compiler. Not having at hand the text of *Sharâi-alislâm*, we cannot collate Mr. Baillie's translation with the original; but we can say so much, that it is very readable, and elucidates with great clearness subjects of a rather obscure and intricate character. The *Sharâi-alislâm* seems to us by far inferior to the *Hedaya;* the *raisonnements* of different doctors, which are particularly adapted to give an insight into the principles of the law, are less frequently quoted than in the *Hedaya*. The subject-matters are not discussed at very great length, and we must leave it to be decided by the experience of law-officers in India whether Shaikh Mu'ayyad's work will prove an adequate vade-mecum through the varied casuistry of a practical life.

We cannot refrain, in this place, from directing the attention of the reader to a rich source of information for the history of the Shîah, its geographical extension, its literature and great men—in fact, to a vast variety of subjects, many of which relate particularly to India, regarding which our current information is extremely scanty. We allude to the work of Nûr-Allâh b. Sharîf Alḥusainî Al-Shushtarî, called *Majâlis-Almuminîn*, whose great value was already recognized by Morley (*The Administration of Justice in British India*, p. 262). The Bodleian Library at Oxford possesses

in the Ouseley Collection two good copies, which might serve as a reliable basis of an edition or translation.

Ed. Sachau.

Medieval Manuscripts, by W. Wattenbach. Leipzig: Verlag von S. Hirzel. 1871.

The author of the excellent handbook, *Deutschlands Geschichtsquellen im Mittelalter bis zur Mitte des dreizehnten Jahrhunderts*, also well known as the editor of several volumes of the *Monumenta Germaniae Historica*, has been ever since collecting a variety of original notices illustrative of the art of writing during the middle ages. These are now published in the shape of a book, and serve at once as an introduction to the auxiliary departments of historical study and as a forerunner to a much more arduous work—a general history of writing. Though with the vast extent of libraries to be consulted completeness in these matters will hardly ever be obtainable, and though researches of this nature will naturally reflect the individual peculiarities of German scholarship, the medieval period as a whole receives many highly-welcome illustrations by a novel collection of much curious matter like the present. It is for the first time we find it carefully arranged under distinct heads, supported by works of reference and a great number of original extracts.

The introduction contains a detailed account of the *Origines Diplomaticae*—their systematic organization by Mabillon and the French Benedictines of the seventeenth century, the labours of German scholars, the separation of diplomatics in modern times, and Greek palæography chiefly originated by Montfaucon. In the first chapter the different materials on which people learnt to write are surveyed. These were—(1) stone and metal; (2) wax tablets, which have been in common use from the days of Herodotus even down to a time within the memory of living men and, being easily folded, attained very soon, in the shape of *diptychs* and *codices*, the form of books; (3) clay and wood; (4) the English tallies as late as 1834; (5) papyrus, exported from Egypt and obstinately adhered to by the early popes in spite of its scarcity; (6) leather, the favourite article for the sacred volumes of the Jews; (7) parchment, introduced by Eumenes II. of Pergamus in opposition to papyrus, but recommendable for its numerous advantages, its remarkable durability and solidity, which enabled the scribe to write on both sides of the sheet, the ease with which it receives the purple and other stains, preserves gilt and silver letters, and is bound up in a book; and last, not least, paper—both the filmy Oriental cotton web and linen or rag paper, which in the course of time has superseded nearly every other material.

The second chapter treats of the forms which manuscripts assume, viz., rolls, books, and charters. Scholars are well aware how important it is for critical purposes to ascertain as accurately as possible the subdivision in columns, the number of lines, verses, and even of letters in each line; and the necessity of work increases indeed with the age of the manuscript. Other utensils for writing and their distinct use are likewise as old as the art itself. A new dissertation in a separate chapter is, therefore, aptly introduced by some well-known epigrams from the Greek Anthology, in which these different implements are enumerated. Extracts from medieval writers explain how the parchment had first to be smoothed, patched, and lined, and how very difficult it was even then to procure good ink (ἔγκαυστον, *inchiostro*, *encre*). Red (minium) and other colours, gold and silver, were used for writing and illuminating. Then there is the stylus and the pencil, the reed and the pen, the curious medieval penknife; the manner of writing itself; its abbreviations, its punctilious accuracy; and a very instructive paragraph on palimpsests, in which the mischief so frequently done to the most valuable manuscripts by the ruthless application of injurious chemical fluids is very properly censured. Many curious subjects are summed up in the fourth chapter with regard to the different modes of emending manuscripts in order to constitute a correct text; rubrication and the splendid art of illumination, binding, and forgeryun—fortunately of frequent occurrence during the period, not only in charters and other public or private documents, but in the fabrication of entire works.

The fifth chapter is devoted to scribes and copyists, their names and employment in ancient and medieval times, the inestimable activity of the monks and friars, clerks of chancery and such lay people, male and female, who lived by copying writing-masters, and a very amusing collection of subscriptions and signatures, which, with certain typical allusions, are met with in many manuscripts. The sixth chapter contains information about the book trade of the Greeks and the Romans, the transcription and sale of books, and the stationer's trade in the middle ages. The seventh treats of ecclesiastical, personal, and public libraries, with some remarks on archives and records. Throughout the whole book every term in connection with the subject is explained with philological precision from Greek, Latin, or modern languages.

It is but natural that the multitude of subjects which have never before been discussed in such intimate reference to each other should remain as it were inexhaustible. The author himself, whose extensive reading appears in every page, has appended to his first edition twenty pages of addenda and corrigenda. A conspicuous place is very justly given to the ancient chancery of the popes and Italy—the prototype in these matters of Western Europe—where everything connected with the art of writing, books, official registers, and libraries, preserves the uninterrupted traditions of antiquity. We know a great deal about Merovingian, Carlovingian, and Capetian France from the volumes of Bouquet and Pertz, from the numerous collections of documents, and the admirable labours of the Ecole des Chartes. Sickel's *Monumenta Graphica Medii Aevi*, with splendid photographical plates, as yet unfinished and very expensive; his *Acta Regum et Imperatorum Karolinorum digesta et enarrata*, Böhmer's, Ficker's, and Jaffé's works throw a great deal of light on imperial diplomatics. Wattenbach himself has done his best to illustrate everything connected with the art of writing in medieval Germany.

England, where the art of writing has ever flourished since the days of the Irish and the Anglo-Saxon monks, is certainly not overlooked by our author. He has not only consulted Mr. Westwood's publications and similar works, with facsimile illustrations, but he has personally inspected many a rare volume in the manuscript department of the British Museum. Professor Wattenbach draws largely from the account of the great bibliophile of the thirteenth century, Richard de Bury, Bishop of Durham. He is acquainted with the old library of Merton College, where some ponderous volumes still remain chained to their oaken boards; and he is aware of the external difference between the Exchequer and the Chancery Rolls—the membranes of the first being fastened in the shape of a book, like the Polypticha, the latter being stitched longitudinally to each other. Still there was a great deal more to be said about writing and books in early England. The author has not been over the Record Office sufficiently, where a system of enrolment and uninterrupted official writing is exhibited, quite unique in its way, almost as old as William the Conqueror, and certainly more complete and incomparably more accessible than the repositories of the Vatican. We miss a reference

to the magnificent facsimiles by photo-zincography recently issued from that office. Quotations from the *Dialogus de Scaccario* of Henry II.'s time about the Rotuli, the Scriptor Thesaurariae, the Scriptor Cancellariae, would have been very suitable in their place. On p. 111, with the *magister* the *custos rotulorum* ought to have been mentioned. We find the word *inrotulare* duly noticed, but not *contrarotulare*, to control. There is evidently a mistake, p. 121, note 2, when it is asserted, on the authority of Du Cange, that indentures with the word *chirographum* written across the dissection of the two literally equal documents had been common before seals were introduced soon after the Norman Conquest. On the contrary, as the old Tower Records show, such indentures are extremely numerous at a later time, for instance during the reign of Edward III.

A few more remarks may conclude this notice. To the books described according to their cover, as red, white, or black books, p. 230, should be added the *Liber niger Scaccarii* ed. Hearne and the *Liber Ruber*, viz., the *Dialogus de Scaccario*. In the very elaborate dissertation about the *scriptorium* attached to so many celebrated monasteries, though we meet an occasional allusion to St. Albans, hardly any notice is taken of the prominent and fertile activity of Matthew Paris and his school, who imparted fresh vigour to their scriptorium in the latter half of the thirteenth century. From Sir Frederic Madden's edition of the *Historia Anglorum* we learn how Matthew copied and illumined his own works, and how, with the original manuscripts, he has left us maps, pictures, and even his portrait, drawn by his own hand. Professor Wattenbach mentions at various places, pp. 208, 225, 313, the limners, binders, and stationers who worked their trades under ecclesiastical protection and with the ancient academical privileges of Paris or Heidelberg. Yet Oxford is passed over altogether, though the very statutes passed there for the sake of Stationarii, Pergamentarii, Luminarii, Scriptores have been lately published in Mr. Anstey's *Munimenta Academica*. The same work contains curious statements about books pawned to or lent from the chests of colleges, the donation of Bishop Cobham's library in 1365, and the catalogue of books presented by Humphrey, Duke of Gloucester. The late introduction for official use of cotton paper into Spain, p. 96, is confirmed by some letters of Alonso X. to Edward I. in Spanish, preserved amongst the royal letters of the Record Office, execrably printed in the new edition of Rymer's *Foedera*, and restored as much as possible by the present writer in *Monatsbericht der K. Academie der Wissenschaften zu Berlin*, November 13, 1854. The *graphium*, *scalprum*, or whatever it may be, is to be seen worn round the neck on Chaucer's well-known portrait, taken from a copy of Occleve's Poems and prefixed to the Pickering and other recent editions of the *Canterbury Tales*. R. Pauli.

Contents of the Journals.

Historisches Taschenbuch, 1871 (now edited by Riehl).—After the inevitable "Elsässische Culturstudien," we have an article by A. v. Reumont on Carlo Filangieri, prince of Satriano, a name well known in Neapolitan and Sicilian history, and especially noted in connection with the reconquest of Sicily in 1848–9. Von Reumont knew Filangieri personally, and the account is very interesting. Naples has not been so rich in military and civil talent of late that she can afford to forget him. Weber has a good article on Froissart and the supremacy of French literature in the 14th century—a parallel in some respects to "the age of Louis XIV." But the chief article is of course Döllinger's on the "predictions of the Middle Ages." Excluding national and dynastic prophecies, all those in fact which had a mere political purpose, the main interest lies in those which predict a great reformation of the church, while earlier the coming of Antichrist and the end of the world were kept chiefly in view. Joachim of Calcloria, Brigetta, Hildegardis, and many others, spoke of the temporal power of the Papacy, and the coming judgment of God on the corrupt church.

Allgemeine Zeitung, May 10, contains a review of the "Letters of the Archduchess Elizabeth Charlotte of Orleans" (1707–15). They contain some matter interesting to us about the accession of George I. The archduchess had a bad opinion of English loyalty, and thought King George's chance a poor one. She was mother of the Regent Duke of Orleans, and gives an interesting acount of Louis XIV.'s death-bed.

Literarisches Centralblatt, May 27.—A. v. G(utschmidt). reviews at length Müllenhoff's "deutsche Alterthumskunde," vol. i., which only comes down to the voyage of Pytheas to the Baltic somewhere about the time of Alexander the Great! The book should have been entitled "Essays on the Knowledge of the West of Europe possessed by the early Phœnicians and Greeks." The author follows Movers too closely, who found traces of Phœnicians everywhere, and is wroth with the comparative mythologists who refuse to see anything in the legend of Hercules carrying off the oxen of Geryon from the West but the representation of the sun setting among red clouds. A good account is given of the Ora maritima of Avienus, and an attempt is made to point out the interpolated parts.—Bu(rsian) reviews Demitsas' Ἀρχαία γεωγραφία τῆς Μακεδονίας not very favourably. We are glad to see that Bursian accepts the correction *Driloni flumini* for *Oriundi flumini* in Livy 44, c. 31. Brunn's important theory as to the dates of ancient vases also receives consideration. Allowing that many late vases adopt archaic forms, yet is it not equally true that archaic forms continue on in some branches of art side by side with the new developments? Brunn's view will need very serious limitations.

Göttingische gelehrte Anzeigen, May 24.—Kohl reviews Anderson's curious journey from Liberia to Musardu, the capital of the Western Mandingoes. The difficulties of African travel, owing to the incessant detention by the natives, make the results very slight. Frensdorff gives an account of the early "Town Chronicles of Strasburg."

Revue Archéologique, Sept. 1870.—Lenormant continues his account of the "Ethiopian period" in Egyptian history. The sister of Sabaco gave her daughter in marriage to Psammetichus, who secured his throne by this marriage with the heiress of Thebes. The later Ethiopian dynasty was partly hereditary and partly elective, with the peculiarity that the hereditary right came through females to the exclusion of males, contrary to the Egyptian rule.—An account of Livia's house on the Palatine describes a fresco which is very curious as giving us a picture of a street in ancient Rome.—A short note by Clermont-Ganneau shows the exact spot in Dibon where the famous Moabite Stone was found—built up into the wall, perhaps in Roman times. There is a good notice of Legrand's "Collection de monuments pour servir à l'histoire de la langue néo-hellénique," the most important of which is a grammar by Sophianos, a Corfiote trained in the celebrated Greek College founded at Rome by Leo X.

New Publications.

Beaulieu-Marconnay, Carl Freih. v. Der Hubertusburger Friede. Nach archival. Quellen. Leipzig: Hirzel.

Bursian, Conr. Geographie von Griechenland. 2. Bd.: Peloponnesos u. Inseln. 2. Abth.: Die Landschaften Arkadien, Elis, Achaja. Mit 3 lith. Taf. Leipzig: Teubner.

Campana de Cavelli, Marquise. Les derniers Stuarts à St.-Germain-en-Laye. Documents inédits et authentiques etc. 2 vols. Paris: Didier. London: Williams and Norgate.

Dirksen, H. E. Hinterlassene Schriften zur Kritik u. Auslegung der Quellen römischer Rechtsgeschichte u. Alterthumskunde. Hrsg. v. Prof. Frdr. Dan. Sanio. 1. Bd. Leipzig: Teubner.

Hahn, Consul J. G. v. Reise von Belgrad nach Salonik nebst 4 Abhandlgn. zur alten Geschichte d. Morawagebietes. Leipzig: Fues.

Markham, C. R. A Memoir of the Indian Survey. London: Allen and Co., for the India Office.

Monumenta Sacra et Profana. Op. Coll. Doct. Bibl. Ambrosianiae. Tom. iii. Fasc. iv. et ult. Tom. v. Fasc. x. Mediolania. Turin: Loescher.

Philology.

On Early English Pronunciation. By A. J. Ellis, Esq. Part III. Illustrations of the Pronunciation of the Fourteenth and Sixteenth Centuries. Trübner.

The fourteenth-century illustrations consist of the Prologue to the *Canterbury Tales* and extracts from Gower and Wiclif, all in critical texts and phonetic transcriptions. The following lines will give an idea of the conjectured pronunciation of Chaucer:—

"Dhan loq'en folk to goon on pilgrimaadzh'es,
and pal'meerz for to seek'en straundzh'e strond'es,
to fern'e Hal'wes kuuth in sun'dri lond'es;

and spes'ialii, from ev'rii shiir'es end'e
of Eq'elond, to Kaun'terber'i dhai wend'e,
dhe Hoo'li bli's'ful mar'tiir for to seek'e,
dhat Hem Hath Holp'en, whan that thai weer seek'e."

Then come the phonetic treatises of the sixteenth century, the most important of which are Salesbury's accounts of Welsh and English pronunciation. On account of the great rarity and value of these treatises they are printed almost in full; the latter, which is in Welsh, with an English translation. They are of the highest interest, both for English and Welsh philologists. Mr. Ellis then gives copious specimens of the phonetic writings of Hart, Gill, and other sixteenth-century authorities, transliterated into palæotype, touching incidentally on the pronunciation of Latin. Such sentences as (Sizero rethorika siqgyylooz visit), (invizus mizer non delektatur plasidis myyzis), show that the reform now contemplated is in many cases but a return to the older usage. The results of the whole investigation of the pronunciation of the sixteenth century are summed up in an elaborate pronouncing vocabulary, with references to the various authorities.

The rest of the volume is devoted to Shakespearian pronunciation, including an examination of his puns, rhymes, and metre. The puns are interesting, as confirming the results of the general investigation: many of the witticisms are quite unintelligible in the present pronunciation. Thus Falstaff's joke on "gravity," "gravy" (2 H. iv. 1, 2), is lost in our (græviti, greevi), while in the old pronunciation both words have the same vowel (graviti, graavi). In the same way the connection between "Person" and "one" (L. L. L. 4, 2) is made unintelligible by the modern pronunciation of "one" as (wən); Mr. Ellis gives the Shakespearian pronunciation thus: (Master Person, kwaasi "Pers-oon?" And if "oon" shuuld be "perst," whitsh iz dhe "oon?") From the specimens with which the volume ends we select part of Portia's speech on Mercy:—

"Dhe kwaliti of mersi iz not straind,
it dropeth az dhe dzhentl rain from Hevn
upon' dhe plaas beneedh'. It iz tweis blest,
it bleseth Him dhat giivz and Him dhat taaks.
-t iz meiHtiest in dhe meiHtiest. It bikuumz
dhe throoned monark beter dhan Hiz kroun."

Among the more archaic pronunciations that probably existed in Shakespeare's time may be mentioned (mikhtiest) for (meiHtiest), and (truuned) for (throoned).

Mr. Ellis says that the restored pronunciations, both of Chaucer and of Shakespeare, have met with general approval from those to whom he has had opportunities of reading passages aloud. At the same time he deprecates any attempt to reform the present pronunciation of Shakespeare, which, generally speaking, preserves the metre, and adds but little to the irregularity of the rhymes. "The language of the sixteenth century stands in this respect on a totally different footing from that of the fourteenth. Chaucer's verse and rhyme are quite unintelligible, if he is read with our modern pronunciation. Hence the various 'translations,' or rather 'transformations,' of Chaucer perpetrated by Dryden, &c., and more recent attempts, in which the words of the original are preserved so far as the exigences of rhyme and metre, according to nineteenth-century notions, permit. But even then the effect of the new patches on old garments is painfully apparent." The question of Shakespearian pronunciation will, however, depend greatly on the extent to which the practical study of phonetics is carried; it is certain that anyone who fully masters the genuine pronunciation will never care to return to the modern, with its degradation of (a) and (aa) into (æ) and (eei) and general loss of consonantal force.

Henry Sweet.

Catonis Philosophi Liber. Recensuit Ferdinandus Hauthal. Berlin: Calvary, 1870.

M. Hauthal, the editor of the Scholia of Porphyrion and Acron on Horace, has here given in a cheap and commodious form an authoritative text of a book now little known, but still interesting as a literary problem. The Distichs of Cato, or, as it is called in the most reliable MSS., *Liber* or *Libri Catonis*, sometimes simply *Cato*, is a short moral compendium in two parts. The first and shorter is in prose; it consists of a brief preface followed by fifty-six apophthegms, generally of two words, in one or two instances of as many as five or six, *e. g.*: *Cognatos cole, Familiam cura, Coniugem ama, Cui des videto, Quae legeris memento, Beneficii accepti esto memor, Pauca in convivio loquere, illud stude agere quod iustum est.* This part is sometimes called *Parvus Cato.* The second and longer part is made up of four books of hexametrical distichs; the first book has 40, the second 31, the third 24, the fourth 49: to each of the last three books is prefixed a short introduction, also in hexameters; the first has none. This part is sometimes called *Magnus Cato.* As a specimen of the distichs (*versus bini*, IV. 49) may be quoted:—

I. 3. Virtutem primam esse puto, compescere linguam:
Proximus ille deo est, qui scit ratione tacere.

29. Quod vile est carum, quod carum vile putato;
Sic tibi nec cupidus, nec avarus nosceris ulli.

II. 5. Fac sumptum propere, cum res desiderat ipsa;
Dandum etenim est aliquid, dum tempus postulat aut res.

26. Rem tibi quam nosces aptam, dimittere noli,
Fronte capillata: post haec Occasio calva.

Perhaps the origin of the proverbial *Take time by the forelock*: as IV. 19,

Disce aliquid, nam cum subito Fortuna recedit,
Ars remanet, vitamque hominis non deserit unquam,

seems to express *Ars longa, vita brevis*; and

Demissos animo et tacitos vitare memento;
Quod flumen placidum est, forsan latet altius unda,

our *Still waters run deep.*

Of the author of the Distichs we know nothing. They have been ascribed to Seneca, Ausonius, Probus, Boetius; even to Manilius and Serenus Samonicus, the former mainly on a resemblance of style (see Hauthal on IV. 12), the latter on account of the not unfrequent medical allusions. Scaliger, on the authority of an early and very valuable codex in possession of Bosius, ventured to give a greater personality to the unknown author by calling him Dionysius Cato, a title which has been generally repeated since, and still appears on M. Hauthal's title-page, in spite of his own scepticism. He himself contributes one new fact to the question; in a Paris MS., No. 8320, the prologue is headed thus, *Incipit Prologus Librorum Catonis Cordub.*; whence it would appear that some traditions made the author a native of Cordova.

If we could be sure that the work as we have it is in its original state, it cannot be earlier than Lucan, who in the prefatory verses to Book II. is recommended as the proper authority on the civil wars of Rome. On the other hand, it cannot be later than Valentinian I.; for a verse (II. 22) is quoted in a letter written to that emperor by a person named Vindicianus. The book was well known in the Middle Ages and often quoted, as by the author of the treatise *De non adorandis imaginibus*, supposed to be Charlemagne or Alcuin, by Luitprand, Ditmar, Peter of Blois, John of Salisbury, Jacobus de Viragine, Hieremias de Montagnone, author of the *Compendium Moralium Notabilium*, or as it is rather better known in its printed form of *Epitoma Sapientiae.* It was translated into Greek by Planudes and Scaliger. With Scaliger it was a favourite book; he

wrote notes on it, and complains that it was gradually going out of fashion as a school-book, whereas he had known many grave and learned men of an older generation who at an advanced age had condescended to learn it by heart. Erasmus himself wrote a commentary on it, not always with a complete comprehension of its meaning, to judge by M. Hauthal's extracts.

The language of the Distichs is allowed to be good, a sort of medial Latin, not unlike the Satires or Epistles of Horace; the structure of the verses is correct, and at times sufficiently epigrammatic to be pleasing. There are a few instances of harsh hiatus, *e.g.:* I. 14, *iudex tu esse* (unless this is a misprint); II. 14, *Forti animo esto;* III. 14, *Quod potes id tempta*, to which we may perhaps add *Successus noli indignos*, II. 23, though the reading is doubtful: the *e* of *vide* is shortened IV. 25, *peterē* lengthened before *qu*, I. 31, as it is often in Prudentius; *potes* is long before a vowel, I. 38; *denarium* is a trisyllable in IV. 4. The writer can hardly have been a Christian, as, though sometimes using *Deus* in a vague manner, *e.g.:* II. 2, *arcana Dei;* IV. 34, *Deus iniustas ulciscitur iras;* IV. 38, *Ture deum placa; Ne credas gaudere deum* (cf. II. 12, *Quid Deus intendat*), he speaks of Janus as a god II. 27. The worship of God is inculcated, no doubt, at the outset of each part of the work; but the general tone of the precepts is worldly; similarly God is to be appeased with incense, partly because he has no pleasure in sacrifices, but partly also because bullocks are more useful for agriculture. Nor could the Distich IV. 14,

> Cum sis ipse nocens, moritur cur victima pro te?
> Stultitia est morte alterius sperare salutem.

well come from a Christian, at least with the addition of the second line. It seems more probable that the author, if we regard the work as substantially one, was so far in sympathy with Christianity as to approve of the disuse of sacrifices, but so far in antipathy as to disapprove of the continuation of the idea in another form. The lengthening of *re* before *qu* would seem to be in favour of a rather late date; on the other hand, it hardly seems fanciful to trace in the *Sermones blandos blaesosque* (III. 4) an allusion to the Blandi and Blaesi, familiar to us as powerful nobles in Juvenal, Statius, and the younger Pliny. We cannot indeed be sure that we have anything like an integral work remaining; the prose apophthegms may be really ancient, possibly even descend from the time of the elder Cato, who wrote an ethical treatise addressed to his son, which A. Gellius calls *Carmen de Moribus* (*N. A.* xi. 2), as well as a book of Apophthegms; a relic of the old language may be thought to survive in the deponent *concupisci* (54); and these may have been supplemented in the first three centuries of our era by precepts more in accordance with the feeling and language of the time; the whole being thus formed gradually, and reduced by a succession of grammarians to a general appearance of uniformity.

To notice one or two special points of this edition, we object to M. Hauthal's reading of I. 33:

> Cum dubia in certis versetur vita periclis
> Pro lucro tibi pone diem, quocunque laboras.

The opposition of *dubia* to *certis* becomes flat with the addition of a preposition which could not in sound be distinguished from the negativing prefix of *incertis*, and would more probably than not be written connectedly on either hypothesis. In the second line, *quicunque*, the MS. reading, is the nominative as explained by Ulitius, and need not be changed. In I. 39, *Cum labor in damno est* seems to mean, "when labour is a losing concern" and cannot command its price, not "is on the decrease." In IV. 20, *Prospicito cuncta tacitus quid quisque loquatur*, we should perhaps read *cuncta et tacitus*, "Consider beforehand everything and in silence," avoiding the asyndeton of M. Hauthal's *cunctans tacitus* (compare IV. 31). In the preface to B. IV. *Invenies aliquid quod te vitare magistro* is excellently emended *quo tute utare m.* The misprints, and they are not few, M. Hauthal will doubtless alter in a second edition.

R. Ellis.

On Greek Pronunciation. [*Ueber die Aussprache des Griechischen.* Von Friedrich Blass.] Berlin: 1870.

The question as to the possibility of practical reforms in the Erasmian pronunciation of Greek now prevalent in Germany, the philological country *par excellence*, continues to be discussed from time to time, though we cannot see that it is likely ever to advance beyond a certain point. Dr. Blass is quite right in complaining of the wearisomeness and eternal repetition of the arguments in favour of the modern Greek pronunciation, and appears to be seriously alarmed at the proposal of a certain Mr. Scholz, whose predilection for the modern pronunciation culminates in the wish that Greeks might be sent round to the German colleges in order to instruct the German teachers of Greek in their native pronunciation. Dr. Blass roundly declares that he will not submit to any such teaching, and considers himself better qualified to judge of the subject than the modern Greek professor. It is true that it is simply impossible and mere waste of time to discuss this question with the Greeks of the present day; for the same unpractical vanity as induces them to identify themselves with the ancient Greeks, and the same retrograde attempt, in the face of all historical development and the spirit of modern times, to work back their modern language to the position of the old speech—cause them to consider the genuineness of their modern pronunciation a point of national honour which must be defended tooth and nail. We agree with Dr. Blass that it is, for these reasons, unnecessary to pay the slightest attention to modern Greek treatises on this point; but we do not agree with him when he goes so far as to reject the evidence of the modern pronunciation altogether. The truth is that in spite of the existence of numerous treatises on this subject only very little has been done towards settling two preliminary questions, which it is absolutely necessary to answer before coming to the main question: how are *we* to pronounce Greek? These two questions are:—1. What were the differences of the pronunciation of the Greeks according to the various periods of their language, and again according to its various localities? An answer to this question would imply a complete and systematic history of Greek pronunciation; and there are vast materials in existence towards a phonological work of this kind, which would no doubt (if conscientiously carried out) rival in importance Corssen's well known book on Latin pronunciation. 2. What are the differences and variations existing up to the present day in the modern Greek pronunciation, and how far can they be traced back to ancient times? In an article on Mr. J. Peile's *Introduction to Greek and Latin Etymology* (*Academy*, vol. i. p. 244) I pointed out that even from the existing variations of the modern pronunciation something might be gained for ancient phonology; I was not then aware that Mr. A. J. Ellis, whose important work on English pronunciation will always be a noble model of methodical investigations of this kind, says, *l. c.* p. 526: "If we examined the Greek dialects at present for variety of pronunciation, we should probably obtain a large amount of information, important in its bearings even upon ancient Greek usages." And in general, Mr. Ellis's observations on our subject (pp. 518-530), brief as they are, appear to be entitled to the highest attention, and it is much

to be regretted that they should not have fallen under Dr. Blass's notice.

We are not quite clear from the treatise before us whether the author believes his own *German* pronunciation to be substantially the same as that of Pericles or Thucydides; but we perceive that he is of opinion that his own *German* system, in as much as it gives each letter its pure sound, *must*, at one time or other, have been in use among the Greeks: *when* we find nowhere stated. Dr. Blass is the editor of Hyperides, and from the papyruses which have preserved his speeches many proofs may be adduced—besides a great many obtained from other sources—that the *principal* features of the modern Greek pronunciation were in existence at the time when they were written. Sometimes our author gets rid of them by sophisms worthy of a modern Greek advocate; but it is almost pitiable to see him shifting his ground in the instance of the diphthong αι, the pronunciation of which is there established by the spellings ἀσπάζομε, κέ, ἐπεδεύθησαν, and the dropping of καί before κελεύειν; instead of arguing that most probably this shows the pronunciation of the *learned* Alexandrians as well as the *unlearned*, he sophistically turns against the want of education perceptible in the solecisms of some contemporary letter-writer. Is this impartial criticism? Just as we hope to be for ever freed from such "proofs" as ἥκω and ἵκω, γῆ and γίγας, and other nonsense of the same kind, a large collection of which may be found in Mullach's preface to Demetrius Zenus, we earnestly beg to be spared such empty declamations as Dr. Blass indulges in against the cacophony of modern Greek pronunciation. Hear a Greek lady read or recite Christopulos, and then tell me if this is not harmonious! But the fact is that the modern pronunciation is exceedingly difficult in all its niceties and refinements, and is not so easily caught by a foreigner, least of all by a German, who is candid enough to confess that σθένος and λέγεσθαι cannot be pronounced with the English sound (of *th*) even by the most practised tongue (p. 39). Dr. Blass thinks εὔκολος fearful, in his mouth it may be, but it has a very pretty sound in a Greek mouth. If "subjective" criticism of this kind be allowed, what will, *e. g.* become of Tennyson's "melody" in "Claribel," at least in Dr. Blass's mouth?

Dr. Blass is quite as much a blind defender of his familiar Erasmian pronunciation as those Greeks whom he blames are of their national pronunciation; though it is demonstrably certain that Plutarch or Lucian pronounced to all intents and purposes like the modern Greeks, except that they seem to have been more careful of prosody and quantity (see also Mr. Ellis, p. 530; *New Journal of Philology*, vol. ii. p. 159), he declaims against the Syrians and Byzantines, and hugs his own mode of pronouncing, as if he had shown it to be the genuine pronunciation of the ancients. His treatise contains some good observations and some new materials, but a scholar like Dr. Blass might have written more to the purpose. His treatise resembles the careless chat on this point of a clever scholar; but there is a difference between chatting and printing. W. WAGNER.

THE PRONUNCIATION OF LATIN.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—Allow me to say a few words in reply to Prof. R. Ellis' long letter in your last number. They must be few, or else we shall soon expose ourselves to laughter by these assaults on poor Priscian's head in a controversy in which a Max Müller has mingled, and to which Mr. Rhŷs has made such a valuable contribution. In his second paragraph Mr. Ellis says, "Surely Prof. Munro will not maintain that the old Romans said *siwilum*." Heavens! "quid feci ego? quidve sum locutus?" that this should be asked of me! If any one maintain that the old Romans did not pronounce *af* and *ab* as *af* and *ab*, *sifilum* and *sibilum* as *sifilum* and *sibilum*, just as they pronounced *rufus* and *ruber* as *rufus* and *ruber*; or that to Priscian the digamma was not a dead tradition, as much as it is to us, or that this unpronounceable *aF* was not the merest antiquarian dream, I have no common ground on which to meet him. This is all I have to say on Mr. Ellis' first two long paragraphs.

The third, I confess, astonishes me. Must one repeat that consonant *u* and consonant *i* were not only to Priscian, but to Virgil and Cicero, and every one alike in every age, a bar to hiatus, like *d* or *b*, or any other letter, whether sounded as *y* and *w*, or as *j* and *v*? "Mr. Roby actually uses this very argument, the facility with which *u* consonans *did* fall out in Latin forms like *amasse* . . . . in support of the *w* pronunciation." Yes; and I have used it, and hope to use it again, and think it one of the most powerful arguments for the *w*. To Cicero and Virgil and Priscian alike *noverat* was a good dactyl, and consonant *u* a bar against hiatus. At the same time its semi-vowel nature allowed *noverat* to pass into *norat*; but neither in *noverat* or *norat* is there any hiatus. Just compare now Ἀργεῖος and *Argivus*, βόες and *boves*, and see what Priscian means by preventing hiatus. And so in a less degree with consonant *i*: *reicit* might be either dactyl or trochee: powerful reasons surely for the *w* and *y* sounds. Nay, in this very chapter Priscian himself, by rightly connecting *augurium*, &c. with *avis*, testifies to this twofold power of consonant *u*, which in my opinion a *w* sound could alone give to it. What does Mr. Ellis understand by hiatus? Priscian says, and even if he did not say it, it is an indisputable fact, that consonant *u* does prevent hiatus. It is an equally indisputable fact that it has the other power. What is the fair inference? As to the question of MSS., I repeat that barbarous Western copyists could learn Priscian's pronunciation only by supernatural means. I am astonished that the unintelligible *F* in any case kept its ground, and did not always yield to what an ignorant transcriber would look upon as its natural Greek equivalent. On the other hand, I know no two letters less liable to be confused than *f* and consonant *u*.

I come to Mr. Ellis' paragraph 4. Prof. Munro did not assert that Priscian meant to make a purely metrical remark: in Cicero's prose, just as much as in Virgil's verse, *solvo* had its first syllable lengthened by position, and *metuo* was three and not two syllables. This is what Priscian implied by *vim*; and if it could mean, as it cannot mean, simply the *sound*, even then Mr. Ellis' conclusion would be a mere *non-sequitur*.

I pass to paragraph 5: *docui* is as original a form as *audivi*. The *-bo*, *-bas*, *-bat*, &c. forms I had quoted in my last article to show the futility of ransacking the first formations of the language, but struck them out to avoid useless prolixity; I expect soon to find Mr. Ellis maintaining that *sunt* and εἰσί, *father* and *père*, must be sounded alike, because they can be traced back to the same original formations. As to the passage from Figulus, though Mr. Ellis cannot quite catch my meaning, I have already said enough, and confidently leave it to our readers to decide between us.

In paragraph 7 Mr. Ellis discusses "the by no means settled question of the comparative weight of MSS. and Inscriptions. But it was from Prof. Munro himself, as well as from Lachmann and Ritschl, that I learnt to consider manuscripts, in particular cases, not merely trustworthy, but decisive guides in matters of orthography." Yes; but all turns on the particular cases. Inscriptions and manuscripts, *ceteris paribus*, are quite co-ordinate; an inscription of the first century has the same authority as a manuscript of that age—one of the fifth century has the same authority as manuscripts of the same time. From the length of the latter and the rapidity with which they were written, errors of mere carelessness and inadvertency, such as the confusion of similar letters, will naturally be more frequent in them than in inscriptions. But in matters of orthography manuscripts and inscriptions have the same indisputable authority in cases *where corruption had not yet entered into the language*. Thus an inscription, a palimpsest, and a manuscript of Virgil, say of the fifth century, will be all alike of decisive weight on a question between *ci* and *ti* for example. We will take *dicio*: this was the only known spelling in the fifth century. Even a faulty codex will not err in more than one letter out of a hundred: the chances are therefore a hundred to one against our manuscript miswriting the *c* of *dicio*. If it does by accident put another letter for *c*, the chances will be, say, twenty to one against that letter being *t*. The chances are thus 2000 to one against our finding *ditio*; and if the word occurs several times, we have an absolute certainty that *dicio* is right. But in the ninth and

following centuries this *ci* and *ti* had become so hopelessly confounded that a manuscript of those ages is absolutely without weight on such a point, and is as likely to give us *ditio* as *dicio*. Long before the fifth century, however, that confusion between consonant *u* and *b* had begun of which I spoke in my paper of May 1; here then our manuscript or inscription of the fifth century will not have much more weight than one of the tenth century in regard to the other point. I must therefore repeat what I said before, that "it is useless for Mr. Ellis to quote from a palimpsest of Cicero twenty instances of confusion of *v* and *b*. Every palimpsest, every ancient manuscript in existence, revels in this confusion, which had commenced long before they were written, but *not* in the time of Cicero." I only dwell at such length on what appears to me self-evident, because Mr. Ellis' mind seems to be in a state of such strange confusion on the points in question. Even now I fear I shall speak to deaf ears; for he has not only introduced into his *Catullus*, from late manuscripts, the barbarism *sodalitium*, but has not shrunk from twice presenting us with the still grosser barbarism *provintia* on the authority of a fifteenth-century codex. Nay, because some manuscripts give us from simple inadvertence the familiar *et quis* and the like for the more unusual *ecquis*, &c., in the last number of the *Journal of Philology*, p. 265, he maintains what I deem the astounding paradox that an *ex* or *ec* can change to *et* before *f* or *q*.

To come to inscriptions, I have exorcised, I see, *Nerba Traianus*; but, says Mr. Ellis, "even in the first volume of Mommsen's *Corpus*, containing only the inscriptions of the Republic, there is at least one instance of the interchange of *v*, *b*." Was it not worth while to turn to the inscription itself, to see that Ritschl omits it altogether, that Mommsen publishes it only as a curiosity, that *libertav* is but one of its many solecisms and barbarisms, that the editor himself thus concludes:—"titulum licet appareat scriptum esse post liberae rei publicae aetatem, tamen recepi, ut documento esset aliquoties vetustiora redire vel aetate posteriore in ipsis plebei sermonis sordibus"? As to the spellings from the walls of Pompeii, allow me to observe that *Vesbius* and *Vesbinus* are distinct dialectical forms, and no more a confusion of *b* and *v* than are *Vesevus* and *Vesuvius* of *e* and *u*; that the Greek Βείβιος proves nothing; that in a Greco-Osco-Roman town a *Bibius* might well be once scribbled on its walls—may be, in fact, a Campanian form; and that I acknowledge no identity between a *C. Venni* and a *Benni P.* But enough of this.

The remaining paragraphs of Mr. Ellis' letter do not much concern me. When in paragraph 8 he quotes Priscian for the fact that *i* and *u* as consonants and vowels "diuersum sonum et diuersam vim habent," I will only remark that here and elsewhere Priscian joins together *i* and *u*, and that the *w* advocates do not wish for any closer connexion between vowel and consonant *u* than between vowel and consonant *i*. And when in paragraph 9 Mr. Ellis says, "An aspirate can never precede *i* or *u* consonans; would this be true if *u* consonans were a *w*?"—I ask in astonishment, whether it is not utterly and confessedly foreign to the genius of the Latin language to join an aspirate with any consonant whatever. In Greek initial ρ *must* have an aspirate, in Latin *r cannot* have an aspirate joined with it: Ἑσπέρα is possible enough in old Greek; *hwespera* or *hvespera* alike out of the question in classical Latin. We English say *which*, &c., but we cannot unite *hl* or *hr*, while our forefathers luxuriated in these combinations. If points like this are to be started, volumes may be written with no result but useless irritation. I would say the same of *cupiwweram* and *cupivweram*. The uncertainty in his day between *b* and consonant *u* exercised Priscian sorely, but not, I fancy, in the way Mr. Ellis supposes.

Trinity College, Cambridge. H. A. J. Munro.

Intelligence.

Dr. Joseph Budenz has recently read before the Hungarian Academy two papers of interest. The first was on *l* and *z*, as formative elements in denominative verbs in the Hungarian language, especially with reference to the other Ugrian languages. In it he showed that the Hungarian *l* corresponds to the *d* in other Ugrian languages, while *z* corresponds imperfectly to the Ugrian *j*, having been affected by other formative elements. The second was an examination of Dr. Vámbéry's treatise on the words common to the Hungarian and Turkish languages. Dr. Vámbéry admits that the Hungarian belongs to the Ugrian family, but seems to think that that fact does not prevent it from belonging in some sort to the Turkish family also. This confusion of ideas with regard to the relationship of languages, Dr. Budenz observes, has vitiated the whole treatise, and has prevented the author from clearly distinguishing between such words as are really common to both the Ugrian and Turkish families and such words as have been borrowed by the Hungarians from Turkish languages, especially from the Tchuvash. After carefully sifting these two classes of words from a mass of other coincidences accumulated by Dr. Vámbéry, but held to be either erroneous or unimportant by his critic, Dr. Budenz comes to the conclusion that, all reckoned, the words borrowed by the Hungarian from the Turkish do not amount to more than half the number of words which the Hungarian has taken from the Slavonic languages.

Prof. Haug, of Munich, gives, in the *Augsburg Gazette* for June 3, a highly complimentary notice of Mr. E. W. West's edition of the Mainyô-i-khard, or "Spirit of Wisdom," the best source for the religion of Zoroaster under the Sasanidæ (A.D. 226–640). See the title below. "Many readers," so Prof. Haug concludes, "will be not a little surprised at the many points of connection between Parsism and Christianity. Christian influences are excluded by the fanaticism of the Parsee priests during this period. Besides, all the doctrines concerned, as the Resurrection of the Dead, can be distinctly traced in Zend texts, written certainly before the Christian era."

A judicious summary of the discussion on the Moabite inscription has appeared in the new number of the *Jahrbücher für deutsche Theologie*. It is from the pen of Prof. Diestel, of Jena.

The following works have lately arrived from India: No. 26, vol. ix. of the Journal of the Bombay Branch of the Royal Asiatic Society; The Dialectic of the Nyáya Darṣana, by the Rev. R. Stothert; A Facsimile, Transcript, and Translation of an Inscription discovered by Mr. G. W. Terry in the Temple of Amra-Nátha near Kalyána, by Dr. Bhán Dájí; Brief Notes on Hemachandra or Hemáchárya, by the same; and, Brief Notes on Mádhava and Sáyana, by the same.

New Publications.

Arnoldt, Dr. Rich. Scenische Untersuchungen üb. den Chor bei Aristophanes. Ein Beitrag zur richtigeren Anordng. aristophaneischer Chorpartien. Elbing: Neumann-Hartmann.

Bartsch, Karl. Bibliographische Uebersicht der Erscheinungen auf dem Gebiete der germanischen Philologie im J. 1869. [Aus *Germania*.] Wien: Gerold's Sohn.

Bergmann, F. G. La fascination de Gulfi (Gylfa Ginning), Traité de mythologie scandinave comp. par Snorri, fils de Sturla. Traduit du texte norrain en français, et expliqué dans une introduction et un commentaire perpetuel. 2e éd. Augmenté. Strasburg. Leipzig: Brockhaus.

Bibliotheca Manuscripta ad S. Marci venetiarum. Digessit et commentarium addidit Jos. Valentinelli. Tom. iii. (Codices MSS. latini Tom. iii.) Venedig: Münster, 1870.

Boëce. De la consolation de la philosophie. Traduction grecque de Maxime Planude publiée pour la première fois dans son entier par Prof. E. A. Bétant. Genève. Berlin: Calvary.

Brambach, Wilh. Rhythmische u. metrische Untersuchungen. Leipzig: Teubner.

Carmen in vetere canticorum thesauro inventum.—Ἔως ἐσμὲν νεαροί. Emendatum ed. Gust. Reichardt. Additur chorus Aeschyli modis Eugenii principis accommodatus. Jena: Bran.

Cornelius Nepos. Erklärt v. Oberlehr. Dr. Heinr. Ebeling. 2. Bearbeitg. der Ausg. v. J. Chr. Daehne, Helmstedt, 1830. Berlin: Ebeling u. Plahn.

Forcellini, Aegid. Totius latinitatis lexicon in hac editione novo ordine digestum amplissime auctum atque emendatum adjecto insuper altera quasi parte onomastico totius latinitatis cura et studio Prof. Dr. Vinc. De-Vit. Tom. IV. Prati. Leipzig: Brockhaus.

Heynemann, S. De interpolationibus in Carminibus Horatii certa ratione dijudicandis. Bonn: Marcus.

Jacut's geographisches Wörterbuch. Hrsg. v. Ferd. Wüstenfeld. 6. Bd. 1. Abth. Leipzig: Brockhaus.

Schmidt, Dr. J. H. Heinr. Die Kunstformen der griechischen Poesie u. ihre Bedeutung. 3. Bd. A. u. d. T.: Die Monodien u. Wechselgesänge der attischen Tragoedie. Text u. Schemata der lyrischen Partien bei Euripides. Leipzig: Vogel.

West, E. W. The Book of the Mainyô-i-khard. The Pazand and Sanskrit Texts (in Roman characters) as arranged by Neriosengh Dhaval in the fifteenth cent. With Engl. transl., a glossary of the Pazand text, containing the Sanskrit, Persian, and Pahlavi equivalents; a sketch of Pazand grammar, and an introduction. Stuttgart: Grüninger.

ERRATUM IN No. 25.

In page 277 (b), line 6, for "discovered," read "translated."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
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General Literature.

Essays Theological and Literary. By R. H. Hutton. Strahan.

NEITHER of Mr. Hutton's two volumes is a mere casual aggregate of unrelated articles. In the theological volume, indeed, the author has, by careful arrangement and revision, skilfully superinduced cohesion upon essays originally written for quite independent occasions: and the literary volume is composed of careful studies of carefully selected objects, in most cases specially adapted for the exercise of Mr. Hutton's peculiar critical faculty. The former volume is in some respects the more interesting, and probably to the author the more important: indeed we feel in reading the studies of Goethe, Wordsworth, Shelley, Clough, George Eliot, that the theological bent of Mr. Hutton's mind has to some extent given the direction to his literary criticism. Still, of the two sets, the theological essays are the more unsatisfying: in reading them, one has a continual sense of inadequacy and incompleteness, partly inevitable, from their brief treatment of vast questions, but partly resulting from Mr. Hutton's peculiar manner and method. He is gifted with a psychological insight at once vigorous and delicate: and upon the accuracy of its results he is wont to place too much reliance. Now in interpreting the characters of modern men, who have expressed themselves in a series of literary products, if a man sees clearly, discriminates subtly, and conveys his impressions forcibly, by the aid of a fertile and ingenious imagination, we are well satisfied, even if he seem to miss as often as he hits the mark. His errors may be as suggestive as his truths: we do not expect exactness in his results: they are not premisses for establishing vast conclusions. In Theology the case is different. If we are to argue from the facts of man's nature ascertained by observation of his thought and feelings, to the most profound and comprehensive judgments as to the essence of the universe, its origin and end—and I agree with Mr. Hutton, in opposition to many careful thinkers, that such argument is legitimate—we must surely take extreme heed to get our psychological premisses as irrefragable, and our principles of inference as clear and definite, as possible. Now many of Mr. Hutton's general statements about human nature seem derived from introspection, insufficiently corrected by a comparison of other minds with his own: many of his historical interpretations of Jewish and Christian feelings are arbitrary to a degree of which he appears unconscious: and from these somewhat treacherous premisses he leaps to conclusions on which he rests as certain, with startling and disappointing facility. It would be most unfair to class him with those who (as Mr. Froude says) "reason by sentiment and make syllogisms of their passions": his anxious candour in representing the views of opponents, and his intense resolve that his conviction shall be thoroughly rational, are among the striking features of the book: still his method of attaining conviction seems, as he gives it, singularly slight and summary, considering the vast issues involved.

The theological essays form a series gradually determining by negation Mr. Hutton's position, and leading the reader from Theism to Binitarianism, as we may term his special form of Christianity. In most of them I seem to feel, in different ways, the inadequacy of the method. On the first essay, "On the Moral Significance of Atheism," I have only space to remark that Mr. Hutton seems to have before his mind a very particular kind of atheist, specialised to suit his argument. In the second he combats Feuerbach's contention that the religious object has no independent existence, God being man's ideal projected, like the shadow on the Brocken mist. Mr. Hutton rests his rejection of this view chiefly on the sense of duty and responsibility, "a moral necessity, implying freedom, suddenly substituted in our experience for a physical necessity": we are compelled to infer an external moral source of the moral law. The argument has satisfied many: but our author should have met the obvious explanation of the phenomena of conscience on the opposite view. The sense of moral responsibility, the atheist argues, is a transference by association to secret wrong acts of our legal sense of responsibility; and naturally carries with it a suggestion of an invisible Judge, to supply the place of a visible. The next essay, on "Science and Atheism," is a protest against premature attempts to coordinate psychological facts with biological, and so with all natural phenomena. Darwinianism, Mr. Hutton contends, will support rather than weaken the cosmological proof of theism: it explains the old puzzle of death and destruction by showing their beneficent results: it does not eliminate the need of a creator: we have still *besoin de cette hypothèse* to explain the origin of "life out of that which is not living, and love out of that which is not loving": and (to distinguish man from other animals) of Free-Will out of that which is unfree. Free-Will is such an unfailing resource of our author's in all argumentative difficulties that I wish he had communicated more expressly to his readers his apparently clear and certain apprehension of its nature and significance. To most of us the reconciliation of Freedom, as an inevitable form of conceiving our present acts, with Causation by character and circumstances, which we habitually trace in our own past and the acts of others, is so profound a psychological puzzle that we are not inclined to base much on this phenomenon in the obscurer region of theology. It is hard to see (*e.g.*) how "there is philosophical room for the introduction of special providences in the free decisions of the human will" (Essay IV.): for the suggestion of motives is understood to take place, even by Libertarians, according to fixed laws: and if these laws may be interrupted by arbitrary Divine Will, why not others?

In Essay V., what I may call Theological Presentationism is maintained against the Regulationist theory of Dr. Mansel. Much that is urged against that Agnostic (to use a happy term of Mr. Hutton's) seems substantially good, though not quite appropriately stated. In dealing with a reasoner like Dr. Mansel, whose forte and foible are logical formality, a dry, close, patient style is useful; whereas Mr. Hutton cannot resist expressing himself in images, and making direct appeals to feeling. I do not mean that the latter are entirely out of place. That the preaching of an unknowable deity would not effectively stimulate worship, and that the iron yoke of an immoralised divine law would not practically be a good support for human virtue, may be

fairly urged: but Mr. Hutton presses these points rather too far, having never managed to look at Regulationism from within. He seems to confound "regulative" with "hypothetical" beliefs: whereas, on Dr. Mansel's view, our duty to aim at human justice is none the less certain because Divine Justice has no resemblance to it. Turning to history, he tries to show that the Regulative theory of Revelation does not fit the narrative that we have received of the actual revelation to the Hebrews. The apprehension of the Divine Personality in Jewish seers and prophets is unlike what we should expect reception of "adapted" truth to be: it is described to us as the sense of a "haunting overpowering presence," from which the mind of man instinctively shrank back to the more "adapted" notions of different idolatries. This is an illustrative specimen of Mr. Hutton's worse arguments. It is ingenious and eloquently stated: but the historical premisses are too hastily seized, and a little reflection would have shown the uncertainty of the inference. Many critical readers of the Pentateuch find in it a more crudely anthropomorphic theism, earlier than that which Mr. Hutton describes; *e.g.* the elders admitted to the sacred mount, who "saw God and did eat and drink," do not appear as shrinking from the Divine Presence. But we obviously cannot settle the question between Presentationism and Regulationism by this purely emotional test. Mankind have had an intolerable shrinking from ghosts and devils: an eager ineffectual longing to rid ourselves of any belief is no evidence of its truth.

The opposite view to Dr. Mansel's is the key to Mr. Hutton's theology, as it is to that of his master, Mr. Maurice. It may be expressed thus: "God is immediately or intuitively, but not adequately, made known to us: and what is made known of Him is more than can be expressed in propositions, or communicated from one man to another." This seems to me an appropriate account of our apprehension of Divine, as of much other, fact: but I am unable to see how it furnishes the barrier against scepticism which Mr. Maurice and Mr. Hutton seem to find in it. The "sources of our faith" may be indefinitely wider than the "evidence of our convictions": but when the diversities of faith cause any one to enquire into the truth or falsehood of his own, a rational answer must indicate "evidences" and not "sources." Mr. Hutton sees this, and offers "really universal reasons" for believing the Incarnation. These are the old combination of psychological and historical premisses: only miracles are omitted from the latter. "We have a need of believing in a Filial God: and Jesus claimed to be and was recognised as such." In explaining the former premiss Mr. Hutton rather confounds emotional want with intellectual anticipation: even if it be true that our spiritual yearnings cannot be satisfied without this belief, the presumption thus obtained cannot be compared with the presumption that a friend or a chemical substance will act in a given way. The exposition of these spiritual needs, as Mr. Hutton apprehends them, is highly interesting: but they seem to me too idiosyncratic to constitute "really universal reasons." Who, except him, "knows" that the "free will of all other men (except Jesus) is intrinsically indifferent," and that "self-sacrifice is not indigenous in man"? If we long to institute a complete comparison of the spiritual effects of pure theism and Christianity, we find the materials too scanty: so that Mr. Hutton's method of psychological proof, even if cogent, is as yet inapplicable.

Of the literary essays I have scarcely space to speak as they deserve. As literary criticisms they are perhaps one-sided: our author examines not so much the properly artistic faculties and gifts, the methods and technical performance of the authors studied, as their ruling impulses, the drift and bias of their nature and genius: what they aimed at rather than what they effected. His judgments on particular works and literary qualities are sometimes eccentric, as when he declares *Götz von Berlichingen* to be Goethe's best drama, and remarks that George Eliot's humour is "not of the ironical or satirical kind." But in the power of distinctly discerning and effectively describing very subtle psychological facts he is quite unrivalled: and there is so much insight of this kind in these essays that they must rank among the most instructive studies in recent literature that have been published. The essay on Wordsworth is the best in the volume, and seems to me to hit the mark more than any other criticism of that much criticized poet. The elements of strength and weakness mingled in his egotism, his intense perpetual self-concentration and self-direction, are very well given. And the general formula for Wordsworth's poetic vision is very felicitous: that he did not contemplate Nature objectively, nor other men sympathetically, but Nature as influencing man, and other men as centres of natural influence on himself: and yet not on his individual self—as Hazlitt sneered—but his universal and typical self. Mr. Hutton's criticism abounds in formulæ of this kind, which are always striking and suggestive, and often as true as such antithetical propositions can well be. Thus, though the article on Shelley is not thoroughly appreciative—one feels that the finest fragrance of that wonderful flower of poesy has not been caught by the critic—it is full of excellent characterisations, like the following:—

> "Shelley's mind was powerfully excited neither by the proper spiritual nor by the proper physical world, but by an ideal zone peculiar to himself, where the uninteresting part, as he thought it, of reality was purged away, and the solemn shadow of unseen power not yet reached. . . . . His intellect, subtle as it was, had no muscular comprehensiveness in it; if I may use a somewhat pedantic expression, it had no integrating power. It was swift and infinite in fertility: but the only string by which he ever bound his thoughts firmly together was continuity of desire."

The description, too, of Shelley's "aweless curiosity" is good.

The article on "Goethe and his Influence" is, perhaps, the least satisfactory. It begins by promising an explanation of Goethe's peculiar fascination: but Mr. Hutton seems to have found himself, while writing, so much more repelled than fascinated as to be quite unable to fulfil his promise. He is even betrayed here and there into phrases which have a touch of impatient Philistinism. To talk of Goethe's "sickly pottering" about the "pyramid of his existence" is surely an inadequate manner of speaking of the apostle of self-culture. And on the whole the critic seems to lean too much to the common error, which in one passage he resists, of taking the Goethe of the autobiography for the real Goethe. No one was ever fascinated by the hero of *Wahrheit und Dichtung*. The charm of Goethe depends on the rare harmony of strikingly contrasted qualities, the poise and balance of strongly conflicting impulses: the intellect of driest light, yet with perpetual vision of a radiantly coloured world: the nature responsive to all gales of emotion and breezes of sentiment, yet using all as forces to carry it in its "unhasting unresting" course—which we only see by comprehensive comparison of his studied and unstudied utterances, and his life as seen and felt by his contemporaries.

The other studies in the volume have rather less completeness and coherence: but all contain fresh, independent, and often brilliant expression of close and refined observations, and therefore may all be read with profit.

H. Sidgwick.

A Snapt Gold Ring. By Frederic Wedmore. London: Smith, Elder, and Co.

This is just the sort of novel which Dr. Arnold might hope would be common if only we had an academy. At present, even, easy finish, clearness of outline, coupled with a modest but genuine artistic intention and some knowledge of artistic effect, are unfortunately so far from common that they distinguish their possessor favourably from the majority of popular novelists, most of whom put forward higher pretensions than Mr. Wedmore, and many of whom have more natural vigour to justify them.

The subject of the book is familiar: Paul Warner, an artist and a pupil of Ingres, marries a woman whom he finds, or thinks he finds, to be incapable of understanding him: he is seduced by a woman who pretends that she does. The writer had intended to present this situation with a difference. Madeleine, the hero's wife, is introduced as quite "a problematical nature," wonderfully impressible by the beauties of the external world, and clear-sighted by reason of her simplicity and unconsciousness. After her marriage she is allowed to sink into a mere loving doll, who dotes upon Paul in her prosperity and sick children in her adversity. Another inconsequence, though not such a grave one, is the character of Edwin Greyling, whose presumptive baseness in allowing his elder brother, the father of Madeleine, to be disinherited, is discussed through a whole chapter; yet when he comes upon the scene in person, he acts like a man of honour, and leaves all his money to Madeleine. He is a Queen's messenger, and so is often separated from his wife, who seduces Warner under her *nom de proie* of Dolores Burton. She is tracked from Nice to Hyères, and from Hyères to Lucerne, by Greville Byng, an amateur detective and wine taster, who waylays her husband at Ancona on his return from Teheran, to tell him the bad news, and has to inform the widow at Lucerne that her husband has been killed in crossing the St. Gothard. The scene between them is upon the whole the best in the book, and approaches very near to the standard of genuine comedy. Warner falls ill at Lucerne. Mrs. Greyling leaves him. Madeleine comes to him, finds Mrs. Greyling's hat and gloves, and dies without seeing him. As the shock kills her, we are surprised to find she survives several hours, and from her simplicity and docility of character we are hardly prepared to see her made in her last moments the organ of the author's theological preoccupations.

Madeleine has a cousin, Kate Lemon, who goes upon the stage, and is engaged to a barrister's clerk, and an aunt who is an amusing compound of Mrs. Poyser and Mrs. Malaprop, and before her marriage she spends a couple of months as a parlour-boarder with Miss Markham, who keeps a finishing school, and gives herself very entertaining airs of enlightenment. In fact the whole book is a series of finished little pictures which succeed each other naturally, but without connection. Such a method, when practised on a great scale by a writer like Thackeray, serves to represent the rich inconsequent complexity of real life; but it is, to say the least, tantalising in a book so short as *A Snapt Gold Ring*. It is disappointing to find nothing whatever comes of Mr. Andrewes' spite or of Kate Lemon's illness.

Beside this questionable system there are one or two faults of execution. Paul Warner talks too much about art, though we are warned he disappoints in conversation (another time, if Mr. Wedmore will tell us that his characters are clever, he should put some of his own epigrams into their mouths). Perhaps it was necessary for dramatic reasons that he should write to Madeleine from abroad about scenery, but his quotation from Ruskin, with chapter and verse, is priggish as well as heartless. Bad as Mrs. Greyling was, we do not believe that she read the Tauchnitz edition of Mrs. Braddon at Lucerne, of which the author accuses her by implication. It is to be regretted that such a cultivated person as Mr. Wedmore should sanction the superstition of earnest young men that to have read the best authors of the day is an education in itself. But these are superficial blemishes in a book which is uniformly idyllic and elegant, even in the scenes with Mrs. Greyling.

G. A. Simcox.

LITERARY NOTES.

The dramatic fragment by George Eliot, announced for *Macmillan's Magazine* of this month, fills nearly thirty pages of the number, and has for subject a crisis in the career of a musical genius. The opening scene sets forth the *début* of the heroine Armgart; her lame cousin Walpurga and high-born lover Graf Dornberg discuss her gifts and future until she comes in, elated from a triumphant operatic success in Gluck's *Orpheus*, with her singing-master Leo. The next day Dornberg presses his suit; and we have a dialogue on what is the true career for a woman: Armgart scorning her lover's ideal of mere womanly perfection in favour of the ideal of artistic greatness to which her own nature and instincts passionately urge her; he for love of Armgart ready to waive his theory and let her follow her profession as his wife. But she refuses, foreseeing that a husband's cold toleration of her pursuits will hinder them not less than his prohibition would; and they part. A year elapses, and we find that Armgart, just recovering by the help of severe remedies from a dangerous affection of the throat, has gone off without leave to a rehearsal—her first occasion of singing since her illness. She comes back, desperate at finding the beauty of voice gone for ever, and at first determined upon suicide; until a sudden revulsion is wrought in her by the appeal of Walpurga, who touches the right chord in Armgart by charging her with selfishness in letting herself be overwhelmed by her personal calamity; as if she more than others amid the struggle of the world—more than Walpurga herself, her faithful and obscure companion—had had a born right to such fruition of art and glory as that to which she had aspired. Meanwhile Dornberg, warned by a true instinct that any advance of his would now be regarded as compassion, and rejected as insult, has written a letter at once of sympathy and farewell. And Armgart, in a humbled temper, and with a new sense of gratitude to Walpurga, determines to go with her old master and her cousin, and become a teacher of music in the town where Walpurga was born, and where it will make her happiest to live.—The above are the bald outlines of a piece of which the excellence is rather psychological than poetical. It recalls previous work of the author's in several points, as especially in its selection of a character possessed, like Maggie Tulliver and Fedalma, with the overmastering passion and rapture of music, and in its ethical conception of an intense personal agony made bearable by the absorption of the sense of self under the wider sympathy with mankind. Its fragmentary form exempts it from too close criticism as a work of art; but one might, according to certain standards, demur to the incident on which the action hinges, and ask whether a bronchial affection should be dignified into a tragic predicament. There are many lines and passages admirable both by vehemence and concentration, as where Armgart declines to be

> "The millionth woman of superfluous herds,"

and many strokes of that epigrammatic form—epigram charged with emotion—which belongs peculiarly to this writer, as where the heroine again talks of

> "That chant of consolation wherewith ease
> Makes itself easier in the sight of pain."

The pregnant and close-packed character of the thought a little suggests Browning, and the piece will be found to require some re-reading before its dramatic sequence and evolution come out, or the full subtilty of motive is apprehended in passages so good as that where Armgart declines Dornberg's final offer, or that where she suddenly gives way before the reproaches of Walpurga.

On the question raised by Professor Masson, as to whether Milton ever actually served as a soldier, Mr. Richard Owen remarks as follows :—"The following reasons, made public by Milton himself, breathe his simple, great, and truthful nature, and have been satisfactory, no doubt, to others as to myself. They are given in the *Defensio secunda*, &c. : 'Atque illi quidem Deo perinde confisi, servitutem honestissimis armis pepulere : cujus laudis etsi nullam partem mihi vendico, a reprehensione tamen vel timiditatis vel ignaviæ, siqua infertur, facile me tueor,' &c.* I give the whole 'apology' from Burnet's translation : 'Thus, confident of the divine aid, they drove out slavery in their glorious warfare. Of this glory, though I claim no share for myself, it is easy for me to defend myself against the charge, if any such be brought against me, either of timidity or cowardice. For, if I avoided the toils and perils of war, it was only that I might earnestly toil for my fellow-citizens in another way, with much greater utility and with no less peril. In doubtful postures of our affairs, my mind never betrayed any symptom of despondence, nor was I more afraid than became me of malice or even of death. Devoted even from a child to the more humanizing studies, and always stronger in mind than in body, I set an inferior value upon the service of the camp, in which I might have been easily surpassed by any ordinary man of more robust make, and betook myself to those occupations where my services would be of more avail ; that, if I were wise, I might contribute my utmost power from the higher and more excellent, not from the lower, parts of my nature, to the designs of my country and to this transcendant Cause. I thought, therefore, that if it were the will of God those men should perform such gallant exploits, it must be likewise His will that, when performed, there should be others to set them forth with becoming dignity and ornament ; and that the truth, after being defended by arms, should be alike defended by reason—the only defence which is truly and properly human. Hence it is, that while I admire those men, unconquered in the field, I complain not of the part allotted to myself ; nay, I may rather congratulate myself and once again return my highest thanks to the heavenly Bestower of Gifts, that such a lot has fallen to me as may be viewed, with much greater reason, as a subject of envy to others, than in any way as a cause of repentence to myself.'"†

We are informed that Mr. J. A. Symonds is carrying through the press a selection of the miscellaneous works of his late father, Dr. Symonds, of Clifton. He intends to preface it with a short memoir. The book, which will appear shortly, will contain, besides articles on general subjects, several scientific studies, and some essays on the social and political aspects of medicine.

Blätter für literarische Unterhaltung for June contain notices of a number of recent novels and tales by F. Lewald, R. L. Stab, Gustav v. See, A. Wilbrandt, &c., all of which appear to be sufficiently well-intentioned to disarm criticism, though the quality of the actual performance is not such as to call for very serious consideration.

Karl Witte reviews the third volume of the *Dante-Yearbook* in the *Allgemeine Zeitung* for June 18.

The two last numbers of the *Phœnix* (the new monthly magazine for China, Japan, and Eastern Asia) contain, among other articles, part of a Japanese novelette, translated by the Rev. S. C. Malan. It well deserves perusal as a vivid, realistic picture of life and manners in Japan, and is decidedly more spirited than the Chinese story, "A Cure for Jealousy," which has been running through several numbers of the same periodical. The *Phœnix* for May presents us also with a technical description of "Rice-beer or Sake-brewing in Japan," and a continuation of Mr. Hodgson's researches on "The Literature and Religion of the Buddhists," which, though first published many years ago, have lost none of their importance.

* *Johannis Miltoni Opera omnia Latina*, fol. Amstelodami, anno MDCXCVIII. p. 80.
† *The Prose Works of John Milton*, &c., with New Translations and an Introduction. By George Burnet, late of Baliol College, Oxford. 12mo., vol. ii. (1809), p. 331.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—Upon a single leaf of my *Clément Marot* (pp. 109, 110), I have by inadvertence ascribed to one Margaret of Navarre some anecdotes of court compliment which Brantôme has told of another of her name. Observing this, a reviewer of the book in the *Academy* for June 1st has said of me—

"He has gone to Brantôme, and there he has found, true enough, the life of a Margaret, who lived two generations later, the bride of the *noces vermeilles* of St. Bartholomew, the beautiful daughter of Catharine de Medicis, divorced by Henri IV. on account of her debaucheries. From this life, as that of the patroness of Clément Marot, Mr. Morley has transferred passages to his pages. *In the place of that strange Renaissance compound of mystical devotion and sentimental passion which is typified in Margaret d'Alençon, we have the characteristics of the luxurious sensual animal who was unworthy to be the wife even of Henri IV.* This is not only the confusion of two characters, but of two ages, the age of the mental turmoil of the Reformation, with the bloody Catholic reaction by physical force. Is it possible that a man who had the slightest true knowledge of the century could have confounded two persons who were as totally distinct as Elizabeth of Bohemia from Queen Elizabeth, or Queen Anne from Anne of Denmark ?"

Permit me to point out that the conclusions of your reviewer are mistaken. Except in the leaf above referred to, and three lines and a half on p. 212 of vol. i., which place another piece of Brantôme's gossip, accurately cited, in a context showing it to be false, there is no passage of my book in which I have made any use of Brantôme, or quoted him directly or indirectly.

I have been acquainted for nearly twenty years with the writings of Margaret of Alençon, have spoken of her in two preceding books, of which the latest appeared fifteen years ago, and carefully re-read her letters, poems, miracle-plays, and much of the *Heptameron*, when I had to write of her more fully as the patroness of Clément Marot. Nobody can be further than I am from confounding her with the divorced wife of her grandson, or endowing her, in the words of your reviewer, with "the characteristics of the luxurious and sensual animal who was unworthy to be the wife even of Henri IV." I cannot but think that the further charges assumed against me, on the evidence of the particular inadvertence noted on pp. 109, 110 of vol. i., will be found untenable by any one taking the pains to examine my account of Margaret's character on pp. 111, 113 of the same volume, or almost any other of the passages (i. 159, 160, 178-183, 211, 212, 256, 272-275 ; ii. 48, 49, &c.) where her name occurs.

Henry Morley.

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Art and Archæology.

A History of Painting in North Italy. By J. A. Crowe and G. B. Cavalcaselle. Vols. I. and II. London : Murray.

The issue of a new instalment of Messrs. Crowe-Cavalcaselle's great historical work makes an epoch for the student of art. But the criticism of the volumes is beset on the threshold by the obvious difficulty of verifying their most important contents unless by travels undertaken for the purpose. Neither the revision of familiar attributions, nor the technical comparison of obscure styles in painting, is a task of which the execution can fairly be judged except actually in presence of the data and monuments. For instance, when our authors ask us to discharge from our notion of Giorgione the Louvre pictures of the "Concert" and the "Madonna with Saints," upon which that notion is in great part founded, we feel that, in order to place ourselves at the new point of view, we absolutely require a fresh personal inspection both of these works themselves and of the entire class from which we are taught in future to exclude them. Although therefore, from the moment it comes into our hands, the book before us can be well enough estimated as to its methods, industry, research, much time, and the revising studies of eye-witnesses, will be needed for the estimation of its results. Criticism in regard of these, postponing examination for the present, must in the main confine itself to statement.

The bald generalities of the history of painting in Venice have been familiar enough to all students. How the work of the great Tuscan innovators and path-breakers of the thirteenth and fourteenth centuries had at Venice neither influence nor counterpart; how the queen of the Adriatic, with her back turned to the Italian mainland and her arms opened to the commerce of the East, had preferred the pompous and time-honoured precedents of the Byzantines, until an Umbrian and a Veronese of Umbrian training, employed successively by the Venetian state during the first half of the fifteenth century, at last introduced the spirit of central Italy; how this spirit was taken up first by a famous painter-family of Murano, and then by the more famous and more nobly gifted family of the Bellini; how these families and their pupils next caught and perfected with astounding celerity a new secret of the craft brought to the lagoons by a Sicilian pupil of the Flemings—so that the art of Venice, unlike that of any other city, may be said to have burst from the swaddling-bands to full growth within the compass of three-quarters of a century,—how all this fell out, I say, it has been easy to apprehend in rough outlines more or less to the purpose. But the details of these movements, as they were to be found in existing authorities and in compilations based upon them, were sadly slurred and muddled. Ridolfi, for example, the most comprehensive biographical authority for the Venetians proper, disposes, in a sketchy and confused set of prefatory paragraphs, of an incongruous group comprising Guariento, the archaic Paduan employed, probably on account of his archaism, by the Venetian state in 1365; Francesco del Fiore and his son Jacobello, perpetuators of "the Greek manner" down through the first quarter of the fifteenth century; the energetic, simple-souled, and hard-headed Crivelli, whom Ridolfi calls a pupil of Jacobello, but who was in fact a pupil of the Muranese, influenced towards the close of his career by Mantegna; the Vivarini of Murano; the inland innovators Gentile da Fabriano and Vettor Pisanello; together with Basaiti the exquisite disciple and imitator of Giovanni Bellini, Diana the coarser competitor of Carpaccio, and Buonconsiglio called "Il Marescalco," the Vicentine follower of Antonello da Messina.

Messrs. Crowe and Cavalcaselle have not failed to put quite a new clearness and coherency into their account of the origins of the improved style in the mistress city of the North. Their opening chapter on Jacobello and Donato should be read in connection with the account of Guariento given in ch. ix. of the second volume of the former part of their work. Coming to the family of the Muranese, we find a conclusive refutation of the patriotic theory which has endeavoured to set up a separate Muranese pair of brothers Giovanni and Antonio, who should be free from the suspicion of transalpine origin implied in the known Giovanni's surname, "di Alemannia." We find the joint work of the brothers Giovanni (Alemannus) and Antonio da Murano clearly traced in examples ranging from 1440 till the conclusion of their partnership in 1447; the third brother, Bartolommeo, then taken into partnership with Antonio, and by and by working alone under the new surname of Vivarini; attaching himself by degrees to the sculpturesque modes of the Paduans, and prolonging his career, as a distinguished master in the second or third rank, down to the close of the century. Meanwhile his kinsman in we know not what degree—Luigi Vivarini, falsely set down by earlier writers as the oldest instead of the youngest painter of his house—turns to still better account the teaching of the times, and works with always increasing force and pleasantness of manner as the serious rival of Giovanni Bellini, until his labours are closed by death in the year 1503. The letter of Luigi Vivarini to the Signoria, clenching the fact that this rivalry existed and was avowed, was discovered by Mr. Rawdon Brown, and has been already published by Selvatico. Supported by the testimony of his works as they are described by our authors, the fact of this family competition gives a substantial and picturesque personal centre to our ideas of the history of Venetian painting on the road to its climax.

But, in the distribution of genius, it was not the house of the Vivarini, it was the house of their rivals, which prevailed. History has nothing to correct in the judgment according to which the name of the Bellini has been celebrated as that of the great furtherers and forerunners of the Venetian climax in art. The career of Jacopo Bellini, the father, is illustrated by our authors with some new documents bearing on his residence at Florence in the service of Gentile da Fabriano, and on the cause which interrupted it. With the data furnished by his few extant works, and especially by the priceless book of original sketches which has found its way into the British Museum, they formulate satisfactorily enough the services which this eldest of the Bellini rendered to the art of his countrymen in acquiring and importing the science of the realists and perspective-masters of the peninsula. And, in following him to his residence at Padua as the head of a school, in which his illustrious sons Gentile and Giovanni were brought up, they carry us to what is one of the most valuable portions of their work. Jacopo Bellini, setting up his workshop at Padua in the period between 1445 and 1460, will have been regarded as something of an upstart competitor by the numerous adherents of the established school of Squarcione in that city. Upon the name of Squarcione a reflected glory has been cast, in the eyes of posterity, from the greatness of his pupil and adopted son Andrea Mantegna; and an almost mythical reputation had gathered about him, made up partly of modern conjecture and partly of the prattle of the biographers, as the great trainer of the Northern youth in the principles of the classical antique. The solvents of real research leave little of this illusion. Mantegna is the one illustrious name among the pupils of Squarcione; the remaining Squarcionesques, to whose fragments Messrs. Crowe and Cavalcaselle give a searching analysis, attest a training which adds a good deal of the vulgarity of affectation to all the disagreeableness of stony and bony rigidity, strained exaggeration of expression, and clumsy emphasis in imitating the qualities of bronze and marble. That the inexorable manner of Mantegna is tinged to the end with reminiscences of this training is patent; but it is equally patent that we must look elsewhere for the nobler elements of that manner. The result of our authors' studies is to reduce to a minimum the impression of Squarcione's teaching upon the genius of Mantegna, and to ascribe to that of the Florentine sculptors (represented by Donatello and his works done at Padua at this time) the best part even of his inspiration to statuesque mould of figure and marble firmness of definition; while his union by marriage with the Bellini family marks his final parting from the rival school, and assures for his art the influence and concurrence of his father-in-law and brothers-in-law. Mantegna, in a word, is not a Squarcionesque; he is an individual genius, in whom the grotesque and ill-understood classicism of the Squarcionesques is at the outset superseded by nobler influences, and who, in the first stage of his career, absorbs alike the manly science of the mature school of Florence and the gravity of the youthful school of Venice, and adds to both of these an austere passion and strenuousness which are his own.

There are in England two precious works of this Paduan

period with reference to which our authors confirm what will have been the impression of most students—that they must have been painted in friendly rivalry by Giovanni Bellini and Mantegna at the same time: I mean the two versions of a nearly identical composition of Christ on the Mount of Olives, one by Bellini at the National Gallery, another by Mantegna in the possession of Mr. Baring.

The luminous discussion of the circumstances of Mantegna's youth and training is followed by a detailed technical analysis of his extant works (his works in engraving excluded) in our authors' usual manner, mixed up with a biographical sketch in which, I think, they make of their materials a use rather more picturesque than usual. And in following step by step, under their guidance, the long and honoured career of Giovanni Bellini, we feel that in this case no less we are placed at a new vantage-ground for historical appreciation, and can trace with new distinctness the development of a noble genius young to the last, and always appropriating the best part of each successive contemporary influence, from the stern influence of his brother-in-law Mantegna to the melting and passionate influences of the young Giorgiones and Palmas of his latter days.

Mantegna and Gian Bellini are naturally the foremost figures of this first volume. But scarcely less interest attaches to the admirable scenic and historic art of Gentile Bellini, and of his one great follower Carpaccio, in whom Northern shrewdness and precision were strangely allied to Southern fire and romance. And besides the leading figures of world-wide fame, there are the groups of subsidiary figures, in the criticism of which our authors' habit of persistent and indefatigable research has achieved things that will commend themselves at their full value to the scholar, but cannot be expected to have much attraction for the general reader. In the discussion of the subsidiary group of the Bellinesques, indeed, no reader can fail to be interested who has caught anything of the special charm—the charm of sunny content, and unfevered devotion, and happy vigour of the pulses in a world of bright landscape and pleasant radiance—which belongs to every one of these fifteenth-century masters of the Venetian province. Cima da Conegliano, Catena, Basaiti, Previtali, these are not names which the lover of Venetian art will care to skip. Some of them are painters so closely allied in manner to each other and to their master that distinction of attribution among their several works, and his, is exceedingly difficult if not impossible. It is of the character of Messrs. Crowe and Cavalcaselle that they should defy this difficulty, and perhaps a little also that they should, in doing so, show some signs of pleasure in the mere disturbance of accepted nomenclatures. One piece of ascription particularly interesting to the English student will be that which assigns to the comparatively obscure Venetian, Catena, two of the loveliest pictures in the National Gallery, the small pure-coloured "Jerome in his Library" officially set down to Bellini, and the large "Knight kneeling before the Virgin," which bears almost certainly the marks of the same hand as this. Catena was a clever and delicate imitator, who took up with success the style of the season; if our authors are right, the pieces in question will have been produced by him under the influence of Bellinesque and Giorgionesque examples, at the moment when these two were most closely allied.

The subordinate names, both Squarcionesque and non-Squarcionesque, of Paduans, Vicentines, and Veronese, which group themselves about the central figure of Mantegna, and are discussed in contiguous chapters of vol. i., offer on the other hand a case of the research which must in truth put up with being its own reward, and in the results of which, for the most part, it is hard even for the professed student to feel very warmly interested. But we soon again get into chapters which deal with personages so important as those of Francia and Lorenzo Costa.

The second volume contains a crowd of illustrious names. There are five chapters in it which possess the freshest interest and value, and each one of which is an incontestable gain to science—those on Antonello of Messina, Giorgione, Palma the elder, Pordenone, and Sebastian del Piombo. With reference to the first of these and his antecedents, the result of the analysis applied by our authors is to dismiss to the limbo of little better than fictions the supposed Neapolitan school sometimes collected round the names of Colantonio and Zingaro, and to render doubtful the story of Antonello's personal apprenticeship under John Van Eyck; leaving the bald fact of his having learnt the Flemish methods in Flanders, and imported the knowledge of them to Venice, where, in the eager rivalry of schools, they effected an instant and most fruitful revolution. Then follows a particularly interesting criticism of the extant portrait-panels of the master, in the course of which it is proved that the date 1445 on a famous example at Berlin is forged or altered by tampering. In regard of Giorgione, the brilliant leader of the great brotherhood who achieved in the last years of the fifteenth century the full perfection of the *raddolcito stile*, we have already indicated that Messrs. Crowe and Cavalcaselle carry their negative criticism so far as to overthrow many of our accepted ideas on the subject; removing from the class of genuine Giorgiones both of the well-known Louvre pictures, with the "Gattamelata and his Squire" of the Uffizj and plenty of other examples; but leaving in the class the small "St. Liberale" of the National Gallery, the picture in the possession of Mr. Wentworth Beaumont, and the "Judgment of Solomon" at Kingston Lacy, exhibited in the first collection of Old Masters at Burlington House.

In the story of the elder Palma, again, much destructive and reconstructive work has to be done. We find his birth-date definitively fixed towards 1480, and his position established as the compeer and contemporary of Giorgione and Titian—as among the foremost of those who perfected the new and emancipated art of oil-painting, and carried it to the last Venetian pitch of swimming and splendid richness, in the impartial representation of Scripture, antiquity, and romance subjects in the dress of the healthy and festival life of city or country amid which they lived. The multitude of Brescian, Bergamasque, Friulan, and Trevisan imitators, to one or another of whom should be ascribed three-fourths of the works which pass in galleries under the great central names of the school, are in their turn discussed and discriminated for us, so far as allied styles can be intelligibly discriminated in words. And some of the perplexity is unravelled which attends the name of Pordenone, variously styled Giovanni Antonio Licinio, and de' Corticelli, and Sacchiense; and a fascinating idea—new to those who have not visited the spurs of the Venetian Alps, with their numberless hill-villages full of fading or defaced fragments—is given of the power and fecundity of this the chief fresco-painter of the Venetian school or district. And, lastly, we are carried far into the sixteenth century, and into the august society of Buonarroti, with an account of the life and works of Sebastiano Luciani (del Piombo). This life contains some of the most valuable of the new materials collected by the authors, and augurs well for the quality of that part of their work which will concern the culminating masters of the *cinquecento*, and which still remains to be done.

So far, we have been considering the matter and not the manner of Messrs. Crowe and Cavalcaselle's new volumes. To concern ourselves for a moment with the manner: it has the same class of shortcomings, partly inherent in the nature of the task to be done, which marked their previous work. The task to be done was not a rhetorical but a scientific one—to write out the detailed materials of an art-history, consisting in great part of bald documents, and in still greater part of strictly technical descriptions and comparisons. Now the technical vocabulary of the painter's art is a peculiarly cramped and unattractive one—in English much more so than in either French or Italian—and a writer must needs be hard put to it to express the innumerable distinctions of the eye for which the distinctions of language are coarse or deficient, but upon which all his science is based. Therefore the student must not too much resent the continual recurrence of "select and unselect masks," "addled draperies," "papery break," "angular folds," "horny surface," "peachy touch," "furry dab," nor the repetition of recipes, mediums, scumbles, and glazes, nor any crabbed technicalities whatsoever that may be set before him when his mental appetite is on edge to realise some great work of the imagination. It takes the knowledge and patience of the expert perfected by years to write to any purpose the technical description against which the rhetorical man in us rebels. If the rhetoric could have been added to the science, the literary to the critical excellences, so much the better, and the book might have had as much charm for the general reader as it has value for the scholar. And it might even have been better from all points of view if the technical or executive standard in art had not been kept in view so entirely to the exclusion of the imaginative or sentiment standard. Messrs. Crowe and Cavalcaselle know well enough how to make allowance for manual defects so far as they are accounted for by the historical position and date of an artist; but in the general estimate of two contemporary works I do not think they do know how to weigh the strictly technical against the inventive, or spiritual, part. Hence in their old volumes, for instance, a quite undue general depreciation of Benozzo Gozzoli, because he is in certain technicalities behind his time; hence in the new ones a much too slighting phraseology in regard of Basaiti, of Catena, of many of the most exquisite "second-rates," because their handicraft is not absolutely up to that of their leaders. Hence again, even where the writers are at their best, as in the chapters on Mantegna, their want of power to do justice to his passionate and extraordinary imaginative energy, and their employment of the phrase "grimace" to describe the kind of expression by which that energy finds vent. Granting all this, however, and granting in general terms a style which verges upon the bald and poor—which even permits itself in a phrase like "the sex," and speaks of Giorgione as "adored by the sex"—the two diligent coadjutors whose work we have had before us assuredly confirm with it their already uncontested claim to a front place among the original explorers and historians of art.

Sidney Colvin.

ART NOTES.

The long-neglected Arminius monument, begun nearly thirty years ago by Schwanthaler's pupil, von Bandel, is about, as it appears, to be completed. While the pedestal of his work has been mouldering upon the highest peak of the Teutoburger Wald, upon which the figure was to be planted, the aged sculptor has never given up his hopes for the task. He has completed the statue itself; but a sum of about 10,000 thalers is requisite for its supports and for the costs of erection. A proposal for a public grant to this amount is now before the Reichstag.

The latest work of Knaus, the famous *genre*-painter of Düsseldorf, is a "Burial Procession in a Village of Hesse"—friends and relations following the bier over the snow, and the children of the village school singing a funeral hymn as they walk. Both in colour and expression the picture is described as being in its painter's choicest manner.

A writer in the *Allgemeine Zeitung* gives a pleasant account of the career and the amiable personal character of Paul Konewka, who died in his 31st year at Berlin, on the 10th of May last, of fever resulting from neglected cold, and whose loss will be not less felt in England and America than in Germany. Herr Konewka was of Polish extraction, but completely German by habit and training. His special talent showed itself early in a passion for cutting out paper figures with his sister's scissors. He was put to study sculpture under Drake of Berlin, and afterwards entered the studio of the painter Adolf Menzel, to whose teaching is to be attributed much of Konewka's accuracy and subtlety as a draughtsman. His first outline compositions were in illustration of German *Volkslieder* (it is related how the poetry of Edward Mörike was his particular delight); then came a large composition of the "Spaziergang" in *Faust;* then the "twelve illustrations to *Faust*," published in England later than the subsequently executed designs to Shakespeare's *Midsummer Night's Dream.* It is on these exquisitely subtle and fanciful silhouette designs that his popularity chiefly rests. The child's book, *Der Schwarze Peter*, is only less delightful. Konewka was also among the contributors to the series of *Münchener Bilderbogen.* He leaves behind innumerable studies and snippings in his peculiar manner; having been in the habit of constantly carrying about with him black paper and scissors, and with these materials cutting out the likeness of whatever struck him with marvellous quickness and dexterity.

The last number of the *Zeitschrift für bildende Kunst* contains nothing of so much interest as a short paper by Anton Springer on the new edition of Schnaase's great history of art. The writer points out the superiority of this history over Kugler's *Handbook*, its only serious predecessor, and describes how the first appearance of the original volumes four-and-twenty years ago made upon students the impression that all the currents of art-history, till then dispersed in a multitude of monographs, were at last to be worthily collected in a comprehensive book of no less eloquence than science. With reference to the new and revised edition, of which the last part only is still awaited, Herr Springer proceeds with much justice to describe the elasticity of mind which the veteran historian still displays, and the excellent use which he and his coadjutors have made of the new materials resulting from recent research, especially in the departments of early Christian and Byzantine production.

The Art Union of Vienna is reconstituted on a more extensive basis; it contemplates the following publications, some of which are already in hand:—Line engravings of Raffaelle's School of Athens, by Professor Louis Jacoby, and Van Dyck's portrait of the Princess Thurn und Taxis in the Lichtenstein; line etching of Rubens' triptych in the Belvedere; and coloured woodcuts of a portrait by Van Eyck, a Trinity by Dürer, and Bitterlich's Three Graces, in the same collection.

In the meetings of the Ligurian Society for National History, held on Feb. 11 and March 18, Cavaliere Alizieri completed his discussion of the guild of painters and blazoners (Collegio del arte pittorica e scutaria), which played so important a part in the development of art in Genoa in the fourteenth century.

In the Italian *Official Gazette* Signor Cavallucci continues his researches into some of the obscurer art-monuments of Florence. He gives us detailed dates of the restoration and vicissitudes of the mosaics of the church of S. Giovanni, executed by a Franciscan Fra Jacopo, whom Vasari has confounded with Jacopo Torrite, by an error already exposed in the first volume of

Messrs. Crowe-Cavalcaselle's *History*. He proceeds with a list of the sacred utensils formerly possessed by the same church, and some of them still preserved in the *Opera* of Santa Maria del Fiore.

A rich mine of sculptures was discovered last Christmas in the ruins of Takht-i-Bahi (near Hoti-Murdan), on the Punjaub frontier, by Dr. Leitner. We are glad to learn from Trübner's *Oriental Record* that government have since despatched a party of sappers, who are exploring the locality. It is said that there are many other places in the Yusufzai district equally rich in these remains. The statues appeared to Dr. Leitner to be "Græco-Indian and Buddhistic."

The *Göttingische gelehrte Anzeigen* for June 11 contain a careful and appreciative notice by Fr. Wiesseler of the lately published second volume of the Catalogue of Greek and Etruscan Vases in the British Museum.

Music.

THE FOURTH TRIENNIAL HANDEL FESTIVAL.

These gatherings are more interesting for what they represent than for what they are. A fourth of the number of persons concerned in them, properly placed, might be made to produce a better musical effect than has yet been got out of the vast multitude whose assemblage seems to be their principal attraction; and an eighth, or even a tenth, would perhaps be the largest number of efficient performers that could be gathered to any good purpose into any place where music could be heard as it should be. Two advantages, however, are attained, or thought to be attained, by the bringing together of a body of voices as large as that concerned in the Handel Festivals; the peculiarities and vulgarities of individual *timbre* are lost in general effect; and a charm is given to passages of great delicacy which has certainly not been given heretofore by inferior numbers. Whether this would be the case were inferior numbers very carefully selected is a question. It is notorious that many vocalists, after a certain amount of chorus-singing as it is commonly carried on, lose the power of singing softly at all; and it is anything but unlikely that, during these much admired passages (of great delicacy), half, or more, of those assembled in the Handel orchestra are mute, so that the supposed "piano" of the many is only after all the "piano" of the competent few, set off by contrast and the large space over which it has to travel. For, strange to say, passages of extreme delicacy, especially when delivered slowly, seem to be audible, and even agreeable, in the worst auditoriums: it is the loud and rapid passages that are apt to prove ineffective or unintelligible. In every other respect, the addition of every voice and instrument to an orchestra beyond a certain tolerably well ascertained number is an addition to the difficulty of maintaining precision and to the risks of failure in what the orchestra is got together for the purpose of doing,—but for what they represent the importance of these Handel Festivals can hardly be over-rated. They are expressions—to some extent even causes—of a great and growing amount of musical culture; and they are periodically a means of bringing under discipline a vast deal of knowledge and skill which is ordinarily little subject to it, and of testing and increasing the power of attention in a pursuit too apt to be carried on with little exercise of it. If it be added, as must be admitted to be the case, that the imagination, however little impressed by anything else, is generally impressed by magnitude, the Handel Festivals must in some degree stir or disturb a good deal of the philistinism of those concerned in them, whether as doers or hearers. Musically, the Fourth Triennial Festival has been an improvement on those which have gone before it. Sundry mechanical contrivances — screens, *velaria*, and the like—have contributed to give better effect to combined efforts, and to make individual ones more easily and pleasantly heard. As on former occasions, the performers—the vocal especially—have increased in accuracy, because in confidence, on each succeeding day of performance. The choruses for two choirs are, and always will be, the musical feature of these gatherings. To them the distance at which the choirs are placed apart—far more than the magnitude of each choir—gives an effect altogether unprecedented, because unattainable in a smaller area.

John Hullah.

NOTES ON MUSIC.

In a little pamphlet called *Ueber die Aufführung des Bühnenfestspieles "Der Ring der Nibelungen,"* published some weeks ago, Richard Wagner reminds the friends of his art of his old idea of performing his grand trilogy founded on the Völsunga Saga, and calls upon their assistance. The plan is to erect a theatre, with all the scenic apparatus necessary for the purpose, and to assemble the best singers of all the German operas. The performances would take place on four subsequent evenings, and be repeated during three weeks. We understand that the town likely to be chosen for the festival is Bayreuth. The expenses, to be covered by previous subscriptions, amount to about 300,000 thalers (45,000*l.*).

A new complete edition of Wagner's theoretic works is going to be published by the enterprising firm of E. W. Frisch in Leipzig.

Franz Hüffer.

New Publications.

Bauernfeld, E. Gesammelte Schriften. Band I.–III. Wien: Braumüller.

Gregorovius, Ferd. Wanderjahre in Italien. 4. Bd. Leipzig: Brockhaus.

Inside Paris during the Siege. By an Oxford Graduate. Macmillan.

Jahns, F. W. Karl Maria v. Weber in seinen Werken. Berlin: Schlesinger'scher Verlag (R. Lienau).

Michaelis, Adolf. Der Parthenon. 15 lith. Tafeln in Doppelfolio. Mit einem Textband. Leipzig: Breitkopf u. H.

Retberg, R. v. Dürer's Kupferstiche und Holzschnitte. Ein kritisches Verzeichniss. München: Ackermann.

Sallet, Alfr. Die Künstlerinschriften auf griechischen Münzen. Berlin: Weidmann.

Strodtmann, A. In der Nonnenschule. Aus den Papieren einer Verstorbenen. Berlin: Duncker.

Theology.

History of Jesus. [*Geschichte Jesu von Nazara* in ihrer Verkettung mit dem Gesammtleben seines Volkes, frei untersucht und ausführlich erzählt von Dr. Theodor Keim. Vol. I.: Der Rüsttag. 1867. Vol. II. Part I.: Der Galiläische Frühling. 1871.] Zürich: Orelli, Füssli, and Co.

[First Notice.]

Just one-half of Dr. Keim's great work is now before the public. The first volume appeared in 1867, and the author had hoped to complete the work in a second. This hope however has been disappointed, and he has found himself compelled to add a third. We are glad to hear that the responsibility now rests chiefly with the printer, who is to deliver the whole in four parts, of which the first lies before us.

Of the three volumes, the first is taken up chiefly with introductory matter, an examination of the sources of the history, a detailed account of the political and theological conditions existing at the time, and a discussion of the preliminary period of the history itself. The second is devoted to the Galilean ministry, and the third is to include the last journey and the catastrophe at Jerusalem. The Galilean ministry is divided according to the peaceful "idyllic" aspect of its beginning and the growing troubles and opposition that marked its close. The "Galilean Spring" and the "Galilean Storms" are the names Dr. Keim gives to these two parts, and it is the "Galilean Spring" that has just appeared.

We propose to give to the present notice something of the character of a retrospect, making it embrace the whole published portion of the work, in order that the reader may have in his hand the main threads of the subject as he sees them drawn out to their conclusion, and in order that he

may take up the book with some general idea of its characteristics and value.

This value, we need hardly say to anyone who is acquainted with the history of recent German theology, we rate exceedingly high. However much opinions may differ as to the particular results obtained, there can be no question as to the great importance of the work taken as a whole. It occupies in many ways a unique place among the various works that have dealt with the same subject. Its very bulk is a mark of distinction from the *Vie de Jésus* of M. Renan, on the one hand, and the *Geschichte Christus* of Dr. Ewald, on the other. It will be remembered that in these two cases the modest size of the volume was produced by different causes: in the first by a certain scantiness in the materials, in the second by the concealment of them. M. Renan gave all his materials to the world, but then they were comparatively few. Ewald's, there is every reason to think, were ample, but they were kept jealously out of sight. Dr. Keim has avoided both these faults—for faults we cannot but term them. His materials are exhaustive, and he has left the whole mechanism of his processes visible. He makes no statement without supporting it by argument, and he uses no argument without supporting it by copious references, so that it is the reader's own fault if he is led into admissions that he afterwards finds it necessary to retract.

The first thing that strikes us in Dr. Keim is his erudition—a truly German erudition—such as few Englishmen, who do not know it, will have any idea of. He has evidently made up his mind to master thoroughly every portion of his subject—and he has certainly been successful. Every square inch of his canvas bears traces of the same minute and careful study. Whether it is the Essenes, the Herods, the geography of Palestine, points near to or points remote from the central figure, equal pains seem to have been bestowed upon them. All the very best that has been thought and written upon the subject is here brought as it were into focus—often not without new and striking additions. Yet the total effect is not one of disproportion. It is only that the subject has been treated upon the largest possible scale, so that even distant parts appear as if they were magnified.

Neither is the style, as might be expected, heavy and pedantic. It is, to our mind, a shade too rhetorical; and it is not quite immaculate on the score of taste. We are obliged to say this of the amenities that Dr. Keim dispenses among his opponents (p. 272, *n.* 4). But it is a style considerably above the average for all practical purposes. It has plenty of vigour, variety, and clearness. An immense mass of detail both of argument and illustration is thrown into the text without leaving any appearance of awkwardness or confusion. The desired effect is given with much vividness and force, and the notes are replete with condensed information.

Clearness, vividness, above all thoroughness, are the outward characteristics of Dr. Keim's work. But in one respect perhaps these qualities have combined to show it somewhat to a disadvantage. We do not wish to depreciate its constructive side. It contains much fine reasoning and many able combinations. But the transparency of the method gives the reader an opportunity of laying his finger upon points with which he does not agree, and we suspect that these will be not a few.

It cannot be altogether an idiosyncrasy that makes us differ so often from Dr. Keim. With the same premisses—his own premisses—before us, we are frequently compelled to come to an opposite conclusion. This is especially the case where certain subjects are concerned—such as the priority of St. Matthew or the genuineness of the Fourth Gospel, on which Dr. Keim starts with a decided opinion.

We will give an instance. The tradition that St. John lived to a great age, and died at Ephesus, has hitherto been never, or scarcely ever, disputed. But Dr. Keim finds himself compelled to reject it. The six pages in which this conclusion is arrived at, though characteristic of the author's vigour and ingenuity, are also—we are afraid we must add—a specimen of his hasty logic. Nothing could well be more ingenious than the hypothesis that John the Presbyter (mentioned by Papias, c. 150 A.D.; Dionysius of Alexandria, c. 250; Euseb. &c.) has been systematically mistaken for his namesake, the Apostle, and that all the writers who allude to the Apostle as having lived at Ephesus have really been guilty of this confusion. But in order to sustain such a hypothesis, Dr. Keim is involved in sequences such as these: "Papias (in 150) knew nothing of St. John in Asia, because he has placed him sixth on a list of seven apostles"—as if proximity in point of place were the only train of association that could determine the order in a list of names. "Irenæus made a mistake in regard to Papias, therefore he must also have made a mistake in regard to John"—though his relation to Papias was remote, and his relation to John a near one, Polycarp being the single link between them, and though his evidence is confirmed in a striking manner by the silence of the church at Rome. Similarly, "because Polycrates was wrong in regard to Philip, he too must have fallen into the general confusion with regard to John"—though he was bishop of Ephesus itself, and had been nearly forty years contemporary with Polycarp, John's pupil. This is leaving out of view the extreme improbability that four independent witnesses, Irenæus in Gaul, Polycrates at Ephesus, Clement in Alexandria, and Tertullian in Africa, at no great interval from one another, should all with one consent have fallen victims to the same misconception, and that that misconception should have come to be accepted as history, while every trace of the true facts has been obliterated. But Dr. Keim is only not staggered at the consequences of his own theory, because he has not really weighed them, or formed any exact estimate, either of the probabilities on which it rests or the counter-probabilities with which it has to contend. (Perhaps we may suggest, in passing, to Dr. Keim, and Dr. Holtzmann, who, in the articles "Johannes der Apostel," "Johannes der Presbyter," in Schenkel's *Bibel-Lexicon*, seems to indicate a leaning towards Dr. Keim's view, that, if the Presbyter was really living at the time Papias wrote (150 A.D. Dr. H., 160 A.D. Dr. K.), much stress cannot be laid on the supposed similarity of his history to that of the Apostle.)

Another instance in which we believe Dr. Keim is arguing against his better reason is the elaborate chronological discussion at the end of vol. i. Taking no account of the remarkable, if approximate, coincidence between Luke iii. 1 and John ii. 20, he rests his whole case on the two precarious assumptions (*α*) that the execution of the Baptist must have *immediately* preceded the defeat of Herod Antipas by Aretas; (*β*) that the declaration of war by Aretas must have followed *immediately* upon Antipas' ill-usage of his daughter. This gives as the result the following dates:—Philip the Tetrarch dies, and Herod goes to Rome and is joined by Herodias on his return, in 33 A.D. John begins to baptize in the autumn of the same year. Christ begins to preach early in 34. John is put to death late in 34. The Crucifixion takes place in Easter 35 (it cannot possibly be put later), and Antipas is defeated by Aretas in 36. Here again the theory involves ulterior complications. It *compels* the restriction of the public life of Christ to a single year. It allows for the career of the Baptist little more. It crowds together improbably a series of events in the life of Herod Agrippa I. It forces what we believe to be the natural

construction of Tac. *Ann.* vi. 27 (date of the death of Flaccus). It makes Antipas, at the age of 54, elope with Herodias, who was only about seven years younger, and the daughter of the latter, Salome, who is described as κοράσιον in Mark vi. 28, dance for the amusement of the court, though at that time she would be a widow whose husband had scarcely been dead a year. These are points which individually perhaps are none of them decisive, and which, taken together, might conceivably have been overridden: but as it is, all the other data given in the Gospels tend in the same direction, and the most that Dr. Keim has to set against them is contained in the two assumptions which we have noticed.

It is curious that this system of chronology should find especial favour with critics who hold the general views of Hitzig (cf. *Geschichte des Volkes Israel*, p. 567, *n.*), Keim, and Hausrath. A curtailment of some five years in the interval which separates the events from the documents is not inconsiderable, especially when it is allowed that the mass of these documents was in existence before the taking of Jerusalem, and already at that date shows signs of internal development.

We might easily add a number of minor points on which we cannot think that Dr. Keim will find a large following. For instance, the notion that to "every one who has eyes to see" the five husbands of the Samaritan woman will stand for the five heathen religions that the inhabitants brought with them out of Asia, and the sixth for the mutilated worship of Jehovah. Once more this endless ingenuity. But is it credible that so much fine dramatic detail should be nothing more than the superfluous clothing of an allegory? Surely, if the Evangelist had really been allegorizing, he would have made his purpose much more apparent, and would have carried it through much more consistently. If the "five husbands" are a well-known historical fact, how could the woman say, "He told me all that ever I did"? How, too, has it come about that Dr. Keim in the year 1867 was the first to discover that it was meant for an allegory at all? Has it been so with the allegories of Philo or St. Paul or Origen, or, indeed, with those of any age or country? Again we are told that the Parables of the Unjust Judge and the Unjust Steward are two of the "grossest" inventions of a certain Ebionite document—which has more than one sin laid to its charge (the writer of pp. 443–4, "die Weltoffenheit Jesu," ought not to have said this)—and that the Parable of the Prodigal Son "has a comparatively late origin, and has arisen out of the post-apostolic reconciliation of the two parties in the church." It is strange that, if the parabolic form was used with so much mastery and freedom, no other example of it should be found outside the Gospels. It seems to us highly important that in cases like these the hypothesis should be supported by well-authenticated parallels. Otherwise there will always be the obvious reply that it is an easier hypothesis, and one which involves less disturbance of the natural order, to accept the narrative simply as it stands. It is one thing to put together a credible history, and another to show that that history gives a credible account of the documents from which it is extracted. But both processes are equally necessary if the theory in which they result is to be a tenable one.

Dr. Keim's book is in some respects a strange mixture. Along with much able reasoning and studied moderation there are parts which we cannot help characterizing as perverse and extravagant. And along with much profound psychology there is not seldom a failure to discern that which is truly natural and human. We confess we should like to see more of that judicial spirit which is not content with giving reasons, but weighs and tests and balances its reasons as it gives them, looking cautiously on this side and on that, proving all the links which bind its arguments together, following them out into their remote consequences, and not resting until it has referred its conclusions both to the narrower standard of contemporary analogy and to the wider standard of common experience. It is a task which requires labour and patience no less than logical and constructive power. And although Dr. Keim possesses the first of these two pairs of qualities in an eminent degree, we fear he has somewhat exhausted them in collecting his materials. If he had applied them constantly and uniformly, we cannot but think that the result would have been more completely satisfactory. But it is a high ideal to propose, and a great deal to demand. Perhaps θεῖόν τι καὶ οὐκ ἀνθρώπινον.

W. Sanday.

History of the Doctrine of Justification and the Atonement. By A. Ritschl. [*Die christliche Lehre von der Rechtfertigung und Versöhnung.* Band I.] Bonn: Marcus.

In the year 1838 Baur of Tübingen published *The Christian Doctrine of the Atonement in its Historical Development.* Since then no book on the subject has been produced of equal importance with the one before us. The author is well known as an able and uncompromising antagonist of Baur on the field of New Testament criticism, and some of his positions cannot be duly appreciated except from this point of view. He now offers an equally decided opposition to the views of Baur on the history of dogma. The patristic period is merely handled by way of introduction; its importance had been sufficiently developed not only by Baur, but in the ordinary historical manuals. On the other hand, the opinions of the schoolmen are reproduced on the basis of solid and original studies, and in a form which preserves a happy mean between a mere string of quotations and a formal criticism of the documents. And the compression of the author's style is the more remarkable as it really serves to illustrate, not, as is so often the case, to obscure the meaning. "Der Gedanke ist der beste Epitomator;" this saying of Hegel's often recurred to our mind in the perusal of this volume.

It is impossible for any extracts to give an adequate idea of so comprehensive a work. The history of this doctrine enables us to trace the entire course of the theory of Salvation. One of the most masterly sections in the book is that which shows that the transfiguration of this theory dates only from the Reformation, when the moral relation between God and man was finally released from that private legal character which all the schoolmen from the time of Anselm had ascribed to it. But even the individual schoolmen can only be accurately estimated, when we know their performances in detail, and measure them by the acuteness applied to the solution of particular problems. In this respect it is of great interest to watch the dissolution of that compact doctrinal system which we still find in Anselm, a process which begins with Thomas Aquinas, and is completed in Duns Scotus, in spite of his superior degree of scientific finish. After a similar detailed examination, our author adjudges the prize to the system of Calvin and of the Reformed church rather than to Melanchthon, from whom the traditional Lutheranism has inherited not a few imperfections. Another striking peculiarity of the author is his depreciation of the supposed importance of Schleiermacher's *Christliche Glaubenslehre* for the regeneration of Protestant theology. According to Ritschl, this great theologian must resign at least half his honours to another—the philosopher Kant. The importance of the latter has often been underrated, owing to the relapse of his theological adherents into that stage of shallow "enlightenment" (the so-called *Aufklä-*

rung), which before Kant's time had been predominant in German theology. But, so far from being obsolete, as though he were but a member of the contemporary group of rationalists, Kant "made a sensible advance beyond the 'enlightened' school, and, even after the ceaseless alternations of theological tendencies, he supplies an irremovable standard for the correct appreciation of the fundamental Christian idea" (p. 408). We have allowed ourselves this quotation, because it points to the ultimate source of the misunderstanding between the prevalent English and the liberal German theologies. The main Kantian principles have in Germany become the tacit assumptions of all classes of scientific inquirers, whereas in England they have not yet worked their way to anything like general recognition.

H. J. HOLTZMANN.

RECENT BIBLICAL LITERATURE.

SEVERAL works of interest in this department have appeared lately, which the continued pressure upon our columns prevents us from reviewing in detail. We take this opportunity of noticing the salient points of a few of them. And first, of the (so-called) *Speaker's Commentary*, which bids fair to become a useful companion to the English-reading student of the Bible. The two volumes on the Pentateuch which have already appeared are, on the whole, more learned, more judicious, and more attractive in style, than any similar production of "conservative" English theology. The only exception, we regret to add, is furnished by Bishop H. Browne. The commentary on Genesis is in the highest degree superficial, while the accompanying introductions by the same author are dogmatic and aggressive to the verge of discourtesy. The other contributors have made a much more serious attempt to qualify themselves by preliminary studies. Their weak point is criticism; they have but a fragmentary acquaintance with the opposite side, and fail to appreciate the actual position of the criticism of the Pentateuch. On the other hand, they are strong in archæology; the accurate local colouring of the Pentateuch has seldom, if ever, been brought out so distinctly. We are surprised, however, that Mr. Cook should be blind to the fact that "sceptical" theories are susceptible of readjustment to the discoveries of Egyptology. The only portions of the work which possess an independent value are Mr. Cook's appendices to Exodus, "On the Bearings of Egyptian History upon the Pentateuch," and "On Egyptian Words in the Pentateuch." In the latter the writer attempts, in many cases very plausibly, to show that several words in Genesis and Exodus, especially proper names, are accurately transcribed, and that others admit of being derived, from unquestioned Egyptian words; and infers that passages of the Pentateuch in which those words occur were written either in the age of Moses (to whom Mr. Cook ascribes them) or subsequently to the accession of Solomon. We are at a loss, however, to understand note 93, p. 462, where *zaf*, the Egyptian word for "food," is apparently derived from *seph*, "the last syllable of Joseph's Hebrew name"!—Professor Rawlinson, one of the contributors to the *Speaker*, has published a lecture on *The Alleged Historical Difficulties of the Old and New Testaments* (Hodder and Stoughton); we doubt whether so slight an attempt deserved publication.—Two other works on the Old Testament may be here mentioned, proceeding from opposite schools of thought, the posthumous second volume of Dr. Rowland Williams' *Hebrew Prophets* (Williams and Norgate), and the Rev. T. R. Birks' *Commentary on Isaiah* (Rivingtons). The best parts of the former are the critical introductions, which are well adapted for general readers; of the latter, the appendix on Assyrian history: both are weak in philology.—The last book on our list is a new work on St. Luke, *Het Paulinisch Evangelie*, or *The Pauline Gospel*, by Professor Scholten of Leyden. It consists chiefly of a minute phraseological analysis of the Synoptists, designed to show, 1. that the writer of Luke had before him the Proto-Mark and Matthew; 2. (in opposition to Baur) that the constant aim both of the writer and of the compiler of the Acts is to exhibit the life of Christ in such a form as to disparage Judaism and "the Twelve," and to invest Pauline doctrines with the authority of the Master; 3. that the writer of Luke is distinct from Paul's companion in travel, who wrote the passages with "we" (*Wirstücke*) in the Acts; and 4. that neither the writer of Luke nor the compiler of the Acts can be identified with the Luke of Col. iv. 14.

T. K. CHEYNE.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—I heartily agree with Professor Westcott in his commendation of that part of Mr. Orr's book which relates to the traces of an earlier Judæan ministry in the Synoptics, but I doubt whether Professor Westcott himself is right in adding to these the various reading Ἰουδαίας for Γαλιλαίας in Luke iv. 44.

Granting that Ἰουδαίας is "unquestionably the true reading," *i. e.* the reading prevalent in the earliest and best MSS., it still would not follow with certainty that it was written by the Evangelist, and if so written, it might have been written erroneously.

The passage in which it occurs, Luke iv. 40-44, is exactly parallel to Mark i. 32-39, which is more detailed and precise, and to Matthew viii. 16, 17, which is more condensed: but all these passages are evidently based upon the same original, whether document or tradition. In this original the reading must have been Γαλιλαίας, which stands unquestioned in Mark i. 39, and is required by the whole context. If, therefore, St. Luke really wrote Ἰουδαίας, it can hardly have been otherwise than accidentally.

W. SANDAY.

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Contents of the Journals.

Transactions of the Saxon Gesellschaft der Wissenschaften (philological and historical class, 1870, part i. pp. 40–114).—Dr. Krehl collects and analyzes the principal passages in the Koran, and the traditions which relate to the doctrines of Predestination and Free Will. Instead of attempting, like some European writers, to find a common principle of these two contradictory dogmas, he shows that, as the idea of original sin found no place in the creed of Islam, the Mohammedan dogma of predestination was necessarily much more absolute than in other religions, *e.g.* in the Christianity of Calvin. But where Dr. K. appears to us to be in error is in attempting to prove, on the basis of Mr. Salesbury's researches in *Journal of the Amer. Oriental Society*, vol. viii., that this doctrine, which existed in Arabia even before the rise of Islam, was originally foreign to the creed of Mohammed. An examination of the passages in the Koran which speak of predestination has convinced us that this conception is sufficiently explained by the idea which Mohammed formed of the divine omnipotence.—H. Z.

Theologisches Literaturblatt (Rom. Cath.), June 5.—Chief articles: —1. Lipsius on the Chronology of the Roman Bishops, rev. by Peters. [The immense labour of the work is duly appreciated; its Baurian assumptions rejected; many of its details fairly criticized.]—2. Frank's System der christl. Gewissheit, vol. i., an able but unsuccessful attempt to mediate between the antitheses of Catholicism and Protestantism. Comp. an able review in the *Theologisch. Zeitschrift* for 1870. June 19. —Fritzsche's edition of the O. T. Apocrypha, rev. by Reusch. [A few omissions are pointed out in the critical apparatus, *e.g.* the versions are not adequately cited; Fritzsche is also too sparing of emendations of the text.]—Prof. von Schulte's important researches on the history of Canon Law are reviewed by Gross of Innsbruck.

Literar. Centralblatt, June 3.—Ritschl's Hist. of the Doctrine of the Atonement, vol. i., rev. by A. H. [A thorough and instructive work. But the author's Abelardianism and Catholicizing view of the Reformation seem highly questionable to the reviewer.] June 10.—Bernstein on the Origin of the Legends of Abraham, Isaac, and Jacob, rev. by Th. N(öldeke). [The author seems to regard these narratives as invented to represent contemporary events and persons; the reviewer, more plausibly, from a "liberal" point of view, as founded on myths, which mostly reflect primitive states of nations and tribes.] June 17.—The same critic has an able article on the new edition of Tuch's Genesis. He asserts the unity and pre-exile date of the fundamental record (*Grundschrift*). If the ritual, or any part of it, can be proved to be late, let it be excluded, but this is very doubtful. Some of the laws can never have been carried out, whether before or after the exile, so that the impracticability of a regulation is no argument against its comparative antiquity.

Götting. gelehrte Anzeigen, May 31.—Geiger's Psalter Salomo's, rev. by H. E. [H. E. complains of Geiger for ignoring Ewald's researches, according to which the second half of the Book of Baruch, and hence also the Psalms of Solomon, belongs to the period of the conquest of Jerusalem by Ptolemy I., and reverting to the view of Movers, who referred these Psalms to the conquest by Pompeius.]

Jahrbücher für deutsche Theologie, 1871, No. 2.—Chief articles: Ritschl on the Method to be pursued in the History of Dogma. [A criticism of the plan of Nitzsch's very able *Grundriss der christl. Dog-*

mengeschichte.]—Diestel on the Moabite Inscription. [A survey of recent discussions, with remarks on the striking analogy between the cultus of Chemosh and the religion of Jehovah in its lower forms.] —Herrlinger on the Theology of Melanchthon, II. [Draws out the distinctive characteristics of Mel.'s doctrine of the Eucharist; *e.g.* he did not, like Luther, believe in the ubiquity of Christ's body.]—Pfleiderer's Wesen und Geschichte der Religion, rev. by Besser. [Laudatory.] —Among the small-print notices, see Diestel's, of a scholarly treatise on Obadiah by Seydel; and Möller's, of Kienlen's lucid and concise Commentaire sur l'Apocalypse.

New Publications.

Alabaster, H. The Wheel of the Law; or, Three Phases of Buddhism. Illustrated from Siamese sources by the Speculations of a Siamese philosopher. A Buddhist Gospel; or, Life of Buddha. And an account of a Visit to the Phra Bat, or Holy Footprint of Siam; with notes, and a preface on Buddhism. Trübner.

Bender, W. Der Wunderbegriff des Neuen Testaments. Eine historisch-dogmat. Untersuchung. Frankfurt a. M.: Heyder u. Zimmer.

Bible, The Holy, according to the Auth. Vers., with an explanatory and critical Commentary, and a Revision of the Translation, by Bishops and other Clergy of the Anglican Church. Edited by F. C. Cook, M.A. Vol. I. in two parts: the Pentateuch. Murray.

Biblia Sacra. Graecus codex Vaticanus . . . . collatis studiis C. Vercellone . . et Jos. Cozza . . editus. Car. Vercellonem excepit Cajetanus . . . Tom. II. Romæ: 1870.

Kinkel, G. Die Ueberlieferung der Paraphrase des Evang. Johannis von Nonnos. Erstes Heft: Bericht üb. den Cod. Florentinus u. den Cod. Venetus. Zürich: Herzog.

Luzzatto, S. D. Il Pentateuco volgarizzato (col testo a fronte) e commentato, con introd. critica ed ermeneutica. Opera postuma. Vol. I.: Genesi. Padova.

M'Caul, J. B. The Epistle to the Hebrews, with Commentary and Illustrations.

Werner, A. Herder als Theologe. Berlin: Henschel.

Philosophy and Science.

The Politics of Aristotle. [*Die Staatslehre des Aristoteles.* Von W. Oncken. Erste Hälfte.] Leipzig: 1870.

This work deserves respectful notice from those who are interested in the political thought of ancient Greece. Its author is already known by a series of essays on leading Athenian statesmen, in which, while accepting for the most part the conclusions of Grote, he leaves on each subject the mark of his own original research and independent judgment.

Of the present treatise on the *Politics* of Aristotle, the first part deals with the literary history of the work, and with the relations of its author to the political thought and action of his times; the second will attempt to distinguish the peculiar and modern elements of the work from the common stock of Greek associations [or separate the two currents of Aristotelian thought referred to in a well-known passage quoted from Wilhelm von Humboldt]. The early chapters treat perhaps with unnecessary fulness subjects adequately discussed already in more special works; but on most points the author has something of interest to add, if we except a short account of Aristotle's logical method, the authorities for which are obviously taken from G. H. Lewes; and a survey of the questions connected with the order of the books of the *Politics*, which adds little to the exhaustive discussions of Hildenbrand and Bendixen.

But the comparison of the literary style of Aristotle with the rules furnished in his *Rhetoric* presents forcibly an old conclusion, and the summary of Bernays' arguments on the lost dialogues prepares the way for some remarks on a treatise of *Aristotle on Monarchy*, and on the attitude of its writer towards the Macedonian rule, which will probably be developed in the second part.

Certainly fresh arguments seemed needed to justify the statement that Aristotle was "a zealous partisan of the Hellenizing mission of the ruling dynasty," or that he "looked upon the contemporary state of Greece with the more satisfaction as it ripened for the growth of a national unity under the supremacy of Macedonia" (p. 19). In later pages he characterizes clearly the different classes of political malcontents at Athens, and the peculiarity of Aristotle's position as an alien, estranged from public life, with little sympathy for the hopes and fears of the statesmen of his day, with scant respect alike for the ambition of reformers and the prejudices of a narrow conservatism. These points are brought out more fully in the elaborate chapters devoted to criticism of Plato's *Republic* and the Spartan constitution. In the former, justice is done to Plato by paying more regard than is usual to some of the dominant tendencies of Greek society; in the latter, the distinctive features of the Spartan system are ably treated, and the view of Grote, that the division of property attributed to Lycurgus was a romantic afterthought of a later age, is defended with spirit against Schömann and others.

[There is weight in the author's remarks on the extent to which the importance of capital, other than land, is ignored by Aristotle as well as Plato, at the very time when it had become a power of the first class (p. 183); on the probability that the greater freedom enjoyed by the Helots accounted for the constant danger from the servile population which threatened Sparta alone of Greek states (p. 260); and on the want of self-restraint among the Spartan women, as a natural consequence of the tyranny of state discipline and public life over the other sex.]

The writer's style is clear and vigorous, relieved at times by epigrammatic points, and by historical analogies very tersely presented, which have not indeed escaped hostile criticism in Germany as presenting ancient facts and ideas in too modern a dress, but in regard to which he may fairly plead the defence urged in like case by the veteran and conservative Schömann, that the charge is levelled frequently against historical views for which the critic has either a lack of discernment or sympathy. Thus the admirers of Sparta, such as O. Müller, he terms "Epigonen unserer Romantik" (p. 285); they write in the spirit of ancient partisans, and reproduce "die empfindsame Verherrlichung der fossilen Zustände einer angeblich 'guten alten Zeit'" (p. 21). The rule of the Ephors was a "Schreckensregiment gemildert durch Bestechung" (p. 281). He speaks of the outward resemblances between certain philosophers and monks: "die Grenzlinie zwischen *den Tonnenheiligen der Heiden und den Säulenheiligen der Christen*, zwischen dem Cynismus griechischer Philosophen und der Weltverachtung christlicher Büsser, ist oft kaum mehr festzuhalten" (p. 153); of the aliens in the Greek cities content to ply their trade, "ohne die Lasten des Bürgerthums, *gleich den Juden des Mittelalters*" (p. 150); of the uses of the philosophic advisers at the petty courts of the later Greek tyrants, "wie es den *italienischen Kleinfürsten* des 14/15. Jahrhunderts die Humanisten gewesen sind" (p. 156). Such historical analogies are frequently indicated, and add much to the force and liveliness of the style. W. W. Capes.

Notes of a Naturalist in the Nile Valley and Malta. A Narrative of Exploration and Research in connection with the Natural History, Geology, and Archæology of the Lower Nile and Maltese Islands. By Andrew Leith Adams, M.B., author of Wanderings of a Naturalist in India. Edinburgh: Edmonston and Douglas, 1870.

Mr. Adams is so enthusiastic a naturalist, and has done such excellent work among the ossiferous caverns of Malta, that we are somewhat disappointed to find his valuable materials

presented to us in a form so much like that in which they must have existed in his original note-books. The result is, that while the volume will be an invaluable handbook to every naturalist or archæologist visiting Malta, it will not prove very attractive to the general reader. As a guide to the natural history and pre-historic archæology of the Maltese islands, it leaves little to be desired. The geology of the islands is fully described, and is illustrated by an excellent coloured map. The best localities for fossils are indicated, and there is a full account of the caverns and superficial deposits which yielded to Captain Spratt and the author those wonderful relics of a by-gone age—the pigmy elephants, the hippopotamus, the great extinct swan and fresh-water turtle, and the great dormouse. This assemblage of animals points unmistakably to the connection of what is now Malta with Africa, and indicates the existence of great rivers, marshy plains, and a luxuriant vegetation where there is now only bare rock, stunted shrubs, and burnt-up herbage. Three fossil elephants were determined by Dr. Falconer and Professor Busk, from the remains sent home by Mr. Adams. The largest of these would have stood about 7 feet high, the next under 5 feet, while the smallest was not more than 2 feet 6 inches to 3 feet! Yet these were undoubtedly adult animals, sufficient materials having been found to trace all the stages of growth of some of them. We have here a very striking exception to the rule of extinct being larger than existing species. There seems however to be still a little doubt about the specific distinctness of these three forms, for we are told that, "in *every situation* in which more than one individual was discovered, teeth and bones of the two larger species were found lying side by side, and, what is also of importance, and should be well borne in mind, there are *several general characters as regards the crown pattern of the molars common to all the Maltese elephantine fossils.*" The dormouse was as much a giant as the elephants were dwarfs, being as large as a squirrel; while the swan and tortoise were larger than any existing species.

We have also a very full account of the aspects of Malta at different seasons of the year, of the character of the vegetation, and of the birds (most of which are migratory), and of the few indigenous reptiles and mammalia; while a complete list is given of the fossils, the birds, and the fishes, which have been yet discovered. An interesting chapter is devoted to the great pre-historic rock-temple of Hhagiar-Kim, with its strange pitted ornamentation and curious idols, and to the various dolmens, towers, rock-tombs, and other antiquities of the islands.

That part of the work which treats of the Nile is of much less interest, consisting of notes on such objects of natural history as were observed during a three months' tour, with the determination of some of the species represented in the Egyptian sculptures.

Alfred R. Wallace.

Journeys in North China, Manchuria, and Eastern Mongolia; with some Account of Corea. By the Rev. Alexander Williamson, B.A., Agent of the National Bible Society of Scotland. With Illustrations and two Maps. Two vols. London: Smith, Elder, and Co., 1870.

Mr. Williamson travelled over an immense deal of ground, some of it quite new, and from his thorough knowledge of the Chinese language had great facilities for obtaining information. Yet for want of knowing how to sift and arrange his materials, and from a deficiency of literary taste and judgment, his book, though abounding in facts and containing much solid information, is very heavy reading. The first part of the work consists of a kind of gazetteer account of Northern China, bristling with statistics and topographical details. Afterwards we have the journal of travels, crowded with the unimportant daily occurrences of such journeys, but entirely wanting in all those picturesque details and vivid pictures of Chinese life and character which gave such a charm to the pages of the Abbé Huc.

Our author has a high opinion of the Chinese nation, which he believes is destined to dominate the whole of Eastern Asia; and he altogether denies that they are less inclined than Europeans to advance and improve. Many of his readers will be astonished to learn what excellent work the English and American Protestant missionaries have done in making the Chinese acquainted with modern science and literature, by translating such works as *Euclid*, Newton's *Principia*, Loones' *Analytical Geometry and Differential and Integral Calculus*, Herschel's *Astronomy*, Whewell's *Mechanics*, Wheaton's *International Law*, and others on almost every branch of modern science and European knowledge. And these works are so appreciated, and are in such demand, that the greater portion of them have been reprinted by Chinese of rank and position. Fire-engines, life-boats, and vaccination have also been adopted in China; and the government have employed translators of works on engineering, metallurgy, chemistry, electricity, and all the arts connected with the manufacture of warlike implements.

Mr. Williamson has evidently been much influenced by long association with an almost exclusively mercantile and naval European community, or he would hardly express the opinion (and support it on high moral grounds) that it is our duty to force a trade with Corea, even at the expense of a war. Notwithstanding the many defects of the book, the patient reader will find much curious information on the history, literature, and antiquities of China, and will obtain some notion of Chinese life, and of the scenery and agriculture of the northern provinces.

A. R. Wallace.

Scientific Notes.

Physiology.

Velocity of Light.—Dr. J. J. Müller, physical assistant to Prof. Ludwig, who in 1870 communicated to the Royal Society of Saxony an account of a new method of demonstrating and measuring the increase of velocity of transmission of sounds, caused by an increase in their intensity, viz. by means of a modification of Kundt's lycopodium figures in glass tubes, has lately been investigating the same phenomenon in the case of light, and has come to some very remarkable results, which he gives in the *Berichte der Kön. Sächs. Ges. der Wissensch.* of Feb. 11. The light used was that of a vapour ignited in a Bunsen's burner. This light was split up by means of a prism, the spectrum obtained from which was allowed to fall upon a vertical screen. On the screen was a slit through which a single spectral line was allowed to pass. A real image of this line was cast by means of a lens on the hypothenuse face of a small reflecting prism, which was placed in the focus of a collimator lens, beneath which was an interference apparatus for obtaining Newton's rings. Between this apparatus and the collimator lens cross threads were stretched. In the first series of experiments made, a bead of a sodium, lithium, or thallium salt was first held on the outside of the Bunsen's flame, and then pushed into it, an increase of intensity in the light being thus obtained. It was found that when the bead was pushed into the flame a movement of the Newton's rings was obtained, which showed an increase in the wave length of the light in question. This movement was partly due to a small decrease in the mean refrangibility caused by an increase of the quantity of ignited vapour observed. Dr. Müller has found that when the amount of vapour is increased the lines broaden themselves out more towards the less refrangible side. This fact he has verified in the case of the sodium, lithium, and thallium lines. Prof. Zöllner has since succeeded in making the same observation in the case of the sodium line with a simple reversion spectroscope. These results are in agreement with the observations

of Hennessey, that at sunset the atmospheric lines of the solar spectrum broaden themselves out more towards the less refrangible side. This fact is of great importance in the determination of the velocity of motion of the stars by their spectrum. If the position of the centre of a dark spectral line is dependent on the mass of absorbing vapour, this fact must be taken into account in the calculation. The amount of the alteration in the different spectral lines produced by an increase in the amount of vapour will be a variable one, dependent on the various qualities of the several vapours present, whilst that produced by a movement of the source of light on the successive lines will be a determinable one, since that movement depends on wave length. In order therefore to make certain that a change in position of lines is due to motion of the source of light, the velocity arrived at from the displacement of several different lines must be found to be the same. No certain result can be obtained from the observation of one line alone. As a part of the movement of the interference lines in the first experiments was found due to the increase in quantity of the ignited vapours, another series was made in which this amount remained constant, but the amount of light observed was varied by means of absorption with smoked glass plates. The light of glowing hydrogen in a Geissler's tube was also used, a rheostat being introduced into the electrical circuit, so that the intensity of the induction stream could be varied at pleasure. In each case an increase of wave length was found to be caused by an increase of the intensity of the light; that is to say, an increase of the velocity of transmission of light is caused by an increase in the *vis viva* of its undulations. In the case of the sodium line, a change of intensity in the proportion of 1 : 3 produced a change in wave length of 0·000005 of its actual magnitude, a change of 1 : 10 an increase of 0·000010. In the case of the red hydrogen line a change of 1 : 3 gave an increase of velocity of 0·000004, in that of the blue one of 0·00002. The increase is thus larger in the case of the greater undulations. The same result has been since obtained by Dr. Müller by a very different method. An account of his experiments will shortly be published.

Mr. H. N. Moseley is at present engaged, at Leipzig, in making experiments on the effects of strychnia upon black beetles (*Blatta orientalis*).

Botany.

The Geographical Distribution of Sea-Grasses.—A paper on the geographical distribution of sea-grasses, by Dr. P. Ascherson, who has devoted four years to the study of this subject, is published in the seventh part of *Petermann's Mittheilungen*. The particular appearance and distribution of each species is described; and from the chart which illustrates the work, the general conclusions are drawn that the greater number of sorts occupy united areas, and belong either to the tropical or to one or other of the temperate zones exclusively. Of the 22 species known, 14 are found in the Indian Ocean, 13 in the Pacific, 7 in the Atlantic, and only one in the Arctic Sea.

Chemistry.

Occurrence of Diamond in Xanthophyllite.—In the *Jahrbuch für Mineralogie*, 1871, 275, v. Jeremejen, writing from St. Petersburg, announces the discovery of microscopic crystals of diamond in the xanthophyllite of the Schischimskian Mountains, near Slatousk, in the Ural. They are of variable size, and are unequally distributed through the flakes of the mineral. Magnified 30 diameters, they are distinctly visible; and with 200 diameters their crystalline form can be distinguished with the greatest precision. The latter is the hexakis-tetrahedron, combined with a slightly developed tetrahedron; and though the faces of the former are distinctly rounded, the planes of the latter form are completely flat. The greater portion of the crystals are colourless and perfectly transparent; some have a slight brown colour. The diamonds are symmetrically embedded in the matrix, their trigonal intermediate axes being vertical to the foliation of the xanthophyllite. The greenish plates of this mineral near the spherical aggregations of talcose slate and serpentine enclose a particularly large number of the crystals, and they are likewise to be found in the two rocks themselves. This discovery of the diamond, though of but microscopic size, *in situ* is one of great interest.

Conversion of Chloral into Aldehyde.—Melsen having shown that chloracetic acid can be converted into ordinary acetic acid by the action of sodium amalgam, J. Personne (*Ann. der Chemie*, lxxxi. 113) sought in like manner to reproduce from chloral, $C_4HCl_3O_2$, aldehyde, $C_4H_4O_2$, of which typical compound it appeared to be a derivative. This change, though it cannot be brought about in an alkaline solution, takes place with great ease in the presence of free acid and zinc. If turnings of this metal be placed in a solution of chloral acidulated with sulphuric or hydrochloric acid, the odour of aldehyde is soon noticed, and with but little trouble sufficient material may be prepared for examination. Polymers of aldehyde, especially paraldehyde, are also produced. Though the formation of chloral by the direct action of chlorine on aldehyde has not been effected, the above reaction and the fact of chloral combining with bisulphite of soda place it beyond question that this substance is to be regarded as tri-chlorinated aldehyde.

Indigotine.—This compound, it is well known, is insoluble in most of the ordinary solvents. From its solution in concentrated sulphuric acid it does not separate altogether unchanged; creosote and phenylic acid take it up only to a slight extent; acetic anhydride to which a drop of sulphuric acid has been added is the only solvent hitherto known that does not act upon it. A. de Aguiar and A. Bayer (*Ann. der Chemie*, lxxxi. 366) have found another in aniline, which yields from the better kinds of ordinary indigo indigotine pure after the first crystallization. The organic base dissolves the colouring matter almost immediately at the boiling temperature, forming a deep blue solution, which on cooling deposits crystals that, after recrystallization, are purer than indigotine obtained by any other method. They have the usual habit, a very brilliant lustre, are of a copper red by reflected light, and rival in point of beauty those obtained by sublimation.

Artificial Production of Crystals of Titanic Acid.—The investigation of the allotropic states of titanic acid by G. Rose, to which attention was directed a few months since, led W. Knop (*Jour. Chem. Soc.*, May, 1871, 20) to repeat the experiments on a larger scale. From microcosmic salt, according to G. Rose, titanic acid separates in flat plates, which he considers to be anatase. Knop was enabled to prepare several grammes of these crystals, and finds that they polarise light, and probably belong to the rhombic system, and not to the quadratic. Their specific gravity is 2·9; that of anatase being 3·8 to 3·9. On analysis they were found to contain phosphoric acid in quantity corresponding to the formula $3TiO_2, P_2O_5$; they are therefore not anatase, but phospho-titanic acid.

The Acid of the Gastric Juice.—R. Bellini has recently examined this question, and shows (*Ber. Deut. Chem. Ges. Berlin*, 1871, No. 7, 414) the acid to be hydrochloric acid. It is known that cyanide of mercury, which is decomposed by haloid acids, but not by oxygen acids (and of these, it should be remembered, not by lactic acid), acts as a poison, and that hydrocyanic acid is evolved during the distillation of the contents of the stomach of an animal that has been killed by this salt. Sulphuretted hydrogen, which also decomposes the cyanide, was, the author found, not present. He examines the arguments against this view, and endeavours to prove that the acid is a result of glandular secretion, and may even arise from the action of the lactic acid on the alkaline chlorides.

Alloy of Lead with Platinum.—An alloy of three parts lead with one of platinum, broken up and exposed to moist air, carbonic acid, and acetic acid, was found by A. Bauer (*Jour. Chem. Soc.*, May, 1871, 202) to be converted into white lead and a grey powder, mixed with some finely divided platinum. The steel-grey powder has a specific gravity = 15·77, and is composed of 49 per cent of platinum and 51 of lead, which corresponds to the formula PtPb. The author has more recently shown (*Ber. Deut. Chem. Ges. Berlin*, 1871, No. 8, 449) that this compound is produced by melting platinum with a small excess of lead under a layer of borax glass; they readily combine with brilliant incandescence. On allowing the crucible to cool extremely slowly, the alloy is obtained very beautifully crystallized and of a reddish colour resembling bismuth. The slight excess of lead is removed by acetic acid, as before. The specific gravity is 15·736, and is somewhat in excess of the theoretical number, 14·89, showing that contraction takes place in the formation of the alloy.

Chemical Nomenclature.—Prof. Filopanti, of the University of Bologna, in a lecture entitled *Alcuni Misteri di Chimica popolarmente spiegati e Nuova Novenclatura* proposes the following scheme to replace the unsatisfactory nomenclature at present in use. He forms words on his system that shall express not only the chemical formulæ, but, where possible, some of the properties of the compounds. Hydrogen is *a*, oxygen *e*, nitrogen *i*, and carbon *o*; and these letters, the first four vowels of the alphabet, indicate at the same time the quantivalence of the elements in question. The other elementary bodies have names consisting of four letters, the first being invariably *u*, the last the vowel denoting the quantivalence, and the remaining intermediate two being consonants taken from the ordinary name of the element. Thus we have for chlorine *ucra*, calcium *ucle*, copper *upre*, silicium *usle*. To mark the number of atoms contained in a compound, consonants are employed of the following respective values:—

b,	*c*,	*d*,	*f*,	*g*,	*l*,	*m*,	*n*,	*p*,	*r*;
1,	2,	3,	4,	5,	6,	7,	8,	9,	0;

And numbers over nine are shown by a combination of the above letters, *de* being 3 atoms of oxygen, *man* 78 atoms of hydrogen, and so on. State of aggregation, degree of basicity, and other characteristics, are indicated by the position of the accent. In this new language water becomes *beca*, carbonic acid *ccebo*, lime *bebuclee*, urea *bobecifa*, melissylic alcohol *belacdor*, and chloride of sodium *busdabucra*.

Contents of the Journals.

The new number of the *Zeitschrift für Philosophie*, edited by J. H. von Fichte, contains a discussion by Professor Schaarschmidt on the genuineness of the disputed Platonic writings.

New Books.

Briot, C. Lehrbuch der mechanischen Wärmetheorie, hrsg. von Prof. H. Weber. Leipzig: Voss.

Ehrenberg, C. G. Uebersicht der seit 1847 fortgesetzten Untersuchungen über das v. der Atmosphäre unsichtbar getragene reiche organische Leben. Berlin: Dümmler.

Hertling, Priv.-Doc. Geo. Frhr. v. Materie u. Form u. die Definition der Seele bei Aristoteles. Ein krit. Beitrag zur Geschichte der Philosophie. Bonn: Weber.

History.

The "Recesses" and other Documents of the Hansa. [*Die Recesse und andere Akten der Hansetage von* 1256-1430. Band I.] Leipzig: Duncker and Humblot, 1870.

Eleven years ago the late Dr. Lappenberg, of Hamburg, proposed at the meeting of the Munich Historical Commission, of which he was a member, that all documents referring to the German Hansa as a corporation should be published in a separate work, especially what are called the *Recesses* of this confederation beginning more or less with the year 1370. Both German and foreign historians know well how great is the value of these documents for the history of civilisation in general, of trade and commerce, of the laws and customs of civic life, and of early German intercourse with other European countries. Most extensive preparations were immediately made not only in the libraries and archives of the German towns which had been connected with the old Hanseatic League, from Dantzic in the east to Amsterdam in the west, but likewise in Copenhagen and in London, in the Record Office as well as in Guildhall. The publication, however, was unavoidably retarded by the lamented deaths of Professor Junghans, who was employed for the chief labour, and of Dr. Lappenberg himself, whose great attainments in Hanseatic German and early English history call for no superfluous eulogy. Happily a very able successor has been secured in the person of Dr. Koppmann, of Hamburg, a young historian of the best critical school. From his hands, the necessary researches having been so far completed, we now receive the first or rather introductory instalment of a grand national collection.

The successful model of the *Reichstagsakten* (Proceedings of the German Diet), edited by Professor F. Weizsäcker of Tübingen for the same commission, has been judiciously adopted by the present editor. Each meeting of the cities, and every separate group of negotiations, is reproduced from the introductory correspondence, the minutes, resolutions, and treaties, in strict chronological order. Many texts, original and copies, had to be collated in order to secure a systematic reproduction, which at the same time would yield a complete documentary picture of the transactions, and a perfect control by a widely scattered but truly enormous apparatus of records. Sometimes extracts and references are found to suffice, but in general we find the whole extant matter skilfully arranged around its nucleus,—a dated meeting for certain political or commercial purposes. It is always headed by a concise historical summary and the references to the manuscripts or printed books in connection with the critical notes, on which the text is based. Copious indices of the names of places and persons are subjoined at the end of the volume; a linguistic glossary, highly desirable for the many Low-German and Flemish documents, though promised, appears to be reserved for the last volume of the work.

The learned and well written paper which Dr. Koppmann has prefixed to his volume not only teaches the reader to make the proper use of its stores but draws a striking sketch of the first growth of the famous league itself. When the deputies and plenipotentiaries of the single cities or several separate confederacies existing between them met, all parties with equal powers, they used to terminate their proceedings, if possible, with a registered act of dismissal called a *recess*. It is, therefore, the main object of the work to trace the first vestiges of this kind of federal co-operation, being in fact the prototype of the later Hanseatic Diets, whereas the resolutions of the German merchants in foreign countries (as those of the Steelyard in London and the guilds at Wisby or Novgorod) are omitted altogether as having nothing in common with these general negotiations.

To be sure, the league took its origin from two distinct sources, those ancient settlements abroad with the specific name of *hanse*, occurring first in England (*hanshus*, in the charter of Archbishop Turstin of York, in the days of Henry I.), and the somewhat later alliances of several towns at home. From a very early period the merchants of Cologne, together with those of some confederated places on the shores of the German Ocean, had their *gildhalla Londoniensis*. During the reign of Henry III., under the special favour of Richard of Cornwall, king of the Romans, the traders of Lübeck begin to be admitted in this country to similar privileges, although they are not at once admitted into the fraternity enjoyed by the people of Cologne. Yet the union of Lübeck with certain Baltic places, the so-called Wendish towns, Wismar, Rostock, Stralsund, Greifswald, discernible since 1256, is the germ of a larger confederacy which gets a footing on the western sea chiefly by a treaty between Lübeck and Hamburg. Next, there is Wisby, on the isle of Gothland, where principally Westphalians had erected a community of their own for the purpose of trading with the Livonian and Russian ports in the east, inhabiting likewise a distinct quarter in the city of Novgorod. A number of acts still testify their very remarkable privileges in those regions. In Bruges again we find the traders of the Roman Empire incorporated since 1252 as represented by the leading cities of those three divisions, viz. Cologne, Lübeck, and Wisby. They still guard with jealousy their distinct codes of laws and separate lines of commerce, having plenty of disputes to settle among themselves.

But the new principle, a larger combination of these and other unions, is vigorously pushed on towards the end of the thirteenth century by the intimate connection between Lübeck and Hamburg; by Lübeck gradually assuming the leadership not only of the Wendish towns but of the whole Wisby division; and by treaties with a Saxon confederation to which Bremen, Hamburg, Brunswick, Stade, Lüneburg, Goslar, and many more inland places belonged. Thus the first natural separation between the eastern and the western sea is almost arched over, and Lübeck ruling the Baltic assumes, as it were of itself, the guidance of a consolidated Hansa. Yet individual and local interests still continue in their original force as before. Cologne has not given up her predominance in the west and even over the Prussian cities in the dominion of the Teutonic Order; nor is the right of separate treaty for the benefit of old and new groups precluded.

After a successful war against Norway, Lübeck and her confederates are most signally defeated by King Eric of Denmark, who, supported by some North-German princes, has risen to quell these civic autonomies. Fortunately, soon after her fall and secession in 1308, Lübeck had the courage

to take up her old aim. By a most curious instrument, the Coopers' Roll of 1321, p. 57, she succeeds, in conjunction with Hamburg, in re-establishing the union, at first with the same group of neighbouring cities. Soon others join them; as before, their diets for transacting common affairs are taken up with a new spirit, and become more frequent and regular; the minutes, indentures, and treaties, begin to be carefully deposited in the various archives. In the year 1358 we observe a most remarkable activity; the cities meet more than once in order to remove a number of old misunderstandings, and to renew their friendship with Bremen, which had been *verhanset, i. e.* excluded from the Hansa, for a century from the date 1258 (p. 139). Henceforth the transition to new and firmer forms of federal union with common political objects become more and more apparent. The preliminary history of this federal development may be said to close with the Greifswald Confederation of September 7, 1361 (p. 180). When the federated cities failed in a war against Waldemar IV. of Denmark, the combined efforts are taken up in the meetings of the following years, until the diet at Cologne, November 11, 1367, removes the last difficulties which had threatened from that quarter (p. 372). By another successful war against Denmark and Norway, and the glorious peace of Stralsund, February 25, 1370 (p. 479), the sovereignty over the Baltic is conquered and simultaneously the Hanseatic Union concluded at last on equal terms.

During this first stage of development, embracing the time from 1256 to 1370, no less than 138 meetings and negotiations with federal objects have been traced, and are illustrated by about 600 documents. Some of them have been printed in Sartorius und Lappenberg, *Urkundliche Geschichte des Ursprungs der Deutschen Hanse*, i., 1830, which also came down to the year 1370; others in the magnificent *Urkundenbuch der Stadt Lübeck*, of which three volumes have thus far appeared. But the objects of these collections being different from the present, they hardly appeared under their proper heads. Moreover, a vast quantity of new material and chiefly the recesses themselves have been added. It is impossible to enter into further details, except by pointing out that a diet at Lübeck, January 6, 1352 (p. 81), concerns England, where the goods of the Hanse merchants at Bruges had been seized by order of Edward III. The patents and letters of the king, the accounts and valuations drawn up by his officials in London, in the counties of Warwick, York, and Wilts, are either copied from the originals or from the Public Record Office, or Guildhall. Much more of the kind will necessarily occur in the next volumes, but in the present an inexhaustible mine for researches in medieval commerce, in the history of prices and tolls, in peaceful and warlike transactions of the period, has already been opened. Among the crowds of names whose signature or attendance is recorded, we meet repeatedly the clear-sighted merchants themselves, the magistrates and trustees of their communities, moving to and fro as able diplomatists and even as gallant warriors. No student of this subject will be able to do without the book before us, and every civic library ought to possess it before all others.

R. Pauli.

MR. GROTE.

If the literary character of our age might be denoted by a single epithet (in the way in which Church historians used to name the Christian centuries), we should call it the *historic* age. The very idea of a preliminary enquiry into the nature of Evidence is of modern growth; even the sceptical Hume quotes the *Saxon Chronicle* and the worthless compilers of the fifteenth century in the same note, as if they were of equal authority and value. With his contemporary, Gibbon, on the other hand, the theory of evidence already appears in a complete form, and many chapters have a sort of summary of it prefixed to them. Of course the view itself is old enough. Livy says that "contemporary literature is the sole guardian of historic truth," but on this view how little of Livy is history.

Mr. Grote's consistent adherence to this principle constitutes one great and leading merit of his *History of Greece*. It can hardly be said how great a relief it was to get rid of the Pelasgians and begin with such a comparatively modern epoch as the Dorian settlement in Peloponnese. Even as to this Colonel Mure was perhaps right in charging Grote with having accepted too much rather than too little. But all this part is only a sort of preface: Grote's real history begins and ends with the period of Athenian glory and autonomy; all else is but the setting of the picture. Here we have full contemporary history, and the further question arises as to the differing value to be assigned to the contemporary authors. Mitford had accepted Plato's attacks on Democracy and Aristophanes' jokes and satire as of equal value with Thucydides. When Aristophanes parodies Herodotus' first chapter by an account of how the Peloponnesian War arose from an alternate carrying off of women from Athens and Megara, Mitford records the account as a fact, and makes it weigh heavily against Pericles, much as some modern writers think great historical events can be accounted for by anecdotes. Grote's wrath was roused by Mitford's persistent injustice, and "indignation" can produce other and higher kinds of literature than verse. It was too much that an Englishman should apologise for Dionysius the Tyrant, and abuse the people who created the idea of Equality before the Law. So Grote stood up, something like his favorite Homeric heroes, to defend the mighty dead from the barbarous foe. And he did the work once for all. After his sifting of the evidence, the old view cannot be restored; it can only be maintained at all as to a few of its details. Grote's account of Cleon may be unacceptable, but the defence of Pericles and Demosthenes is complete. The charge against Athens of ingratitude to her great men is disproved; it is the fault of kings to forget the services done to their predecessors, as Machiavel long ago pointed out. And then how thoroughly Grote brings modern experience to illustrate that which is called ancient history, but is really in so many points of view intensely modern. Medieval history is as ancient as you please, it represents an early period in the development of the human mind. But Thucydides is completely modern; his point of view is critical, the causes of events are always historical, oracles and prophets are held in the slightest possible esteem. Grote's commercial and political experience here stands him in good stead; he writes of what he knows, and his knowledge of the present enables him to interpret the past. He makes large use of others' experience as well as of his own. Sleeman's account of the Hindoo modes of thought is used to illustrate the early Greek religious views; a fanatical outbreak in Paris, when an image of the Virgin was destroyed, illustrates the religious panic at Athens, when the images of Hermes were mutilated. Our complaint against Mr. Grote must rather be that he did not carry this mode of illustration far enough. If he had done so, he would not have despaired of giving an historical account of the early mythology; he would not have said of it that "the curtain is the picture, there is nothing behind," or "it was a past that never had a present." For the formation of Mythology is still going on in various parts of the world; the comparative method enables us to apply contemporary evidence in the strict sense of the word; the creations of the human mind now in races which are in the position of the early Greeks are strictly analogous, in some cases identical even in form, with the creations of the early Greek or Aryan mind. This enables us to reconstruct the history, not of the battles of the brave men who lived before Agamemnon, but of the views which they held as to nature and their own relation to the world of nature. The same principle throws light on early institutions, of which Grote vainly strove to ascertain anything certain. Of course we are not criticizing Grote for not holding views which had hardly begun to exist when he first wrote; but it is worth while to point out how really consistent they are with his great rule, which we are in truth following even when we seem to be abandoning him. There is one other point in which he is more fairly open to criticism. Like enthusiasts in architecture or painting, who admire one period of art so much that they can see little beauty in any

other, Grote was so enamoured of the perfect beauty of Athens that other Greek states and other periods of Greek history hardly receive from him the consideration due to them. The mighty Dorian race is looked on with little favour, except when as at Syracuse a portion of it embraces democratic views, or when as in the persons of Brasidas or Callicratidas it produces some one or two chiefs who were worthy to be Athenians. Alexander the Great is the foe who overthrew Greek independence, and his history is consequently given unsympathetically.

In the same way, in Grote's later work on Plato, though admirable for its clearness and thoroughness, yet as each dialogue is criticized separately from the modern point of view of the Experience philosophy, the want of sympathy with Plato is too apparent throughout to make the book satisfactory. And Grote's acceptance of all the Alexandrine Canon of the Platonic writings sins against his own rule of contemporary evidence. Thrasyllus, the author of the Canon (who did not show much judgment in arranging the Dialogues into sets of dramatic trilogies), lived so long after Plato that his list merely proves what the Alexandrine Library contained in his time with Plato's name attached to it. It is of course so far of value, but is very far from decisive evidence. In truth, Mr. Grote would have given us a much more valuable book on Aristotle if he had lived to complete it. We should have liked to have had his remarks on the *Politics*, or the *Political Constitutions*. There our author would have been on his own ground, and on that ground he had no rival to fear. Curtius' *History of Greece* may be taken as proving our point both positively and negatively. It is better than Grote's in the early part, and the physical and geographical descriptions have the vividness due to the author's personal experience being called into play, but the political views are those of the student rather than of the serious and practised politician. Grote's love of truth and the fairness with which he allows for opposite views are due to his genuine English character; equally English is his practical political sense, equally English perhaps the deficiency above noted in literary criticism. Those who read the volumes of Mr. Grote's great work as they successively appeared from 1846 to 1856 will not soon forget the impression made on them. They felt that, after all allowance made for disputable points, the political history of Greece had received its best modern interpretation. The book is not in itself a work of art, it has too much commentary and discussion for that; but it is instinct with life, and the fulness of political thought is such as to possess itself of the reader's mind. It is no slight glory to have given to the English race the political history of Athens as her truest sons might have wished it to be given to a future age.

HISTORICAL NOTE.

In the village of Valle, near Carate, between Monza and Como, there has been recently discovered a Roman *ara*, since transported to the Brera Museum of Milan. This, though a very recent institution (I remember a few years since to have met there the masons letting into the walls the first Latin inscriptions brought thither from Casa Archinti), is rapidly increasing by the zeal of the director, Signor Biondelli, and the secretary, Signor Caimi, and has by this time got to be one of the richest provincial collections of Italy. There I copied some weeks ago the inscription of the *ara* in question: it runs thus:—

IOVI · O · M
PRO · SALVTE
ET · VICTORIA · L
VERGINI · RVFI
PYLADES · SALTVAR
V · S

I have no doubt that it belongs to the famous adversary of Vindex, who *imperium adseruit non sibi, sed patriae*, and still less that it has some connection with the great catastrophe of the year 69 A.C., in which the Julian dynasty perished, and the foundation of the modern empire was laid. The imperial Rome does not know any victory but of the reigning emperor, and in fact the phrase *pro salute et victoria* is, I believe, never used but in connection with the emperor (*Corp. Inscr. Lat.* ii. 1305, &c.). Rufus, having been offered the crown by his troops, hesitated some time before he refused (Tacitus, *Hist.* i. 8). It seems that his bailiff dedicated his offering to the god who had protected the life of his master in the struggle against Vindex and had given him the victory, just in the interval between the offering and the refusal; and so, though abstaining of course from giving him the imperial titles, still attributed the victory to him, which in fact it would have been extremely difficult to appropriate to any other legitimate authority. Besides, we know already from Pliny's *Letters* (2, 1, 8: *utrique eadem regio, municipia finitima, agri etiam possessionesque coniunctae*) that Rufus did spring from some city near Como. It is now evident, what hitherto was only probable, that he was of Milanese origin, and that he had his property at the very place where the stone has turned up, on the boundary of the ancient municipia and the modern provinces of Milan and Como.

TH. MOMMSEN.

Intelligence.

Two very interesting historical novelties are advertised by Messrs. Duncker and Humblot: "*Die Deutschen Mächte und der Fürstenbund.* Deutsche Geschichte von 1780-1790, von Leopold von Ranke. Erster Band," in which the celebrated author deals with the last ten years before the French Revolution, the concluding years of the Great Frederick, and the hasty reforms of Joseph II. at a period when, amidst the conflict with the head of the realm, Prussia attempted for the first time a union under her guidance;—and "*Der Ursprung des Siebenjährigen Kriegs*, von Leopold von Ranke," the great historian, with wonderful activity in his seventy-fifth year, elucidating the epoch at which his country stepped independently into the concert of powers which hitherto divided and swayed the European continent among themselves.

Contents of the Journals.

Historische Zeitschrift, 1871, zweites Heft.—Hartwig criticizes "the Legend of John of Procida," who is supposed to have organized the plan of revolt against Charles of Anjou which led to the massacre of the French in "the Sicilian Vespers." Amari had already shown the spontaneous character of the outbreak; Hartwig adds an enquiry into the original source of the legend. The question depends on whether the Sicilian account or that in John Villani the Florentine historian (Florence was in close alliance with Charles) is the original.—Ulmann, in describing "the English mediation" between Francis I. and Charles V. in 1521 (his account is largely taken from Mr. Brewer's prefaces to the *Calendars of State Papers*), discusses the larger question of the possibility of impartial mediation in modern days.—Meyer reviews recent attempts at forming a Philosophy of History (including Mr. Buckle's), and rejects them all on the ground of their being constructed on some partial idea which is only true in a limited sense, such as Progress, Development of the Idea, "the three necessary epochs" (the last of which is Positivism), and so on. He pleads for a series of previous enquiries into the facts of history, on which to base a sound induction. —The smaller notices (besides an account of late Slavonian publications) summarise the recent works on German local history, especially those bearing on the period of the Reformation.—A separate notice discusses the question whether the poem of Nicolas of Biloera (a student of Erfurt who visited Rome, and reported to the Germans what he saw) is not rather a collection of poems. The conclusion is that the poem is one, and the Interdict of 1279 the chief subject. The dislike of Martin IV. for the Germans is incidentally brought out, "papa in tanto odio habebat Teutonicos ut optaret totam Alemanniam unam esse piscinam."

Centralblatt, June 17.—A review of the 5th part of Dahn's The Kings of the Germans brings out the important influence of the "Foedus Romanum" on the political position of the Visigothic kings in Spain. The legend of Pelayo is incidentally considered.—The last volume of Gregorovius' excellent History of the City of Rome in the Middle Ages is noticed as giving the whole work a sort of epic unity. The old municipal independence of Rome comes to an end just as the period of the Reformation begins, and the old order of ideas passes irretrievably away. Von Reumont's History, in coming down to our own days, loses this unity, and inevitably takes a far more one-sided point of view.

Gazzetta Ufficiale, No. 157, contains a review of Gli Statute della Colonia genovese di Pera, just printed at Turin by V. Promis. These Statutes throw much light on the maritime law of the middle ages, as well as on the relations of colonies to the mother country. Modern commercial law begins with the commercial republics of Italy, who adapted the rules of the Roman code to the altered conditions of trade.

New Publications.

BENTINCK, Graf. W. Aufzeichnungen über Maria Theresa. Mit Einleit. über d. österreich. Politik in den Jahren 1749-1755. Herausg. v. Adf. Beer. Wien: Gerold.

Hennessy, W. M. The Annals of Loch Cè. Rolls Series.

Icazbalzeta, Joaquin Garcia. Historia eclesiastica Indiana. Obra escrita a fines del siglo xvi por Gray Geromino de Mendieta. Mexico. (London: Trübner.)

Parker, J. History of Oxford.

The Book of Ser Marco Polo, the Venetian. A new English version. By Col. Henry Yule, C.B. London: Murray.

Thomas, E. The Chronicles of the Pathán Kings of Delhi. London: Trübner.

Philology.

Milton's Poems. [*English Poems*, by John Milton. Edited, with Life, Introduction, and Selected Notes, by R. C. Browne, M.A., Associate of King's College, London.] 2 vols. Oxford: at the Clarendon Press, 1870.

This is one of the very useful and beautifully printed handbooks belonging to the Clarendon Press Series, and is likely to prove a great boon to a large class of readers. Instead, however, of enlarging upon the merits and usefulness of the work, which may be at once admitted and recognised, we proceed to point out a few instances needing correction, because unnecessary mistakes in a book which is likely to be widely used are rather serious.

In the first place, there are two points in which the arrangement might be improved. The first is, that there should have been an index or table of contents; whereas, by a singular omission, there is none whatever. Examination shows that the contents of the first volume are—a Life of Milton, Introduction, Chronological Table, Early Poems (including *L' Allegro*, *Il Penseroso*, *Comus*, *Lycidas*, &c.), Sonnets, *Paradise Lost*, Books I.–VI., Notes, Various Readings, and Glossarial Index. The second volume contains *Paradise Lost*, Books VII.–XII., *Paradise Regained*, *Samson Agonistes*, Notes, Appendix, and Glossarial Index. The second point is, that the mere headline "Notes" is of no service. There is no finding one's place, no clue as to whether (at p. 283, vol. i. for example) we are in the midst of Notes to *Comus*, or Notes to *Lycidas*, or elsewhere. It is true that, by turning back to p. 270, we find the word "Comus;" but this is very inconvenient. We also think it would be a great improvement to combine the two volumes in one; but in any case, the two Glossarial Indices should have been united.

But the point most worthy of remark is this. When an important text-book of this kind is brought out, we expect to find the English scholarship in it perfectly sound. Yet Englishmen have, as a rule, paid so little heed to their own language that it has become usual for the information concerning it to be of a low standard; and hence it is that, whilst the editor has clearly taken pains on this point, he has made a few slips which ought not to have been made, and which learners will perhaps follow only too diligently. Compilers of text-books should remember what a weight of responsibility lies on them, and by all means endeavour to avoid the indiscretion of misleading eager and industrious students. Yet the mistakes made are, some of them, fundamental. In vol. i. p. 273, note to l. 161, we are told that *glosing* is the A.-S. *glosynge*. It is bad enough that the fashion prevails of calling our oldest English words "Anglo-Saxon;" but to reverse the process, and apply this name to English of the fourteenth century, is even worse. It may be noted that the termination *-ynge* is not a mark of the nominative case in "Anglo-Saxon." The word intended is *glesing; glosynge* is the spelling found in MSS. of Chaucer. Only four lines below, a similar mistake occurs; *gear* is derived from the "A.-S. *geren*, to set in order," whereas a student may soon discover that A.-S. verbs do not end in *-en*. *Geren* is, in fact, fourteenth-century spelling; and the word intended is *gearwian*. At p. 276, note to l. 312, the adjective *bosky* is derived from the Italian *bosco*. This again is an error of a nature which suggests that the author hardly pays sufficient regard to etymological chronology. It is more nearly the other way; the Italian *bosco* might more reasonably be deduced from the Teutonic *boske*. It is, however, strictly speaking, merely of cognate origin. The Old English *boske* occurs as early as in Robert of Gloucester. It is the Dutch *bosch*, Danish *busk*, Icelandic *buski*, and, in short, merely the word which we now spell *bush*. At p. 283, l. 893, *azurn* is "perhaps from the Italian *azzurino*, as *cedarn* from *cedrino*." It follows the usual English method of forming an adjective, used in Anglo-Saxon. Thus we have *golden* from *gold*, *silvern* (A.-S. *seolfren*) from *silver*, and so on. Compare the old proverb, "Speech is silvern, but silence is golden." We draw attention to these matters because they are errors, not of detail, but in fundamental principles, and show that the science of language is still but imperfectly understood, even by teachers. But it is fair to conclude that these and similar mistakes have arisen from the editor trusting too much to his guides; the source of some of them may have been Richardson's *Dictionary*, a truly valuable work, but not free from some curious errors. Wedgwood's *Etymological Dictionary* and the edition of Webster revised by Dr. Mahn are much safer authorities.

We subjoin a list of some derivations against which we, with all respect, beg leave to protest.

The very worst derivation in the book is that of *aloof* (vol. i. p. 321) from *all off*. But this is Mr. Keightley's.

Aghast (vol. i. p. 245) has no connection with *agazed*, but must be referred to the Mœso-Gothic *us-gaisnan*, to become terrified. See some excellent comments on it in Wedgwood's *Etymological Dictionary*. *Agazed* is merely a corruption of *aghast*.

Strain (p. 249) is not from the A.-S. *strangian*, but from the Latin *stringere*. Compare the word *constrain*.

Quaint (p. 253) is not from *comptus*, but from *cognitus*; see Diez, s. v. *conto*. Its meaning may have been influenced by early confusion with *comptus*, but that is another matter.

Wight (p. 255) is not from *witan*, to know, but is merely the A.-S. *wiht*, a word which we now also spell *whit*.

Pester (p. 271) is not from the Italian *pesta*, a crowd, but from the Old French *empestrer*, to encumber an animal's legs. The Italian *pesta* is from the same idea.

Pert (p. 273) is not contracted from *pretty*, but is excellent Welsh.

The prefix *to-* in *to-ruffled* is not the German *zu*, but the German *zer*. See *To* in Glossary to *Piers the Plowman* (Clarendon Press Series), or consult Diefenbach.

Welkin (p. 309) need not be referred, as it was by Horne Tooke, to *wealcan*, to roll. It is merely the A.-S. *wolcnu*, G. *Wolken*, clouds.

Portcullis (p. 314) is decidedly not from the Latin *porta clausa*.

To *wreak* (p. 323) is not from the A.-S. *wræccan*, which is a plural substantive signifying *exiles*, but from the verb *wrécan*, to avenge.

We hope these suggestions may be received in the spirit in which they are offered. Whilst wishing the book every success, we trust that these and other similar blemishes may be removed in a second edition. Walter W. Skeat.

Etymological Grammar of Anglo-Saxon and English. [*Etymologische angelsächsisch-englische Grammatik.* Von J. Loth.] Elberfeld: R. L. Friderichs, 1870.

This work gives within a modern compass the general results of the investigation of German philologists on the history

and development of the English language, comprising a general introduction, phonology, inflexion, and derivation. It need hardly be said that a work of this kind was greatly needed, by English not less than German readers: the grammars hitherto published in England are notoriously insufficient, and those of Fiedler, Koch, and Mätzner are too elaborate and abstruse for popular use. The best part of the book is the introduction, which gives a brief account of the historical and ethnological relations of the conquerors of Britain, a sketch of the literature and general characteristics of Anglo-Saxon and English, and of the influence of political changes on the two languages. The remarks on the irregularity of our orthography, however, reveal a false conception of the history of English sounds. Mr. Loth assumes, or, at any rate, leads his readers to assume, that the present confusion in our orthography existed from the beginning of the English language. He lays the responsibility on the scribes of the centuries immediately after the conquest, who, although they tried hard to preserve the traditional A.-S. pronunciation, in spite of the change of meaning, could not avoid violating some of the rules of A.-S. orthography, because of their imperfect knowledge of the language.

"Da die alten angelsächsischen Schriftsteller wohl nur von wenigen Engländern im 14. und 15. Jahrhundert, als sich die englische Sprache aus den Trümmern der ags. Sprache bildete, gründlich studirt wurden, so ist es nicht zu verwundern, dass, auch bei dem besten Willen die alte Schreibweise zu bewahren, doch aus *Unkenntniss* viele Verstösse gegen die ags. Orthographie gemacht wurden." Imagine Chaucer inculcating on Adam Scrivener the necessity of a thorough knowledge of Anglo-Saxon! This theory is only tenable on the assumption that English pronunciation has remained unchanged since the thirteenth century. But if it can be proved either that the early scribes did *not* follow A.-S. traditions of orthography—in other words, that they tried to write as they spoke—or that English pronunciation has altered (and either one of these assumptions necessarily involves the other), the explanation must be sought elsewhere. Without entering into a lengthy argument, it will be enough to refer to Mr. Ellis's recent investigations on English pronunciation. He has proved conclusively that the pronunciation of English nearly up to the time of Shakspeare was not only quite regular, but strictly phonetic, without a trace of A.-S. orthographical tradition, or, indeed, any orthographical traditions at all. Such words as *knight* and *night* were written differently because they were pronounced differently, not because they were distinguished in A.-S. orthography. Mr. Ellis has shown that as late as the time of Shakspeare these words were pronounced (in German spelling) *knicht* and *nicht*. The present state of our orthography is entirely due to the great sound changes which took place in the seventeenth and eighteenth centuries, while the orthography remained unchanged. Hence our spelling has to do double duty, the result of which is an endless confusion of ideas, proofs of which may be found not only on every page of Loth's phonological section, but also in the plan and arrangement of the whole. Thus in treating of the vowels he first gives an account of the A.-S. vowels by themselves, then enumerates the various English *sounds* into which each A.-S. letter changes, using the five vowels and their combinations with various diacritics to distinguish each sound, and in a third section gives an account of the various graphic representations of each modern English sound. This plan is about the worst that could have been devised. Instead of utilising the traditional orthography to elucidate the intermediate changes, Mr. Loth makes a desperate leap from the tenth to the nineteenth century—from the *côh* of *leôht* to the *ai*-sound of the modern equivalent, as if the one group of sounds had changed directly into the other. This neglect of the earlier English period runs through the whole book, and makes many of the changes quite unintelligible. If Mr. Loth had boldly adopted a purely phonetic orthography, at least for nineteenth-century English, and not altogether ignored the intermediate changes, he could have avoided arbitrary diacritics, waste of space and hopeless confusion, and perhaps have been able to explain some of the laws of change, which, as it is, he professes himself unable to do. He evidently has very vague ideas on the subject of sounds in general. In his table of consonants (p. 42) he calls *f*, *p*, and *h* labial, dental, and guttural aspirates respectively, and enters *h* again under the spirants along with *s*. A little further on (p. 50) he calls *h* a guttural spirant, remarking at the same time that the *proper* guttural aspirate *ch* does not exist in A.-S., but is replaced by the guttural spirant *h*. All this while he does not give the slightest hint about the pronunciation of this remarkable letter. Does he mean that the two *h*'s in *heâh* were both pronounced like the *h* in *high*? Mr. Loth's A.-S. words are given in their conventional forms. It would have been better to take the older and, in some cases, dialectic forms, when these are nearer to their English equivalents. Thus the late West-Saxon *hŷran* ought to be entirely omitted in favour of *hêran*; *haldan*, *woruld*, *swæt*, and *am* are preferable to *healdan*, *weoruld*, *swât*, and *eom*.

In treating of the verb the Northumbrian *lufas* for *lufad* ought to have been brought forward. In spite of these defects the book is a useful one, and can be safely recommended on the score of accuracy. Some scattered errors may be mentioned. The preterite of *win* does not rhyme with *on* in ordinary English, nor is the *a* of *Harwich* pronounced as in *father*. The original of *gospel* is not *godspell*, but *gôdspell* (literally *evaggelion*), although the borrowed *gudspiall* shows the vowel was early shortened. The interjection *alas* is of Romance, not Teutonic origin: the second syllable is the adjective *lassum*. Henry Sweet.

IMMANUEL BEKKER.

The name of Immanuel Bekker, who died at Berlin on the 7th June, is one which carries us back to what now seems the heroic age of German philology. Born in 1785 at Berlin, Bekker became a student at Halle, where he soon attracted the notice of Wolf, thanks to whose influence he was nominated in 1809 to a professorship at the newly founded University of Berlin. Like his English counterpart, the late Dean Gaisford, he viewed the ancients almost exclusively from the grammatical rather than the literary or historical side. Repeated visits to Paris, an Italian journey (in 1817–18), and a short stay in England in 1820, put him in possession of a mass of critical material, which was digested and given to the world in his *Anecdota Graeca* (1814–21), and in his editions of Thucydides (1821), Plato (1816–23), the *Oratores Attici* (1822), and Aristotle (1831)—editions which by common consent form an epoch in the criticism of these authors. The long series of his subsequent productions, which includes editions of Homer, Suidas, Sextus Empiricus, Photius, and Plutarch, together with contributions to the great Bonn collection of the Byzantine Historians, terminates with his *Homerische Blätter*, published in 1863. To those who know this indefatigable scholar only through these classical works, so severely limited in plan and execution, it may be a surprise to hear that Bekker was an accomplished student of Provençal literature, and published some important papers on this subject in the *Transactions of the Berlin Academy of Sciences*.

We regret also to announce the death (June 9) of Dr. Friedrich Ueberweg, of Königsberg, well-known by his *Logic*, his *History of Philosophy*, and his work on the genuineness of Plato's writings.

Intelligence.

Messrs. Macmillan and Co. announce the first part of *A Grammar of the Latin Language from Plautus to Suetonius*, by Mr. H. J. Roby.

This year's "Programm" of the public school at Pforta (one of the few German schools managed in the same way as the great public schools in England) contains a new edition of the *Itinerarium Alexandri*, by Dr. Diederich Volkmann, with a copious critical commentary, a new collation of the Milan MS., and an instructive preface. The *Itinerarium* is in reality a Latin extract from Arrianus' *Anabasis*, and is interesting for its peculiar mixture of high-flown phrases with very low Latin. As a specimen of the rare and obsolete words which might be quoted from it, we may mention the word *avidere*, the original form of the verb *audere*, which in Plautus (e. g. *Trin.* 244 : *si me amas, si audes*) bears the sense of "desiring," *avidum esse.*

The Greek journal Κλειώ (published at Trieste) contains, in Nos. 511 to 516, most interesting extracts from the medieval Greek poems in a Vienna MS. hitherto unpublished, by one of the ablest Greek writers of the day, Constantine Sathas, the author of a series of biographies of learned Greeks from 1453 to 1821, and of a history of Greece under Turkish dominion (Τουρκοκρατουμένη Ἑλλάς). Mr. Sathas has copied all these poems, and most liberally placed them at the disposition of Dr. Wilhelm Wagner, the first part of whose collection of medieval Greek texts we reviewed some time ago. It may, therefore, be hoped that we shall soon get the continuation of Dr. Wagner's work.

Prof. C. F. W. Müller, of Berlin, has just published ten sheets of "Nachträge" (Addenda) to his Plautine prosody, in itself a very stout volume of eight hundred pages, and which appeared two years ago. Both works show exceeding industry and an extensive acquaintance with recent works on Plautus and his contemporaries, and contain a valuable collection of materials for an impartial investigation of the subject—though it cannot be said that the author himself is impartial. His method is, on the whole, the same as that employed by Ritschl in his *Prolegomena*, and especially on the question of hiatus, Prof. Müller corrects lines objectionable to him in a manner quite regardless of the MSS., his reasoning being always that if there is any way of avoiding the hiatus (and he always knows how to do so), we should at once pronounce that it would have been foolish in the poet to admit hiatus. The Plautine prosody not having found favour with Ritschl in his new edition of the *Trinummus*, Prof. Müller retaliates upon him by questioning the value of Ritschl's recent discoveries concerning the final *d* in the ablative and many other obsolete forms attributed to Plautus. His preface contains also a furious onslaught against the reviewer of his first work in the *Philol. Anzeiger* (Oscar Seyffert, the inventor of many happy emendations in Plautus). It is not unjust to say that one may be thankful to Prof. Müller for his collection of materials, without agreeing with his conclusions or admiring his emendations, most of which have about as much probability as those of Mr. Blaydes in Sophocles.

Messrs. Ebeling and Plahn, at Berlin, have just published a very useful little treatise on "Latin Orthography," by Dr. C. Wagener, containing a list of the most important words in which the results of recent studies necessitate deviations from the spellings hitherto adopted in most schools, and copious references to the works in which these questions are more fully discussed. We beg to recommend the unpretentious and useful little work to the notice of English schoolmasters, whom it is superfluous to remind of the importance of the subject, after the eloquent and authoritative pleading of Prof. Munro in the introduction to his *Lucretius*. The subject is, in our mind, of even greater importance than the pronunciation of Latin ; or, rather, it is impossible to reform the one without touching the other. At various public schools in Germany small lists have been drawn up for the use of the pupils ; and it is contemplated to bring the whole question under the notice of the leading men of the schools, to secure uniformity in the system to be adopted.

Contents of the Journals.

The **Transactions of the Saxon Gesellschaft der Wissenschaften** (part i. 1870) contains *Bemerkungen über die Tragweite der Lautgesetze, insbesondere im Griechischen und Lateinischen*, by G. Curtius. In this article, written with his usual penetration and clearness, he examines the conditions under which the general laws of phonetic change are modified in their application. He finds that the "range" of these laws depends very much upon the "seat" of a change, that is, upon the class of words or of syllables in which it takes place. Language does not proceed according to fixed rules by which a given letter passes into another, but makes compromises between the demands of intelligibility and the desire of easy utterance : so that the meaning and emphasis of a syllable enter as a modifying or regulating factor along with the purely phonetic principle. Dr. Curtius shows this (1) in the termination or formal element as compared with the root or stem of a word, pointing to the violent changes by which the person-endings are derived from the original pronouns *ma*, *tva*, *ta*, to the loss of the augment, and to the corruptions produced in the reduplicated perfect in Latin Gothic, &c. ; (2) in the comparative importance of different formal elements, *e.g.* the retention of final *s* of the genitive compared with the nominative, of final *i* of the dative singular and of the dative plural of the three declensions, and of the three plurals of verbs, whereas it is lost in the dative plural of the other declensions, and in prepositions ; (3) in the special treatment of the particles, especially the frequent apocope, with some significant exceptions such as περί ; and (4) in the numerals. The result is that what has hitherto seemed merely anomaly may be due to the cross working of psychological along with physiological tendencies or laws.

Götting. gelehrte Anzeigen, June 7.—Philippi's work on the *Status Constructus* in Hebrew (see title below) is reviewed very favourably by Prof. Nöldeke. It is in two parts. Part i. illustrates the nature of the *status constructus* by examples from Syriac and Arabic, which Nöldeke criticizes in detail. Part ii. discusses the origin of the Semitic inflexions of nouns. The author's arguments have induced Nöldeke to admit that the nouns as well as the verbs in the primitive Semitic language had vowel-terminations, the germs of the Arabic cases. But the development of three cases out of these vowel-germs, and the so-called Nunation, is not necessarily primitive. Nöldeke thinks that these are peculiarities of southern Semitic, if not of Arabic alone. The author supports his theory of the cases by the three varieties of Mimmation, ם־, ם־, ם־, which, if M. Oppert is to be believed, existed in old Assyrian. But "for reasons which will soon appear in print elsewhere," Nöldeke is averse to utilise the results of Assyriology in linguistic as well as in historical matters ; indeed, the phenomena referred to by Philippi have, according to Nöldeke, a highly suspicious air. The author is wrong in denying that the Semitic tongues possess any relative pronouns, as well as in other points of detail ; but his work contains many suggestions of interest to all students of Hebrew and the cognate languages.

New Publications.

Aasen, Ivar. Norsk Ordbog (oder det norske Folkesprog). 1. Heft. Christiania : Mallings.

Bormann, Dr. Ungedruckte lateinische Inschriften. Berlin : Calvary.

Brentano, E. W. H. Untersuchungen über das griechische Drama. 1. Th. : Aristophanes. Frankfurt a. M. : Heyder und Zimmer.

Herrmann, A. Die Veroneser Vergilscholien. 2. Heft. Berlin : Calvary.

Homer, Iliad of ; with Eng. Notes by F. A. Paley. Vol. II. London : Whittaker.

Hóra-Világ. Ísta Szilágyi Ferencz. Pest : Athenaeum.

Iscrizioni delle Chiese e d' altri Edifici di Roma dal Secolo xi. fino ai giorni nostri, raccolte e pubblicate da Vincenzo Forcella. Vol. I. Roma.

Jänicke, Dr. Beiträge zur Kritik des grossen Wolfdietrich. Berlin : Calvary.

Khayyath, archiep. Geo. Ebedjesus. Syri orientales, seu Chaldaei, Nestoriani, et Romanorum pontificum primatus. Comment. historico-theologica adjectis textibus citationum. Accedunt appendices duae. Romæ.

Martens, A. De L. Annaei Senecae Vita. Altona : Mentzel.

Mommsen, Tycho. Bemerkungen zum 1. Buche der Satiren des Horaz. Berlin : Calvary.

Müller, C. F. W. Nachträge zur Plautinischen Prosodie. Berlin : Weidmann.

Nitsche, Dr. Ueber die Abfassung von Xenophons Hellenica. Berlin : Calvary.

Philippi, F. W. M. Wesen u. Ursprung des Status Constructus im Hebräischen. Weimar : Boehlau.

Schömann, G. F. C. Commentatio Macrobiana. Leipzig : Teubner.

Vergil. With a Commentary by J. Conington and H. Nettleship. Vol. III. : containing last six books of the Aeneid. London : Whittaker.

Von dem Übelen Weibe : Eine altdeutsche Erzählung. Mit Anm. von Mor. Haupt. Leipzig : Hirzel.

Williams, W. Dictionary of the New Zealand Language. 3rd edit. Williams and Norgate.

Wilson, H. H. Select Specimens of the Theatre of the Hindoos. 3rd edit. London : Trübner.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Tuesday, August 1, and advertisements should be sent in by July 27.

Subscribers to THE ACADEMY who find it difficult to receive the numbers regularly through the newsagents may secure their regular delivery on the day of publication, post-free, by order to the publishers, at 12s. per annum, or 6s. for 6 months, payable in advance.

General Literature.

Krilof and his Fables. By W. R. S. Ralston. Third edition, greatly enlarged.

The words "third edition" are particularly agreeable to the ears of a Russian, in connection with this issue of Mr. Ralston's excellent translation of Krilof's fables, as they prove that English readers are beginning to feel an interest in the literature of his country, and in the national life and character which they have hitherto only contemplated from a political point of view. And Krilof certainly deserves all the attention thus bestowed upon him. He is the only original fabulist who has appeared since La Fontaine; and though he does not, perhaps, equal the exquisite grace of the inimitable Frenchman, though he has fewer sly strokes of wit, less cunning simplicity in telling a story, he has, on the other hand, more originality of invention. His observant good sense penetrates to the roots of things, and he possesses a genuine kind of phlegmatic humour which betrays the Oriental element in Slavonic nature. In his birth and all the circumstances of his life Krilof was as Russian as possible: he was essentially national in his ways of thinking, feeling, and writing; and it may be maintained without exaggeration that a foreigner who has carefully studied Krilof's fables will have a better idea of the Russian national character than if he had read through all the travels and essays that attempt to describe it. Russian children learn Krilof by heart as French ones do La Fontaine, without entering into all the wisdom of his teaching, but in later life they return to him with double profit. Like La Fontaine, but to a still greater degree, Krilof has supplied the public conscience with a number of precepts and adages and sayings which have become proverbial even in the mouth of unlettered peasants; no one is oftener quoted than he, and, like the Bible and Shakespeare in England, those who quote him have often no idea of their obligation—proof positive that his work has been completely absorbed into the national popular life from which it sprung. The present day offers no higher reward to literary ambition than this faint reflection of the past grandeur of epic poetry, which is only great because it is impersonal.

Mr. Ralston's translation leaves nothing to desire in the matter of accuracy or colouring, and the fables which he has added are not amongst the least welcome. The short preface and memoir prefixed to the volume, and the historical and literary notes on some of the fables, have been done conscientiously and *con amore*. It will not be his fault if Krilof does not prove to be thoroughly "naturalised" in England.

Personally, the present writer remembers to have seen Krilof once a short time before his death. He had a majestic head rather massive and heavy, fine white hair, pendent cheeks, the mouth large but well formed and earnest, the eye fixed and eyelid drooping, an expression of indolence and almost of apathy on the whole face, but with intelligence and humour, as it were, showing through. He scarcely ever spoke, but listened—brilliantly, if I may say so, since his silence was accompanied by an internal sort of smile, as if he were imparting to himself a number of lively observations never destined to be given to the world.

One anecdote of Krilof has been communicated to us by the person who witnessed the incident, which throws additional light on his indolent and original character. A large and heavy picture, which hung just above the place where Krilof generally sat, had slipped from one of the nails which supported it and threatened to fall on the head of the thoughtless fabulist. His attention was called to the danger, and he replied quietly: "Oh! I have studied the situation, and I calculate that if the picture falls, it will take a diagonal line, just clear of my head." And so, for a long time, the picture continued to hang askew and Krilof to sit under it.

I. Tourguéneff.

Lyrical Poems. By F. T. Palgrave. Macmillan and Co.

Mr. Palgrave is already known by a vigorous protest against the general ineptitude of British sculpture, by some hymns whose discreet fervour has made them very acceptable to educated half-believers, and, above all, by an exquisite anthology which is already and justly classical. The poems of an author who knows so much about poetry are sure to be worth study, if they did nothing but let us into the practical side of the education which formed his judgment. It would be unjust to imply that this is the only value of Mr. Palgrave's lyrics, but he is certainly to be thanked for having let us, in his own case, into those "secrets of the study" which he desires to guard in the case of others with a jealousy which borders upon petulance. More than one of Mr. Palgrave's poems is worthy of a distinguished place in future supplements to the *Golden Treasury*, and others where the achievement is less satisfactory may still be profitably examined by those who wish to know where a writer who can so well appreciate the literary movement of the past has sought the centre of the literary movement of the present. In the dedication "To the Immortal Memory of Free Athens" the writer has told us with a conscious modesty, which is not unmanly, what he has tried to do. The explanation is not superfluous: a sympathetic and intelligent reader might go through the volume more than once without discovering that the author intended to rest its claim to such merit as it might be thought to possess upon its approximation to the Attic manner. Yet the reader will not be misled by the indications which the author has chosen to give. Many of the poems move with Greek directness and sobriety, if hardly with Greek grace and ease, upon that middle region between thought and imagination, between preaching and poetry, which was trodden by Simonides in the happy days when prose was not yet invented, and mythology was not yet obsolete.

The following lines may serve as a specimen, though they are not inaccurately translated, for they are quite as like Mr. Palgrave as Simonides.

"There is a song
That on high rocks, bright, inaccessible,
Girt with the circling dance, her holy throng,
Doth Virtue dwell:
Nor on that throne
Seen of all human kind: by him alone
Heart-pierced in soul-corroding toil, and so
To height of perfect Manhood climbing slow:
By him alone."

It is the moral and intellectual elements of Greek art rather than the æsthetic which Mr. Palgrave considers to be of permanent significance, at any rate for English writers, who have to work in a "conglomerate" language, and besides are called to an indiscriminate universality of subject which excludes concentration.

This theory harmonizes with an exaggerated estimate of Wordsworth, as the writer of the greatest and purest poetry since Milton. The volume contains several instances of the mistake which Wordsworth did so much to accredit, that it is enough to present a striking subject clearly and faithfully without any attempt at transforming or adding to it. A comparison of the poem on Margaret Wilson, a little girl who was knocked down by a train after saving two smaller children, with the paragraph quoted in a note from the *Daily News*, and with Heine's immortal elegy on the little boy who was drowned in saving a kitten, will show the full extent of this mistake.

The influence of Wordsworth is seen to more advantage in the "Linnet in November," which recalls the "Ode to the Cuckoo," pleasantly and not too closely. "Alcestis" inevitably reminds the reader of "Laodamia," one of the greatest of Wordsworth's poems, and "Alcestis" is hardly great. It is elevated, refined, perhaps even pathetic, and it contains stanzas which are really beautiful; but it is not solemnising perhaps, because, after all, it is not tragical. A sacrifice, which turns out to be no sacrifice, is a bad subject for severe and concentrated treatment, if indeed it is a suitable subject for serious treatment at all. Mr. Morris did not venture to revive "Alcestis," though the motive of his whole book is the craving for an earthly immortality, and though he had lingered over the part of Admetus till the reader ceased to feel his love of life unmanly. Most likely Euripides was right in thinking nothing better could be made of the legend than a serio-comic poem, with the shabbiness of Admetus for its principal subject.

As might be expected from the extent of Mr. Palgrave's reading, his volume is remarkably independent of the influence of his more prominent contemporaries. There is nothing whatever to remind us of Mr. Tennyson, and only one poem ("A Story of Naples") which reminds us now and then of Mr. Browning, and this reminds us much oftener of the late Miss Proctor—a writer who, like Mr. Palgrave, had studied Heine, and was sometimes content to reproduce a fine story in a dignified way.

It is an interesting proof of the real distinction of Dr. Arnold the younger, and Clough, that such an accomplished and distinguished person as Mr. Palgrave should impress us chiefly by his resemblance, and, it must be added, by his inferiority, to them. In saying this, we have no intention to imply that he has imitated them, but he has thrown himself into the same movement, and he does not represent it so well. "Melusine" is a pendant to the "Forsaken Merman;" both writers have sought by remoteness of subject to obtain ideality and repose; but Mr. Palgrave is tedious where Dr. Arnold is spirited: Dr. Arnold has infused the maximum of passion into his subject; Mr. Palgrave has extracted the maximum of edification from his. "Ibycus and Cleora" certainly leaves little to be desired on the score of passion; but on turning to Dr. Arnold's "Switzerland," one sees that the mood of anxious, hopeless resignation may have subtler if not deeper motives than the indifference of a pretty woman to an elderly admirer. The semi-religious poems are what remind us most of Clough; but they have all the indecision and nothing of the insight which will make the works of the author of "Easterday" memorable. Those who can bear to be perplexed without becoming indifferent are happily very few; for we are inclined to think such an attitude is more likely to lead to sterile antitheses like Mr. Palgrave's than to subtle heartsearchings like Clough's. About the best of this unfortunate series of poems is the one headed "Veni Creator," which is an edifying hymn for the use of those persons who are proud of the misfortune of not having courage to make up their minds. The worst is to "Fidele," and is intended to enforce the barren sophistry that because ladylike piety is likely to be acceptable to any imaginable God or gods, therefore pious ladies may and ought to go on practising Christianity without troubling their heads whether it or positivism is true.

It is characteristic of Mr. Palgrave's optimism that he has devoted a poem to enquire into the ideal reason of the doubtful and unimportant fact that Scott was the only recent writer whose death was regarded at once as a national calamity. Considering that neither Wordsworth nor Shelley nor Keats have ever enjoyed a genuine popularity, the artistic instincts of the British public are not worth ascertaining or explaining.

The purely personal and individual motives of Mr. Palgrave's poetry are not numerous; the one to which he recurs with most complacency is the antithesis of youth and age, of childhood and maturity. We will conclude with some charming stanzas based upon it; others deserve to be quoted, but these are the best:—

EUTOPIA.

"There is a garden where lilies
And roses are side by side,
And all day between them in silence
The silken butterflies glide.

"I may not enter the garden,
Though I know the road thereto,
And morn by morn to the gateway
I see the children go.

"They bring back light on their faces;
But they cannot bring back to me
What the lilies say to the roses
Or the songs of the butterflies be."

If Mr. Palgrave had composed many such imitations of Heine (or other modern classics), there would be no question as to his right to be numbered among genuine and delightful minor poets. G. A. SIMCOX.

Select English Works of John Wyclif. Edited from original MSS. by Thomas Arnold, M.A. of University College, Oxford. Oxford: at the Clarendon Press. 3 vols. 1869-71.

[FIRST NOTICE.]

THE homage paid by the University of Oxford to the memory of one of her most distinguished sons has been somewhat tardy in its expression, but none the less sincere and complete. In 1850, the literary world hailed with satisfaction the completion of the noble edition of Wyclif's Bible, to which the accomplished and indefatigable editors, the Rev. J. Forshall and Sir Frederic Madden, devoted a considerable portion of their time, during twenty-two years. In the course of their work, they examined and described no less than one hundred and seventy MSS., of which some were complete, whilst others only contained various portions of the whole. In 1865, a catalogue of the original works of John Wyclif was printed by Dr. Shirley, to assist in forming the basis of an edition; and in 1866, Dr. Shirley's proposal to prepare for publication selected English works of Wyclif was accepted, Mr. Arnold being appointed sub-editor. The lamented death of Dr. Shirley interrupted in some measure the design, but it was soon resolved to persevere in it, the principal responsibility thus naturally devolving upon Mr. Arnold, who has executed the task with evident care and

diligence. The works now published under his editorship comprise several sets of Sermons, fifteen exegetical and didactic treatises, fourteen controversial works, and some letters and documents. The Sermons occupy nearly the whole of the first two volumes, and include sets of Sermons on the Sunday Gospels throughout the year, on the Gospels for the Commune Sanctorum, on the Gospels for the Proprium Sanctorum, on the Ferial Gospels, and on the Sunday Epistles; in all, a goodly array of very nearly two hundred Sermons, now for the first time rendered accessible to the general public. The contents of the third volume are of great importance, and are the more welcome from the singular circumstance that only eight of them have ever appeared in print before; one of the most remarkable of these latter being the "Fifty Heresies and Errors of Friars," printed by James, Bodley's Librarian, so long ago as in 1608. The whole question of reasons for selection or rejection of particular treatises is carefully considered, and in only one instance do we beg leave to differ from the editor, viz. in his exclusion of the tract known as "Wyclyffe's Wycket." This is excluded principally on the ground that it has often been printed before; but that is precisely the reason why we wish it had been retained, for it seems rather odd to find that, in an edition so complete as the present, the very piece to which most attention has been drawn is conspicuous by its absence.

It is somewhat singular that the question of the authenticity of Wyclif's Homilies turns upon the same point as that concerning the priority of the texts of "Piers the Plowman." Because some of the Homilies make mention of a vigorous persecution going on against some of the Wycliffites, and even go so far as to declare expressly that some "symple" men were "brend or kild as worse than theves," the objection arose that Wyclif, who died in 1384, could not have spoken of the burning of heretics, seeing that the statute "de Haeretico Comburendo" was not passed till 1401. But Mr. Arnold considers that the objection is not valid, for that cases of burning for heresy seem to have occurred considerably earlier than the date of the passing of that statute. In particular, he points to a passage in Mr. Bond's edition of the *Chronicle of Meaux* (vol. ii. p. 323), in which it is expressly stated that, in 1330, "in Anglia, in quadam silva, combusta (*sic*) sunt viri quinquaginta quinque, et mulieres octo, ejusdem ordinis et erroris;" where the "ejusdem" refers to the Franciscans. We believe Mr. Arnold's conclusions to be perfectly correct, that instances of the burning of heretics at an early period might be multiplied, and that William Sawtre was not, as popularly supposed, the first person who suffered death for his religious opinions. As early as 1222 or 1223, a certain deacon was burnt at Oxford for apostacy, having embraced Judaism for the sake of a beautiful Jewess. The story is, indeed, variously related, since Matthew Paris says that he was beheaded by a zealous knight, but Bracton and Wykes say expressly that he was burnt; see M. Paris, *Historia Minor*, ed. Sir F. Madden, ii. 254; Bracton, *de Legibus Angliae*, fol. 124; Wykes, ed. Luard, p. 63. The mere fact that Bracton could express himself so positively on this point, in the time of Henry III., renders it tolerably certain that such cases sometimes occurred in England, possibly even at Oxford, long before 1401, though they may not have always been considered as worthy of being recorded. If it were considered advisable to burn a heretic, it was easily done, viz. by handing him over to the laity; or, as Bracton puts it, "per manum laicalem comburatur." And now to recur to "Piers the Plowman." Of this poem there are three different versions, which may be called the A-text, B-text, and C-text. Dr. Whitaker, who edited the C-text in 1813, came to the conclusion (contrary to all evidence) that the third version was earlier than the second, because the latter contains a reference to the burning of heretics, not very distinctly expressed. We contend that the line in question, which is found in a great many MSS. and not only (as Whitaker suggested) in the Oriel MS., may very well have been written as early as 1377, and that perhaps even the Laudian MS. containing it is of the same date; see MS. Laud. Misc. 581, fol. 63. The passage stands thus in that MS.—

> "Go to the glose of the verse · ye grete clerkes,
> If I lye on yow to my lewed witte · ledeth me *to brennynge!*"
> *Piers the Plowman* (E. E. T. S.), B. xv. 80.

It is discussed at page v of the preface to the Early English Text Society's (B-text) edition, where the editor cites from Walsingham (ed. Riley, i. 278) the case of the two friars who were burnt for heresy at Avignon in 1354.

From all this, and from the evidence produced by Mr. Arnold (especially the additional direct evidence in the "Notice" prefixed to the second volume), we may safely conclude that the Homilies which he has printed as Wyclif's are certainly genuine.

Following the example of the editors of Wyclif's Bible, Mr. Arnold has examined and described nineteen MSS. containing the Sermons. By some accident, the MS. in the library of Christ's College, Cambridge, seems to have been overlooked. It commences thus:—"Here bigynneth the pistle on the firste sunday of aduent, bifore christmasse; romaynes the thrittenthe chapiter. The firste sermoun. We taken as bileue that epistlis of apostlis be*n* gospelis of crist; for he spak hem alle in hem; & crist may not erre; and alle the gospelis speken goode tithingis of ioie of the blisse of heuene." This agrees, letter for letter (with the exception of *goode* for *good*), with the beginning of the first Sermon on the Sunday Epistles, vol. ii. p. 221.

The manner in which the works are edited and the form in which they are printed leave very little to be desired, except in one rather important respect, viz. that the editor sometimes betrays a curious want of familiarity with the language in which the works are written. The proportion of unlucky mistakes is larger than might reasonably have been expected. There are side-notes to show the general drift of the text; collations at the foot of the page, and also several excellent foot-notes on remarkable passages. By way of criticism, we must say that we wish the side-notes had been a little fuller; that we wish the editor had not followed the quite unnecessary yet prevalent fashion of printing *v* instead of *u*, and *u* instead of *v*; and that we object to a capital *F* (made, as usual, with two downstrokes) being printed as *Ff*. Readers who can peruse old English at all are equal to the knowledge that *haue* is the word we now spell *have*, and that *vpon* means *upon*; and we are the more surprised to see these changes made because the editor has carefully preserved the thorn-letters and the early *g*'s. The fact that the letters *u* and *n* are frequently indistinguishable in early MSS. (*n* being often more like *u* than itself) causes much difficulty to editors, and we think Mr. Arnold has, in several cases, fallen into the trap, and given us the wrong word. We suppose that *leeves* (iii. 154) ought to be *leenes*, *i. e.* lends; that *founed* (p. 262) should be *fonned*; *assoyve* (see glossary) is certainly wrong, and should be *assoyne*; *bolue*, *sene-fote*, should be *bolne*, *sene-fote*; and *tharve* should be *tharne*, as is easily proved by observing that in the Lay of Havelok the Dane it rhymes with *barne*. *Underlont* is rightly corrected, in the glossary, to *underlout*. Another difficulty is that *t* is often plainly written like *c*, and conversely; we should therefore be inclined to read *encorcif*, not *encortif* (cf. *corsy* in Halliwell), *jettour* (the usual form),

not *jectour*, *flotte* (used by Chaucer) and not *flocce*. The glossary in the third volume is a most useful and excellent appendage, and Mr. Arnold deserves our thanks for its compilation. We merely note the following corrections. *Alther* does not mean an elder, but is the genitive plural of the adjective *all*, being a corruption of *alder*, written for *aller*. *Defyed* means simply *digested* (Piers Plowm. Clar. Press). *Discrevynge* is the usual old English for *describing*. *Floon* is plural, and does not mean a *dart*, but *darts*. *Sidnesse* means *length* simply, without reference to "on the side." *To-tere* (unexplained) is to *tear in pieces*. Finally, *eyren* does not mean *heirs*, but *eggs*. The plural of *eire* (an heir) is *eires*; see vol. iii. p. 301. Mr. Arnold here refers us to the Wycliffite Glossary; but we there find, as we expected, that *eyren* is entered as the plural of *ey*, an egg, and *eiris* as the plural of *eire*. Caxton tells us a story of a man who asked a goodwife for *eggis*, but could not make himself understood, as he ought to have asked for *eyren*.

We must reserve the consideration of the very important subject-matter for a second notice. Walter W. Skeat.

LITERARY NOTES.

The *Fortnightly Review* for July contains an eloquent although guarded criticism on the genius of the dramatist Ford, by A. C. Swinburne. The writer declines to assent fully to the enthusiastic estimate of Charles Lamb; and after balancing Ford's special merit of sweetness and intensity of human sentiment against his special shortcomings in occasional dull licence, and a certain sluggishness both of humour and imagination, proceeds to place him in the second rather than the first rank of the illustrious Elizabethans.

An article on Walt Whitman and the poetry of Democracy, in the *Westminster Review* for July, is directed to show how that writer actually fulfils many of the literary predictions of de Tocqueville.

In the first part of a new periodical for the study of Romance literature and languages, edited by Professor Boehmer, of the university of Halle (*Romanische Studien*, see Intelligence, p. 364), Karl Witte, the famous Dante scholar, gives a very interesting essay on Michelagnuolo (not Michelangelo as is commonly written) as a poet. He relates how by the preservation of the original manuscripts we are enabled to look into the writer's poetical workshop; for we have in several instances three, four, or even as many as thirteen different redactions of a single poem. The poems were first, but not completely, printed by Michelagnuolo Buonarrotti the younger, 1620. This editor, however, did not give the poems in their original shape, but in a renovated and as he believed refined form. He had completed the unfinished poems without saying a word about his alterations and depravations. Later editors followed him almost exclusively, and it is only recently that we have known the verses of the great artist-poet in their true form, through the edition which Cesare Guasti published at Florence in 1864. Witte defends this editor against most of the charges brought against him by Hermann Grimm, though he admits that for the sure establishment of the text much work remains to be done, and that a careful collation of the Vatican MS., which Guasti knew only by an old copy, is much to be desired. Witte gives, further, a highly amusing account of the manner in which Riccio contrived to get poems out of his friend Michelagnuolo, by sending him poultry, fish, and other delicacies, and he traces a lively picture of the poetical genius of Michelagnuolo, interspersed with many successful German translations of his poems. The whole essay is of high interest not only for romance scholars, but for all lovers of poetry and admirers of Michelagnuolo.

Apropos of the above-mentioned periodical, Dr. Edm. Stengel of Bâle sends us the following remarks:—Professor Boehmer is favourably known to Romance scholars by some excellent treatises on Dante's minor works and several valuable studies on various subjects of Romance philology. Being personally acquainted with many distinguished scholars in the various countries where Romance languages are spoken, he will certainly be able to fulfil his task well, and the contents of the present first part fully confirm our assumption. We therefore heartily wish good success to his enterprise. May the *Romanische Studien*, together with its elder brother, the *Jahrbuch für Romanische und Englische Litteratur*, do good service in advancing the study of rich but too long-neglected literatures and languages. It is to be wished that the Romance-speaking populations themselves would show less apathy towards the treasures bequeathed them by their ancestors, and make equal efforts with Germany to dispel the obscurity which still rests upon many problems of mediaeval literature. In Southern France, indeed, we have to note the *Revue des Langues romanes*, started last year, and of which the issue is to recommence immediately, and we may also hope for a new periodical promised long ago by MM. Paul Meyer and Gaston Paris.

Professor Boehmer's serial is to consist of independent parts, each one devoted to some special branch of Romance philology.

With reference to Tobler's edition of an interesting thirteenth-century French MS., giving the earliest version hitherto discovered of the fable of the three rings (see title in full, p. 364), the same scholar observes:—It contains the oldest known version of the parable known by the story in Boccaccio's *Decamerone*, i. 3, and by Lessing's *Nathan*. From these, however, it differs essentially. In the present version the true ring is found out after the father's death, whilst Boccaccio and Lessing tell the contrary. Of course the allegorical meaning of the true ring is the Christian faith, and the two false are the Mahomedan and the Judaic faith. The Mahomedan faith is considered the oldest because it represents the pagan faith in general. The unknown poet alludes to the version preserved by Boccaccio and Lessing as false and shameful. We may therefore conclude that this was the older, and that the French poet transformed it. The editor has very ably fulfilled his duty. He discusses in a long introduction the time and special country to which the poet belongs, and comes to the conclusion that he lived in the north of France, probably in Artois, at the end of the thirteenth century. The allusion to the loss of Acre seems clear enough to fix the date between the years 1291 and 1294, although the editor prefers a somewhat older date. The story of the parable is not treated by Tobler. He promises the study of another scholar on this point. It would have been agreeable for many if a short analysis of the poem had been added. The literary notes on the other paragraphs of the MSS. and the philological notes will be very useful to special scholars.

Dr. Dove, the editor of *Im Neuen Reich*, contributes to No. 22 of his magazine a full account of the second volume of Klaus Groth's *Quickborn*, published lately, nineteen years after the appearance of the first volume. Klaus Groth was the first writer to exhibit, in this popular work, the pathetic simplicity and luminous vigour of his own beloved Low-German dialect as it is spoken in Mecklenburg and Holstein. His popularity among German readers has been since superseded by that of Fritz Reuter, who has used the same provincial patois in many works and sketches, but who in point of artistic workmanship cannot justly be considered the equal of his predecessor. The new second volume of *Quickborn* consists of two stories, one in verse and the other in prose, and miscellaneous poems. Dr. Dove in his article lays great stress on the national and political importance of the first volume, which appeared at a time when the language threatened to disappear under the centralising tendencies of the Danish government.

It has been said of the peasants of German Switzerland that they understand the language of the *Nibelungenlied* without study as well as the learned doctors of Breslau and Berlin. Accordingly the "schuolmaister an der latinischen schuol ze Sangallen," Professor Ernst Götzinger, has celebrated the late war and its heroes in an elaborate chronicle or "Warhafftige nuwe zithing" in the High German of the sixteenth century, or what is meant for such. The vocabulary is no doubt correct,

and the composition, though rather ponderous as a *jeu d'esprit*, might be useful as a reading lesson in the dialect, were it not for the modern ideas and expressions which make it unduly easy.

A committee has been formed in Russia, under the patronage of the Emperor Alexander, for the purpose of erecting a national monument to the poet Pouschkine.

A new translation of Byron is announced from Prague. Professor Durdik, of that city, to whom literature is already indebted for a valuable essay on that poet, is about to translate his complete works into the Bohemian language.

Art and Archæology.

Dürer's Engravings on Copper and Wood. [*Dürer's Kupferstiche und Holzschnitte.* Ein kritisches Verzeichniss. Von R. v. Retberg.] München.

This is one of the publications which marked the advent of the *Dürerfest* lately held in Nürnberg to celebrate the four hundredth anniversary of the birthday of Albert Dürer. Other publications, such as the drawings in the Royal Museum at Berlin produced in photolithography by Herr Sigmund Soldau the bookseller of Nürnberg, a sumptuous reproduction of portraits sketched by Dürer at the imperial diet at Augsburg and during the Netherland journey, have been rather artistic than literary. This, on the other hand, we can scarcely consider as either one or the other, although its author distinguished himself a good many years ago by his *Nürnberg's Kunstleben*, and has since written on Dürer and other allied subjects. It is a catalogue entering into a full description of each engraving, but not, properly speaking, "critical," although on an entirely new principle, with new, and, as we think, often unwarranted assertions and views. The principal catalogue, (1), which has two illustrations, and extends over a hundred large pages, is elucidated or supplemented by six other catalogues—(2) unauthenticated works; (3) authenticated works classified by Dürer's own marks; (4) the same classified according to kind, *i.e.* etched or engraved on copper or wood, or niello, as Retberg calls the Little Crucifixion, the supposed ornament on the pommel of the Kaiser's sword; (5) according to the watermark on the paper of the first printing; (6) according to subject; and (7) according to the numbers of Bartsch!

Since recent additions to Dürer literature, every reader may be presumed to know not only the principal engraved inventions of the great Nürnberg master, such as "The Knight with Death and the Devil," "The Great Fortune," "Melancholy," and others, but also something of the problems hitherto considered unsolved regarding them. The second of these, for example—the emblematic woman holding a bridle and a splendid cup—was called by Vasari *Temperantia*, which it undoubtedly is, but the German traditionary name has always been *Das grosse Glück;* and Dürer himself, in his "Journal," does not mention either one or other of these names. "The Knight with Death and the Devil" is also wanting in the frequent enumerations of his principal works occurring in his "Journal." But we find *Nemesis* and *Ein Reuter* frequently mentioned; and critics have found some difficulty in understanding how a figure of Temperance could be called anything else, or which of the two names, "Nemesis," or "A Knight," would best apply to the wonderful romance of the fated warrior with his evil escort. Moreover, the capital letter S with the date on a tablet in the corner was, as long as the armed man was accepted as a type of Christian courage, said to be the initial of the name of (Franz von) Sickingen: afterwards it was guessed to be that of Sparnecker, a robber-knight executed at Nürnberg just before the publication of the plate, under the new law against such gentry. Our present author takes no notice of any of these difficulties, but calls the emblematical figure Nemesis, and affirms, not as a conjecture but as an almost certain fact, that the S indicates Dürer's friend Stephen Baumgärtner, whose portrait in the Pinakothek at Munich (formerly called by mistake that of Sickingen) has a background similar to that of the print. The same extraordinary assurance, which dispenses with any argument or reason whatever, allows him to assign a date to every one of the master's works, and to interpret them all without hesitation. That usually called "The Dream," representing a young man, like a deacon or priest, sleeping beside a great earthenware stove with an evil imp blowing into his ear and a Venus (not the celestial) beckoning to him, he calls, without any explanation, *Der Traum des Podagristen*, "The Dream of the Gouty Man." Assigning to it, without giving any reasons whatever, the date 1507—the year of Dürer's visit to Venice, and consequently of his satirical letters to his friend Pirkheimer—he says it is most probably *eine Fopperei* which Dürer played upon his friend Willibald, although he avoided making the young man sleeping a portrait of Pirkheimer. Again, the curious engraving supposed to be the earliest of the master, "The Wild Man seizing the Woman," our author calls "Death and the Woman"; and the very beautiful print called hitherto "The Shield with the Skull," wherein a wild man—an Orson, common as a supporter in heraldry—is about to kiss a woman in the Nürnberg gala-dress, he styles *Das Wappen des Todes, oder die sterbende Braut*, the wild man being Death disguised! These arbitrary interpretations are entirely unsupported by precedent or analogy, Death being frequently introduced into designs by Dürer, and always as a skeleton, as well as by every German for several generations. In the *Danses Macabre*, and on monuments as well as in pictures, Death, at this time, as well as long before and after, was invariably represented as a living skeleton.

The book before us, however, must still be considered an important addition to our Dürer literature, notwithstanding so many personal assumptions, and notwithstanding, too, the fact that the author's art-knowledge is so far defective as to let him include the Roswitha and Conrad Celtes' prints among Dürer's own works. In his introduction, indeed, we find him saying, "Further; I attach little value to the so-called connoisseurship and feeling of style, as I have become convinced by thirty years' experience how often and easily we may err about such particulars and momentary impressions, and how, after ten, twenty, thirty years the subjective judgment changes." We may therefore dismiss the notion of the writer going by internal evidence in his conclusions on works of art—throw him over, in fact, entirely as a critic, and accept him only as the shrewdest, most systematic and laborious writer from the outside point of view. Besides, we are far from repudiating some of the author's novel appellations and interpretations, though we wonder at his coolness in advancing them without argument. But most probably, had Herr von Retberg entered upon discussion, instead of being under two hundred pages, his book might have stretched out to a thousand. That he has not read all that has been written on the subject, however, we find proved by his notice of the "Virgin with the Butterfly," which, by the way, he calls a grasshopper. The present writer, in his *Life and Works of Dürer* published two years ago, pointed out that the design was an exact copy, though reversed, from a print by Schöngauer unknown to Bartsch. Herr von Retberg suspects it is after some elder master, but does not know who that master may be.

William B. Scott.

ART NOTES.

The British Museum has just effected an important purchase of twelve vases found recently at Capua. These are all of them finely preserved examples of a rare and beautiful class, generally assigned to an epoch little lower than that of Alexander, and distinguished by large size and supreme and subtly varied elegance of form. They are principally amphorae and crateres, without figure-designs, but with their bodies painted black, and fluted in the manner which indicates an intention of imitating the forms of metal vases. The neck is generally adorned with a wreath of leaf-sprays picked out in gold.

Two French etchers, artists of the first distinction in their own province, M. Bracquemond and M. Lalanne, are at the present moment in London. The former, we understand, is engaged in etching after some of the Turners in the National Gallery.

Our attention has been called to the remarkably successful reproductions made by the electro-galvanic process, by the Cavaliere Giuseppe Pellas of Florence, from many famous and important works of sculpture. The Cavaliere has devoted his means and his energies to this enterprise, with a genuine desire to promote the interests of good art, and especially the reputation of Italian art. One very valuable object which he keeps in view is the reproduction of fine works belonging to private owners, and consequently known only within a narrow circle. Glancing over a catalogue of Cavaliere Pellas' works, we observe the Elements, by Cellini; the Neptune, Via Crucis, and various other works of the same master; the St. Cecilia, Youthful St. John, and several others, by Donatello; the Mercury of Giovanni di Bologna, and among modern works, specimens of Canova, Thorwaldsen, and Flaxman. These works are produced in the Piazza del Prato, Florence, and are visible at a showroom, No. 3, Via dei Panzani.

In the supplement to the *Augsburg Gazette* for June 27, Dr. Lübke calls attention to a monograph by Albert Jansen on the Sienese painter Soddoma, published last year, but not hitherto much noticed. According to Dr. Lübke this is "one of the most modest and at the same time most attractive treatises which modern art-history has to show"—setting forth with admirable brevity and insight the unequal genius and weathercock temperament of this fascinating master, whose time seems to have been quite as much taken up with his race-horses and the animals of his private menagerie as with his art. The research of documents leaves no doubt that we must consider Bazzi, and not Razzi, as heretofore, to have been his true surname.

The same journal for July 4 speaks in enthusiastic terms of a series of outline designs of classical and historical subjects exhibited by an officer of the army, named Schöpfer, a native of Botzen in the Tyrol. The writer sees in this amateur (the suggestion of whose name he does not fail to turn to account) the true successor of Genelli and Moritz Schwind in spontaneous classical inspiration.

Readers interested in modern German art will find much instruction in an excellent article by Alfred Woltmann, on the life and works of Moritz Schwind (in *Unsere Zeit* for June 15). In this comprehensive paper a full account is given of the chief works of an artist who was Cornelius' most distinguished pupil; and we are further informed (what was not sufficiently known) of his strong talent and liking for music. At one time his choice of profession was actually undecided between music and painting. And one of his earliest pictorial works was of a musical subject —an illustration of Mozart's *Nozze di Figaro*, from the humour of which, as we are told, Beethoven derived amusement during his last illness.

In the *Götting. gelehrte Anzeigen* for June 11, Prachow shows how the art of the Ægean islands and coasts differs from that of the Greek mainland and South Italy. Kirchhoff had already shown this as to the two sets of alphabets. And in the same journal a letter from Pompeii describes the fresco last discovered there, the subject being the favourite one of Dionysus finding Ariadne on Naxos.

The *Centralblatt*, June 10, contains notices of Conze's essay on the "history of the beginning of Greek art," *i.e.* chiefly the early vases, which are compared with the similar products of North Europe; this tending to prove a period of general European (*sc.* Aryan) culture before Greece felt the Orientalising influences of commerce (reviewed in *Academy*, No. 20). Another notice analyzes the new part of Benndorf's great work on Greek and Sicilian vases, and the subjects represented on them.

Music and the Drama.

The Destination of the Opera. [*Ueber die Bestimmung der Oper.* Ein akademischer Vortrag. Von Richard Wagner.] Leipzig: Fritzsch.

Wagner's last pamphlet, *The Destination of the Opera*, was written on the occasion of the author's visit to Berlin, and delivered as a lecture. By this circumstance its limits were strictly defined, and also its contents and the mode of their expression strongly influenced. In the latter respect this influence has proved decidedly favourable. Wagner's prose is exclusively founded on the style of modern German philosophy, and among philosophers chiefly on that of Schopenhauer. Although this author shows an immense progress in comparison with Kant or Hegel in the matter of literary form, and occasionally rises to the highest artistic pathos, still his very subject prevents him from exhibiting in general that perfect clearness and graceful ease of which, since Goethe and Heine, we know that German prose is capable. Almost exactly the same thing may be said of Wagner's prose writing. In the present pamphlet, however, the conditions of a spoken address have prevailed upon him to abstain from those long and complicated sentences by which he sometimes puzzles even his most patient readers. This fact, combined with the historical treatment of the subject adopted in the work before us, make it, if not the deepest, certainly the pleasantest specimen of its author's pen. The origin and development of the opera have always been the favourite subject of Wagner's investigations; and therefore anything essentially new could not be expected from an occasional *brochure*. Still, as it contains in a condensed form the leading doctrines scattered about in the *Oper und Drama* and other extensive works, it is particularly adapted to convey a popular explanation of the great composer's ideas about the past and future of that branch of art which is his own domain.

The modern opera, Wagner begins, with its shallow display of scenery and its utter neglect of poetic consistency, is generally considered as the chief cause of the degradation of the modern drama. In reality, however, opera is much less the cause than the consequence of this degradation, inasmuch as it owes its popularity to the facilities offered by it for those violent isolated effects which the public appreciates and requires. This faulty state of the public taste is principally due to the want of intelligence and study among actors, who, as a rule, have been absolutely without power to realise on the stage the idealistic conceptions of the great German dramatists. The showy rendering of salient and exciting passages has been made to serve instead of that higher power of embodying great creations; and hence (since all works written for the stage must to a certain extent be adapted to the average abilities of the actors) the false sentiment and shallow tirades by which the German public was touched to tears in Houwald's and Kotzebue's pieces. Wagner is certainly justified in saying that the classical

German dramatists, Goethe and Schiller, have been in some degree responsible for this state of things by allowing the didactic and declamatory element of the antique tragedy too much influence on their own dramatic creations. A much truer instinct was shown in this matter by the French, whose present drama is entirely restricted to the reproduction of daily life, and succeeds in expounding the tragic and comic elements of contemporary society to a remarkable degree.

Shakespeare, on the other hand, even in his most sublime creations, was first of all an *actor*, who wrote for the stage and copied human passions and actions with the unrivalled knowledge and accuracy which give to all his characters the unmistakable colour of reality, but which sometimes entirely destroy the harmony and unity required in every work of art. In a certain sense the art of Shakespeare may be called an art of improvisation akin to the actual improvisation practised by the performers in the earlier stages of the drama. In this respect it may even show what this improvised drama was like, or rather what it would have been like if all the performers had been men of Shakespeare's gifts.

Wagner at this point enters upon an elaborate parallel between the poet proper and the dramatic poet, and shows how the high and ethereal aspirations of the former are quite independent of, and sometimes even interfere with, the more powerful and realistic touches required for the stage. To solve this dilemma, he proceeds, and to combine the loftiest ideals of the poet with the most real and direct impulses of passion, only music is capable. Music is in fact the foundation and most immediate expression of all the vibrations of the heart, and yet by its very essence it raises the realities of human strife and struggle into the purer atmosphere of the ideal. This can be said, not of course of the regulation *aria* and *finale* of the Italian opera, but of music only as it has been delivered from its traditional fetters and developed to its greatest power of expression in Beethoven's symphonies—or, we may add, in Wagner's own "Music Dramas." The opera therefore, while it in one way illustrates the last stage of artistic degradation, is at the same time destined and alone capable to redeem the drama out of this state of decay, and fulfil its highest aspirations by amalgamatiug Schiller's idealistic pathos with Shakespeare's realism of passion.

These are, in brief, the leading ideas of Wagner's new pamphlet, and, more or less, of all his theoretical writings. We have stated at a former occasion (see *Academy*, No. 20) how we differ from his opinion that a further independent development of music and of the spoken drama in their several spheres is impossible. Still it is undoubtedly true that words and music combined have a range and power of expression never attainable by either as a separate art; and on this very fact rests the immense importance of Wagner's own achievements towards the regeneration of the opera.

It remains to say a few words about the relations which our author's æsthetical writings bear to his own dramatic creations. These have been often misunderstood and even more frequently misrepresented. German as well as English critics have said that Wagner's powers are entirely of the speculative kind, and that his operas are written, as it were, after a certain scheme explored by previous philosophic investigations. This statement is as absurd from a psychological point of view as it is inaccurate according to the chronological dates. Wagner's works are entirely the emanations of immediate artistic impulse; and form for him, just as do also the compositions of any other master than himself, no more than a basis or material for speculations which they precede in time, and with which they sometimes are essentially at variance.

Franz Hüffer.

LA COMÉDIE FRANÇAISE.

An association of such first-rate performers as the French actors who have been playing at the Opéra Comique for the last two months is something so unusual in this country, and has achieved such brilliant results, as to deserve most careful attention from all who take an interest in the stage. These artists claim to be the direct representatives of the company that Molière got together for the performance of his comedies; they have a peculiar constitution, more like that of a college than a dramatic company—the "Sociétaires de la Comédie" answering to the Fellows, and the rest of the actors to the Undergraduates. These latter are either players who have acquired a reputation at some other house and are invited to the Théâtre Français, or distinguished pupils of the Conservatoire. The Sociétaires hold their position for life, and take a pension after a certain number of years of service. The plays to be performed are selected by a "Comité de Lecture" chosen out of the Sociétaires. Finally, they have hitherto been guaranteed from loss by a subsidy which places them above the necessity of pandering to popular taste in the selection of works for representation.

An arrangement such as this is nearly perfect in theory, and works well in practice, notwithstanding the jealousies of individuals which cannot but occasionally interfere with it. So large a company must sometimes be divided into cliques: and actors of a certain position are apt to be overbearing. Those who have read Dumas' *Souvenirs dramatiques* will remember his amusing description of the way in which Mlle Mars laughed at his early efforts, and refused to speak more of his tirades than she choose: and it is well known that when Victor Hugo's *Hernani* was in rehearsal the same lady refused, and carried her point, to speak certain lines of which she did not approve. On the whole, however, the system does work admirably well. Actors who always play together acquire a steadiness, a unison, and a precision which no company, assembled at the will of a manager, can ever hope to attain. Their feeling too of what is due to the credit of their high position compels them to take especial care that every part in their pieces is adequately rendered. To effect this, an actor who plays the principal part one evening will take a subordinate one the next. Their practice, therefore, is the very reverse of ours. It is well known that on our stage no actor will ever take a part that he considers beneath him; and, thanks to the detestable star system now in vogue, we degrade our stage into an advertisement of the excellence of a given actor in a particular style, to suit whom a piece is put together as closely resembling a monologue as possible.

The "Comédie Française" is not merely a theatre but a school of acting. The unbroken line of their traditions has preserved to them the art of speaking the rhymed verse of the seventeenth century, imitating the exact dress, manners, and deportment of that period without awkwardness or constraint. Consequently theirs is the only theatre where standard plays, that in any other country would be spoken of with respect, but rarely read and never acted, are still represented with intelligence and with faithful adherence to the text. The value of such a school is seen even in Paris, where at no other theatre (not even at the Odéon, where the system is to some extent the same as at the Français) can the *ancien répertoire* be played half so well. The young actors are carefully trained to play the standard comedies, taking parts according to their individual capacities; and in addition to this, the juniors, when a new play is being performed by the leading members of the company, "understudy" the different parts, as it is termed, so that they may be able to take any one of them should the original representative of it fall ill, and besides, may have the benefit of so much training in their art.

The performance of the older plays by these artists is so exceptionally first-rate that their supremacy in modern pieces may sometimes be overlooked. Yet in these even more than in the old plays—where the style and "business" are regulated by tradition—the peculiar excellence of this company and the individual genius of its members are brought out. In dealing with a character the intention of the author is invariably their first thought: it is not himself that the actor aims at displaying through his part, it is his part that he aims at adapting or suppressing himself to illustrate. For instance, in *Mlle de Belle-Isle*, M. Bressant, who plays Richelieu, contrives to sink his own individuality in the character so completely that the illusion is perfect. Again, in *Mercadet*, M. Got is absolutely transformed

into the restless speculator, who has not yet lost his sense of honour, nor his love for his family: and in *Le Gendre de M. Poirier*, the same inimitable artist sets bodily before us, as it was never done before, the scheming ambitious old tradesman, senile and insolent by turns, who has sold his daughter to a penniless nobleman that he may be "pair de France" before he dies. More perhaps than any other of the modern *répertoire*, this play brings out the finest art not only of M. Got but of his colleagues Mlle Favart and M. Bressant no less.

Again, the development of each character is worked out with painstaking minuteness of detail that belongs to the most conscientious art. The artist to whom it is entrusted is never idle for an instant; his by-play is as important as his dialogue, and this elaboration is carried out as carefully with the minor characters as it is with the principal. Nor is any piece ever played till after a number of rehearsals sufficient to render the assumption of a character perfectly easy and natural to the actor who undertakes it. The result of this system of training is a perfection in the dramatic art so thorough and so refined that those who have followed it can perform with success pieces that would be impossible at any other theatre. Where else, for instance, could actors be found like Mlle Favart and M. Delaunay, to interpret on the stage with the due fire, dignity, and intelligence, a difficult psychological dialogue like *La Nuit d'Octobre*, or that terrible last scene of *On ne badine pas avec l'Amour*? The excellent training and the high degree of cultivation attained by the actors who have just left us (with recollections, as we should be glad to hope, not less kindly on their part than on ours) are facts supplying the answer to the question, "Why do authors of eminence write so frequently for the stage in France?"

J. W. Clark.

New Publications.

Goltz, Bogumil. Shakespeare's Genius. Kindheit, Jugend und Alter. Das deutsche Volksmärchen und sein Humor. Drei Vorlesungen. Berlin: Janke.

Hebel's, J. P., Werke. Neu rev. Auflage, mit Hebel's Bildniss. (In 12 Lief.) 1. Lief. Stuttgart: Baur.

Kingsley, C. At Last: a Christmas in the West Indies. Macmillan.

Saphir, M. G. Ausgewählte Schriften. 6. Aufl. (In 40 Lief.) 12. Lief. Brünn: Karafiat.

Senior, Nassau W. Journals kept in France and Italy in the years 1848–1852. Edited by his daughter, Mrs. Simpson. H. S. King.

Theology.

History of Jesus. [*Geschichte Jesu von Nazara* in ihrer Verkettung mit dem Gesammtleben seines Volkes, frei untersucht und ausführlich erzählt von Dr. Theodor Keim. Vol. I.: Der Rüsttag. 1867. Vol. II. Part I.: Der Galiläische Frühling. 1871.] Zürich: Orell, Füssli, and Co.

[Second Notice.]

Dr. Keim has passed through the school of Tübingen; and his theory still bears traces of the Tübingen tradition. His treatment of the documents on which the history rests is in form, if not in substance, very similar to that of Baur.

Dr. Keim takes as his chief criterion the eschato-logical discourses in Matt. xxiv., Mark xiii., and Luke xxi. According to the form assumed by these he thinks it can be determined whether the Gospels that contain them were written before or after, or within certain approximate limits how long after, the taking of Jerusalem.

On this ground he assigns the priority to St. Matthew. He believes this Gospel to have been written about the year 66 A.D. At the same time he is of opinion that the original Gospel has received considerable later additions. Amongst these he would class the whole of the matter intervening between the genealogy in ch. i. and the baptism of John in ch. iii.; the marriage of the king's son, xxii. 1–14; the wise and foolish virgins; the last judgment, xxv. 31–46; the watch at the sepulchre (these last chiefly as breaking the context), and a few other shorter passages.

St. Luke's Gospel he ranks next, dating it about 80 A.D. The ground document of this Gospel he considers to have been a certain Ebionite Gospel, which he is more and more inclined to identify or at least closely correlate with the Gospel of the Hebrews, and which he bases upon the original of our Matthew. Besides this he assumes several Paulinising documents of an opposite tendency to that of the Ebionite Gospel, especially one that is taken up more particularly with matter relating to the Samaritans.

In respect to the second Gospel, Dr. Keim is at one with Griesbach and that section of the Tübingen school who regard it as a mere "colourless epitome" of the other two. He would place the date of its composition at about 100 A.D.

While thus agreeing very much with Baur in the order he assigns to the synoptic Gospels, Dr. Keim has arrived at his results in a different way. He believes the mass at least of their contents to be historical, and reduces the amount of conscious invention in the interests of party to a minimum. So far he represents a clear advance, but we may doubt whether the advance is equally evident when comparison is made not with the cruder Tübingen theories but with that which has been so thoroughly worked out by Dr. Weizsäcker (*Untersuchungen über die Evangelische Geschichte*; Gotha, 1864) and Dr. Holtzmann (*Die synoptischen Evangelien*; Leipzig, 1863). The question is one on which we should wish to express ourselves with reserve, but it is noticeable that Dr. Keim's view is isolated from the main current of critical investigation during the last ten years, and that he himself cannot altogether repress some misgiving as to its complete tenability.

He agrees too with Baur in rejecting the Fourth Gospel, and here the view put forward is more striking and original. It is remarkable chiefly for four things:—(1) The very fair and candid examination of the external evidence which Dr. Keim admits will not allow us to place the composition of the Gospel later than the reign of Trajan (100–117). If anything, Dr. Keim over-rates rather than under-rates the amount of evidence to be drawn from the Epistle of Barnabas and the earlier Gnostics. (2) The final dismissal of the Paschal Controversy as an important element in the discussion. (3) The admission, which we think is new in one who does not believe the Gospel to have been written by St. John, of a distinct Hebrew colouring in the style, and of accurate local knowledge in respect to topography and customs. (4) And chiefly, for the introduction of an entirely new argument based upon the criticism of the Ephesian traditon — to which we have alluded in our previous notice.

In much of this Dr. Keim has shown conspicuous clear-sightedness and impartiality. We are only surprised that, having gone so far, he has not seen fit to go a step further. We still find him holding to the view, which since Weizsäcker we should have thought was untenable, that the Johannean and Synoptic narratives are in irreconcilable antagonism. He still gives too much weight to the presumption that because the object of the Evangelist is dogmatic or theological therefore the events that he records are unreal (p. 124). He still exaggerates the Hellenic and anti-Judaic character of the theology itself (cf. i. 109–112, 124, 126, 127, 129 *ad fin.*, insufficiently qualified by 130, *n.* 1). Though the prologue seems to give a Hellenic cast to the whole, the appearance is really superficial. And though we think that Weiss and Wittichen have gone into an opposite extreme in looking for none but Jewish antecedents, still this extreme seems to us nearer the truth of the two. Against the prologue on the one hand may be set almost any number of passages like iv. 22, v. 39, vi. 15, vii. 22, 23, 40–52; viii. 39, 40, 56, &c. on the other. The Hebraistic substratum in the theology is even more marked than in the style. And

one strong reason for accepting the Ephesian tradition is that it accounts so exactly for the proportions in which the two elements, the Hellenizing and the Hebraizing, are mixed. Once assume the truth of this tradition (and supposing there were no historical evidence for it, there would be nothing against it merely as a hypothesis)—and assume further that the Apostle is writing in old age, when the events of his youth appear to him as it were "foreshortened," and his own strong individuality has infused itself into his recollection of his Master's teaching—and we can see nothing, even in the complicated and difficult phenomena that the Gospel presents, which will not be explained. It is to us as certain that the Gospel was written by a Jew of Palestine, by a member of the original Christian circle, and by a prominent member, as that it was written late in the century and in the midst of the Greek language and Greek ideas. If this was not St. John, we ask who was it? And Dr. Keim is evidently sailing near the wind when he points to the "Diaspora of Asia Minor."

Dr. Keim explains his dogmatic position in the important chapter entitled "Die menschliche Geburt überhaupt" (i. 337–361, esp. 357–361). After criticizing the contents of the earlier chapters of the First and Third Gospels he sums up the results in their bearing upon the object of the history as a whole. While the evidence does not seem to him to establish the supernatural conception historically, he still thinks that there is something of truth underlying the idea. "In face of facts such as the sinlessness of Jesus, His unclouded consciousness of God (*Gottesgefühl*), His serene apprehension of the Divine Fatherhood, His miracles, His resurrection, His boundless claims surpassing all the achievements and all the self-assertion of the best and most elect spirits among mankind, and therefore surpassing humanity itself, as experience shows it to us—facts which all the methods employed by Strauss will not enable him to degrade—in face of such facts he is compelled to acknowledge that in the person of Jesus a higher human organization was brought into being by a creative congenital act of the Divine Will. And to this act he will not refuse the name given to it by St. Paul—it is a new creation in humanity, a perfecting, revealing, spiritualizing, deifying of that which was first made in the image of God."

This is perhaps the highest mark that Dr. Keim's language has reached, but it is not to be taken too literally. The phenomenon he describes is "unique and specific," but "it is not necessary in order to account for it to assume the union of a human personality with the divine." "History is full of extraordinary personalities. Aristocracy, not ochlocracy, is its essential character." "Yet though the life of Christ is limited at its circumference, at its centre it transcends everything human." "It is the crowning point of that ceaseless creative effort by which God presents His own Being in visible form to man, and of that ceaseless struggle by which humanity aspires upwards to God."

There appears to be a certain indecision in this language. But after all, the difference which separates Dr. Keim from the orthodox view is not so very wide. It is only a question as to the formula which shall be used to express certain facts which, if they are not exactly the same, yet bear the same names. "The sinlessness of Jesus, His unclouded sense of oneness with God, His serene apprehension of the divine Fatherhood, His miracles, His resurrection, His boundless claims surpassing all that the best of men have either done or pretended to do." What else is the dogma of the Divinity of Christ but a summary of these facts or a further inference from them? Scientific, i.e. *à posteriori* or inductive, theology, to whatever sect or party it may belong, has no other materials to deal with. All that it has to do is to determine the exact limits of the interpretation which is to be put upon the several items which go to make up this complex idea, and so far to determine the character of the idea itself. But the different shades of gradation between those who start from a basis of sound historical investigation will not be strongly pronounced.

We are warned that the whole of this dogmatic portion is to be revised in the concluding volume. In the meantime it may be worth while to point out that the admission of miracles in the passage just quoted is not unqualified. We may divide Dr. Keim's treatment of miracles in some such way as this:—(1) A number of "supernumerary miracles." Such are all those which are only mentioned in general terms, without further specification. In this class, as equally "unproven" (*unbeweisbar*), he puts the cases where the miracle is a mere accessory detail in an incident that is otherwise important, *e.g.* the healing of the centurion's son, of the Syro-Phœnician woman's daughter, the dispute with the Pharisees respecting the casting out of devils, &c. (We do not quite understand Dr. Keim here. We should have thought that these were precisely the cases in which the evidence for miracles was strongest. Dr. Keim himself seems to admit as much in regard to the centurion's son, the only case that he has yet had to deal with in the course of the narrative.) Under this head too will come the duplicates, feeding of 4000 and 5000, &c.

(2) A second class is made up of miracles which are the distorted forms of what was originally a parable, gnomic saying, or non-miraculous action. Such would be the draught of fishes, the stater in the fish's mouth, the barren fig-tree.

(3) Myths founded upon the analogy of the Old Testament. The influence of this factor, Dr. Keim thinks, has been largely exaggerated by Strauss. Still it has been at work, *e.g.* in the loaves and fishes, raising of the dead, &c. This is to be treated more fully as occasion arises: in the meantime we are referred to Luke iv. 25, follg.

(4) But in spite of all this there is a residuum which no critical analysis will entirely dissolve. The evangelical miracles, while they are like, are also very unlike, those of the Old Testament. Why are so many miracles attributed to Christ and none to the Baptist? Many of these miracles are intimately bound up with words of Christ or with facts that are historically little less than certain. Nay, they have the immediate and direct attestation both of Christ Himself and of His opponents (cf. Matt. xii. 25, follg.; xi. 21, follg.; x. 8; xiv. 2).

There are some miracles then which must be accepted; but here Dr. Keim draws a line. He accepts just so many as can be explained by causes which, if they are extraordinary, may still be called natural. He lays stress upon the effect that would be produced by a personality at once so commanding and so fascinating acting upon temperaments already excited by the Messianic hopes and rumours of the time. In this way he can account for the healing of (so-called) demoniacs, of cases of fever, paralysis, &c. Those on the other hand, such as the healing of the leper, which surpass the limits of such a power, or, again, those which imply an interference with the conditions of external nature, he relegates to one or other of the classes previously enumerated.

We may remark upon this that it introduces the difficulty of a cross division. Some of the miracles which would be rejected on these *à priori* grounds are precisely those which have the strongest historical attestation, *e.g.* the Syro-Phœnician woman, which involves healing at a distance, and in a case of demoniacal possession, *i.e.* where the patient must certainly have been unconscious to events not passing in

the immediate proximity;—yet the story is quite beyond the reach of invention. We doubt, too, whether Dr. Keim's mode of rationalising the miracle of the leper (ii. 173–175), or that of the centurion's son (ii. 184), will be thought satisfactory.

But that which is most characteristic of Dr. Keim, and which distinguishes him especially from M. Renan and Dr. Strauss, is the attempt to draw out the sequence and development of events and causes. Most other writers, among whom Ewald, however, is an exception, have contented themselves with giving a tabulated or classified arrangement of the different sides and aspects in the life and work of Christ. Dr. Keim tries to co-ordinate these under a general law of progression. On the one hand he traces a gradual expansion of the Messianic idea in the mind of Christ Himself, and on the other hand he traces the effects of this in growing opposition on the part of the Pharisees, and in various fluctuations and advances in the faith of the disciples. Naturally the materials for delineating this double progression are scanty and confused, and have to be supplemented by means of more general considerations. But as yet we have not enough of Dr. Keim's work before us to be able to judge how far he has succeeded. The question is not foreclosed even for those whose first principles differ entirely from Dr. Keim's. For the highest Christology admits a development towards without if not from within. And the Gospels contain several clearly marked stations or turning points, such as the selection and Mission of the Twelve Apostles, the Transfiguration, along with St. Peter's confession, &c. At present the two principal points that Dr. Keim seems to have made out are—(1) That Messianic powers and titles were assumed by Christ from the very beginning of His public ministry. This against Strauss, Schenkel, and others, who would make the consciousness of Messiahship itself a later and gradual development. (2) That of all the *titles* of the Messiah the one most frequently employed at first was the "Son of Man," to explain which Dr. Keim goes back not only to Daniel, but also—we cannot think with so much reason—to the 8th Psalm. While the often quoted passage in Daniel (vii. 13) brings out the exalted Messianic side of the title, the Psalm, he thinks, throws into relief another side on which it is rather linked with the infirmities of humanity. It is in this sense that he would understand the expression "*Son* of Man" as representing not so much the "ideal of humanity" as its "limitations" and "dependence."

The characteristics of the current Messianic idea are discussed partly in this section on the "Son of Man" (ii. 65–76), and partly in that on the "Expectations of a Messiah" (i. 239–250). The importance and difficulties of this question were clearly brought out in an article by Dr. Holtzmann in a recent number of the *Academy* (No. 15). Dr. Keim agrees with Volkmar as against Hilgenfeld in assigning a post-Christian date to IV. Esdras, but on the main issue he may be said to agree rather with the latter. His position is indeed something of a compromise or *via media*. He believes that the Messianic idea did exist, and was not dormant, but he would draw a broader line than Dr. Hilgenfeld does, between the current form of the idea and that which was embodied in Christianity.

Our space would not permit us to touch upon more than these few salient points. But we shall probably have said enough to show that Dr. Keim's work is indispensable to the serious student of theology. As yet the narrative is only brought down to the Mission of the Twelve Apostles. We shall look forward with much interest to its continuation.

W. Sanday.

Intelligence.

Dr. Abraham Geiger, the well-known leader of the reform movement among the Jews, has just published the third part of his lectures on *Judaism and its History*. (See the title in full below.) Like all this writer's works, it is eloquently and picturesquely written, and though it contains nothing that is absolutely new to Jewish scholars, it may be recommended to general students of history and literature. For instance, the sixth lecture contains some valuable information on the share of the Jews—Santob the Castilian, Süsskind the Minnesinger, and Manoello, or Immanuel, the friend of Dante—in the development of popular literatures. The historian of religious opinion may also consult with advantage the lecture on the attitude of the Jews towards Christianity, which explains the occurrence of so many secessions from Judaism in the thirteenth and fourteenth centuries. The piquancy of the letter addressed to a renegade by Prophiat Duran (pp. 106–109) is very striking. Dr. Geiger's characteristic assumptions, *e. g.* his exaltation of the Pharisees as the destroyers of Jewish sacerdotalism, and his disparagement of the Church as an instrument of culture, need not be criticized here.

Contents of the Journals.

The **Theological Review** for July contains no article of special interest for scholars. We may notice, however, Mr. Call's highly plausible, though by no means original, paper on the Nero-Saga and its traces in the Apocalypse; also an able criticism on Bp. Hampden's Life, by Presbyter Anglicanus; and a review of The Recovery of Jerusalem, from the pen of the Rev. K. Paul, who finds the work "disappointing and unsatisfactory," and questions the fairness of the argument from the topographical accuracy of a Biblical writer to his historical credibility.

Contemporary Review for July 1.—The Character of Christ: does it supply an adequate basis for a religion? By Rev. W. Fowle. [The author contends that recent efforts to establish the *human* character of Christ, without reference to His Divinity, as a basis for religion, has failed and must fail because of a supernatural or miraculous residue left in all attempts to pourtray that character.]

Cornhill Magazine for July.—Literature and Dogma, by Matthew Arnold, Part I. [Dr. Matthew Arnold repeats his thesis that religion is transcendental morality, and affirms that morality at the emotional pitch generates religion, and did so among the Hebrews. He contends that the doctrinal or dogmatic interpretation of the phrases and personages of old Jewish religion is a would-be scientific and therefore false way of treating things that belong not to science, not to "abstruse argument," but to the feelings, to imagination, rhetoric, "literature." There are two collateral arguments running through his essay—one directed against the idea of God as a "magnified and non-natural man," which proceeds from taking literally the figments of emotional anthropomorphism; the other claiming these subjects as a fit study for the literary and not for the scholastic or scientific habit. His views are supported by well-chosen and piquant citations from the Bible, Bishop Wilson, Quinctilian, and Sophokles; but the essay leaves the impression that intellectual wilfulness for one thing is less effectually controlled by the "tact" derived from "literary experience" than by the faculty for "abstruse argument."]

Theolog. Literaturblatt (Rom. Cath.), July 3.—Heinichen's Commentary on Eusebius is reviewed in a dry unsatisfactory way by H. Kellner. Maassen's Literary History of Canon Law, vol. i. (an important work, based on an independent examination of the MSS.), finds an appreciative critic in Prof. von Schulte. We heartily join in the wish that Dr. Maassen, who is a professor at the university of Grätz, may supplement his work by a new edition of the documentary material. Among other reviews, that of Lecky's History of European Morals, vol. i., will be read with interest; from a Catholic point of view, the work is of course vitiated by its fundamental assumptions.

Monatsschrift für Geschichte und Wissenschaft des Judenthums.—It would be difficult to give an adequate summary of this closely packed magazine of recondite Jewish learning. All that is in our power, and all perhaps that is necessary, is to mention the chief articles of interest to Christian scholars, who might otherwise be repelled by the dry and technical details which abound in these pages. The first article in the January No. is on The Two Ben-Asher and the Masora. The writer, Dr. Grätz, complains of the inaccuracy of the current notions on this subject. In order to obtain a fixed chronological point he investigates the age of the Masoretic critic, or critics, named Ben-Asher. The statement of the untrustworthy Gedaliah Ibn-Jachja, that Ben-Asher flourished about 1034, has been passed on from one Biblical introduction to the other, but is totally unfounded. Dr. Grätz seeks to establish four points:—1. That there were two persons named Ben-Asher, father and son. 2. That neither the one nor the other belong to the eleventh century, but that the father wrote a Biblical codex at the end of the ninth century, and that the son, a contemporary of Saadia, lived in the first half of the tenth. 3. That both were Karaites, which did not prevent Rabbanites from making use of their

codices for critical purposes. 4. That the term Masora had acquired a definite meaning as early as the ninth century; and that the Masoretic notes were inserted in the margin under the names "the little and the great Masora." 5. That besides the Masora parva and magna, Ben-Asher wrote an alphabetical index of words which belonged together, or which might be compared in other respects, like the Masora finalis or the *Ochlah W'ochlah*. This index, however, received continual accretions through more careful observations.—In the May No. Dr. Grätz adopts the view of a recent Italian writer, Dr. Barzilai, that the only animal to which the Biblical descriptions of the *Reem* (A. V. "unicorn") fully correspond is the reindeer, which was common in the Black Forest as late as the time of Julius Cæsar (*De bello Gall.* vi. 27). He connects תועפות with the Syriac עופא, "branch," also "top of a tree," as if תעופות; but will this suit Num. xxiii. 22? In the same No. Dr. Bacher has an essay on the exegetical peculiarities of the Targum on Job; Dr. Grätz also begins a series of papers on difficult passages in the Mishna.

Götting. gelehrte Anzeigen for June 21.—A notice of Rönsch's The New Testament of Tertullian points out the value of such reconstructions for the criticism of the Bible, especially in the case of authors like Tertullian, whose text (though not yet critically edited) has not been wilfully tampered with or interpolated.

New Publications.

Geiger, Dr. A. Das Judenthum und seine Geschichte. Dritte Abtheilung: Vom dreizehnten bis zum Ende des sechszehnten Jahrh. Breslau: Schletter.

Hurter, Prof. Dr. H. Nomenclator literarius recentioris theologiae catholicae theologos exhibens, qui inde a concilio Tridentino floruerunt aetate, natione, disciplinis distinctos. Tom. I. Innsbruck: Wagner.

Mühlfelder, Dr. M. J., Rabh. Ein Lebensbild zur Geschichte d. Talmud. Leipzig: Leiner.

Vance-Smith, G. The Bible and Popular Theology. Longmans.

Philosophy and Science.

The Gorgias of Plato. With English Notes, Introduction and Appendix by W. H. Thompson, D.D., Master of Trinity College, Cambridge, and late Regius Professor of Greek. London: Whittaker and Co.

With those who know Dr. Thompson's *Phaedrus* the present volume will require no further commendation than is implied in the statement that it is by the same Editor and on the same plan as its predecessor. While professing to be little more than a school-book, it belongs to a class of which there are assuredly not too many specimens in this country. We hope we are duly "thankful for small mercies," yet we cannot refrain from expressing a desire (not confined to ourselves) to see the rare qualities of so accomplished a scholar exhibited in a worthier sphere, by the publication of some work which the learned world might permanently connect with his name.

A closely written Introduction of twenty pages examines a variety of preliminary questions bearing on the *Gorgias*. The aim of the dialogue, according to Dr. Thompson's view, is to discuss the ethical principles which conduce to political well-being: it is an error to regard it as a direct attack on Gorgias himself or his opinions; still less is it, like the *Phaedrus*, a critical treatise on the Art of Rhetoric, as some of the ancients seem to have thought. But the dialogue has a sort of secondary aim in that it serves incidentally as an apology for Plato's renunciation of political life as soon as he saw the "hopelessness of any attempts to amend the existing laws and practice of the Greek communities by any of the ordinary and constitutional means." As to the date of the *Gorgias* the limits of conjecture may be determined with tolerable certainty. Read by the light of the Seventh Epistle and the circumstances of Plato's life, the dialogue would seem to have been the first, or one of the first, published after his return from Megara in 395; and it is difficult to imagine it to have been written later than 389, the year in which he left Athens on the occasion of his first visit to Sicily. It may be remarked that the Editor considers it a "plausible" view that the *Republic* also, which presents so many striking points of resemblance to the *Gorgias*, was at least begun during the same period; that is, in the interval between 395 and 389. Without entering into the details of Dr. Thompson's argument, a sceptical critic might deem it a sufficient reply to say that it assumes the historical credibility of the Seventh Epistle and the general trustworthiness of the chaos of traditions and inventions which combine to make up Greek literary history. Dates, indeed, in questions of this kind, are worse than useless, because they lend an illusory appearance of fixity to matters which vanish into air as soon as one comes to examine them. If there is "no improbability in the story in Athenaeus" that Gorgias lived to read the Platonic dialogue named after him; if we are to believe the legend that he died at the mature age of 105 or 108 years; if we may lay stress on the calculation of Foss that his death occurred in 388 (and not rather in 375, as Zeller and others seem to think), we cannot avoid a suspicion that Greek literary history must still be in what may be termed its pre-Niebuhrian stage. As to the Editor's formal distinction between the *authority* and the *authorship* of the Seventh Epistle, we hardly think it comes to much; nor can we approve of so reactionary a step as his implied assent to Mr. Grote's argument in favour of the genuineness of the whole series of the Epistles; we are bound, moreover, to enter an emphatic protest when Mr. Grote's view is supported by an assertion that Cobet, the "most fastidious of critics, declares that no one but Plato could have written them." The truth is, that Cobet has never ventured on so astonishing a statement, the remark to which Dr. Thompson alludes applying to the Seventh and Eighth Epistles alone, and not to the whole series. Even this comparatively slight concession, however, has been retracted in terms which leave little doubt as to the side on which better knowledge has caused the "most fastidious of critics" to range himself. "In these days," Cobet tells us in the Λόγιος Ἑρμῆς (p. 456), "no critic is unaware that the Letters attributed to Plato are the *jeu d'esprit* of some Sophist"—an assertion which we regard as a very valuable sign of the direction which opinion is now taking.

The notes at the foot of the page are in their way a model—always to the point, yet full of philological information, and with singularly felicitous specimens of translation in the case of the more knotty passages. A prominent and most instructive feature in the commentary are the illustrative quotations, especially those from Isocrates. Dr. Thompson does not seem to avail himself of the two great editorial privileges—that of silence where explanation is most needed, and that of diffuseness where it is superfluous. Let us add that a disciplined sense of what is grammatically possible leads the Editor to acknowledge the presence here and there of corruptions in the text, and that he accepts an emendation, in preference to assuming, as Stallbaum occasionally seems to do, that in matters of language Plato was capable of any enormity. An idea of the sort of changes introduced may be gathered from the fact that he brackets καὶ ὑστεροῦμεν in 447 A with Cobet, περὶ in 490 C with Hirschig; and writes ὧν for ὡς in 492 E with Badham, and ἐλθόντε for ἐλθόντα in 456 B with Dobree. We cannot, however, think him right in his approval of Dobree's κακίαν (for ἀδικίαν) in 478 E, a passage which runs thus in the new version of Prof. Jowett:—

"*Soc.* Then he lives worst who has known [ἔχων ἀδικίαν] and has no deliverance from injustice?

"*Pol.* Certainly.

"*Soc.* That is, he who commits the greatest crimes, and who, being the most unjust of men [τὰ μέγιστα ἀδικῶν καὶ χρώμενος μεγίστῃ ἀδικίᾳ], succeeds in escaping rebuke or correction or punishment, which, as you say, is the case with Archelaus and all your tyrants and rhetoricians and mighty men?

"*Pol.* True."

The conclusion here can hardly be called a *non sequitur* (as Dr. Thompson styles it), unless we overlook the emphatic superlatives in the second question. The drift of Socrates' argument, surely, is that the injustice of the tyrant is an *extreme form* of that unrighteousness which had previously been shown to be, when uncorrected by punishment, the worst of spiritual evils. Ἔχων ἀδικίαν, "unjust" or "unrighteous" in the Scriptural sense of the words, is much the same thing as ἔχων κακίαν (see Deuschle), and accords equally well with what precedes; while it is absolutely demanded by the concluding part of the reasoning. Among the Editor's own emendations (which are unfortunately not very numerous) we may instance ἀναλίσκῃ for ἀναλίσκηται in 481 A, τρί' ἄττα for τρία ἄρα in 486 E, as having every claim to a permanent place in the text of the future. Here and there the readings of MSS. are mentioned—more especially those of the "Bodleian Plato," the famous Codex Clarkianus, the paramount importance of which is now universally acknowledged among the learned. It is in the interests of the Clarkianus therefore that we notice the following inaccuracy in the comment on 480 C:—

"For τυγχάνῃ ἀδικῶν the 'Bodl.' gives τυγχάνοι, which Heindorf ('quod mireris') endeavours to defend."

Now the Clarkianus has τυγχάνῃ, and no one has hitherto imagined it to have anything else. The Editor should surely have informed his readers that in this single instance "Bodl." means not the Clarkianus but a late and worthless MS., which modern scholars have agreed to forget, although Heindorf, in default of more satisfactory data, was glad to quote its readings from Routh. But the "Bodleian" of Heindorf and Routh is not what *we* understand by the name. To confuse the two will appear strange to those who remember that Heindorf's book made its appearance just fifteen years before the *Lectiones Platonicae* of Gaisford, who was the first to collate the Clarkianus.

Throughout the present volume good use has been made of the Neoplatonist Olympiodorus, whose commentary on the *Gorgias* is to be found buried away in one of the Supplements to Jahn's *Jahrbücher* (vol. xiv.). Notwithstanding his Neoplatonic perversity, Olympiodorus is a very sound interpreter, and fully deserves the Editor's encomium on his "comparative good sense" and insight into his author's meaning. In some few cases we are inclined to think that the ancient has the advantage over the modern expositor. Olympiodorus, for instance, in a Scholium on 507 A defines bravery in the following terms:—ὁ γὰρ ὑποτάττων τὰ χείρονα τοῖς κρείττοσι καὶ μὴ ἐῶν ἡττᾶσθαι τὸν λόγον ὑπὸ τοῦ θυμοῦ, οὗτος ἀνδρεῖός ἐστιν—a description which the Editor endeavours to improve by correcting τοῦ θυμοῦ into τῆς ἐπιθυμίας (coll. *Rep.* iv. 430 E). Most students of the *Republic*, however, will probably think with us that "the old is better." While on the subject of Olympiodorus, we have a brief word to say in connection with his Scholium on 474 A, which Dr. Thompson conceives to contain an anecdoton from Heraclitus. We wish we could agree with this view. The truth is, that the words in question, so far from being an anecdoton, have no claim to be considered a Fragment at all: any one who turns to Diogenes Laertius (ix. 1) or the Greek Anthology, will see at once that they are nothing more than a scrap imperfectly remembered from an epigram on Heraclitus, there given in its integrity.

The volume ends with an Appendix of ten pages, containing the Fragments of Gorgias. The collection, which is slightly fuller than that in Mullach's second volume, has gained much in point of general interest through the judicious commentary by which each Fragment is illustrated. We are puzzled to understand the principle on which the references are given—why, for instance, recourse should be had to Valerius Maximus for a dictum which might have been taken direct from so familiar a work as Cicero's *De Senectute* (i. 5)—why, again, another Fragment on the same page (p. 184) should be "given on the authority of Arsenius" (a contemporary of Leo the Tenth), when a source we know not how many centuries older might have been discovered without difficulty in a much more accessible book. Arsenius, a notorious compiler, happens in this case to be transcribing from Stobaeus (*Floril.* 118, 29); and Stobaeus tells us that his excerpt comes ἐκ τῶν Ἀριστοτέλους χρειῶν. Whatever theory we adopt as to the date of the pseudo-Aristotelian *Chriae* (to be found in Heitz or Rose), it is obviously inappropriate to quote Arsenius for a fragment which may be traced back to a writer so early as the pseudo-Aristotle. We regret that the Editor felt precluded, by the plan of his edition, from discussing the philosophical position of Gorgias, and the various questions connected with the famous treatise "On Nature or the Non-Existent," commonly attributed to the great rhetorician. In expressing this regret, however, we must be understood to speak with a consciousness that when a single volume gives us so much that is excellent in its own special line—that of exact scholarship and careful exposition—it is perhaps hardly graceful on our part to ask for more. I. Bywater.

Scientific Notes.

Physiology.

Nerves of the Blood-vessels.—In the *Berichte der Kön. Sächs. Gesellschaft der Wissenschaften, math.-phys. Classe, Sitzung am* 6. *Mai* 1871, is a communication from Ph. Owsjannikow with regard to some experiments made by him at the Leipzig laboratory, under the direction of Prof. Ludwig, with a view to the determination of the position of the tonic and reflector centres of the nerves of the blood-vessels. It is well known that these centres lie higher up than the spinal cord, since, after section of that organ, irritation of a sensitive nerve which receives its roots from below the point of section produces no rise of blood pressure. In these experiments, which were made on rabbits, the animal was curarized and kept alive by artificial respiration. A canula was placed in the carotid, and the blood pressure was written off on an endless strip of paper by means of a manometer in the ordinary way. A series of trephine apertures were made in the hinder part of the skull on each side of the middle line, and through these fine-bladed lancets were successively introduced so as to cut successively different portions of the medulla oblongata. After the introduction of each lancet, the effect of the irritation of a sensitive nerve on the blood pressure was observed, a rise of pressure being taken as evidence that the centres in question were still intact. After the experiment was over, the brain was hardened in alcohol, with the lancets still *in situ*, and their exact position carefully determined by dissection. The result attained is that the spot from which the blood-vessel nerves of the rabbit receive their tonic stimulus lies in a space the upper border of which is situate from one to two millimetres below the corpora quadragemina, whilst the lower border is four to five millemetres above the calamus scriptorius. The length of the space therefore is about four millimetres. The observations further show that these centres lie somewhat on each side of the medulla, and not in the middle line. The author has confirmed these results obtained in Leipzig by further experiments made in St. Petersburg on cats. Removal of the whole or part of the cerebellum has no effect at all on the blood pressure. This organ thus has no connection with the centres in question. When a cut is made immediately in front of the centres a remarkable fall of pressure occurs, which continues for a long time. If the sciatic be now irritated so as to produce a rise of pressure and the nerve then allowed to rest, this fall of pressure recurs. It is moreover not a simple fall, but shows a remarkable periodicity. On separation of the blood-vessel centres this fall of pressure disappears. Experiments made by Ph. Owsjannikow on the action of chloral hydrate

show that this drug produces in strong doses the same effect as separation of the blood-vessel nerve-centres. When small doses are used, the pressure, fall, and irritation of a sensitive nerve produce a much less marked rise of pressure than in a healthy animal.

Nerves of the Wings of Bats.—In a communication published in the *Archiv für mikroskopische Anatomie*, Band vii. I., Schöbl gives a minute account of the termination of the nerves in the membrane of the wings of the bat. It has long been known that this part is highly sensitive; and Schöbl finds in accordance with this that the nervous supply is very rich. His descriptions show that there are no less than five layers, of which one is principal, fundamental, or central, whilst the other four are arranged successively nearer to the surfaces. The fundamental layer is composed of the large trunks: the layer immediately above, or superficial to this, contains nerve-trunks with from six to forty fibres in each, which form irregular plexuses, and, like the trunks of the preceding layer, accompany large vessels; the third layer lies in the plane of the capillary vessels, and is composed of fasciculi with only two to four fibres in each; the fourth layer is immediately superjacent to the capillary plexus, and consists of an irregular plexus of isolated pale nerve-fibres, with triangular, quadrangular, or polyangular nodal swellings; the fifth layer contains the termination of the nerves in the Reti Malpighii, the fibres are almost immeasurably fine, and form on the one hand a delicate plexus, and on the other terminal corpuscles, which are situated within the vitreous membrane of the hairs, with which they therefore coincide in number and position. These last he thinks minister to tactile sensations, whilst the terminal plexuses constitute the recipient surface for impressions of temperature, pain, &c.

Zoology.

Affinities of the Sponges.—In the *Annals and Magazine of Natural History* for this month (July) Mr. H. J. Carter contributes a paper on the ultimate structure of the calcareous sponges, confirming what has already been written on the same subject by Professor James Clark of Boston, U.S. The opinion of these two writers is that the Sponges as a group are most closely allied to the Flagellate Infusoria, and not, as Prof. Haeckel has proposed, to the Cœlenterata. Mr. Carter has expressed his opinion that they are more closely related even to the compound Tunicata, a view which is however dissented from by Mr. Saville Kent in *Nature* for July 6, who regards them as a distinct group of the Protozoa, allied on the one hand to the Flagellate Infusoria, in virtue of their uniciliated and funnel-bearing cells, and on the other, to the simpler Rhizopoda, in the presence of the general pervading and sarcode layer, subservient to the secretion of the common supporting skeleton. While opposed to Prof. Haeckel's proposition of uniting the Spongiadæ and Cœlenterata under one sub-kingdom, Mr. Kent does not deny to the latter the position of the next round of the ladder in the ascending scale of organized beings, though he at present considers there are too many links missing to permit of their fusion.

Appendiculariæ.—In "Notes on Appendiculariæ and the Larval Condition of an Acanthocephaloid Scolecid," published in the *Quarterly Journal of Microscopical Science* for this month, Mr. W. Saville Kent affirms his belief that the organisms first referred to are neither independent beings as regarded by Professor Huxley, Gegenbaur, and other authorities, nor transitional larval conditions as supposed by Leuckart. He would rather compare them to the free-swimming reproductive medusoid zooids of the fixed Hydroidea, and believes them to be the similarly related reproductive zooids of stationary Tunicata. The specimens supplying the material for Mr. Kent's deductions were captured by himself last year during his dredging expedition off the coast of Portugal. Hitherto spermatic filaments have been the only undoubted reproductive elements met with associated with the Appendiculariæ, but those recently encountered by Mr. Kent contained well-developed ova also in great abundance. Should the author's views be confirmed by the investigations of future observers, he will be the first to have recorded the occurrence of parthenogenesis in the molluscoidan sub-kingdom.

Australian Vertebrates.—Mr. Gerard Krefft, the Curator of the Australian Museum, Sydney, has published a synopsis of the indigenous vertebrate fauna of Australia, recent and fossil. The recent forms include 173 mammals, 670 birds, 158 reptiles, 42 batrachians, and 440 fishes, or a total of nearly 1500 species. Amongst these the marsupial mammalia number 110 species, or exactly double the residue of the same class, of which a single dog, 24 bats, and 30 rodents, are the representatives. Among the birds the parrot tribe is most conspicuous, numbering over 60 species: no woodpeckers, humming-birds, or trogons have ever yet been met with throughout the country. The reptilia are very numerous, including one species of crocodile, *C. porosus*, often attaining the enormous length of 30 feet, and occasionally becoming very troublesome to the settlers. The spiny lizard or *Moloch horridus*, inhabiting South and West Australia, is perhaps one of the most interesting and extraordinary representatives of the Lacertilian group. Five only out of the 80 known species of snakes are venomous, neither of which is so deadly in its bite as our English viper. The frog tribe, so well represented in Australia, includes numerous species of *Hylæ* or tree-climbing forms. Every sub-class and order of fishes is represented in the Australian seas and rivers, including the interesting dipno-ganoids *Ceratodus Forsteri* and *Miolepis*, closely allied to *Lepidosiren* of Western Africa, and congeneric with fossil forms of the early Devonian and Triassic formations. The synopsis now published is intended as the *avant-courrier* of a complete natural history of Australian vertebrata by the same author.

Development of the Gregarinæ.—Dr. Edouard Van Beneden, who has already won for himself so deserved a reputation as an embryologist, has been lately paying attention to the development of the *Gregarinæ*. Experimenting on the colossal species *G. gigantea*, discovered in the intestinal canal of the lobster, and described by himself last year, he has added many new facts to our previous knowledge of these lowly organized animals. That the adult gregarine undergoes a mode of encystment, and then breaks up into a number of small bodies called psorosperms or pseudonaviculae, which, after passing through an amœboid condition, again assume the form and characters of true *Gregarinæ*, is already well known; but at the same time these transitional stages of development have been enveloped in much obscurity. According to the eminent Professor of Liège, the first condition assumed by these bodies, after leaving the psorosperm, is that of a moner allied to *Amœba*, but differing from it in its greater simplicity, having no nucleus nor differentiated external membrane, and not projecting its pseudopodia to any distance. This body, to which Prof. Van Beneden applies the name of "cytod," shortly assumes a spherical shape and quiescent state, preparatory, however, to its undergoing its most singular metamorphosis. Two buds now spring from an unprescribed area of the surface of the cytod, one developing faster than the other, exhibiting a greater amount of vitality, and assuming an arm-like or vermiform contour. This arm-like appendage next becomes constituted at its point of junction with the body, and, finally separating itself from it, swims away, leaving its fellow to develop in a similar manner; the last one, in its course of development, absorbs into itself the remaining portion of the body of the cytod, and then takes on the active free swimming condition of its predecessor. To the cytod undergoing these stages of development, Prof. Van Beneden applies the name of "generative cytod," and to the free swimming bodies developed that of "pseudo-filariæ," this last term being suggestive of their close general resemblance to minute nematoid worms. The pseudo-filariæ, simple threads of protoplasm, attenuated at one extremity, and slightly swollen at the other, next show a tendency to become sluggish in their movements, and the body, diminishing little by little in length, becomes entirely quiescent. A dark spot now makes its appearance near the centre of the body, and, becoming more and more clearly defined in its outline, develops into a true nucleus and nucleolus; the anterior portion of the body at the same time develops a greater number of refringent granules, is separated by a transparent zone from the remaining one, and nothing now distinguishes it from a true gregarine, which has only to increase in size to become that fine cell of sixteen millimetres in length which has so well merited the name of *G. gigantea* applied to it by its accomplished discoverer. Prof. Ed. Van Beneden supplements his communication with remarks on the terms "protoplasm," "germinal matter," &c., now current among histologists. The first of these he accepts as designating the substance of the body of a cell which has undergone a first differentiation by the formation of a nucleus and nucleolus; and the second as expressive of the living elements of the cell, whether the nucleus has been differentiated or not. He proposes the new term of "plasson" to distinguish the primitive vital element before it has assumed a cellular condition, or developed a nucleus and nucleolus: of such structure are the whole of Haeckel's "Monera," as likewise the "cytods" of the *Gregarinæ* here described. Dr. Ed. Van Beneden's important contribution to science appears in the *Transactions de l'Académie royale de Belgique*, and is also translated at some length in the pages of the *Quarterly Journal of Microscopical Science* for July.

Geology.

On the Stratigraphical Distribution of the British Fossil Lamellibranchiata.—Mr. J. Logan Lobley has devoted much time and attention to this subject, and has, by means of tables and diagrams, shown what is the present state of our knowledge of this class of Mollusca. If we take the census of the British rocks, we find that Lamellibranchs are sparingly represented in the Lower but are more numerously met with in the Upper Silurian group, falling off again in the Devonian: their numbers greatly increase in the Carboniferous, are scanty in the Permian rocks and the Trias, attaining their maximum development in the Jurassic rocks. They are likewise largely represented in the Cretaceous and Tertiary seas. Without in the least degree wishing to underrate the value of such carefully prepared statistical papers as Mr. Lobley's, we must bear in mind that before we can generalise upon the distribution of any group in time, we must have the statistics of its life-history collected from every country in the world, a task which

has been undertaken in the case of the Cephalopoda by the illustrious Barrande in Bohemia. Even when this has been faithfully accomplished, the gaps to be filled up by future explorers are so vast that our generalisations break down, not merely on account of the imperfection of the geological record, but by the paucity of the explorations accomplished, as compared with the areas yet remaining to be examined by the palæontologist.

The Men of the Stone Age.—Where are the bones of the men who made the unpolished flint implements? Mr. W. Pengelly, in an article in the *Quarterly Journal of Science* for July, discusses this question. He points out that it is ordinarily assumed that the bones of man are as conservable as the bones of any other mammal, that no human remains have been found with the extinct cave animals, that until they have been so found the doctrine of man among the Mammoths remains unproven. Mr. Pengelly first shows that the preservation of human remains mainly depends upon the conditions of their interment. He cites numerous authorities in proof of human remains having been found in caves both in England and France associated with many extinct animals. He concludes, however, that it would have been as illogical had Robinson Crusoe doubted that a human being had made the footprint on the sand because he had never seen the individual, as that anyone should doubt the presence of man associated with the extinct mammalia, because his presence is only indicated by his implements and not by his osseous remains.

A Coral of the Chalk Sea found living at the present day in the Deep Sea.—One out of the many interesting results (announced by Professor Duncan *) which have accrued to science from the prosecution of deep-sea dredging by the *Porcupine* Expedition, carried out by Messrs. Carpenter, Wyville Thomson, and Gwyn Jeffreys, has been the discovery of a living coral, dredged up off the coast of Portugal in deep water (690–1090 fathoms), agreeing, says Dr. Duncan, exactly with the *Caryophyllia cylindracea*, of Reuss, found fossil in the Chalk formation. A similar coral was obtained in the deep-sea dredging off the coast of Havannah by Count Pourtalès. The identity of other living deep-sea forms, such as *Echinothuria*, *Rhizocrinus*, and the remarkable bird's-nest sponge, *Pheronema* (*Holtenia*) *Carpenteri*, with forms occurring fossil in the Chalk, confirms in the most interesting manner that doctrine of continuity of life under similar conditions which was so ably advocated by the late Professor Edward Forbes, and is among the fundamental principles of all sound palæontological reasoning. The deep sea at the present day is, however, not strictly speaking the Chalk sea, because certain forms living under similar conditions in the Chalk period are also now found living in the North Atlantic. For if, as Professor Ramsay justly observed, the bed of the Atlantic were raised, though many Cretaceous genera, and even species, might be found, there would on the whole be a very marked difference between the fauna of these Atlantic beds and that of the Chalk.

British Bears and Wolves.—Mr. W. Boyd Dawkins contributes an article under this title to the *Popular Science Review* for July, in which he treats of the value of bears and wolves in classification, and the light they throw on the ancient physical condition of Britain. Bears are not found in any deposit older than the Pleiocene: there are four species fossil—*Ursus arvernensis*, *U. spelæus*, *U. ferox*, *U. arctos*. The two first-named species are extinct, and occur in the oldest deposits; the two latter are only found in post-glacial deposits, and have continued down to the present day in Europe. Bears remained in England down to the tenth century. Wolves were not exterminated before the end of the fourteenth century. The last wolf was killed in Scotland by Sir Ewen Cameron in the year 1680. In Ireland they were not finally extirpated till the year 1710.

On some supposed Vegetable Fossils.—Mr. William Carruthers, F.R.S., notices an interesting series of remains which have been erroneously regarded as vegetable fossils. Commonest among spurious forms of vegetable fossils are the dendritic markings met with in rocks of all ages, often presenting, even to the careful observer, the appearance of perfect foliage. Mr. Carruthers notices two genera and three species of fossil fruits founded on what he believes to be impressions of air-bubbles in soft and moist clay-beds under pressure. He next noticed the occurrence of reptilian eggs in the Stonesfield slate, which had been considered to be fruits; and also from the Wealden, Isle of Wight. The curious prehensile hooklets, arranged in rows on the arms of a calamary, found fossil in the lithographic stone of Solenhofen, have been figured and described by Count Sternberg as a fossil vegetable! Many other curious cases of mistaken identity might be brought together, and form a capital chapter for a new volume of *Curiosities of Natural History*.

Chemistry.

Carnine, a New Base in Extractum Carnis.—Weidel describes (*Ann. der Chemie*, June, 1871, 355) the following method of obtaining this new compound. The extract of meat is to be dissolved in from six to seven parts of warm water, and precipitated with a concentrated solution of baryta water. On adding to the filtrate from this precipitate basic acetate of lead solution, a light brown precipitate is thrown down, which contains nearly all the carnine in the form of a lead salt, and is distinguished from the other lead salts deposited with it by its solubility in boiling water; some chloride of lead dissolves with it, but that can be readily removed with sulphuretted hydrogen. To remove the hydrochloric acid, the liquid is further precipitated with nitrate of silver; the chloride of silver is removed with ammonia, and the silver compound of carnine decomposed in boiling water with sulphuretted hydrogen. Treatment with animal charcoal and recrystallization furnished a pure product, which gave on analysis the formula $C_7H_8N_4O_3$. The new base forms about one per cent. of the extract, is soluble only to a slight extent in cold but readily in boiling water. It is insoluble in ether and alcohol, and has a bitter taste. It is not precipitated by neutral acetate of lead, and is unacted on by a concentrated solution of baryta water at a boiling temperature, even after the lapse of some hours. The hydrochlorate crystallizes in fine needles. Bromine water converts it into the sarkine of Strecker, $C_5H_4N_4O$. Nitric acid of ordinary concentration converts it into sarkine nitrate, $C_5H_4N_4O,NHO_3$. The new substance differs from theobromine, $C_7H_8N_4O_2$, in containing an additional atom of oxygen. An attempt to convert it with hydraiodic acid proved unsuccessful. The physiological action of carnine is being investigated by Prof. Brücke, and has as yet yielded no conclusive results.

Freieslebenite and Diaphorite.—V. Zepharovich (*Jahrbuch für Mineralogie*, 1871, 277) sought to determine the crystalline system to which the former mineral belongs, it having been severally assigned by Miller, Escosura, and Breithaupt to the monoclinic, rhombic, and triclinic systems. He examined some unusually fine crystals of freieslebenite from Przibram, and found they were rhombic. Finding its density however to vary not inconsiderably from that of specimens of this mineral from Freiberg and Hiendelaencina, he extended his enquiry to the specimens from these two localities, and arrived at the conclusion that the substance $Ag_4Pb_3Sb_4S_{11}$ is dimorphous. The rhombic species, to which he has given the name diaphorite, has a specific gravity 5·90, and occurs at Przibram and at Braunsdorf near Freiberg; the other species, true freieslebenite, is monoclinic, has a density 6·35, and is met with chiefly at Freiberg and Hiendelaencina.

Preparation of Indium.—K. J. Bayer, who has recently prepared a large quantity of the new metal in Prof. Bunsen's laboratory, recommends (*Ann. der Chemie*, June, 1871, 372) the following method. The Freiberg zinc is to be treated with common hydrochloric acid; the former being in slight excess. The residual metal is to remain in the solution from twenty-four to thirty-six hours, when all the indium precipitates. This metallic mud, separated from the solution and zinc, is to be warmed with a few drops of dilute sulphuric acid, to dissolve the basic chloride of zinc, and washed by decantation till all free acid is removed. Treatment with nitric acid causes the tin to separate as oxide, and by immediate addition of sulphuric acid, followed by evaporation, the lead also becomes insoluble. The sulphates are now treated with water and filtered, and on the addition of ammonia in great excess to the filtrate, copper, zinc, and cadmium remain in solution, while indium and iron, contaminated with a little zinc, cadmium, lead, and copper, are thrown down. From this precipitate, by solution in as little hydrochloric acid as possible and boiling with an excess of acid sulphite of soda till the liquid has no odour, the indium is obtained as a white crystalline powder, entirely free from any trace of these four metals. Should the iron be present in considerable amount, some may oxidize and precipitate, and render re-crystallization necessary. The product may still contain a little of the sulphites of lead and of soda, and can be separated from them by further solution in sulphurous acid, which does not take up the former, and subsequent precipitation by boiling, when the latter impurity remains in the filtrate. This white product has the composition $2In_2O_3,3SO_2,8HO$, the atomic weight of the metal being, according to Bunsen, who determined its specific heat, 56·7. It is completely insoluble in water, a property of great value in quantitative determinations of the new element.

A Remarkable Well.—A strange phenomenon was observed at Delft last year during the operation of boring for water. H. Vogelsang states (*Jour. Chem. Soc.*, June, 1871, 328) that on the 3rd of August the iron tube had been driven to a depth of 17·5 metres through a bed of alluvium, when gas began to rush up the tube with great violence, followed by a stream of water. The foaming column rose 14 metres into the air, and played for 14 hours without intermission; it then appeared after intervals of nine minutes. Its intermittent activity lasted till the 21st, and terminated with an evolution of gas alone. The water, when the eruption commenced, contained much iron in the form of carbonate, and had a temperature of 13° C. The gas burnt with a large but feebly luminous flame, and was composed, on the 6th of August, of 16·4 volumes carbonic acid to 83·6 volumes of marsh gas; and on the 16th of the same month, of 11·6 volumes of carbonic and 88·4 volumes of marsh gas. On the 21st the tube was driven farther, and at a depth of 30 metres a supply of water reached.

* Geological Society, June 7th.

A New Class of Colouring Matters.—Galleine is formed, according to A. Baeyer (*Ber. Deut. Chem. Ges. Berlin*, 1871, No. 10,555), from pyrogallic acid, when fused with phthalic acid, in the following way:—

$$\underbrace{3C_6H_6O_3}_{\text{Pyrogallic acid.}} - 2H_2O = \underbrace{C_{18}H_{14}O_7}_{\text{Galleine.}}$$

When recrystallized, it is either a brownish-red powder or forms small metallic green crystals. Boiled with much water, to which zinc and dilute sulphuric acid have been added, the dark solution becomes of a bright reddish-yellow, and deposits oily drops of galleine that slowly solidify into brownish-red crystals. They dissolve with great ease in ether, and the dark solution soon deposits brilliant colourless crystals which on exposure to the air crumble away to a red powder. Galleine, which has the formula $C_{18}H_{16}O_6$, whether in an aqueous solution or in the solid form, readily turn red, and are more instable than hæmatosyline. When galleine is heated to 200° with 20 parts of sulphuric acid, the reddish-brown solution turns of a greenish brown. On diluting the liquid with water, black flocks separate that are to be washed with hot water: this substance is cöruleine ($C_{18}H_{10}O_6$), and is formed in the following manner:—

$$\underbrace{C_{18}H_{14}O_7}_{\text{Galleine.}} - H_2O - H_2 = \underbrace{C_{18}H_{10}O_6}_{\text{Cöruleine.}}$$

Cöruleine heated with zinc powder yields a small amount of a hydrocarbon resembling chrysene; it dissolves in sulphuric acid with an olive-brown colour, and in aniline forming a very fine indigo-blue solution; with alkalies it produces a beautiful green that is unchanged in air; cloth dyed with this substance withstands the action of soap, and appears to be of great permanence. Reducing agents convert cöruleine into cöruline; the latter body dissolves in ether with a yellow colour, the liquid exhibiting a beautiful green fluorescence. It may be obtained direct from galleine by gently heating the latter with strong sulphuric acid. The Chinese have a green vegetable dye, Lo-Kao, that greatly resembles cöruleine. It also is blue, gives a green lake, and can be reduced by ammonia and zinc powder to a dark-red liquid that becomes green on exposure to the air. Phthalic anhydride, moreover, produces with resorcine a yellowish-red mass which is soluble in alcohol, and from which water separates yellow flocks of fluoresceine. With ammonia it forms a red liquid, which shows a most beautiful green fluorescence that is visible even after very great dilution; it dyes silk and wool a beautiful yellow without any mordant being required. Ammonia and zinc convert it into fluorescine, and the latter substance can be reconverted by chromic acid.

Action of Chloride of Phosphorus on Benzoylparasulphotoluolamide.—By heating together equivalent quantities of the benzoyl compound, $\left.\begin{matrix}C_7H_7SO_3\\C_7H_5O\end{matrix}\right\}NH$ and the pentachloride at 100°, Miss Anna Wolkow (*Ber. Deut. Chem. Ges. Berlin*, 1871, No. 10) obtained the compound $N(C_7H_7SO_2)(C_7H_5)Cl$, which, in presence of carbonate of ammonia, is converted into a substance having the following constitution: $N(C_7H_7SO_2)(C_7H_5)NH_2$. When the chloride of phosphorus is in excess, the former body is not obtained; but, in place of it, and probably the result of decomposition, benzonitrile, C_7H_5N, and sulphochloride of toluol, $C_7H_7SO_2Cl$.

Miscellaneous.

The *Contemporary Review* for July contains an article "on the Verification of Beliefs," by H. Sidgwick. This is an acute criticism of the experimental doctrine of the certitude of particular as opposed to the incertitude of universal intuitions.

The *Fortnightly Review* has a much more valuable contribution to the science of political economy in the shape of Prof. Cairnes' inaugural lecture in his chair at University College. This is a model of luminous exposition, especially directed against the superstitious worship of political economy by one school of social reformers, and the contemptuous depreciation of it by another. Both of these attitudes in its regards the writer sets down to misunderstanding of its real nature, which he establishes as that of a speculative science as much apart from immediate practice as geology or any other, as not concerned to "sanction" or conserve this or that set of canonic practices, but simply to observe and register their effects.

We have to announce, with the most sincere regret, the death of Mr. A. Keith Johnston, Sen., the eminent scientific geographer.

New Books.

BALL, R. S. Experimental Mechanics. Macmillan.
HAMMOND, W. A. A Treatise on Diseases of the Nervous System. With 45 Illustrations. New York: Appleton.
HUMMEL, A. Das Leben der Erde. Leipzig: Fleischer.
JAEGER, G. Lehrbuch der allgemeinen Zoologie. 1te Abtheilung: Zoochemie u. Morphologie. Leipzig: Günther.
MACNAMARA, C. A Treatise on Asiatic Cholera. Churchill.

Philology.

1. **Grammar of the Romance Languages.** [*Grammatik der romanischen Sprachen.* Von Friedrich Diez. Dritte, neu bearbeitete und vermehrte Auflage. Band I.] Bonn: E. Weber, 1870.
2. **Etymological Dictionary of the Romance Languages.** [*Etymologisches Wörterbuch der romanischen Sprachen.* Von Friedrich Diez. Dritte, verbesserte und vermehrte Ausgabe. 2 Theile.] Bonn: A. Marcus, 1869, 1870.

THE issue of a third edition of Diez's *Grammatik der romanischen Sprachen*, and of his *Etymologisches Wörterbuch*, must cause great satisfaction to all who take interest in the development of this young branch of philology. The fact of the first edition of the grammar having appeared in 1836-44, shows how quickly Romance philology has taken root and spread its branches all over Germany, and far beyond its boundaries, since the study only dates its existence from the first appearance of this work. We are bound to state the fact, because Diez himself, with amiable modesty, declines the honour of having created this science in favour of M. Raynouard, who wrote, indeed, the first *Grammaire des Langues néolatines*, besides a good many remarkable books which illustrate the Provençal language and literature, and have still preserved their usefulness. However, Raynouard's grammar, published in 1822, is only a first attempt, and, besides, it was written on purpose to prove his preconceived but erroneous opinion that the Provençal was the mediator between the Latin and the remainder of the Romance languages. This assertion, long since refuted, but maintained obstinately by Raynouard, prevented him from seeing the facts in their true and simple light, and made him there fore unable to establish a solid ground for a comparative grammar of the Romance languages. Scholars like Bruce-Whyte (author of the *Histoire des Langues romanes*, &c., Paris, 1841), who based their studies only on Raynouard, have been misled into the gravest errors. After Raynouard, another estimable attempt was made by L. Diefenbach in his treatise, *Ueber die romanischen Schriftsprachen*, Leipzig, 1831. This was, however, far too short to treat in an accurate way all the chief chapters of a comparative grammar. It is the merit of Diez to have created—or rather to have appropriated from other branches of science—a peculiar method for the grammatical study of Romance languages, and to have handled it with such mastery that the foundations of his first edifice are still, and will probably for ever remain, unshaken, though the building itself has undergone considerable modifications at the hands of Diez himself, and of numerous other Romance scholars.

The grammar of six literary languages, Italian, Spanish, Portuguese, Provençal (the poetical language of the troubadours), French, and Daco-Romance, spoken about the lower borders of the Danube, constitutes for Diez the special object of his study. (He excludes, and that with some injustice, the Rhaeto-Romance, or, as he calls it, Churwälsch, spoken in some valleys of the canton Graubünden and of Tyrol, and recently treated by Schneller, Rausch, Schuchardt, and myself.) Diez begins with a general survey of the various sources from which Romance languages derived part of their vocabulary, and determines the part we are to ascribe to those sources in the formation of the derived languages. The vulgar Latin is recognised as the prototype or chief source of all Romance languages, and is as truly continued by them as the so-called Anglo-Saxon is by modern English. This is not contradicted by the facts that classical and medieval Latin, Greek, and German have a large share in the dictionary of all Romance languages, the last especially in French and Rhaeto-Romance; or that many Arabic words were introduced into Spanish, still more Slavonic into the Daco-Romance; or that a good

many words of etymology as yet unexplained may be remnants of the extinct languages of the several native populations; for a still greater mixture of Germanic and Romance words occurs in the English language, and no one who has looked seriously into the history of that language would accede to the paradoxical opinion of M. Héricher (*Histoire et Glossaire du Normand de l'Anglais*, &c., Paris and Avranches, 1862–64), that the English language is derived in all its main features from the French.

After having given full lists of prototypes out of the various languages, or periods of languages, from which Romance words originated, and thus illustrated the composition of the whole of the Romance family, Diez proceeds to an examination of its several members in detail. He records briefly the historical and geographical facts which are of importance for their respective history and boundaries; he shows the proportion of un-Latin expressions to the Latin ones, and the chief sources from which the former were drawn; mentions the first literary monuments, and the earliest grammars and dictionaries; enumerates the dialectical divisions and subdivisions, and points out the distinctive features of each of those dialects. It is a vast mass of materials, condensed in the space of 70 pages and arranged in a very clear and agreeable manner; still it is this part of the whole book which has undergone, and will continually undergo, the greatest changes, and is even in its present state the weakest—a criticism which specially applies to the remarks on the distinctive features of the various dialects. Let us take as an instance the remarks on the Norman dialect, and the collateral Anglo-Norman. Diez chooses as representatives of this dialect the *Laws of William the Conqueror*, and the epical poem *Charlemagne*. The latter is published rather imperfectly by Francisque Michel, from a MS. in the British Museum. It clearly shows the distinctive features of the Anglo-Norman dialect; but those are only introduced by the scribe, as may be proved by an examination of the assonances (cf. V. Meyer, *Mémoires de la Société de Linguistique*, i. 253). The poet did not write his poem in the Anglo-Norman dialect, and it may be doubtful if he was a Norman at all. As for the laws of William the Conqueror, they were of course written originally in the Norman dialect, and would be of the greatest importance for both Norman and Anglo-Norman dialects if we had them in their original form; but that, unfortunately, is not the case. We possess only an unfaithful impression of the end of the sixteenth century, and some late MS. copies in which the orthography has been shamefully defaced by a mixture of earlier and later spellings. As we have no rhymes to distingush the original orthography from that introduced by each successive scribe, the value of the document is very low indeed in reference to this question, and it can by no means be used as an example of the Norman dialect of the eleventh century, unless the old genuine language and spelling be restored by a truly critical edition. As it stands, Diez's remarks founded on the poem *Charlemagne*, and on *William's Laws*, characterize neither the Norman nor a precise period of the Anglo-Norman dialect, but only the half archaic, half modernized spelling of later Anglo-Norman scribes. What we want to know is the oldest shape of the Norman dialect, and its successive alterations in France as well as in England; and this still remains to be done. Similarly Diez's remarks on the "Churwälsch" dialects are in several points inaccurate and insufficient.

After these introductory remarks, Diez approaches his proper subject, and treats in the first book on the sounds (vol. i.). The second volume contains book ii. on the inflexion, and book iii. on the formations of words. The third and last volume contains book iv. on the syntax. The second and third volumes of the third edition not yet having appeared, we shall leave aside their contents, and give only a short sketch of the first book on the sounds. This is divided into three sections: the first, starting from the original languages, shows how their sounds are modified in the derived languages. The Latin vowels are examined first, afterwards the consonants. The vowels are separated into accented and unaccented. Only the modifications of accented vowels are studied minutely; those of the unaccented, being more complicated, are traced in their main features. In studying the history of each separate accented vowel, due attention is paid to the divergences caused by its being originally long, short, or long by position, or by its being followed or preceded by certain sounds influencing the nature of the vowel. Thus, to give an example, the accented Latin vowel *a*, be it long, short, or long by position, remains unaltered in the Italian, Spanish, Portuguese, and Provençal; it is, however, no exception when the Latin word *primarius* is reproduced by the Italian *premiero*, the Spanish *premero*, the Portuguese *premeiro*, and the Provençal *primair(an)*, as the change is brought about by the influence of the following *i*. In French the vowel *a*, if not followed by a double consonant, is changed into *e*, and before *m*, or *n*, into *ai* (which sometimes occurs before other consonants as well): *e.g. flamme*, *mer* (*mare*) *pain* (*panis*). The Latin *canis*, however, is reproduced by French *chien*, whilst according to the rule just mentioned we should expect *chain*. Diez gives no reason for this apparent anomaly, which may, however, be explained by means of the old French. In old French *e*, deriving from Latin *a*, is changed into *ie* when preceded by a palatal, and in some other cases (cf. Bartsch, *Germania*, viii. 363, Mussafia, *Jahrbuch*, vi. 116). In modern French the *i* disappeared again, but was retained in the word *chien*, probably to make it more distinct from *chaîne* (catena).

In a similar way the treatment of every single Latin vowel in each Romance language is exemplified by a full list of well-chosen examples. The unaccented vowels are separated according as they are or not influenced by the hiatus. Some concluding remarks and a useful table finish this section. The next one treats in the same manner of the Latin consonants, single and double ones. We may mention here the curious fact that the Romance languages, too, offer a regular "Lautverschiebung," but in quite an opposite direction from that observed by J. Grimm in the Germanic languages. The Latin *tenues* are softened into Romance *mediae*, the *mediae* vanish or dissolve into *semivocales*. But this law applies only to the middle of the words, whilst the Germanic "Lautverschiebung" influences also the beginning. Two short paragraphs are devoted to the history of Germanic and Arabic sounds in Romance words derived from a German or an Arabic source. An inverse method is followed in the second section, where the sounds of modern languages are taken up as the starting point and traced back to their various origins. Several delicate points are however left untouched, as when the author omits to notice the origin of the different sounds of the French *e* (*é*, *è*), which is to be looked for in an etymological difference, *é* corresponding originally to a Latin *e* in position, and *è* to a Latin *a*. In old French both classes were strictly separated, as we learn by an examination of the assonances and rhymes; but the etymological origin has come to be overlooked, and the original pronunciation is nearly inverted. The third section treats of prosody: quantity, accent, and prosodical marks. There are no doubt many curious points still unsettled in the present edition, which can only be cleared up by future study; there are even some valuable recent researches of which Diez has made only a scanty use or none at all; still his work remains what it was, a true representative of Romance philology in its present condition, and a very

reliable standard book. If all is not so perfect as to render the book unimprovable, we must bear in mind the really overpowering mass of materials and the venerable age of the author, and then we shall not only readily accept his excuse in the preface—"I regret only that for lack of time I could not pay due attention to all that has been done during the last years"—but admire also how steadily a man of his age—he wrote his first book in 1817—has kept pace with the ever-increasing and progressing activity of the younger generation.

The new edition of Diez's grammar is accompanied by a new issue of his two-volume *Etymological Dictionary of the Romance Languages*, which has appeared twice before during these seventeen years. The first volume of this third edition came out in 1869, and the second a short time since. The dictionary enjoys still greater favour with the learned public than the grammar, on account of its usefulness to many besides special Romance scholars, not for any higher intrinsic value. Especially to the general linguistic student it renders very good service, sparing him much time, and enabling him without entering into detailed studies to form a clear idea of the etymology of Romance words, while to the Romance scholar it is an indispensable complement of the grammar. Whilst the latter explains the laws which preside over the transformation of sounds and forms, these laws are applied in the former work to special and oftentimes rather questionable cases. The different opinions promulgated about the etymology of a word are discussed and sifted, and the true or most probable is brought forward. Diez divides his dictionary into two distinct parts, the first comprising words common to all or most Romance languages, the second such as are peculiar to one or some of them. Only the chief words of course, and those of which the etymology causes any difficulty, are inserted; words like It. *vino*, Fr. *vin*, do not require any further explanation. In the first part the Italian form takes the lead because it generally is the nearest to the Latin. Every Romance word must therefore be looked for in the alphabetical order of the Italian form. The second part is divided into three sections: first come words peculiar to the Italian; next, words peculiar to Spanish and Portuguese; and thirdly, those that are peculiar to Provençal and French. For practical reasons the French form is put at the head of the articles in the third section, though the pure one is etymologically the Provençal. To facilitate the task of looking for words which are not at the head of the articles, and differ somewhat from the form at the head, an index is added. This in the former editions was divided into three parts—an Italian, a Spanish, and a French, which are now united in one. This is a real improvement; and we only wish that the index could be made more comprehensive in a fourth edition, as it is rather inconvenient to be obliged to look for many words at three different places: first in vol. i., because Spanish, Portuguese, Provençal, French, &c., words which differ but slightly from the Italian form are not entered in the index—as, for instance, the Sp., Pg., Pr., Fr. forms of the Italian *motta* = deposited earth; next, in the index; and third in one of the three sections of vol. ii. The articles have been revised carefully. There are many additions, and some articles are quite new. Still the discussion on many words is far enough from being ended, and on some will probably never be. Even those etymologies which are generally accepted as proved, happen sometimes to lose their solid ground and vanish away by the light of some insignificant form hitherto unnoticed. Absolute certainty is a thing unknown to every science, and especially to the science of etymology. Therefore let us be modest, exclaims Diez, even where everything seems to support our explanations! And modesty, indeed, is the golden thread which is traceable through the whole of his book, and we may add through all his writings and his whole life.

A few corrections and additions to some articles may terminate our notice. Vol. i. p. 80, Diez spells the Daco-Romance form of It. *branca*, Fr. *branche*, *brençe*; whilst in the grammar, vol. i. p. 472, he spells it *bryncę*. The same inconsistency occurred already in the second edition. Vol. i. p. 428, Diez asserts that the Latin *tuba* is still preserved in the Daco-romance *tobę* (a drum), and in the Rhaeto-Romance *tiba* (an alp-horn); but the latter is far more likely the Latin *tibia*, as, in the "Oberländisch" dialect to which the word belongs, only the Latin *ū* is changed into *i*, not the *ŭ* as well, as Diez asserts erroneously. Besides this, I doubt very much the identity of It. *tromba*, Fr. *trompe*, Old High Germ. *trumpâ*, with the Latin *tuba*, *r* and *m* being inserted for the sake of bringing out an imitation of the sound produced by the instrument. Vol. ii. p. 236 and p. 408, Fr. *braire* and *raire*, Engl. *to bray*, are derived from a supposed Latin *ragire;* but they are of Germanic origin—Old High Germ. *brahtan* (cf. my *Dissertation*, Bonn, 1868, p. 18). Edmund Stengel.

Pronunciation, Vocalism, and Accentuation of Latin. [*Ueber Aussprache, Vokalismus und Betonung der Lateinischen Sprache.* Von W. Corssen. Zweite umgearbeitete Ausgabe. Zweiter Band.] Leipzig: Teubner, 1870.

The second volume of this work embraces the continuation of the long chapter on vocalism (pp. 1–793) and the chapter on accentuation (pp. 793–1000). The continuation of the chapter on vocalism contains four sections:—1. (The longest and most important) on the changes of vowels, whether due to weakening or degeneracy, as of *a* to *o* and *e:* to the influence of neighbouring and kindred consonants, as of *a*, *u*, to *e* before *r:* to the influence of neighbouring and kindred vowels: or to the influence of composition (as in the case of *iacio* to *conicio*). 2. On the shortening of vowels, whether in final or internal syllables. 3. On the destruction of vowels by disappearance from the middle of words simple or compounded, or by their dropping from the end. 4. On irrational vowels, or vowels without measurable quantity: including a treatment of ecthlipsis, crasis, synizesis, and synaloephe. In the first section the most interesting and perhaps the best worked division is that in which the author traces the change produced in vowels by the influence of neighbouring consonants (pp. 60–334). This is a field on which, if we mistake not, the future labours of comparative grammarians are likely to be much concentrated. As it is impossible in the compass of a notice like the present to give an idea of the whole scope of a discussion which ranges over so wide an area, it will be best to select a few points on which the author's views seem open to criticism.

P. 172 (participials in *-minus* and *-mnus*). *Aerumna* is connected by Corssen not with αἴρειν but with *ira*. This view seems open to two objections: first, that no such change as that from initial *i* to initial *ai* can elsewhere be made out in Latin: second, that the meaning of *ira* cannot, except by the most violent straining, be in any way connected with that of *aerumna*. "*Aerumnulas* Plautus refert furcillas, quibus religatas sarcinas viatores gerebant," says Festus, in the passage quoted by Corssen. In whatever way *aerumnula* came to bear this meaning, it seems clear from this passage that *aerumna* originally meant a burden; and it does not follow, as Corssen urges, that because αἰρομένη does not bear this sense, that *aerumna* may not have originally meant "a thing lifted." Though its stem is found in Greek, the word is probably of purely Latin growth, like *columna*, *calumnia*, *autumnus*, &c.

Necessus is said (p. 238) to be a participle with the

meaning "not yielding;" the ending in *-us* being explained as neuter, after the analogy of *vulgus*. All that supports this view seems to be the slender analogy of a proper name *Successus* (Corssen, *Kritische Nachträge*, p. 272). It would seem more natural to take *necessus* as an abstract substantive of the fourth declension with the meaning of "a not moving," as *successus* means properly "a moving up." *Necessum* must either be the neuter of the participle or the abstract noun or supine from *ne-cedere*. Whether *necesse* be an abbreviation of *necessum*, or an independent neuter adjective, or a formation based upon a falsely supposed connection with *esse*, is not easily ascertainable with certainty.

It seems very questionable whether, as Corssen states, pp. 292 follg., and incidentally in several other places in the volume, the participles of the second conjugation (*ē* verbs) in *ĭ-tus* were contracted from previously existing forms in *ē-tus*. Several reasons may be alleged for the view that these short forms come from original stems in *ĕ*, and that the infinitives in *ē-re* and tenses following them were independent and probably later formations. (1) If this be assumed to be the case, the participles in question would be seen to follow the analogy of formations like *son-ĭtum*, *crep-ĭtum*, which come directly from *sonĕre* and *crepĕre*, though *sonāre* and *crepāre* exist by the side of the latter. (2) There are a great number of cases in which verbs follow both the *ĕ* and the *ē* conjugation: *fervĕre fervēre*, *scatĕre scatēre*, *tui tueri*, &c.: a double formation which may have been more widely extended in old Latin than it is in the remains of the language which we possess. (3) The perfects in *-ui* (*mon-ui*, &c.) are allowed by Corssen himself to be formed on the analogy of the third conjugation, and not to be contracted from forms in *-evi*. It seems more rational to explain the participles in the same way than to suppose a contraction for which there is little if any analogy in Latin. (4) The formations in *-mentum* and *-dus* from *ē* verbs have a short and not a long vowel, except where there is actually a perfect and supine *ē-vi*, *ē-tum* (compare *horri-dus*, *docŭ-mentum* with *incrē-mentum*). (5) The stems of the analogous conjugation in Greek end in ε, not in η (φιλέ-ω, &c.): the *ē* of *mon-ē*, *monē-s*, *monē-mus*, *monē-tis* may be due to contraction, and that of *monē-re*, *monē-rem* to a simple strengthening of the vowel before the auxiliary stem, like that of φιλῇ-σαι and φιλή-σαιμι; and so with *monē-bam* and *monē-bo*. (6) Like the *ē* declension and *ā* conjugation in Latin, the *ē* conjugation seems to be, to a great extent, a purely Italian formation: a fact acknowledged and dwelt on by Corssen at p. 732 of this volume. Greek, for instance, has φλέγ-ειν, μέν-ειν by the side of the later Latin forms *fulg-ēre* and *man-ēre*, which in perfect and participle preserve a consonantal formation: it happens but rarely that (as in the case of *arc-eo* = ἀρκέω) a Greek indicative of the ε conjugation corresponds with the Latin indicative from the same stem. (7) Those stems of the *ē* conjugation in which the *ē* is preserved in perfect and supine are either monosyllabic (*crē-* *flē-*, *nē-*, *suē-*), and therefore not declinable in any other way, or compounds (*delē-*, *exolē-*), and therefore of late growth: not to say that in the case of *olēre* or *olēre* and its compounds the existence of *adultus* and *abolitus* by the side of *exolētus* proves the previous existence of two forms of the participle of the simple verb. (8) Most of the participial formations in *ē-tum* (*arbor-ē-tum*, &c.) and proper names in *ē-tius* (*Leu-ētius*, &c.) seem to be purely of Latin growth, and cannot be proved older than the supines and participles in *-ĭtum*, *ĭ-tus*.

This leads us to make one observation on the changes of vowels in compounded words, which are treated of pp. 396–436. Corssen calls attention to the fact noticed by Priscian, that verbs of the first and second conjugation often escape, in composition, that weakening of the stem-vowel to which, under the same circumstances, verbs of the third conjugation are liable. Different reasons may, in different sets of words, have contributed to bring this about: one, however, we venture to think, Corssen has overlooked, viz. that a great number of the verbs in *ā* (e.g. *cavare*, *gravare*), are quite recent formations from adjectives, and therefore more likely to have preserved their integrity under the influence of composition: while the consonantal conjugation represents the oldest stratum of Latin verbal stems. The same observation applies to verbs like *constabilire*, *elargiri*.

In the section on the shortening of final vowels (pp. 436, follg.), Corssen has occasion to review the labours of the two schools of metrical criticism, represented respectively by the names of Lachmann and Ritschl. In investigating these apparent violations of the rule of position in Plautus and the older Latin poets, which consist in preserving the length of final syllables which were subsequently (owing to the backward position of the Latin accent) shortened—syllables such as *-or*, *-at*, *-it* of the perfect, and others, Ritschl and Fleckeisen pushed their conclusions too far when they attributed to Vergil and the later poets who occasionally revived those scansions, that consciousness of the original quantity of the syllables in question which was doubtless present to Plautus and Ennius. Lachmann, on the other hand, confined himself too much to the facts presented by the later poetry, and contented himself with merely indicating the line of epigraphical research which Ritschl has pursued with such success in the elucidation of this question. Following in Lachmann's steps, Lucian Müller denies even to Ennius any but metrical justifications for such scansions as *sorōr*, *servāt*, and refuses, as we think somewhat unfairly, to recognise the reality of the work which the Plautine critics have done here. Corssen, surveying the ground without prejudice, adopts what seems the sensible conclusion when he pronounces that Vergil was indeed consciously imitating Ennius in such lines as—

"Et Messapus ecum domitōr et fortis Asilas,"

but that the imitation was the result not so much of the reflections of his etymological conscience as of his antiquarian taste and poetical tact. *Domitōr* would be the natural scansion to Ennius, but an archaism to Virgil. Corssen's carelessness, however, in quoting from Ennius "Partem fuisset de summis rebus agundis" as a proof of the original length of the third syllable of *fuisset* should be noticed; a carelessness like that of attributing *nuntii* to Ovid (p. 703).

In the section on the disappearance of vowels (pp. 518–607) Corssen, like many others, defends the theory that forms like *fac-so*, *fac-sim*, with their corresponding forms in the vowel-conjugations, such as *servasso*, *prohibessit*, are contractions of the ordinary future perfect and perfect subjunctive *fecero*, *servavero*, *prohibuero*. There seem, however, to be several reasons for supposing Bopp to have been right in considering such forms to have been due, like the similar Greek forms ἄξω, &c., to the simple addition to the stem of the auxiliary *(e)so* or *(e)sso*. First, if *fac-so*, *fac-sim* are contractions for *fec-ero*, *fec-erim*, why should they not have preserved the lengthened vowel and been written *fec-so*, *fec-sim*? There is surely no other instance in Latin in which a contraction involves a reversion from *e* to *a*. Again, in the case of the stems in *a*, the usual form of contraction for these tenses, in all periods of Latin, preserves the *r* (*amaro*, *amarim*): and if *amasso* = *amavero*, it is strange that we should not find a pluperfect *amassam* for *amav-*

eram. Still harder is it to see how *habessim* should grow out of *habuerim*. It seems simpler to suppose that these tenses were formed by adding *-so* or *-sso* (*adessint* = *aderunt*, *Corp. Inscr.* i. 198, 63) and *-sim* or (*e*)*ssim* to the stem. Thus *servasso*, *locassim*, would be in form respectively future indicative and future subjunctive, analogous to the Greek future in -σω, -σεις, -σει, and in -σω, -σῃς, -σῃ. If objection be taken to the setting up of a hypothetical subjunctive present (*e*)*ssim*, corresponding to the imperfect *essem*, the supposition is still open that *locassim* = *locasim*, the variation between a single and double *s* being common in old Latin, and analogous to the variations in Homeric Greek between τελέσω and τελέσσω, ἔσομαι and ἔσσομαι, &c. The most formidable objection to this theory is taken from the fact that these forms in *-so* are generally used in the sense of the second, not of the first, future: that if, for example, *fac-so* were a simple future in formation, it would be, which it is not, a simple future in meaning. The only fair answer to this is that a particular formation does not always carry in one language the same meaning that it does in another. *Sim* (= *siem*), for example, is used as a conjunctive present in Latin, as an optative in Greek. No such objection can, however, be brought against the explanation proposed of the forms in *-sim*, *assim*, and *essim*, the use of which as *futura exacta* corresponds to the similar use of the Greek conjunctive aorist (or future?) in -σω, -σῃς, -σῃ.

In the remaining portion of the section on vocalism should be noticed an ingenious theory started p. 692, that genitives plural like *ferenti-um*, *amanti-um* (for *ferent-um*, *amant-um*) may possibly be formed from feminine stems in *i*. The change of Corssen's view (or rather the return to his earlier view) on the nature of the genitive in *ai* and *ei* has already been remarked upon in the pages of the *Academy* by Prof. Max Müller. It may be observed in passing that the truth of the latter scholar's assertion that *s* final after a long vowel is never dropped in Latin seems to be rendered doubtful by the existence of neuter genitives like *cornu* and *gelu*, which must be abbreviations for *cornus* and *gelus*.

The third chapter, on accentuation (pp. 795–1000), is the most readable and interesting part of the book. Here, as a great part of the author's task consists in stating the facts as handed down by the grammarians, there is not so much difference between the first and second editions of his work as in the chapter on pronunciation and vocalism. It is more important to observe that Corssen has not seen any reason for modifying his original views on the relation of accent and quantity in Roman poetry. If we are not mistaken, Ritschl and those who hold with him that the Roman comedians consciously strove to attain an agreement between quantity and accent (an agreement which they suppose to have been gradually given up, until in the hexameter poetry of the Augustan age quantity entirely prevailed) will find it difficult to refute Corssen's arguments. By a somewhat quaint arithmetical computation applied to the Latin poetry of all periods, Corssen endeavours to prove, and more or less succeeds in proving, that agreement between accent and quantity, where it exists, is not more frequent in the older than in the later writers: and that it is not due to the poet's intention, but to the laws of Latin accentuation, and (if so be) to the nature of the metre in which it occurs. Such a hypothesis is far simpler and more natural than that adopted by Ritschl and Fleckeisen, and spares the necessity of a great deal of alteration in the text of Plautus. There are other arguments on Corssen's side on which he does not lay stress, such, for instance, as the consideration that in a language like Greek or Latin, where accent and quantity existed side by side as independent agencies, a poet would be more likely to aim at giving them alternate play than to subordinate his verse to the influence of one power alone. And this consideration would not be more powerful with an epic poet than with a dramatist, whose aim it is to represent ordinary conversation not as it is, but with an admixture of an artificial element. This line of argument, however, which it would require great critical insight and mastery of the facts to push to its conclusions, is secondary to that which Corssen has adopted, a statistical exhibition, namely, of the facts themselves. It is to be hoped that Ritschl will give to Corssen's remarks the generous recognition and thorough examination which they deserve, and not be content, as hitherto, to pass them by with mere expressions of disapproval.

It should be remarked generally in conclusion that there is a certain cumbrousness about Corssen's whole work, partly no doubt because the subject has outgrown, under the author's hands, the artificial arrangement of the prize-essay which formed the basis of the book: an arrangement which necessitates not only the repeated employment of the same facts to illustrate different points, but the exclusion of many questions of Latin grammar and formation which are really akin to, and suggested by, those actually treated, but which could not be legitimately touched upon if the terms of the imposed thesis were to be rigidly observed. The chapter on vocalism is virtually an inverted treatise on the formation and etymology of Latin, the contents of which would be more readily accessible were they distributed into two parts, one of which should form a comprehensive work on Latin formation, and the other a lexicon of roots. But setting drawbacks of this sort aside, there can be no doubt that the book may be taken as marking an epoch in the history of Latin philology. It is a signal example of the method which is now more and more beginning to be imposed upon all students by the increasing accumulation of facts and views in every corner of the field of knowledge—the method of special as opposed to general research, which will probably have yet to be pursued for a long time before the facts can be so ordered as to be ready for the impress of great and final generalizations. Another generation of students will probably have passed away before many of the problems touched on in Corssen's work are considered settled: the task of the present seems to consist in collecting facts and starting hypotheses. H. NETTLESHIP.

Intelligence.

M. Helferding, one of the most distinguished Slavonian scholars of Russian nationality, has just published at St. Petersburg a work intended to facilitate the transcription of all the Slavonian languages into Greco-Slavonian characters. This work, published at the expense of a Slavonian benevolent committee (Slavjansky blagstvaritelny Komitet), consists of an introduction, in which the author expounds the principles of his Panslavonian alphabet, and of a certain number of texts of the Gospels printed in two columns; one column containing the original Bohemian, Polish, Croat, and other texts, according to the accepted orthography; another the transcription according to M. Helferding's proposed system. The work is one of much interest in the study of comparative philology.

We have already announced the publication of Mr. E. H. Palmer's Catalogue of the Arabic, Persian, and Turkish MSS. in the Library of Trinity College, Cambridge. It contains apparently none but common works, such as the Qur'ān, the Mo'allaqât, the works of Sa'adi, Diwāns of Hāfiz, 'Anwari, Khaqānī and Jāmī, &c., or else compilations which require no special notice; but we have perused it with great interest, and recommend it to the student of Oriental languages. There is an excellent index of the titles of the MSS., another containing the names of authors, as well as a list of the works quoted in the catalogue. The system of transliteration adopted in this work seems to us most unfortunate, and we are at a loss to think why Mr. Palmer writes

Ḥwarazim and Buġdād, instead of Ḥwarazm and Bagdād, which represent the real pronunciation of these words. The few Hebrew and Samaritan MSS., described by Mr. W. A. Wright with his well-known accuracy, are chiefly extracts from the Bible, Targumim, Jewish prayer-books, and works of Maimonides. There is also a copy of the Samaritan version published by Jugebold under the title of *Chronicon Samaritanum.*

Prof. A. Riese of Frankfort-on-the-Main has just published the first volume of a new edition of Ovid, containing Ovid's erotic poems, with an appendix of "Poëtae Ovidiani Nux," and the spurious epistle of Sappho to Phaon. The edition is preceded by an account of Ovid's life and works, and critical observations on the most important passages. Prof. Riese is inclined to consider the fragment commonly entitled *Medicamina faciei* as the work of some later poet who imitated Ovid's style.

Contents of the Journals.

Götting. gelehrte Anzeigen, June 14.—Ewald criticizes Philippi's book on the *status constructus* of the Semitic languages from his own point of view, that Arabic is comparatively a late formation, especially as to its three case endings. Philippi's whole view proceeds on the opposite assumption, that Arabic is the earliest form of Semitic, and that the sister languages have lost their cases.—Benfey contributes an important notice on Πύθων ὄφις, as corresponding to the Sanscrit *áhis budhnyás, i. e.* "serpent of the deep" (of air), who holds back the clouds from raining till the sun-god releases them by his shafts of light. He also points out the importance of these *binary* combinations, for comparative mythology, such as φοῖβος Ἀπόλλων, Ζεὺς πατήρ, Τριτωνὶς Ἀθήνη, and so on; and defends the connection of πυθων with βυθος, &c., on etymological grounds.

Journal Asiatique, vol. xvi. No. 59.*—M. Renan's Annual Report. No. 60.*—Recherches sur la langue arménienne, par M. K. Patkanoff. (Mémoire traduite du russe par M. E. Prud'homme; revue sur le texte original et annotée par M. E. Dulaurier.) [Armenian students have hitherto paid too little attention to the ancient dialects of which M. P. enumerates eleven, besides the literary Caucasian or Ararat dialect, called *Ostanic.* The dictionary of the Medietarists contains about 700 and that of Smyrna about 6000 words not found in the ancient literary language. The first chapter treats of the sounds of the letters and their equivalent in the cognate languages; the second chapter on grammatical inflection, declension of nouns and pronouns, and verbal flection. Finally a note by the editor, M. Dulaurier, on the Armenian vowel-system.]—Nouvelles et Mélanges: Remarks, by L. Leclerc, on M. Clément-Mullet's paper on Arabic botanical names.—Review of J. G. E. Hoffmann's De Hermeneuticis apud Syros Aristoteleis, by H. Derenbourg. [Favourable.]—Note, by A. Harkavy, on two geographical names in the Assyrian cuneiform inscriptions.

Romanische Studien (Halle), part i.—1. Karle Witte discusses the MSS. and editions of Michelagnuolo's poetry.—2. Justus Grion describes exhaustively the Vatican MS. 3793, containing 313 canzoni and 683 sonetti of 93 Italian poets, all of whom wrote before or during the early period of Dante's life; only one-third is printed. Grion gives the first verse of each poem, the author, and date of publication. A valuable alphabetical list of the authors and of the persons to whom poems were addressed is appended, as well as a letter by Karl Witte, calling attention to Chiaro Davanzati, the most productive of these predecessors of Dante, of whose poems only 17 sonnets and two canzones are made known, whilst about 100 more sonnets and 60 canzones remain unpublished.—3. The editor gives a revised text of the song on the sun, by Francesco d' Assisi, based upon four MSS. He had already on a former occasion (Damaris, ed. by Lud. Giesebrecht, 1864, part iv.), spoken about this poem.—4. The ed. publishes for the first time a prose treatise of Jacopone da Todi, the most distinguished of the successors of S. Francesco d' Assisi, and author of many poems. He gives besides a large collection of bibliographical notices on prints, translations, and MSS. of Todi's works.—5. K. Witte concludes with a German translation of Savanarola's poem, "Che fai qui core."

Hermes, vi. 1.—M. Haupt: Conjectanea. [On Plutarch: some instances are collected in which hiatus is allowed.]—W. Hentzen: Inschriften aus Nemi. [Found on the site of the temple of Diana. One relates to an unknown C. Salluius Naso, a *legatus pro praetore* in the Mithridatic war: one is a list of offerings apparently to two temples of Isis and Bubastis, within the circuit of the great temple: a third relates to a restitution by Hadrian. M. Mommsen adds a note on *legatus pro praetore.*]—R. Schöll: Die Speisung im Prytaneion zu Athen. [Shows how this custom descended from the Homeric "banquets of the chiefs" assumed the form in which it appears at Athens. There was a special connection, of doubtful origin, with Eleusis, and with the Dioscuri. The Archons had a separate public table in the Thesmothesion; but the πρυτάνεις τῶν ναυκράρων, being the older magistracy, had the right of σίτησις εν πρυτανείῳ, and their connection with it is shown by the Kolahretai. The later Prytaneis of the Kleisthenean constitution assembled in a third place, viz. the new "Tholos"—a sort of colony from the ancient Prytaneion—to which, however, the honorary feasting was not transferred. Light is thrown on the subject by an inscription, probably of the time of Pericles, of which a full discussion is given. It is apparently a decree regulating the classes of persons entitled, the most certain being the representatives, according to primogeniture, of Harmodius and Aristogeiton, the victors in certain contests—probably the gymnastic—of the four great Games, and the successful generals of the State. The maintenance given to poor and deserving citizens is distinct. Later Athens became lavish of this as of other honours in proportion as sound civic virtue was rare. In the "after bloom" of the Hellenistic time a new Prytaneion, in which the Prytaneis and honoured guests again feasted together.]—R. Hercher: Zu griechischen Prosaikern. [Contains *inter alia* the (inedited) conclusion of the 9th epistle of Anacharsis, and a collation of Iamblichus' περὶ τῆς Νικομάχου ἀριθμητικῆς εἰσαγωγῆς from a Laurentian MS.]—H. Jordan: Der Brief des Quintus Catulus de Consulatu suo. [Appears from Fronto to have been a political brochure, in the epistolary form.]—H. Mommsen: Ueber die dem Cassius Dio beigelegten Theile der planudischen und der constantinischen Excerpte. [Planudes, a monk of the 14th cent., used for the first period—not Dion, as Mai supposed, but Johannes Antiochenus; then from Sulla onwards, an abstract of Dion completed from Plutarch's Sulla; finally, a continuation of Dion down to the Emperor Gratian. In all cases, however, Johannes of Antioch may be the immediate source used. The same appears in the Constantinian title, *De Sententiis*, in the excerpts attributed by Mai to Dion. In fact, Dion's work has in later Greek literature somewhat the place of Livy in Latin: and among the writers of abridgments and continuations of it Johannes of Antioch holds an important and not sufficiently recognised place. A separate collection and edition is much wanted.]—V. Köhler: Der Areopag in Athen. [Discusses its topography and bearing on the history of the city. As a preliminary point, a new site is suggested for the "Orchestra" where the statues of Harmodius and Aristogeiton were. The court of the Areopagus is regarded as originally judicial and not political. The name is explained from a period when the hill was a frequent basis of attack against the city on the Acropolis. The Deme Kollytos is placed to the north of the Agora.]—A. Gemoll: Exercitationes Vegetianae.—J. Bernays: Aristoteles über den Mittelstand. [Suggested by an emendation in Madvig's *Adversaria critica* (p. 466) of Arist. *Pol.* iv. (vi.) c. 11, ἔτι δ' ἥκισθ' οὗτοι φυλαρχοῦσι καὶ βουλαρχοῦσι. It is clearly shown that οὗτοι refers not to the extremes of fortune, but to the middle class: the sense requires φυγαρχοῦσι καὶ σπουδαρχοῦσι; the latter word a familiar term at Athens for place-hunting; the former coined by Aristotle to express the opposite and in his time perhaps equally real evil of the "shunning of office" by men of wealth and education.]—R. Schöne: Zu Hygin. [Fab. 95, *pilcum sumpsit* = put on the dress of an invalid of Plato, *Rep.* 406.]—F. Jonas: Zu Seneca. [A quotation from the *Ludus de morte Claudii* in the Vita Walae of Paschasius Radbertus, *i. e.* before the death of Louis le Debonnair.]—Th. Mommsen: Inschrift des L. Verginius Rufus. [Belongs to A.D. 69. The formula *pro salute et victoria* gives Rufus a quasi-imperial style. He was of Milan, but a neighbour of the younger Pliny, who belonged to Como: his lands lay where the inscription was found, on the frontier between the territories of these two cities.]

New Publications.

Bruining, A. Bijdrage tot de Kennis van den Vedânta. Leiden.

Dis, li, dou vrai aniel. Die Parabel v. dem ächten Ringe, französ. Dichtg. d. 13. Jahrh., aus e. Pariser Handschrift zum 1. Male hrsg. v. Adf. Tobler. Leipzig: Hirzel.

Itinerarium Alexandri ed. Didericus Volkmann. Naumburg: Domrich.

Lieblein, J. Hieroglyphisches Namen-Wörterbuch genealogisch u. alphabetisch geordnet. Nach den ägyptischen Denkmälern hrsg. 1. Lfg. Leipzig: Hinrichs' Verl.

Stein, Dir. H. De vetere quodam lexico Herodoteo. Berlin: Calvary and Co.

ERRATA IN No. 27.

In page 332 (New Publications), for "Jahns" read "Jähns."

,, 344 ditto for "Ista" read "Irta," and transfer title of book under *History.*

* These are the numbers for July and August last, only just received.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Tuesday, August 15, *and advertisements should be sent in by August* 10.

Subscribers to THE ACADEMY who find it difficult to receive the numbers regularly through the newsagents may secure their regular delivery on the day of publication, post-free, by order to the publishers, at 12s. per annum, or 6s. for 6 months, payable in advance.

General Literature.

The Poems of Ossian, in the Original Gaelic, with a Literal Translation into English, and a Dissertation on the Authenticity of the Poems, by the Rev. Archibald Clerk. Together with the English Translation by Macpherson. In two volumes. Edinburgh and London: William Blackwood and Sons, 1870.

[First Notice.]

It is but natural that a difference of opinion should exist regarding the expediency of this attempt to revive the weary controversy originated by Macpherson a century ago. The admirers of Ossian, *i.e.* the "Gaelic" or Scotch Ossian, who form the vast majority of his readers, will doubtless acknowledge, with becoming gratitude, the patriotic spirit of the nobleman "at whose request, and through whose liberality," these splendid volumes have been published; and the industry of the editor who has laboured to render the text worthy of the style and subject of the work. But the unbelievers in the "Gaelic" Ossian, who constitute no insignificant portion of the educated classes at home and abroad, will probably consider that Lord Bute's generosity, and Mr. Clerk's industry, might have been more usefully employed than in the publication of what they believe to be a spurious work.

The Advocates' Library at Edinburgh, which once had the honour, as alleged, of possessing Macpherson's "originals," contains a few Gaelic MSS. of respectable antiquity, the publication of any one of which, by affording a fair linguistic standard of comparison, would prove of more practical utility in testing the real age and character of the Scotch Ossian than all the dissertations that have been, or may yet be, written on the subject; and it is to be hoped that, through the means either of public spirit or private munificence (qualities for which the Scotch are pre-eminently distinguished) this standard will soon be supplied, even though it should be to the destruction of the delusion (as some think it) respecting the genuineness of the Gaelic text, under which the Scotch mind has so long laboured.

Meanwhile, the malcontents will not be sorry to possess, in the present work, what professes to be the most correct version of Macpherson's "original," together with his translation, accompanied with another translation which the editor assures us is thoroughly accurate.

The editor, who sometimes, to his credit, evinces but a faltering faith in the genuineness of Macpherson's Gaelic text, thinks that, in the present state of our knowledge, the question as to its authenticity is "far from ripe for a final decision." But why not? Are we to wait until some of those disembodied spirits, which Ossian sometimes represents, like ships and mortals, as "walking" (*ac siubhal*), shall reveal to us the actual agents with whose assistance the clever and unscrupulous Macpherson amplified various traditional descriptions of totally different episodes, and amalgamated them into one imposing if not very harmonious whole? Or must we wait until some new Schleicher shall succeed in recovering for us the primitive Aryan language, in order that we may thereby gauge the originality of the "Gaelic Ossian"? I speak in the name of a few Celtic scholars, acquainted, not alone with the most ancient known forms of the Irish language, but also with those of its youngest, most wayward, and undutiful daughter, the Gaelic of the Scotch Ossian; and I say that the time *has* come. And I venture further to observe that, if competent Irish scholars have not of late questioned the authenticity of these poems, it was in no small degree owing to the hope that some Scottish Gael, more candid or more intelligent than others, would endeavour to disregard provincial prejudices, and venture to demonstrate, in the interest of science, that these poems, as they now stand, were not genuine emanations from the "king of song."

The editor asserts (p. li) that "it is certain, and according to the unanimous verdict of Celtic scholars, that the Gaelic is the original language of these poems." By "Celtic scholars," and "Gaelic," Mr. Clerk no doubt means persons acquainted with, and the dialect of the Celtic language known as, the Gaelic of Scotland. This admission must simplify the question as to the age of the Scotch Ossian, for Gaelic poems could not have been written before the Gaelic language existed. How old is this most corrupt dialect of the old Celtic tongue, for which Gaelic scholars would claim such high antiquity? It is easier to say how old it is *not* than how old it is. No competent philologist will hesitate to declare that the language of the Gaelic Ossian was not the language of the Highlands five hundred years ago. Mr. Clerk complains that Zeuss' *Grammatica Celtica* sheds "no direct light on the language of Ossian, as it does not treat Scottish Gaelic apart from Irish." But Zeuss was too accurate a scholar to recognise any distinction between Irish and Scotch Gaelic, except the distinction arising from the progressive corruption of the younger dialect. That learned man thus refers to Gaelic: "Duae sunt itaque varietates Celticae linguae praecipuae. Est una *Hibernica*, ex qua propagatae sunt linguae adhuc extantes hujus generis, in Hibernia ipsa *Hibernica hodierna*, et in Britannia in montibus, quos dicunt Scoticos, *Gaelica* (i. e. *Gaedelica*, ut Hiberni ipsi suam linguam appellant, media excussa), quae quamvis tuta in altis alpibus vetustiora monumenta non servavit, attamen in vetusta *Hibernica* fundamentum habet." (*Gram. Celt.* pref. p. viii.) In this opinion Ebel fully coincides. The Gaelic entries in the Book of Deer are not written in the language of the Gaelic Ossian, as has been shown by Whitley Stokes, who truly remarks that in the eleventh century, or at whatever period those entries were written, "the Highlanders declined their noun as fully as the Irish" (*Goidilica*, p. 54). Neither is the Mac Donnell Charter of 1408, which Mr. Clerk says is "the only charter in Gaelic now known to exist," written in the language of these poems, although we are told (*Dissert.* p. xxxviii) that any intelligent Highlander "will readily understand" it. Mr. Clerk does not seem to be aware that this charter was first published by the Rev. Dr. Reeves twenty years ago, who observes that, "although a Scottish record, it is strictly conformable to the rules of Irish orthography and construction, showing that the peculiarities which now characterize the Scotch dialect of the Gaelic did not exist in 1408." (*Proceed. R. Ir. Acad.* vol. v. p. 230.)

But, it will perhaps be said, "no one claims for the Gaelic of Macpherson's *Ossian* a higher linguistic antiquity than that of the period in which he heard these pieces recited by

Highland senachies. We know how little like "God prosper long our noble king—our lives and safeties all," is the first distich of the original Chevy Chase. Allow for the modernization of the text inseparable from its traditional delivery, and you will have no reason to expect in these popular oral recitals any of the archaic forms either of eleventh or fifteenth century composition."

To this I answer that it is neither the Gaelic of the entries in the Book of Deer, nor of the "Charter of Alexander," nor is it genuine Gaelic of the age of Macpherson, or at all. In structure, in language, and in ideas, these poems, as they stand, do not seem to have been originally conceived or uttered by Gaelic poets; and the language, in many passages, appears rather formed to reflect the terms and idioms of Macpherson's own English than the conceptions of a Gaelic bard.

It is the essence of an epic that it should not only picture the glories and triumphs, battles and contests, virtues and vices of a nation, but should also depict the habits, customs, manners, and dress of the people; how they ate, drank, and slept, as well as how they loved and fought. In the noble epics of Greece, Germany, and Scandinavia, with which, as a matter of course, Mr. Clerk compares Macpherson's "patchwork of plagiarism" (as Laing called it), these essential conditions are all observed; whereas the reader of the "Gaelic Ossian" seeks in vain through page after page filled with a weary reiteration of monotonous imagery, and ever recurring platitudes about fogs and mists, and locks flowing on the wind, for any mention of what the warriors ate or drank, how they were dressed, where they slept, or how they spent the intervals of repose between one battle and another. As far as the "Gaelic Ossian" is concerned, we might almost assume that they dined on evening dew and breakfasted on the sunbeams of the morning, slept upon pointed crags and furze bushes, and protected their naked bodies with their scanty shields against the biting blasts of winter. To be sure, we sometimes hear of feasts in "the hall of shells;" but whether the viands consisted of fish, flesh, fowl, or good red herring, we are not informed. The critical student of Celtic antiquities will doubtless have little difficulty in deciding whether the oft-mentioned "shell" ever found its way into Highland festive halls, or whether it is not entitled to a modern place in conchology; and it is rather suggestive that the only bird specially named by "Ossian" is the eagle (which the *Fian* could hardly have eaten), and the whale the only fish.

It is to the credit of the editor's intelligence that he does not acquiesce in the reason usually assigned by the Ossianists for the remarkable omission in the poems of all reference to any other kind of fish—that reason being the "*fact* that the ancient Celts, like the Homeric heroes, ate no fish." This is not a fact, but a pure fiction. There is abundant evidence to show that even as late as the eighth century fish constituted no inconsiderable part of the food of both the Irish and Scotch Gael. But the intelligent reader will hardly need to be reminded of such a patent fact.

Not less unfavourable to the character of genuineness claimed for the "Gaelic" Ossian is the remarkable confusion of time, place, and persons, which pervades the entire composition, but more especially the poem of "Fingal," in which Cuchulainn and the heroes of the *Croebh-ruadh*, or "royal branch," are brought into personal relations with Finn-mac-Cumhaill, Ossion, Oscar, and the *Fian*. Such a jumble could not have been made by an Irish Macpherson without being instantly detected, for the Irish Gael preserved the traditions of their forefathers with singular care and fidelity; and it may be safely asserted that in the immense number of heroic tales and romances preserved in the Irish manuscripts no such anachronism could be found as that which forms the foundation of "Fingal."

The impartial student of Celtic poetry and romance cannot fail to discern two distinct and well marked epochs in the romantic literature of the Scoti (*i. e.* of the Irish and Scotch). The first has for its chief heroes Cuchulainn, Conall Cernach, Fergus Mac Roy, and Conor Mac Nessa; and its heroine is Medb, queen of Connacht, whom the "Gaelic" Ossian altogether ignores. Its principal subject is the great *Táin bó Cúailnge*, or "Cattle spoil of Cuailnge," and the various spoils, battles, courtships, and expeditions which form so many prefaces and appendices to that magnificent prose epic. It is true, as has been observed by Mr. Ferguson (*Lays of the Western Gael*, introd. p. 5), that "the readers of the *Táin bó Cúailnge*, as it now exists [in a MS. written circa 1100], have to regret the overlaying of much of its heroic and pathetic material by turbid extravagances and exaggerations, the additions apparently of later copyists;" but it has still, nevertheless, all the characteristics of a hoar antiquity to which the lays of Ossian, even before they were manipulated by Macpherson and his coadjutors, cannot pretend. The scene of this most ancient and genuine legend in Celtic literature is Ulster, with Emania, now the Navan fort near Armagh, as its capital; and the time the first century of the Christian era. (It is worthy of note that Emania, where Conor reigned, and Dun-Delgan (Dundalk), where Cuchulainn lived, are never once mentioned by "Ossian.") The second or Fingalian epoch, nearly three hundred years later, dates from the time of Cormac Mac Airt, Macpherson's "Cormac, son of Artho," king of Ireland, who is stated by the Irish annalists to have died in 266, from swallowing a fish bone, not by the hand of Cairbre (his own son), as the compiler of *Temora* asserts. But we are told that the anachronisms charged against "Ossian" are myths, inasmuch as the "Annals of Tighernach, *first published in* 1825, agree entirely with Ossian" (*Dissert.* p. xlii). It was unfortunate for Macpherson that he had not access to the work of the honest annalist who is here accused of agreeing with the "Gaelic" Ossian, as he might have thereby avoided the fatal mistake of synchronising Cuchulainn with Cormac and Fingal (as Finn-mac-Cumhaill is absurdly called by him), for Tighernach has the obit of "Cuchulainn, fortissimus heros Scotorum," at A.D. 2; and that of Cormac Mac Airt under 266; whilst at the year 273 he quaintly records that "Find hua Baiscne (*i. e.* Find, descendant of Baiscne, alias 'Fingal') decollatus est *o Aiclech mac Duibdren ocus o macaibh Uirgrend do Luaignibh Temrach, oc Ath-Brea for Boind*," "*i. e.* F. ua B. decollatus est by Aiclech, son of Dubdren, and by the sons of Urgrend, of the Luaighne [Lune, co. Meath] of Temhair, at Ath-Brea, on the Boyne." Surely, Mr. Clerk should have hesitated, in the face of these entries, to repeat the groundless statement that "Tighernach agrees with Ossian."

The reluctance of the Scotch to admit the real character of Macpherson's *Ossian* seems partly owing, as Mr. Clerk insinuates, to the apprehension that the sacrifice of that composition would also involve the surrender of all claims to the possession of heroic poetry by the ancient Gael. But this is a very groundless apprehension. It did not require the advent of the Romans to Britain, or their conflicts with the inhabitants of Alba, to inspire the latter with the spirit of poetry. In fact so little influence did the Romans of Britain exercise over their Scotch neighbours that the name of Rome never once appears in these poems. Nay, M. Nigra has shown that the rhyme and rhythm of medieval poetry may possibly have been borrowed from the Celtic poets. "Assonantia finalis vel rima, saeculo quarto obeunte

et quinto incipiente vulgaris aevi, primum occurrit in hymnis Latinis ecclesiae mediolanensis, qui sancto Ambrosio et sancto Augustino tribuuntur.. Prima itaque rimae certa exempla inveniuntur in sole Celtico, apud Celticas gentes, in carminibus conditis a poëtis qui vel Celticae originis sunt, vel apud Celticas gentes diu commoraverunt. Verosimile est, hosce hymnos mediae Latinitatis constructos esse juxta formam Celticae poësis, quae tunc vigebat et quae jam assonantiam finalem praebet in antiquis ejus reliquiis hucusque detectis." (*Glossae Cod. Taurinensis*, pref. p. xxxi.) These are the opinions of an illustrious man, whose labours have thrown much light on the ancient condition of the Celtic language, and to the excellence of whose edition of the Old-Irish Turin glosses every Celtic scholar must testify. Nor is the corresponding evidence of Zeuss, or that of his accomplished editor, Ebel, less confidently expressed on this point. So that we are not solely dependent on the character of the "Gaelic" Ossian for proof of the cultivation of poetry of a very high order by the old Celtic population of Europe.

The principal characteristic of this ancient Irish (or Gaelic) poetry consists in the extraordinary and complex variety of its metrical system, its assonance and alliteration. Mr. Clerk observes (*Dissert.* xlvi) that in the Gaelic of Ossian "both measure and rhythm are frequently disregarded." Is not the almost total disregard of these essentials of true Gaelic poetry the chief feature observable in the style of the present composition, which has nothing whatever in common with the few genuine specimens of ancient poetry ascribed to Ossian (or *Ossín*, as the name should be written)? These specimens are, in truth, very few. The two oldest are contained in the *Book of Leinster*, a MS. of the latter part of the twelfth century, in the Library of Trinity College, Dublin. The style of these poems accords perfectly with known characteristics of the most ancient Celtic poetry extant—in metre, assonance, and alliteration. The following extracts will show how different was the kind of poetry which passed for Ossianic a thousand years ago (for the language of these poems is at least so old) from that which is now published as such. The first, which describes an *Ogham* carved on the monumental stone of Oscar, the son of Ossín, slain by Cairbre Lifechair in the battle of Gabhur [A.D. 284, Four Masters], begins:—

"Ogum illia, lia uas lecht
bali i teigtis fecht fir;
mac ríg hErend ro gaet and
do gae gand os gabur gil."

"An ogum in a stone, a stone over a grave,
In a place to which men were wont to come;
The son of the king of Eriu that was killed there,
By a slender spear, over bright Gabur."

Book of Leinster, 25, b.

In the second poem Ossín relates an encounter which he had with a *mucc mara*, or porpoise, whose size he thus gives, in very archaic language:—

"Méitis ri habraid a derc,
méitis ri mess a fert fó;
selais mu genum a muin,
ocus mu chuib as a hó."

"As big as a caldron her eye,
As big as a hill her good lair;
My sword severed her neck,
And my hound [hanging] from her ear.

Ib. 161, b.

(A copy of the poem from which this is taken is published in the preface to the Dean of Lismore's book, from a Highland MS. of the fifteenth century, the text of which is very correct, though slightly modernised.)

The specimens of Irish poetry printed by Zeuss and Ebel from the St. Gall Codex of the ninth century seem to be identical in age and style with the foregoing, as may be perceived from the following example:—

"Domfarcai fidbaide fél,
fomchain lóid luin lúad nad cél;
huas mo lebrán indlínech
fomchain trírech inna nén."

"The grove makes a festival for me;
A blackbird's lay sings to me—I hide it not;
Over my many-lined book,
The trilling of birds sings to me."

Ebel's *Zeuss*, 954.

The metrical structure of these poems is remarkably peculiar, and forms a curious contrast to the irregular and incongruous lines of the Gaelic Ossian.

W. M. Hennessy.

(*To be continued.*)

A Memoir of Jane Austen. By her Nephew, J. E. Austen Leigh. Second edition, to which is added *Lady Susan*, and Fragments of two other unfinished Tales. London: Bentley and Son.

In obedience to the unanimous demands of his critics, both public and private, Mr. Austen Leigh has now produced from the family storehouse nearly all the fragments of his aunt's compositions which might reasonably be supposed to be of general interest. We say nearly all, because he has not published *in extenso* the first twelve chapters of the work on which she was engaged at the time of her death; neither has he had the courage to produce even a specimen of the many half burlesque stories written when she was little more than a child. The editor is perhaps right in avoiding everything that might bear the appearance of book-making, but our faith in his judgment is rather shaken by his having waited for encouragement from without before introducing us to *Lady Susan* and *The Watsons*. The latter fragment is quite in Miss Austen's best manner, and as it was begun in 1804 or 1805, it is not easy to account for its having been laid aside. The scene is laid at the usual country-town, and the story begins with a ball, where the heroine humanely dances with a little boy, whose uncle, we gather, was ultimately to marry her. The Watsons are the Bennets with a difference, that is, instead of a clever Elizabeth and an amiable Jane, we have a good-natured but vulgar elder sister, and a heroine who is only well-bred and sensible, while the other sisters are quarrelsome and underbred instead of fast and silly. In Miss Austen's hands there was therefore no danger of the work turning out a repetition of *Pride and Prejudice*, and we must therefore suppose that she was not satisfied with the plan of the story, or perhaps, strange as it may seem, that she could not get on comfortably without a leading idea of some sort or a moral to be enforced, and of this there was certainly so far no sign. With *Lady Susan* the case is very different. It is a study rather than a novelette, and a study which there was more originality in making fifty years ago than now, when dangerous heroines are so much in vogue. We need scarcely say that there is no sensationalism in Miss Austen's sketch of such a character, and that she keeps strictly within the limits not merely of the possible, but of the real. Her Lady Susan is a clever and attractive woman far too sensible to murder anybody, and not likely even to figure in the Divorce Court, at the same time thoroughly unprincipled, but fortunately without the quite miraculous powers of deception with which later novelists would have enriched her. Thus it happens that the young man who is to marry her daughter escapes from her snares before it is too late, while we are free to suppose that the young man whom she marries herself will be tormented and perhaps ruined, but probably not poisoned or otherwise made away with. The story is written in the form of letters, but though that device is very well suited to a subject which turns more upon revelations of character than on incident, we have not time in ninety pages to feel at home with six or seven different correspondents.

To the *Memoir* itself, Mr. Austen Leigh has been able to add a few more of his aunt's letters, of the same general character as those already published, and a categorical assurance that Anne Elliot and Fanny Price were in no sense whatever the fruit of personal experience. On the contrary, we are told that Jane declined one suitable offer in her youth, and though a favourite sister thought that she might have been persuaded to marry a gentleman, whom they met at the seaside, if he had lived to ask her, so remote a possibility cannot be supposed to have affected her subsequent happiness. The cancelled chapter of *Persuasion*, in which Anne and Captain Wentworth come to an understanding, is far inferior to the one in the published work, and perhaps all the more on that account helps to raise our opinion of the writer, by showing that judgment had a share in her successes as well as inspiration. In the first draught the *éclaircissement* was brought about by the Admiral's blundering, and everything was arranged so easily and naturally that the result was rather tame. The Captain's letter, written on the spur of the moment in a crowded room, gives a far more heroic turn to the conclusion, though it is only in real life or Miss Austen that so slight an incident could pass for an event. As the illustrations which accompanied the first edition of the *Memoir* are not reproduced in the second, the editor should have withdrawn the allusion (p. 83) to "the likeness prefixed to this volume."

H. Lawrenny.

Rio's Autobiography. [*Épilogue à l'Art Chrétien.* Par A. F. Rio.] Freiburg im Breisgau: Herder. London: Rolandi.

M. Rio's memoirs derive what interest they possess not from the mental processes and experiences of the writer, but from the scenes of which he was a witness and the characters by which he was surrounded. This is the least egotistical form of autobiography, and M. Rio's first object is the wish to do justice to the memory of a deceased friend, in deference to whose own desire the task was undertaken. Autobiographies are seldom uninteresting, and this one furnishes a solid contribution to the history of France in connection with events which occurred in Brittany during the rising in the Hundred Days. If M. Rio's explanation of the revolutionary attitude of the Isle d'Arz (in which, despite its close proximity to the most loyal province of the continent, it was found impossible to raise a single chouan) is a correct one, it supplies rather a curious commentary on the value of political reasons in general. It is stated to have been owing to the indignation excited by the feudal pretensions of an ecclesiastical proprietor, who, in point of fact, seems simply to have brought home to the islanders a portion of the abuses which lay at the root of the revolution. M. Rio's chapter devoted to his experiences of Vannes is a *résumé* of the detailed account given in his previous work, *La petite Chouannerie*, of the spirited attempt made by his college to prostrate the tricolor during the temporary triumph of Napoleon. After these signal services to the royal cause, it is little to the credit of the Bourbons that an application made by M. Rio to the Comte d'Artois for the favour of a chair at his college in Paris should have remained unnoticed, nor does it mitigate such ungrateful conduct to attribute it to the influence of M. Decazes over the mind of Louis XVIII.

In the chapter headed "Munich" M. Rio gives the substance of a dialogue overheard by him between Lamennais and Schelling on the question of the limits of moral certitude. In London he made acquaintance, and in some cases cemented a friendship, with several distinguished men, heard a lengthened historical discussion between Macaulay and Hallam at the table of Rogers, conversed with Gladstone, Carlyle, Lord Brougham, O'Connell, Kenyon, Sheil, Campbell, and Tom Moore, and records a favourable impression of all but the three latter, owing, it seems, to the indifference common to them in matters of religious belief. His highest praise he reserves for Gladstone and Carlyle; the former occupied at that moment with the vexed question of Church establishments, and others of a more abstract nature, such as authority in matters of faith, about which M. Rio had a passage of arms with the ultra "Protestant," Archdeacon Manning, at the table of the elder Mr. Gladstone.

Of Mr. Carlyle, in whom M. Rio (somewhat disconcerted by his io-pæans on the great revolution) seems to have expected a *sans-culotte* of the Danton type, he cannot speak in sufficiently eulogistic terms. He compares him to Dante, as moving through this world "comme une âme en peine douée de toutes les susceptibilités les plus douloureuses." At his house he was presented to Mazzini, who read his *Poésie chrétienne*, and spared it his indignation, probably (as M. Rio suggests) owing to the chapter on Savonarola.

Although this book is of a strictly impersonal character, the reader will find scattered here and there, and especially in the chapter headed "Retour à l'Art Chrétien," much that is interesting in a psychological point of view, and which bears directly on the leading opinions of the author. It is well known that he belongs to the school of mystical Ultramontanism which preferred to recommend Catholicism by insisting on its unequalled power to satisfy the aspirations of the soul in concrete matters, than to assault error by polemical discussion, and overthrow it by the logic of facts. It is this peculiar mode of thought which causes M. Rio to overrate the value of Christian art as a weapon of controversial importance. Doubtless religious influences as often rush in to fill up a void left in the affections as in the reason; but the disciple must be exceptionally predisposed who would fail sooner or later to perceive that the æsthetic character of medieval Catholicism was determined by conditions which were largely independent of the nature of her doctrinal truths. With this key to the writer's bias, it is not difficult to account for the fact that the majority of his sympathizers in his reaction against the iconoclastic character of Protestantism belonged to the sex in which the emotional element preponderates. Occasionally he himself seems to be half conscious of this subjective tendency, as a story shows which he relates as a joke against himself. When, after the Restoration, he was passing through Normandy on his way to Paris, he read over most of the doors of the houses he passed the word PACI, and seemed to see in the faces of those around him a sympathetic something, which corresponded to the construction he had inwardly placed on the word. He was naturally enough not a little rudely shocked when, relating this story some years afterwards, some mocking spirit pointed out the prosaic fact that the mystical letters had simply meant "Propriété assurée contre l'incendie."

Frances Mary Charlton.

Select English Works of John Wyclif. Edited from original MSS. by Thomas Arnold, M.A. of University College, Oxford. 3 vols. Oxford: at the Clarendon Press, 1869-71.

[Second Notice.]

To return for a moment to the question in our last article; as to the mention of the burning of heretics before the year 1401, we may observe that it is expressly mentioned in "Pierce the Ploughman's Crede," which there is no reason for putting later than A.D. 1394, as it was composed previously to the "Plowman's Tale." It is the more worthy

of remark because the anonymous author of these two fierce and indignant poems deliberately charges upon the friars the crime of procuring the burning of the followers of Wyclif in particular. They wanted to burn Walter Brute, only he escaped by submitting to the Bishop of Hereford; and they were ready to murder any such heretic's soul, having first burnt his body; or, as the author puts it—

> "First to brenne the bodye in a bale of fijr,
> And sythen the sely soule slen and senden hyre to helle!"

Such plain speaking as this would have had but little force unless it had reference to known instances of such events.

The chief value of the works of Wyclif in elucidating and illustrating the literature of his time, particularly such poems as the "Canterbury Tales," the "Vision concerning Piers the Plowman," the "Ploughman's Crede," and the "Plowman's Tale," lies in the fact that he discusses and argues many questions at length to which other writers merely incidentally refer. The third volume of the present edition is the one which from this point of view is of most interest and value. It was no part of Mr. Arnold's duty to show this, yet he has occasionally cited passages from Chaucer which well deserve comparison with the language of Wyclif. It is for editors of Chaucer and other poets of the time to follow out this method more fully, and to make the most of the advantage of having Wycliff's works in so accessible a form. Before making a few such comparisons, we will notice some curious passages of general interest, taking all of them from the third volume only.

At p. 161, we obtain the curious notion that it was an opinion seriously entertained by the physicians of the days of Edward III. that it was expedient for a man's general health that he should take care to get drunk once a month, because much good comes thereof; and Wyclif allows, for the purpose of his argument, that the physicians speak the truth. (For *taken soth*, we should rather read *talken soth* here.) It was held, he continues, that a man fallen into drunkenness soon arises therefrom, and is "bettir disposid for to do his werk;" but this view he utterly rejects, and says that he who so argues speaks as a fool; for if a man die while he is drunk, how is he to make satisfaction for his sin to God?

At p. 173, we have a lesson in science, proving that the duration of the impression of an image upon the retina for an appreciable time was perfectly understood by him. Who could understand, he says, that a spark of fire, turned about in a dark night, seems to make a circle, if it were not that men's sight holds the print (*holdes prent*) of a thing beforeseen for a little short while, till all the fire be turned? From which he argues that God's sight may well retain images still longer, so that with Him what happened a thousand years ago appears fresher than yesterday's events are in the sight of man. This is really an anticipation of the very remarkable argument so ably worked out in a curious anonymous publication, entitled *The Stars and the Earth*, which appeared in 1854. On the same page we have a quotation from St. Jerome, which Mr. Arnold has not succeeded in tracing, wherein the father speaks of having the sound of the last trumpet always in his ears. This seems to have been a favourite quotation, as it was versified by Hampole in his "Pricke of Conscience," lines 4675–4680, and by Sir David Lyndsay in his "Monarchy," lines 5604–5611. We will merely add here, in passing, that we strongly suspect, from several indications, that Sir David Lyndsay did actually come across a MS. of Hampole; a hint which deserves to be considered.

At p. 282, Wyclif complains of the exorbitant amount of the fees paid for ordination; they receive, he says, for writing and sealing of a little scroll, with six or seven lines in it, twelve pence or two shillings; and, certes, this is foul extortion. One rather wonders how he would describe the amount which is paid now, and whether he would still stigmatize such fees by the name of simony.

At p. 284, he complains that the marriage-fees were also far too high; no man could be wedded without paying sixpence "on the book," and a ring for his wife, and sometimes a penny for the clerk, and something more besides.

There are several metrical translations of various parts of the Scriptures, and metrical versions of Scriptural stories in Early English, the poem called the "Cursor Mundi" being a notable example. It might be supposed that Wyclif would have regarded these with favour, as being intelligible to those ignorant of French and Latin; and it is, accordingly, somewhat surprising to find (at p. 180) that he not only charges the friars with falsifying the Scriptures by their glosses, but goes on to say that they so dock or clip God's word, and tatter it by their "rimes," that the form that Christ gave it is hidden by hypocrisy. It would be a satisfaction to know to what "rimes" in particular he here refers.

It is very interesting to find him alluding to the practice of intoning as being a new one (pp. 203 and 228). He says of it—"God forbid that any Christian man should understand that this incensing and crying that men now use is the best service of a priest, and most profitable to a man's soul. For, as Augustine and Gregory witness, prayer is better done by compunction and weeping and holy desire of righteousness than by great crying and blowing of man's voice." And again—"Wonder is it why men praise so much this new praying, by great crying and high song, and leave the quiet manner of praying, as Christ and His apostles prayed. It would seem that we seek our own pleasure and pride in this song more than the devotion and understanding of that which we sing; and this is great sin. For Augustine saith in his Confessions (*Conf.* lib. x. c. 33), as often as the singing delighteth me more than that which is sung, so often I acknowledge that I trespass grievously."

In all these instances we have modified the spelling and language. At p. 231, we find Wyclif's version of the saying, "Let the galled jade wince;" and this we give as written in the MS., viz. "thei are wode (*wood*, i.e. *mad*) when thei are reproued oght of her uicis; as a horce vnrubbed, that haues a sore back, wynses when he is oght touched or rubbed on his rugge (*back*). And so shulde men rubbe oute the defautes of freris, and thriste (*thrust*) oute the quyter (*corruption*) of her olde synnes, for thus did Crist with the Pharisees." Here, by the way, the editor prints *hor* for *her*, and is continually substituting *tho* for *the* in the most annoying manner; such eccentricities of the scribe might have been easily corrected.

When we come to compare Wyclif with the "Ploughman's Crede," which was obviously written by a Wycliffite, we find plenty of passages worthy of remark. Wyclif inveighs against the friars in good set terms, alluding to their gay windows and great houses (p. 299; cf. Crede, line 159); and their divergence from the rules of their founders, Benedict, Augustine, Dominick, and Francis (p. 301; Crede, line 775); he compares the friars to Pharisees (p. 350; Crede, lines 487–576); he shows how the four orders disputed for priority, the Carmelites declaring that their order was founded before the coming of Christ, the Augustines that their order preceded the other three by hundreds of years, while the Dominicans and Minorites said just "the reverse" (p. 353; Crede, lines 243, 307); that the mendicant friars are the most covetous of men (p. 373; Crede, 468), and so on. But there are yet clearer indications of how much Wyclif's follower owed to his teacher in such a passage as that in which the friars are likened to *Cain*, which in Old

English was almost invariably spelt *Caym* (Crede, line 486). This was an idea of Wyclif's, who took the first letters of the names of the four orders, Carmelites, Augustines, Jacobins [Dominicans], and Minorites, and thus developed his acrostic (p. 348). Moreover, when the author of the "Crede" refers us to St. Hildegarde, it is by no means improbable that he took his quotation from Wyclif (p. 413); for, though the words do not agree, the general sense is the same.

The number of passages in Wyclif which deserve to be compared with the "Vision concerning Piers the Plowman" is very considerable, and we have no space for pointing them out here. One curious instance may conclude this notice. At p. 233, Wyclif talks about the "perils amongst false *friars*," as he translates the *in falsis fratribus* of the Vulgate version of 2 Cor. xi. 26. Langland has the same pun (P. Plowm. B-text, xiii. 69), sarcastically observing that he never heard a friar preach from *that* text; and in another passage he quotes the sentence—"Non oderis fratres secrete in corde, set publice argue illos" (B-text, xi. 87)—which he takes to mean that it is his duty not to hate friars secretly in his heart, but to take them publicly to task; a duty which he carefully performed.

In conclusion, we must thank Mr. Arnold for all his labour. The lovers of our early literature cannot well afford to neglect the volumes which his industry has given them.

Walter W. Skeat.

LITERARY NOTES.

We call the attention of our readers to the letter of Professor Benfey on p. 387, in which he has communicated to us full details of a very important discovery in Oriental literature lately made—that of the Syriac version of the lost latter portions of the Sanskrit book *Kalîlag and Damnag*. This communication has been unfortunately delayed in transmission, and therefore loses in point of date the precedence which Dr. Benfey had courteously designed it to possess, as the first public announcement of the discovery.

While Europe has been busy with events of a different nature, the Greeks have devoted much time and enthusiasm to the bringing home and the pompous funeral of the body of the patriarch Gregorius, who, as is well known, was the first victim of the fury of the Turks on the outbreak of the Greek revolution. Not to mention the numerous articles and descriptions in the Greek journals, this event has also been celebrated in an ode, Εἰς τὸν πατριάρχην Γρηγόριον, by John Typaldos, written in the popular dialect and being a genuine effusion of poetical and national feeling. We are glad to find that in spite of the endeavours of the λόγιοι and λογιώτατοι, the unadulterated speech of modern Greece has not yet died out, and is as vigorous as in the days of Christopulos and Solomos.

Art and Archæology.

DISCOVERY OF THE TEMPLE OF DIANA AT EPHESUS.

The first public announcement has been made of the discovery of the site of this renowned temple, by the archæological expedition supported from the funds of the British Museum, in a memoir read by Mr. J. F. Wood at an evening meeting of the Society for the Encouragement of the Fine Arts, on the 20th of July—Viscount Stratford de Redcliffe in the chair.

Mr. Wood commenced his memoir by a description of the topography of Ephesus, shewing the respective positions of the Great Theatre, the scene of the tumult on the occasion of St. Paul's visit to Ephesus, the Odeum, the city Port, the walls, the Magnesian and Coressian Gates, and lastly the true site of the temple of Diana.

On first commencing to explore Ephesus in 1863, Mr. Wood made various tentative diggings in the interior of the ancient city, on spots which former travellers had suggested as probable sites for the temple of Diana. He then excavated the Odeum, where he found remains of the Proscenium and fragments of four Imperial rescripts, three of which were addressed by the people of Ephesus to Antoninus Pius, two bearing date A.D. 145, the other A.D. 150. The two earlier Rescripts relate to the services of Publius Vedius Antoninus, the γραμματεύς or notary of the city at the time of the rescript. The 4th of these letters is addressed by the Emperor Hadrian to the people of Ephesus. In the Odeum was also found part of a statue of the Emperor Commodus, whose name is inscribed on the base. On clearing out the ruins of the proscenium in the Great Theatre, Mr. Wood found several decrees of the people of Ephesus inscribed on marble blocks, which, as appeared from the text of the inscriptions, must have originally belonged to the temple of Diana. There were also found many portions of a very long inscription recording various gifts of treasure with which Vibius Labutarius endowed the temple of Diana. The date of this inscription is about A.D. 104. It contains some curious information as to the ritual of the temple, such as lists of the votive objects in gold and silver, and the manner of carrying these in procession from the temple through the Magnesian Gate into the city and then back through the Coressian Gate to the temple.

In the list of statues are several images of Diana with two stags, doubtless such as those mentioned in the Acts of the Apostles as the work of Demetrius the silversmith, and his fellows. Having subsequently ascertained the position of the Magnesian Gate, Mr. Wood was enabled to trace the line of the portico which Damianus, in the third century A.D., built to protect from weather the processions from the city to the temple of Diana. After following the traces of this portico for some distance, and discovering on the way many tombs of the Roman period, Mr. Wood accidentally came upon a massive wall, which, on further examination, turned out to be the angle of the peribolos of the temple of Diana, being proved to be such by an inscription in duplicate built into the wall on each side of the angle, which stated that the Emperor Augustus had rebuilt the peribolos wall out of the revenues of the Goddess Diana. This inscription was in Latin and Greek. It was remarkable for the partial erasure of the name of C. Asinius Gallus, proconsul, of whom we know from history that he was put to death by Tiberius, and his name erased from all public monuments. This discovery took place in April, 1869. The excavations were recommenced in the autumn of the same year, the lines of the peribolos were followed from the angle till they were finally lost, and many pits sunk in the area contained in this angle. At length, as in the course of 1870, a fine pavement of white marble was discovered at the depth of 19 feet in the alluvial plain near the mosque at the Turkish village of Misolah. Further excavations on this site laid bare the remains of a magnificent Ionic temple with drums of columns 6 feet in diameter, the style being, as might be expected, nearly identical with that of the temple of Athene Polias at Priene and the great temple of Apollo at Branchidæ. One base of a column was found in position on its plinth. Red colour was distinctly visible on some of the architectural fragments. No remains of sculpture of any importance have as yet been discovered. The great depth of soil and the influx of water during the winter months have hindered Mr. Wood from making an extensive clearance of this site: when this is done the direction according to compass in which the temple lies will be more clearly ascertained. He hopes to resume his operations early in the autumn of this year. The remains of two Roman buildings were found near the temple, one of which may be the Augusteum mentioned in the inscription on the peribolos.

THE INDIAN ANNEXE AT THE INTERNATIONAL EXHIBITION.

The most interesting portion of this lately opened department at the International Exhibition consists of reproductions—casts, photographs, and drawings—of ancient works of art in India. The popular notion that archæological research has been neglected both by the Government and by cultivated private persons in India is not true, even of the early days of the Company, when indeed Indian art was studied with real interest and devotion, although it was illustrated with more freedom than accuracy.

Since that time the local governments in a desultory way, private persons, and such associations as the Royal Asiatic Society, have been at work on different branches of the subject to such purpose that some of the great monuments of India are almost as familiar to us as those of Italy.

As a preliminary step on the way to the appointment of General Cunningham as the head of a regularly constituted department, the local governments made experimental essays in compliance with suggestions from head-quarters recommending the employment of the students and staffs of the local schools of art as moulders, draughtsmen, and photographers. The fruit of these essays is to be found in part in the new *annexe*. Mr. Cole's expedition to the Sanchi Tope in the Bhopal country may also be regarded as an experiment. The Calcutta School of Art addressed itself to the temples of Orissa, and sends a number of casts and drawings. Madras furnishes photographs of some pagodas at Bellore and elsewhere, while the Bombay school applied itself to the small and obscure but very ancient Jain Temple of Ambernath, in the Konkan, under the hills whose blue outlines overlook the inner reaches of Bombay harbour.

Mr. Cole's work at the Sanchi Tope, shown in the east picture galleries, is perfectly done so far as moulding and sharpness of detail goes; though it may well be questioned whether a few casts and more photographs would not have answered all purposes as well as this facsimile reproduction of the whole. In like manner the architectural drawings of the Ambernath series are perhaps almost too numerous and elaborately faithful. One of the pillars shown in the photographs of the interior is reproduced from base to entablature, while numerous other details are given. Once in a way this thorough-going completeness is perhaps desirable, and if the neglected ruin of Ambernath has no other merit, it is a fair type of a vast number of Ling temples in Western India. The casts from Orissa have the advantage of being taken from sculptured stones of a finer texture and smoother workmanship than the coarse trap of the Bombay Konkan, and they may be taken as fair types of Hindoo sculpture. It will, we repeat, be a question for future consideration to what extent further such reproductions of work in stone may be desirable. *Painted* decorations of any value should certainly be copied at once, for they are rapidly passing away; and it is especially grievous to note that by the fire at the Crystal Palace many of Major Gill's copies of the Ajanta frescoes were destroyed, while the originals from which they were copied are in many places now too much decayed to be made out. Still more lamentable is the fact that vulgar British names have been carved more abundantly than ever on the figures in the Elephanta Caves, which now are chiefly used for junketings and picnics.

Over and above the mystery and fantasy of Indian architecture and sculpture, we find evidence that certain styles have by no means died out; and the possession of a definite inheritance of style is a thing so enviable that, although one may have little sympathy with either the form or spirit of the works shown in the Indian *Annexe*, one cannot but congratulate the native *mistry* on the serenity with which he works on his traditions, counting up the units of his simple scales of measurement and proportion, sure of the result; while we vex ourselves with ill-understood masqueradings of Gothic, classic, Italian, and other disguises foreign to our nature. The photographs, drawings, and casts in the Indian Court may perhaps serve to shew the public at home that there is an indigenous art in the country, and to secure for it some respect. Some views are given by Colonel Houghton of the building in the sacred stream at Nassick, and the rock-cut caves in the Lena hill near that picturesque Marathi town. But perhaps the most remarkable series of all is Messrs. Sykes and Dwyer's set of pictures from Palitana; with them should be studied Mr. Burgess's painstaking description of that really wonderful city of temples, which is carefully kept in repair and added to year by year by wealthy Jains. Mahomedan architecture is very poorly represented; a set of pictures of the tombs of the rulers of Sind of the sixteenth and seventeenth centuries are, however, particularly interesting as illustrating the method of using enamelled tiles for an ornamental veneer to domes, for internal decoration and string courses &c. It is a pity no coloured sketch accompanied these pictures: but there are some tiles and perforated *grilles* from the same neighbourhood, where the manufacture still lingers. Turquoise and shades of blue and green, with white, and occasionally in the old work, two shades of brown, are the colours employed. The effect of these domes, rising as they do from a green oasis in the sandy plain sparsely dotted here and there by the bastard tamarisk, and shining in the sun with an iridescence similar to that of the beetle's wing, may well be imagined to have been singularly striking and beautiful. Of the use of enamelled earthenware in architecture there are traces in Sind, and north-east thence by Mooltan, Lahore and Delhi; and everywhere a peculiarly pleasant shade of turquoise (*Feroze*) seems to have been the favourite colour. This appears in some of the tiles, hookahs, and household vessels sent from Sind and the Punjab. Unhappily it is too plain that the craft is dying out, and there are varieties and developments of it which have utterly vanished. On some of the minars of the mosques of Lahore, for example, there are panels of what may be called "pot mosaic." Each of the petals and each of the leaves of a flower are made of separate pieces of enamelled earthenware, the ground being made in larger pieces. This method is precisely suitable for the large patterns in which it is employed, and produces a satisfactory effect of solidity and firmness quite unattainable by any brush-work. There are photographs in the South Kensington Museum in which one or two of these minars are sufficiently shown for a general comprehension of the plan described, which, in modern work, is flimsily imitated in painted chunam (plaster). It is much to be regretted that no casts are sent from the Bactrian sculptures found at Uzufshai near the N.W. frontier; since of all relics of ancient powers in India, these mysterious half Greek half Buddhist works are probably the most beautiful and interesting.

In the matter of the manufactures exhibited—pottery and woollens—the exceeding simplicity of Indian processes is a point to be noted. With regard to woollens, the common *kumblee* of the ryot and labourer, woven of coarse woollen yarn, with an apparatus of a few sticks and pieces of bamboo stuck into the ground in a patch of shadow by the roadside, may be accepted as typical of Indian manufacture. Nothing could be simpler than the making of the *kumblee;* but when it is made it serves for bed and blanket, for mackintosh, for porter's knot, for wrap-rascal, dust-coat, *tente d'abri*, market-basket, cradle, and a hundred more uses of field or fair. (One of the features of the department is an extremely interesting series of monochrome drawings by Mr. T. L. Kipling, exemplifying this simplicity of process with illustrations of all the common arts and industries of India as they are daily carried on.)

Some of the Madras and Lahore carpets are very good, both in colour and pattern; and it is satisfactory to notice that the gentlemen entrusted with the superintendence of the jails (which in India are in effect large industrial schools) have not, as on former occasions, sent carpets worked with devices of lap-dogs, flower-baskets, milk-maids, shepherds, and the like, in all too brilliant colours. Unluckily, European decorative innovations of this kind take a permanent hold on the native mind, which is serenely incurious as to novelties and improvements of process and manufacture. The fly-shuttle, for example, has been for a long time used in the jails with the ordinary hand-loom; but, although a great number of weavers have learned in the jails to use this labour-saving contrivance, it has never been adopted outside. From the North-West Provinces and the Punjab comes the greater part of the collection of woollen-cloths exhibited, the best being, as a matter of course, the shawls and *pushmeena* cloths of Kashmir and Amritsir. The shawls exhibited by the Maharajah of Kashmir are very beautiful in pattern and less spoiled than most modern Kashmir work by the vulgar and detestable Palais Royal *chic* with which the energetic French agents have tainted the loom masters. In nearly all the Indian stuffs, even when the designs are true in taste, there are melancholy traces of that dismal feat of modern science, the invention of the aniline series of dyes, which the Indian craftsman has learned to fix. When the syces of an Indian rajah dye the sweeping white tails of his horses mauve and magenta to take part in a holiday show, the effect is merely grotesque; but when these colours invade the silk and wool of his garments, horse-trappings, and elephant-housings, which of old were always nearly perfect in colour, it is grievous as well as grotesque.

It would be easy to say much more about the deplorable influence of European importations, as it shows itself in the pottery, the enamels, and other objects of exhibition in this valuable *annexe*.

NEW BUILDINGS AT SOUTH KENSINGTON.

[First Article.]

While an effort has been made within the last few years by the government and the public towards a larger recognition of the artistic element in national buildings, and attempts have been made to select the highest architectural talent for their design, a movement in what at first sight seems an opposite direction has been taking place in a quarter which we have been taught to look upon as the very centre of artistic design. First of all, the new buildings of the South Kensington Museum itself were entrusted to a member of the Royal Engineers, a profession which is supposed to be educated in the science rather than the art of building. And since the completion of the central portion of the Museum, some other buildings of larger dimensions than the first, and equally forming an integral portion of the projected metropolis of art, have been erected under similar auspices.

Now, although this fact might seem to suggest the promise, for the buildings in question, of any other rather than purely artistic merits, the truth turns out to be that they are also very well worthy of attention from the artistic point of view; and chiefly on account of a certain directness of purpose—a quality which, though very essential to any high degree of success, is not usually attained in architectural works of our day. May it not be possible that this particular merit is in some sort due to the circumstance, so unpromising at first sight, that the designers of these buildings were without specific training in the ordinary practice of architecture as a fine art? When it is considered how frequently contemporary architectural work fails, either from a want of frank recognition of its obvious utilitarian conditions, from the design being applied to rather than deduced from its practical necessities, or from the uncontrolled knowledge of the architect which leads him to produce an epitome of research rather than an individual work of art, it will be understood how an engineer, naturally giving full weight to utilitarian considerations, and little likely to be hampered by a superabundance of artistic resources, might be expected to avoid at least these elements of failure. On the other hand, it must be said that in most of these buildings defects occur which are the obvious result of a want of special knowledge, and which a very moderate amount of experience in architecture must have made impossible.

One of the chief points of interest in these buildings is the very general employment of a material elsewhere almost unknown in contemporary building. Ever since London began to approach its present degree of smokiness, and timber construction was disallowed, the necessity of some non-absorbent material has been apparent. Sir Christopher Wren, foreseeing the future dinginess of his greatest work, would have cut the knot by banishing the use of coal from London; but even at that time we may conceive his proposal to have been rather a protest than a practical suggestion. Certainly his foresight was not at fault. Witness the condition of St. Paul's, together with every other stone building in London. The element of grandeur—the impressive shading off of grey tints into deep black—which sometimes attends this dinginess, is only attainable in large stone buildings, and that generally at the cost of rapid deterioration and loss of surface. In small buildings, or where stone is only partially used, the material is altogether unsatisfactory. On the other hand, brick has resisted the carbon moderately well; and where the quality and colour have been originally good, it presents a pleasant appearance even after the lapse of a century and a half. The experiment made at South Kensington is the substitution of terracotta for stone in partial employ—the general wall surface being of Farcham brick of excellent colour and quality. A comparison of the advantages of terracotta as against those of stone on the separate points of surface and colour, construction and ornamentation, shows that—

(1) For surface and colour there is no choice between the old and the new material. This is sufficiently proved in the earliest executed of these buildings, the South Kensington Museum proper, in which both stone and terracotta have been employed. The few years which have elapsed since its erection have rendered the Portland stone dingy and black, while the terracotta retains its delicately gradated tints, which form a very harmonious contrast with the colour of the brick.

(2) Constructionally the result is not altogether so favourable to the new material, which, while it is sufficiently strong for perpendicular, is useless for projecting support. The large corbels which are used in these buildings are consequently formed of iron brackets cased in terracotta, a method of construction which, while it need not be hastily condemned, will at least appear questionable to minds which have not given up all the maxims of the Gothic revival.

(3) For purposes of ornamentation the comparative merits of the materials are more nicely balanced. In terracotta, a large number of blocks being cast from the same mould, the same design is necessarily repeated very frequently. In cornices and strings, and wherever one design is carried on continuously, no disadvantage attaches to this process beyond the loss of the sense of direct handiwork, with a counterbalancing gain in economy both of expense and design. In pilasters, panels of sculpture, &c., the difference in interest would be again merely one between more or less direct workmanship—equivalent to that between a marble or a bronze statue—were it not, further, that the use of terracotta tempts to a wearisome repetition of features which a more prolific age would have delighted to vary. Towards disguising the extent of this repetition some very ingenious contrivances have been resorted to: for instance, the shafts dividing the window openings are cast in a number of similar blocks, each of which has a distinct design on each of its four sides; by changing the position of these blocks relatively to the front of the building and to each other, a large number of combinations has been produced, no one of which is identical with another. Such means of economising design are no doubt valuable at a time when there is so little readiness of invention, if it be assumed that abundance of ornament is indispensable. (On the other hand it may be urged that, in the present dearth of spontaneous invention, to dispense as far as possible with decoration may be a course more favourable to the ultimate development of a style really our own than ingeniously to eke out and multiply such reflections of foreign and ancient art as in our own day usually stand for original design.)

The portion of the South Kensington Museum at present completed consists of a centre and two wings; of which the centre, as being more conspicuous in position as well as more ambitious in design, alone claims particular criticism. Its design is on the whole satisfactory; but in regard of the relations of its several members among one another, we find a defect in the violent contrast of proportion between the upper and lower arcades, the inefficient projection and general poverty of the mouldings both of the cornices and of the pediment, and the insufficient depression of the wings; while the flat decoration in the pediment, though not without precedent, presents a somewhat poor effect. The first-named proportional defect is apparently the result of just such a miscalculation as might arise from inexperience in architecture; for, whereas the smaller arches of the interior surface would in a drawing have so much value as to redress the disproportion, in execution they in no way influence the general composition. As regards the relation of this central portion to the entire projected building, it may in the first place be anticipated that the irregularity of the interior angles, which on account probably of the conditions of site are not strictly rectangular, will have an awkward effect when the whole composition is exposed to view, and, secondly, as it has only a sufficient preponderance over the present wings, it can scarcely be hoped that it will not prove inadequate when the proposed continuation of those wings is completed.

Basil Champneys.

(*To be continued.*)

ART NOTES.

Dr. Woltmann announces that the much-controverted inscription attesting the authorship of the younger Holbein for a well-known picture in the Augsburg gallery must be finally given up. Herr Huber, the director of the gallery, has found the inscription disappear on the application of cleansing media, and reveal traces of quite different characters. This fact reopens many problems in regard to Holbein's youth.

Dr. D. Eisenmann, at present engaged in cataloguing the contents of the thirteen galleries accessible to the public in Rome, avers that in an unnoticed picture of the Palazzo Spada he has discovered an original portrait of Albert Dürer by Titian.

An essay on the interpretation of some of Dürer's larger allegorical plates, "in the light of the common culture of his time," by Max Allihn of Halle, is one of the most interesting of the pieces called forth in connection with the *Dürerfest*. A new and elucidated edition of Dürer's art-writings and letters is promised for this year by the editors of the Vienna series of *Quellenschriften für Kunstgeschichte*.

The *Zeitschrift für bildende Kunst*, of July 21, gives an interesting and complete memoir, from the hand of Dr. Eitelberger, of the distinguished sculptor Hans Gasser (born in 1817 at Eisentratten in Carinthia, and deceased at Pest, 24th April, 1868), to whom a monument has lately been erected in the Carinthian town of Villach.

The same journal contains the first article of a series by Hans Semper on the survival of the true Roman traditions of art in Italy through the dark ages. The object of the discussion is to throw light upon the question of the sources and descent of the style of Niccolà Pisano, which has been debated on new ground ever since the publication of Messrs. Crowe and Cavalcaselle's first volumes. In the present article Dr. Semper confines himself to the traces of expressly Roman character in early buildings of the Lombards in Italy.

In the *Preussische Jahrbücher* for July, H. G. (Dr. Hermann Grimm) corrects, or at least modifies, his view about the two rare engravings, "Pace" and a "Flight into Egypt," lately purchased from Messrs. Amsler, of Berlin, by the British Museum (see *Academy*, No. 23). The writer still maintains his overestimate of the technical merit of these interesting plates; but he finds that he has been wrong in assigning them, as unique specimens, to Domenico Fiorentino (Barbiere). Their monogram is not his, viz. D. F., but that of Domenico Tibaldi of Bologna, viz. D. T. F., with the T and F amalgamated; and they are both known (see Bartsch and Fuseli) as very rare but not unique examples of that master—a brother of Pellegrino Tibaldi, the distinguished imitator of Michelangelo. Having unbuilt the critical theories which he had thus founded on an error about Domenico Fiorentino, the writer is now disposed to rebuild them again about this Bolognese Domenico. In all this, as well as in the remarks on Michelangelo's angel at Bologna, which conclude the paper, there seems a dangerous tendency to indulge in hasty conclusions from uncritical premisses.

Signor Salazaro, the director of the Neapolitan national museum, has in preparation a large publication of South-Italian frescoes, especially illustrating the art of the Regno at the period of the Hohenstaufen.

Messrs. Holloway have in preparation an illustrated book to be called "Works of Art in the Collections of England," by Mons. Edouard Lièvre. It will be of the same class as the magnificent *Collection Sauvageot* and *Les Collections célèbres d'Œuvres d'Art en France*, by the same hand; and will consist of fifty plates engraved in the highest style after drawings to be taken for the purpose by Mons. Lièvre.

In the *Portfolio*, Mr. Sidney Colvin commences a series of papers on "The Treatment of Children in Renaissance and Modern Design."

Music.

Belgian Musical Thesaurus. [*Trésor musical: Collection authentique de Musique sacrée et profane des anciens Maîtres belges*, recueillie et transcrite en notation moderne par R. J. van Maldeghem. Musique profane. 1871: septième année.] Bruxelles: Librairie européenne de C. Maquardt.

This collection, the two secular portions of which have just been issued, is now in its seventh year. To the best of my belief it has never been reviewed in any English periodical. Yet its contents so far are of a kind more likely to interest the musicians of our own than of any other country, not excepting that to which they owe their origin. In Germany unaccompanied part-singing is the growth only of this present century. In Italy it has for a century past, and more, been unknown and unpractised save in the Sistine Chapel. In France it is only now taking, or striving hardly to take, new root. And even in Belgium—its cradle if any one country can be so called—its present culture is not a tradition but a revival, brought about and kept going by foreign example and a spirit of emulation. But in England, despite the shocks which our national music and musical practice have received, from the interregnum of the seventeenth century, the advent of Handel in the eighteenth, and the growth of the symphonic school of Germany in more recent times, the love for and the practice of purely vocal part-music has never wanted witnesses and representatives. Not to speak of our glee clubs, catch clubs, "concentores" societies, and the like—many of which have attained to a respectable longevity—*the* Madrigal Society of London dates, not from the madrigalian epoch assuredly, but from the end of the century in which that epoch came to an end, and therefore from as early a period subsequent to the Restoration—of music as of monarchy—as would have afforded means and materials for its creation. Our own publications, too, of music like that contained in the work before us, have been numerous, excellent, and catholic. We have enshrined in handsome folios the works of our own Wilbyes and Gibbonses, and along with them examples of Arkadelt, Roland de Lattre, Festa, Nanino, and Luca Marenzio—names assuredly more commonly familiar to the English than the Belgian or Italian amateur. The work before us is therefore one calculated to find especial favour among our countrymen; first, as being a "Trésor" of music of a kind constantly loved and all but uninterruptedly cultivated in England; and, secondly, as presenting examples in that kind by musicians some of whose names are mere names to us, and others altogether new. Among the one or the other may be classed Johannes de Fossa, Philippus Verdelot, Cornelius Verdonck, Alexander Agricola, Franciscus Sale, Philippus de Monte, Barthélemy van Roy, and André Pevernage. Not that these comparatively obscure though assuredly admirable writers are paraded to the neglect of better known and greater ones. Josquin Déprés, Arkadelt, Adrian Willaert, and, greatest of all, Roland de Lattre (Orlando di Lasso) have large space awarded to them, and in this are made to exhibit many works, printed copies of which have had no previous existence, or have attained, from their rarity, an all but fabulous value.

The two numbers of the *Trésor* now under consideration—those for 1871—consist exclusively of compositions by André Pevernage. Of this musician even Belgian archæologists (of late years numerous and persevering) have ascertained little more than that he was born at Courtray in or about the year 1541; that he became director of the "maîtrise" of his native town, which he subsequently left for Antwerp, where his best works were produced and published. Like others of his profession, he was honoured even in his lifetime by more than one copy of Latin verses—to be found in Vander Straeten's *La Musique aux Pays-Bas avant le XIXe Siècle*, a recent contribution of great value and interest to the literature of the subject before us. He died at Antwerp in 1589. A contemporary musician of the same name—probably his brother—it has been ascertained, was chapel-master in the cathedral of Ypres. The two numbers before us contain eighteen "chansons" of five parts by Pevernage, some of which from their extent, and any from their science, might

rather be called "madrigals." They are without exception set to French words, with more regard to their quantity and emphasis than their sentiment, which last, indeed, is sometimes of a kind as little suited for or suggestive of anything like musical expression as one of the propositions of Euclid. As music pure and simple, however—the interest of which lies in the beauty of the subjects, the ingenuity of their treatment, graceful and effective motion of parts, skilful distribution of combinations, and modulation natural yet varied, and now and then even surprising—they are one and all of the highest interest to the student; while several, were they sung by a choir used to *and fond of* singing music of the same style and date, would certainly give much pleasure even to the least learned hearer. Though, like all the music of the same epoch, betraying a good deal of the influence of the old tonality, the skill with which the parts are made to move is such that little of the difficulty commonly found by musicians of the present day in the execution of the works of the "old masters" is likely to be found in the execution of these. Nos. 5 and 6, for example, will be found as easy to sing as they will prove effective when sung. The "livraisons" are accompanied from time to time by notes, historical or other, of great interest and value, and further illustrated by facsimiles after contemporary portraits (mostly woodcuts) of the composers quoted and referred to in them.

John Hullah.

NOTES ON MUSIC.

The great organ in the Royal Albert Hall, portions of which only had been brought into requisition at the various oratorio performances given in that building, was formally opened by Mr. Best on the evening of Tuesday, the 18th. In volume and variety of *timbre* the instrument certainly equals, as in ingenuity and finish of mechanism it probably surpasses, any work of its class that the world has yet seen and heard. Its peculiarities are many, one of the most striking being that the majority of the pipes are of metal. Probably more than has ever before been done to bring these under the influence of the performer has been done in this organ. The touch is as easy as that of an ordinary pianoforte, the stops as accessible as those of a harmonium. The peculiarities of the auditorium must have taxed the science and invention even of Mr. Willis to the utmost. He is to be congratulated on the result of his contest with them. No other musical combinations in this building have produced such satisfactory effects as those in his organ. It is to be hoped that future performers will take example by the reticence of Mr. Best in respect to the forces at their disposal, and use the "full organ" on occasions rare and brief; they should remember that the Albert Hall presents no clustered columns, chapels, or monuments, kindly interposing, as in a great church, between the monster with his thousand voices and the unwilling or too sensitive ear.

The retirement of Signor Mario from the stage, on which he has occupied so prominent a position for so many long years, has created a gap which many of us are not likely to see filled up. So many conditions are involved in the production of a great dramatic singer—voice, training at the right time, musical knowledge, general culture, person, and even public favour, for no singer is great till *after* he has won the sympathy and confidence of his audience—that no one generation can hope to attain personal acquaintance with more than two or three. To this must be added the consideration that the art of singing has, all the world over, been declining for many years past. How completely it *is* an art could not be better shown than in the instance of Signor Mario, whose reputation has deservedly increased as his physical powers have declined.

It is a question whether any similar institution in Europe could have given a concert—especially of students—so good, in so many departments, as that of the Royal Academy of Music on the morning of Saturday, the 22nd. Six compositions—four in the highest class, for orchestra, orchestra and piano, or orchestra with chorus—were the composition of present students; while seven solos by Mozart, Mendelssohn, Bennett, and Hiller—four for pianoforte with and without orchestral accompaniment, one for the violin, and two for the organ—were performed by young persons actually under instruction in the institution. The solo singing too, for some time past the weakest branch of "Academy" study, shows manifest signs of renewed vigour. The concert attracted a large and, as was soon evident, well-judging audience, the majority of whom, in spite of its great and indeed extravagant length, kept their seats till it was ended.

An opportunity of making acquaintance with the now so-called "Requiem" of Brahms has been recently afforded to the amateurs of London through the intelligent enterprise of one of them. So much of the interest of the work arises from the instrumentation that a less favourable impression than that produced by the performance in question need not have shaken confidence in the reports of its merit which had already got into circulation. Even without the orchestral parts, however, the audience, not to speak of the executants, was obviously, largely, and even deeply moved by it. It is greatly to be desired that some musical society aspiring to lead, not merely follow, popular taste would take the work in hand and let us hear it, with all its beautiful details and novel combination of pipe and string.

Carl Tausig, the pupil of Liszt, and next to him perhaps the greatest modern master of the pianoforte, died in Leipzig, July 17.

New Publications.

A Vindication of Lady Byron. R. Bentley and Son.
Cennini, Cennino. Das Buch von der Kunst, übers. von Albert Ilg. [Quellenschriften für Kunstgeschichte.] Vienna: Braumüller.
Crawley, R. Cupid and Psyche. Blackwood.
Forman, R. Buxton. Our Living Poets. Tinsley.
Gerlach, Dr. P. Illustrirtes Wörterbuch der mittelalterlichen Kirchenbaukunst. Stuttgart: Ebner und Seubert.
Graesse, J. C. Th. Guide de l'Amateur d'Objets d'Art et de Curiosité, ou collection des monogrammes des principaux sculpteurs en pierre, métal et bois. Dresden: Schönfeld.
Life and Adventures of Count Beugnot, Minister of State under Napoleon I. Edited from the French by C. M. Yonge. Hurst and Blackett.
Meyer, Jul. Correggio. Leipzig: Engelmann.
Reid, G. W. Illustrated Catalogue of the Works of George Cruickshank. 3 vols. 4to. Bell and Daldy.
Sarcey, F. Paris during the Siege. Chapman and Hall.

Science and Philosophy.

RECENT WORKS ON CHEMISTRY.

[First Article.]

I. **Lecture Notes for Chemical Students.** By Edward Frankland, F.R.S. Vol. I.: Inorganic Chemistry. 2nd edition. London: Van Voorst, 1870.
II. **First Principles of Chemical Philosophy.** By Josiah P. Cooke, Jun. London: Macmillan, 1870.
III. **Introduction to the Study of Inorganic Chemistry.** By William Allen Miller, M.D. London: Longmans, 1871.
IV. **Metals: their Properties and Treatment.** By Charles Loudon Bloxam. London: Longmans, 1870.

Even when completest, a text-book can give but a narrow view of its subject. Its value, therefore, depends not merely upon the abundance of the facts it contains, or upon the kind selected, but to a greater extent upon the interest thrown round them by the author's sympathy both with his subject and with his reader, upon elegance of language and simplicity of style, upon the absence of abstruse or unproved theory, which is as unwelcome in a text-book of science as

the higher mathematics would be to the student who is ignorant of the multiplication table. Of the books above quoted, it is their manner or authorship rather than their matter which occasions their being noticed here.

I. Professor Frankland's book is already so well known that it is only necessary to indicate the differences between this and the previous edition. The most conspicuous is the absence of the old graphic formulæ, which consisted of the ordinary symbols, enclosed by circles, wherefrom the bonds or affinities projected. In this edition the circles have dropped out, and have left the bond-lines standing. Space has consequently been economized, and opportunity afforded for assimilating the formulæ in future to those employed by Mr. Cooke (II.), or for subjecting them to other modifications, such as the omission of the bond-lines themselves.

The omission indicates a change in the author's belief in the necessity of elaborate notation, though of course none in its general accuracy in expressing chemical constitution. The change, however, is perhaps not quite insignificant when taken in connection with the definition of chemistry with which this second edition opens, and which is not identical with that formerly given by the author. One great advantage of the new definition—that "chemistry is the science which treats of the composition of all kinds of matter, and of those changes in composition which result from the action either of different kinds of matter upon each other or of external forces upon one and the same kind of matter" —is, that it throws open the science to those who were debarred its study by the previous definition—"chemistry is the science which treats of the atomic composition of bodies and of those changes in matter which result from an alteration in the relative position of atoms."

The change here from contemplation of a shifting about of atoms, incomprehensible in themselves, as the sole aim of chemistry, to a recognition of force as concerned in chemical change is complete, and may result hereafter in a corresponding change in the treatment of the subject.

With regard to the contents of the book, some new facts have been added, and some paragraphs and sentences have been altered or omitted, but these are unimportant, and leave it practically the same as before.

As a collection of notes for students there is no opportunity for display of style, except in the introduction, and in this the author has succeeded in explaining in a few succinct paragraphs the system of chemical nomenclature. This is a topic which, to some writers of manuals, offers apparently more than ordinary difficulty, as it is passed over by them in silence: it is therefore all the more satisfactory to read Professor Frankland's explanations. As a practical matter it is to be regretted that currency should be ultimately given to the term "bisulphate," as denoting the compound of a normal sulphate with sulphuric anhydride, thus converting an anomaly in nomenclature into a standard. Having been applied to the hydro-metallic sulphates, subsequently employed regularly to denote them, and made to include the anhydro-compounds only by deficient knowledge, it would have been better either to have retained it with its original signification, or, if found inadequate to express the modern idea, to have discarded it entirely, and not by definition to have restricted it exclusively to those bodies to which it was extended for want of another word to distinguish them.

II. Since Mr. Daniell, some thirty years ago, published an *Introduction to Chemical Philosophy*, no English chemist, so far as we remember, has attempted an exposition of this subject, and it has been left to Professor Cooke of Harvard to supply a want which it is singular is not more felt.

Without attempting to define either "philosophy" in general or "a philosophy" in particular, we may assume that it denotes the highest and completest ideas arrived at by the most persevering and original thinkers. By "chemical philosophy" similarly would be understood that body of reasoned truth, concerned with certain changes undergone by matter which are called chemical.

A treatise, professedly on this subject, will consist of a discussion on the laws of these changes as established, on the physical foundations of which the laws may be regarded as the mental conceptions; it will examine those sections of the laws which may be less strongly based than others, weighing evidence from different sides; it will clearly state anomalies, explaining them, if possible, or leaving them sharply defined for further investigation. It will also indicate those analogies which, though not yet an integral part of the philosophic system, may form hereafter starting points for more comprehensive views. It will subject to impartial consideration the theories which have been advanced to explain the nature of chemical force, and to bring it within the range of actual experience. The preceding is not intended to exhaust all the subdivisions of the subjects, but rather to show what we consider belongs to chemical philosophy: a treatise on this topic should contain ideas and not facts.

Professor Cooke has a notion that chemical philosophy is at a higher elevation and requires greater discipline of its student than mere description. But in working out the task he has prescribed himself, his notion has somehow slipped out of his grasp. Hence the first objection to the book is its title: if the theme is chemical philosophy, more than half the volume is taken up with irrelevant chemical natural history, to the exclusion or curtailment of the subjects enumerated above as strictly belonging to it. Again, if the author meant to write the elements of chemical philosophy, of what use are the apologies for referring to theoretical explanations which occur more than once? The apology ought rather to have been for the facts. But if the author meant to write—as he has written—a chemical manual not different from the books he mentions in his preface, it was unnecessary to dignify with the name of chemical philosophy a text-book which might be read without difficulty by a beginner.

The book is divided into two parts. Part i. contains chapters on modern chemical theory; on atoms, molecules, equivalency, notation, nomenclature, combining weight, and on the "relation of the atoms to light and electricity."

It is this part alone which can claim to be philosophical, and that only in its theme. The modern theories are stated axiomatically, as if they never had been and were incapable of being criticized, and even in that form they are not complete. From a work on chemical philosophy, the absence of some account at least of the reasoning and methods by which data so important as the combining weights are ascertained is remarkable. It is impossible in any treatise to ignore the laws of combination and the combining weights themselves, but the author does not make them prominent, and though he refers to the aid rendered by specific heat in fixing the weights, nothing is said about their confirmation by isomorphism and diffusibility as physical checks upon the results of chemical combination. No attempt has been made to trace the progress of ideas from the equivalent to the combining proportion, a knowledge of which is indispensable to a critical estimate of atomicity, and of the connection between combining weight and vapour density; of what, in short, forms the basis of modern theory.

The philosophy of which this book is the exponent is purely atomistic, and it is carried out to its furthest verge Having recently adopted the theory of atomic structure, so

far as one can judge, the author has thrown himself into it entirely, has inverted the facts to make them yield their own explanation, and now very naturally smiles (p. 76) at the similarity between the modern "bonds," say of M. Naquet, and the older "hooks," say of M. Lemery. The similarity, however, arises not from the earlier crude fancies being now realised, but from M. Naquet belonging philosophically to the seventeenth instead of the nineteenth century; from these two illustrious French chemists declining to enter the realm of pure ideas, to apprehend energy and motion, and to unshackle themselves from material hooks and eyes. Mr. Cooke exhibits a similar reluctance. He seems to think that a physical phenomenon is explained when the account of it is given in atomic language: thus—"the cause of the power developed in the process of combustion is to be found in the clashing of material atoms" (p. 117); chlorine uniting with zinc "has the effect of an incessant volley of atomic shot against the face of the plate," and an electric current is the result (p. 156); light varies in intensity according to "the force of the atomic blows which are transmitted to the optic nerves" (p. 175). He has adopted also the most advanced views with regard to the "soldering" of molecules (pp. 64, 65), and speaks of "atomic clamps" (p. 74), "vincula" (p. 84), and other material symbols of chemical attraction. Mercury, for example, in the amalgamation process, "picks out the minute particles (of gold) from the mass of refuse" (p. 222). As sometimes happens, however, with converts, there is an occasional confusion between the old and new beliefs; for while the groundwork of this manual is strictly statical and positional, here and there there are not only given explanations on the dualistic and typical bases but we are also told that these are quite intelligible, and are possibly as correct as those which have displaced them (see pp. 86, 88, 132, 467). We think that if the author had realised what chemical philosophy means, his book would not have contained unreasoned explanations from opposing systems. Neither would he have left the reader in doubt respecting atomicity, whether it is fixed or variable, by simply hinting at the possibility of chlorine being triatomic (p. 435), or of nitrogen putting out a couple of extra bonds (pp. 245, 249, 250), not as nature, but as the exigencies of a theory, may require.

Part ii. contains a selection of facts from chemical natural history, intended to illustrate the philosophical exposition in part i. With the facts themselves there is no great fault to find. Still some may think that it is not strictly correct to say even with reservation that nitrogen compounds are unstable (p. 233), that tricalcic phosphate is widely but sparingly distributed, and is an essential but subordinate constituent of animals (p. 250), that carbonic dioxide is an innocuous gas (p. 458), and that actinism deserves the epithet mysterious more than any other physical phenomenon (p. 123).

With the selection, however, it is not always easy to be satisfied, especially when we remember that "definite structure is the legitimate object of chemical investigation" (p. 67). That common salt (p. 213) and nitre (p. 216) are used for preserving meat is unquestionable; that compounds of lead (p. 348) and of silver (220) are employed as hair-washes, gold in dentistry (p. 226), mercury for blue-pill and ointments (p. 333), is not unknown; that arsenic is "much used in packing hides" (p. 259), that potash is familiar to the soap-boiler (p. 216) and sodic carbonate to the baker (p. 214), is within the bounds of possibility: but what bearing have these facts upon the nature and results of chemical force, what obscurities do they light up in what the author calls "chemical philosophy," to our knowledge of the "definite structure" of what form of matter do they contribute? It is difficult to believe that these details are more important for chemical philosophy than would be furnished, for example, by the oxygen compounds of bromine and iodine, which have been altogether omitted, and by the gradation in the attraction of the halogens for oxygen. The author, indeed, is too apt to confuse the frequency of occurrence and commercial importance or wide distribution of a substance with its value as evidence for chemical theory, and to pass over the latter as of "merely theoretical interest" (p. 403), while the former receives sufficient attention. This is one way of "illustrating fully the principles of chemical philosophy, and giving a clear idea of that phase of the scheme of nature which has been revealed by the study of chemistry" (p. 200); it may be questioned if it is the best.

Had not the author himself directed attention to the place of chemistry in a university curriculum, and to its being unsuited or unattractive to those engaged in classical or literary studies, it would not have been necessary to refer to a fondness he has for giving the derivation of chemical names, for introducing new terms, and to his style in other respects. It seems singular that while giving the origin of molybdenum, tungsten, mordant, he should have omitted chlorine, bromine, iodine, selenium, barium, strontium, lanthanum, &c. &c. We do not think that succinium (p. 514) is Latin for amber, or that stochiometry (p. 41) is the correct English spelling of a word derived from στοιχεῖον. Whatever may be said in commendation of the forms "niccolous" (p. 366), "niccoliferous" (p. 365), "disassociation" (p. 128), there is nothing but condemnation of the use of the term "anhydride," in which Naquet also indulges. Not only is Mr. Cooke's use of it directly contradicted by his own definition (p. 85) but it destroys the significance of a very convenient term. Later in the book he speaks, virtually, of the first, second, third... anhydrides, of silicic anhydride, boric anhydride, nitric anhydride, and phosphoric anhydride. From which it may be concluded that if chemistry be of little use to the classical scholar (p. iv), Greek and Latin are indispensable to a chemist, if he wish to understand the words he employs. This use of anhydride is quite in keeping with the phrase applied to water, "most universal solvent" (p. 107), and with other inaccurate expressions due to want of attention and to straining after originality and emphasis.* He retains the term "neutral," as applied to salts in which all the acid hydrogen is replaced, after it had been worn out, and well substituted by the term "normal"—which renders his explanatory definition unnecessary (pp. 87, 90)—and he not only applies the prefixes bi- and di- indiscriminately to anhydro-compounds (cf. pp. 87 and 403) but expressly distinguishes the bisulphate from the acid sulphate (p. 87). The confusion already referred to above is in this way carried successfully a step further.

The preceding considerations are enough to prevent us regarding this work as treating of chemical philosophy. It is merely a text-book, which might be improved in style, in its facts and their arrangement, and in its notation, which is extremely fatiguing to read, and which by a variety of symbols attempts to show what can be effectively done only in the lecture-room or laboratory.

We must give the author full credit for the problems he has added to the different subjects treated of. They are not only convenient for the teacher, but they are highly suggestive for the student, and lead him to the formation of habits of chemical thinking.

* Water, "the life-blood of nature" (p. 201).
"One of the chief offices of nitrogen in the atmosphere is to moderate the action of its violent associate" (p. 233).
"Gold has been called the king of metals" (p. 223).

Upon the whole, the problems form one of the best parts of the book, and it would be unjust to Mr. Cooke if we did not express ourselves to this effect.*

III. That it was easier for the genius in the Arabian tale to re-enter his copper casket than for Dr. Miller to compress himself to the tiny compass of this *Introduction*, a perusal of both will testify. No surprise need be felt at this. With naturally a copious style and ample power of description, Dr. Miller, in his most readable and interesting *Elements of Chemistry*, had been too long accustomed to give them full play to relinquish all at once his habit of exposition. Hence in perusing the present work one feels that it has not been built upon a foundation of its own, but consists of a number of facts culled from the author's *Elements*, without any real cohesion; that, instead of being an organic abstract of the subject, it is merely an abstract of a book.

In this, as in other respects, the work exhibits haste, and one regrets that Mr. Tomlinson, the editor, did not make more suggestions of the kind he refers to in his prefatory note, and carry them out after the work was put into his hands.

The following are some of the imperfections which the book contains. An explanation of chemical nomenclature is conspicuous by its absence. In the arrangement of the book subjects are introduced where no mental association could succeed in placing them: crystallography, for example, is appended to carbon, and the atomic theory is added on to coal gas. Nor is it easy to see what advantage there is in taking atmospheric air, water, and carbonic anhydride, before oxygen, nitrogen, hydrogen, and carbon respectively, when the elements in other cases are described before their compounds.

The facts treated of are those generally met with in text-books, but it has been found impossible to escape altogether from the technological element which, as we have seen, haunts even the chemical philosopher. One property of potash thought worthy of notice is its solvent action on oil-paint (p. 31). Smalt is used by laundresses (p. 235), zinc sulphate is an emetic (p. 233), and amusing experiments can be performed with carbonic acid (p. 76). This reminds one of the amusing experiments with phosphorus mentioned by Stahl, and may be considered parallel to the resemblance between bonds and hooks indicated by Mr. Cooke. The uses of sulphurous anhydride (p. 146) are very curious.

The style of the book is in places awkward, obscure, and inaccurate. The verb "becomes" occurs on an average once in three pages, if not oftener, where "is" would have been at least correct, or where there was no need for an auxiliary at all. Pages 58, 80, 95, 128, 129, 173, 210, 219, 240, 254, 257, furnish instances of defective language; and the phrase "boiling point of a gas or vapour" (p. 194) conveys no accurate idea.

There are other mistakes which should not have been passed over: the use of two systems of nomenclature (p. 172), aqua regiæ (p. 128), ferric for ferrous (p. 95), phosphorous for phosphoric (p. 137); a collection of symbols (p. 190), evidently intended for an equation; another on page 178, which is not completed, and therefore hardly merits the name; the statement that the sign of equality (=) in chemical equation denotes chemical change and not equality (p. 8), and other blemishes. Lastly, the illustrations may be noticed because they are so out of drawing, and consequently convey erroneous impressions as to the construction of apparatus.

The position which Dr. Miller holds as the author of by far the best, indeed it may be said of the only, system of chemistry in English, renders it incumbent on us to speak so plainly of this *Introduction*. The defects are not irreparable, but the book would need to be strictly revised throughout, and even rewritten in part, before it could become worthy of the name of its author.

IV. The preceding is one of a series of "Text-Books on Science," now in course of publication, which are intended for use in schools and for the self-instruction of working-men.

Belonging to the same series is the volume on "Metals," by Professor Bloxam. This is a much better example of a text-book than the preceding. By careful composition and arrangement a large amount of matter has been packed into small space, and the salient points in the treatment of an ore and the extraction of the metal are given with comparative fulness. Iron, of course, occupies the first place, and has a third of the whole book devoted to it. Copper, tin, zinc, lead, silver, and gold follow, with a precise account of amalgamation, and a few pages on platinum, antimony, bismuth, magnesium, aluminium, and cadmium complete the work. Sodium, which was almost entitled to a chapter to itself, is only incidentally described. The writer of a book like this has to face the difficulty of too abundant material. Professor Bloxam, however, has steered his way happily, avoiding, on one hand, details of interest to practical metallurgists only, and on the other encountering scientific facts and principles fairly, simplifying them, making them understood by non-scientific readers, if they will only give the explanation some thought.

The illustrations are numerous, but rough and uncouth; suggestive rather of the *De re Metallica* of George Agricola than of the third quarter of the nineteenth century. It would be no drawback to a popular scientific book were it to have good illustrations as substitutes for the objects themselves.

John Ferguson.

* Reference may be made here to another collection of chemical problems, prepared by Dr. Thorpe, and published by Macmillan (12mo, pp. 67). In this little book the problems are arranged under different heads, and are concerned with the metric system, specific gravity, combination and decomposition by weight and volume, specific heat, calorific power and intensity, and other points. Under each head the method of calculation is first explained, examples are given, and then questions for practice. So far as it goes, it is well done, and will be useful for teachers, but the explanations are hardly full enough for the beginner and private student.

Scientific Notes.

Physiology.

Cause of the Different Action of Fresh and Salt Water on Animal Life.—In vol. xxxvi. of the *Memoirs of the Royal Academy of Belgium*, M. Félix Plateau details the results of a number of experiments, performed chiefly on various species of Articulata, to determine the question whether the fatal effects of sea-water on fresh-water species, and of fresh water on marine species, are due to the difference in the density or in the chemical constitution of the water. Having made a solution of sugar of the density of ordinary sea-water, M. Plateau immersed in it a number of fresh-water species, which either survived in perfect health, or at all events for a much longer period than in sea-water, from which he concluded that the greater density is not the cause of the injurious influence of salt water. On the other hand, he prepared solutions of the principal ingredients of salt-water in the proportion in which they are found in the sea; and, from the results of his experiments with these on fresh-water Articulata, he concluded that the fatality resides in the presence of the chlorides of potassium, sodium, and magnesium, while the sulphates of magnesium and calcium have little or no effect. The former salts, he proved, are absorbed rapidly by the fresh-water animals, and again expelled when placed in distilled water, while the latter salts are scarcely absorbed at all. In the same manner, he found that marine Articulata, when immersed in fresh water, give off a sensible amount of chloride of sodium, which he believes to be the cause of their rapid death. These phenomena M. Plateau believes to be explicable by the laws of endosmose and of

diffusion, and that it is the small diffusibility of the sulphates which renders them innocuous compared to the chlorides.

On the Cellular Structure of the Red Blood-Corpuscles.—Dr. Richardson, of Philadelphia, in the *Transactions of the American Medical Association* (reported in *The Monthly Microscopical Journal* for July 1, 1871), returns to the old view of the structure of the red blood-corpuscles, which asserts that these bodies in the Vertebrata generally are vesicles, each composed of a delicate, colourless, inelastic, porous, and perfectly flexible cell-wall, enclosing a coloured fluid, sometimes crystallizable cell contents, which are freely soluble in water in all proportions. He considers that this view explains the physical phenomena presented by red blood-globules far more satisfactorily than any other hypothesis which has hitherto been advanced; and moreover that the usual biconcave discoid form of the corpuscles in most mammals, as well as the changes of shape which they undergo in fluids of greater or less specific gravity than the liquor sanguinis, becoming crenulated in denser and globular in rarer liquids, are such as are perfectly explicable by the light of our present knowledge in regard to the laws of the exosmosis and endosmosis of fluids through membranes; the equilibrium of these forces being maintained in normal serum, and one or the other being rendered predominant if the specific gravity of that fluid be disturbed.

Relations of Urea to Exercise.—An important paper bearing on this subject is contained in the June number of the *New York Medical Journal*, written by Dr. Austin Flint, Jun., who gives a record of observations made upon a gentleman named Weston, who attempted to walk 400 miles in five days, and who actually accomplished 317½ miles in that period. The quantity and quality of the ingesta were carefully determined, and analyses made of the excreta for five days preceding the walk; for the five days of the walk; and for the five days after the walk; and the general outcome of the observations appears to be in opposition to the views now generally received in this country, consequent on the researches of Fick and Wislicenus, Haughton, Parkes, and Frankland, that in the performance of severe muscular effort the substance of the muscle itself undergoes disintegration and consumption. The question is a very difficult one to answer satisfactorily, and no positive conclusions can at present be drawn.

Action of Heart Poisons.—Dr. Rudolph Boehm, of Würzburg, has just published in a separate form an account of a series of experiments made by him on the action of heart poisons (*Studien über Herzgifte*, von Rudolph Boehm, Dr. Med.; Würzburg, A. Stuber's Buchhandlung, 1871). The poisons whose action has been investigated are atropin, muscarin, nicotin, aconitin, delphinin, veratrin, and physostygmin. The experiments were made on frogs. Dr. Boehm has paid especial attention to the action of the various poisons when administered to the same frog successively. For a detailed description of their action we refer our readers to the original; we give here the physiological conclusions arrived at. 1. The frog's heart possesses automatic nerve centres—(*a*) inhibitory centres; (*b*) excitomotor centres. 2. Both these centres can, in the normal condition, receive stimulus from the brain through centrifugal nerve fibres, which run in the cervical portion of the vagus. 3. The endings of these vagus fibres are not identical with the before-mentioned automatic centres. We must rather suppose the existence of connecting pieces by means of which the endings of the vagus are placed in communication with the ganglion cell composing the automatic centres. 4. The automatic centres of the frog's heart are not localized in any definite manner. Although their headquarters must be considered to lie in the sinus venosus (inhibitory) and the basis of the ventricle (excitomotor), there are yet facts which go to prove that both sorts of ganglions occur close to one another all over the heart. The movements of the several segments are to a certain extent independent of one another. 5. The ventricle, as being a striated muscle, has certain differences from the rest of the heart, and as such obeys the same laws as striated muscular tissue (exhaustion, paralysis, tetanus).

Botany.

The Structure of Bog-mosses.—Dr. R. Braithwaite contributes to the July number of the *Monthly Microscopical Journal* an account of the structure of the *Sphagninæ* or Bog-mosses, which he follows Schimper in considering a distinct order, of the same rank as the true mosses and liverworts; the muscal alliance being thus formed of the three orders *Bryinæ*, *Sphagninæ*, and *Hepaticinæ*. The spore does not, on germination, produce the much-branched confervoid prothallium of mosses, but, if growing on wet peat, a lobed foliaceous production similar to one of the frondose Hepaticæ; if in water, the prothallium is a fine filament, the lower end of which forms roots, and the upper enlarges into a nodule, from which is developed the young plant. The male organs of Sphagnums differ also from those of mosses, and in the arrangement and the form of the antheridia resemble those of Hepaticæ. They are grouped in spikes at the tips of lateral branches, each of the imbricated perigonial leaves enclosing a single globose antheridium on a slender pedicel. Paraphyses surround them, but, instead of being simple, as in mosses, they are very long, much branched, and of cobweb-like tenuity. The leaves of bog-mosses are very peculiar, and form well-known microscopic objects. They are remarkable from the cell-walls being perforated by holes, through which it is common to find that infusoria have passed, which may be seen sporting about in the cell-cavity.

Peloria in Labiatæ.—In the sixty-second volume, Heft 4 and 5, of the *Sitzungsberichte der k. k. Akad. der Wissenschaften* of Vienna, Dr. J. Peyritsch records the continuation of his investigations of peloria or abnormal regularity in the flowers of Labiatæ. He finds the pelorial flower to be very commonly the terminal one in the inflorescence, the lateral ones being of the usual bi-labiate type. The numbers of the parts of the calycine, corolline, and staminal whorls vary from two to six, the number being sometimes uniform throughout, and sometimes varying in each whorl; but by far the most common arrangement four of each. The pistil is usually quite regular, but in one instance the ovary was found to be six-lobed, surmounted by a single style and three stigmas. Examples of peloria are recorded in the following species:—*Galeobdolon luteum*, *Lamium maculatum*, *Ballota nigra*, *Clinopodium vulgare* (one only), *Calamintha Nepeta*, *Micromeria rupestris*, *Nepeta Mussini*, *Nepeta Cataria*, *Prunella vulgaris*. The abnormal development was found more frequently in plants grown in the botanic gardens than in the wild state. The paper is illustrated by several excellent lithographs.

The Cinchona in Jamaica and the United States.—In the monthly report of the United States Department of Agriculture for March and April is a valuable paper on the cultivation of the cinchona in Jamaica, by Dr. C. C. Parry. As the general result of his enquiries in regard to the cultivation of this plant, and the possibility of introducing it into any portion of the United States, he states—first, that the peculiar conditions of soil and climate suitable for the growth of the best varieties of cinchona plants cannot be found in the United States, where no suitable elevations possessing an equable, moist, cool climate, free from frost, can be met with; second, that the Island of San Domingo, located within the tropics, and traversed by extensive mountain ranges attaining an elevation of over 6000 feet, presents a larger scope of country especially adapted to the growth of cinchonas than any other insular region in the western hemisphere; third, that the existence of successful cinchona plantations in Jamaica, within two days' sail from San Domingo, would afford the material for stocking new plantations in the latter island at the least possible expense of time and labour.

The Cinchona and Ipecacuanha in India.—In the "Report on the Progress and Condition of the Royal Gardens at Kew during the year 1870," just issued by the director, Dr. J. D. Hooker, he states that the success of the cinchona plantations is now fully established in the Sikkim Himalaya, the Neilgherries, Khasia Mountains, Ceylon, and Jamaica. The bark from the first-named localities has commanded a price equal to the Peruvian in the English market. Great exertions are now being made by the Indian government to introduce the ipecacuanha plant into that country, for which purpose large numbers of plants have been sent out from the gardens at Kew. Some districts of the continent of India seem well suited for its cultivation.

Flora of Palestine.—At a meeting of the Society of Biblical Archæology, held on July 4th, Mr. B. T. Lowne read a paper on this subject. He considered that the flora composed eight distinct elements—four the dominant existing floras of Southern Europe, Russian Asia, North Africa, and that of Arabia and North-Western India. Each of these floras was stated to occupy a distinct region of the country. Interspersed with these are found numerous examples of plants belonging to palæarctic Europe, constituting its fifth element. The arctic flora of Hermon and Lebanon constitute the sixth. Mr. Lowne thought further that the cedars of the Lebanon moraines, and the papyrus of the Jordan lakes, were the remnants of two ancient and almost extinct floras belonging to two distinct geological periods.

Physics.

A New Method of observing the Sun spectroscopically.—A short description of this new method of P. Secchi is contained in *Poggendorff's Annalen* for June. It consists in placing a direct vision prism system at a suitable distance before the slit of an ordinary spectroscope, so that an impure but extended image of the sun falls on the slit. An extremely sharp image of the sun is then seen on focusing the latter spectroscope. The spots appear more distinctly than when a coloured glass is employed. The protuberances are at once recognised by their brilliant lines; and their height may be measured without difficulty. On fixing the line C on the edge of the sun's disc, the contour of the protuberances around the spots is beautifully seen, and the crater-like form of the latter comes out with surprising clearness.

Leidenfrost's Phenomenon.—The June number of *Poggendorff's Annalen* contains an account of a series of experiments by R. Colley on

the temperature of water in the spheroidal condition. The calorimetric method of mixtures, already employed by Baudrimont in his investigation of the same subject, is the one made use of by the author in these experiments. The calorimeter consisted of a thin silver vessel of about 80 cc. capacity, the mixture being effected by means of a small glass stirrer; an extremely fine thermometer, only 1·7 mm. in external diameter, was employed to determine the temperatures. The calorimetric value in water of the silver vessel, stirrer, and thermometer together was only 1·0339 grm. The experiment was conducted as follows:—A convenient quantity of water being placed in the calorimeter, the whole was carefully weighed together with the stirrer, a silver lid being placed on the vessel to prevent evaporation; the temperature of the water was then read off, the lid removed, and the Leidenfrost's drop, which had been formed in another dish of chemically pure silver, poured in, rapidly mixed with the water in the calorimeter, and the rise in temperature noted; the weight of the spheroid introduced was then determined by again weighing the covered dish. The temperature of the heated dish in which the spheroid was formed was also determined. From the data so obtained the temperature of the spheroid was readily calculated. The temperatures observed in some nineteen experiments vary between 90°·56 and 100°·34, so that there is no doubt that the temperature of water in the spheroidal condition is not constant. The author is of opinion that it is mainly dependent on two causes: on the temperature of the heated dish, and on the size of the spheroid. In five experiments where this dish was heated to redness the temperatures were from 1½ to 2 degrees higher than in six others where the dish was heated only to 250°–300°. The influence of this cause, however, is comparatively slight; and it would even seem that on increasing the mass of the spheroid this influence entirely disappears. The size of the spheroid has a decided influence on its temperature, whereas the temperatures of spheroids weighing between 5 and 6 grms. varied between 90°·5 and 91°·7, spheroids weighing 12·2, 12·7, 15·7, 16·5, 21·3, and 23·6 grms. were heated to 98°·3, 99°·1, 100°·3, 99°·8, 99°·3, and 99°·8. A further result of these experiments is that the view hitherto universally adopted, that the temperature of liquids in the spheroidal condition is always below their boiling point, can no longer be maintained; in four experiments in which the weights of the spheroids were from 16 to 23 grm. the temperature reached the boiling point.

On the Construction of a Filtering Apparatus on Bunsen's Principle.—In *Poggendorff's Annalen*, No. 4, E. Zettnow describes a modification of Bunsen's well-known simple filtering apparatus, which will raise a column of mercury over 500 mm. high. In two thick glass bottles of about 8 litres capacity, two holes are bored near the bottom and leaden tubes, 140 mm. long and 9 mm. in diameter, inserted by means of caoutchouc corks; the two flasks are placed in boxes lined with straw in order to preserve them against injury, and the leaden tube from each projects through a hole in the side of the box. The two flasks are connected by means of alternate lengths of glass tube, 5 mm. long and 9 mm. wide, and caoutchouc tubing, 70 mm. long: flexible tubing alone without glass was not found to answer. A screw pinch cock is placed about midway between the two bottles. In the neck of each flask a cork and tube bent at right angles is inserted. One of the flasks is then filled with a solution of chloride of zinc of 1·85 sp. gr. To use the apparatus, the full flask is connected by means of flexible tubing and a T piece with a manometer and the vessel, in which a vacuum is to be produced; it is then raised to the ceiling by means of a pulley, the screw pinch cock opened, and the liquid allowed to flow gently into the lower, empty flask.

Contents of the Journals.

Zeitschrift für Philosophie und philosophische Kritik (Halle), vol. lix. part 1.—The first article is of a kind somewhat unusual in this journal. It is popular rather than scientific, being a quasi-Platonic dialogue on "Das Philosophiren." [Philosophy is an art rather than a science, its object is not so much self-knowledge only as self-realisation.] It is written with intelligence and feeling rather than grasp.—Dr. A. Richter reviews *inter alia* Durdik's Leibnitz and Newton [an attempt to show that the true basis of philosophy is to be attained by a syncretism of the monadology with the "Newtonian" principle "that a thing is where it acts," *i.e.* everywhere—suggestive, but too fragmentary to be seriously criticised]: also Quäbicker's criticism of Kant's criticism of rational psychology. [This receives a more thorough treatment in the *Philosophische Monatshefte;* see below.]—The most elaborate article is a review by Professor Reichlin-Mildegg of three logical treatises, all confidently rather than successfully revolutionary. [Dr. Seydel understands by logic a complete theory of knowledge, and in expounding this outlines a system of philosophy in which "Gotteslehre" holds an architectonic place among the sciences: and the theological or "glaubensphilosophisch" method, which starts with intuition, is set as a third beside the dialectical or deductive and the empirical or inductive. In Professor Rabus' work Neo-schellingian influence and a theological or even theosophic interest and aim are still more patent: he finds the true criterion of truth in "concrete self-consciousness," of which "knowledge of miracle" and of "the other world" are elements. To a very diverse line of thought belongs Professor Hoppe's reconstruction of logic as "Begriffsbildungs- und Begriffshandhabungslehre," for which the recent—especially English—inductive logicians have prepared the way by discrediting antiquated formations and accumulating materials from their study of the sciences, though themselves unable to build. Professor Hoppe's attitude to formal logic seems to the reviewer too purely critical and negative.]—The controversy about Berkeley still continues, including a "last word" from Ueberweg.

Philosophische Monatshefte, vii. Bd. 1st half, 3rd No.—This also commences with an Apology for Philosophising by Hartmann, of which part has appeared in a previous number. It is vigorous and well-written, but not particularly original. The only scientific article is a very clear and able critique of Quäbicker's work on Rational Psychology, noticed in the preceding paragraph, by Professor Harms. [He protests against the author's treatment of Kant as too narrow and formal. Quäbicker regards Kant's polemic as directed against Wolf's system in particular, and maintains that the famous paralogism is not to be found there, and is an arbitrarily introduced sophism. But Kant had really in view the fundamental and essential method of metaphysical psychology, as it had existed since—and even before—Descartes: and the question is not whether Wolf and his predecessors were guilty of an express logical fallacy, but whether their inference from (empirical) psychology to ontology had a radical defect, which might be conveniently exhibited in this form. Indeed it is useless to criticize Kant's views on this point separately, and out of connection with the rest of his system: as it is to extract a theory of psychology from the Kritik of pure reason only, and call it Kant's. The criticism of Herbert is more briefly treated.]—The number terminates with an account of the presentation of Hegel's bust to Berlin.

Both the great reviews contain articles on Mr. Darwin's *Descent of Man*, and both are strongly adverse. The *Quarterly* adduces some half-dozen points on which Mr. Darwin has modified his views since the first appearance of the *Origin of Species*, and maintains that this throws doubt over his whole argument. The differences of opinion between Mr. Darwin and Mr. Wallace as to the comparative importance of *protection* and *sexual selection* in rendering the colouration of the sexes diverse are brought forward to show that they mutually destroy the value of each other's views, and thus leave the whole phenomena to be accounted for by some unknown innate law. All the minute agreements of structure and variation between man and the apes are said to prove only that man is corporeally an animal, which no one had ever denied. Man's mental nature, however, is said to differ, not in degree, but in kind, from that of animals; so that man forms really even more than a distinct kingdom of nature. The *Edinburgh* goes more into the general question, and advocates evolution by unknown causes as against the definite causes—variation and natural selection. It quotes the strongest arguments of M. Mivart and Mr. Wallace against certain of Mr. Darwin's views, and maintains that they remain unanswered. The views expressed in the new work as to the intellectual and moral nature of man especially alarm the writer. It is argued (very illogically) that, because the *cause* of variations is unknown, to deduce anything from them is a confession of ignorance. The weakest portions of the theory of sexual selection are vigorously attacked, and it is held to be incapable of accounting for the beauty in tints, patterns, and ornaments, that prevails in the animal world. The fear expressed that, if the derivation of the moral sense from instincts is true, the constitution of society would be destroyed is almost ludicrous. [On this and allied points we would direct both the writers and readers of these articles to an admirable essay on "Darwinism and Religion," in the May number of *Macmillan's Magazine*.] Of the two articles, that in the *Quarterly* exhibits the more knowledge and liberality, but neither of them are of the highest class as criticisms of so important a work.

The first part of the new quarterly *Journal of the Anthropological Institute of Great Britain and Ireland* (January–July, 1871) contains, besides the papers read before the new society, occupying 120 pages, the proceedings of the Anthropological and Ethnological Societies of London prior to the date of their amalgamation, in an appendix of 180 pages. It is full of interesting matter, and contains several articles of great permanent value. The paper by Sir John Lubbock, "On the Development of Relationships," treats of the curious but somewhat intricate subject of how savages estimate relationship, and what is the signification of the differences that exist between them. Sir John shows that the language of many tribes indicates a lower state of social morals than their existing practice, while in no case is the terminology higher than the practice; and he deduces from this an additional argument for the almost universal progress of mankind. Mr. C. Staniland Wake discusses the mental characteristics of primitive man as exemplified by the Australian aborigines, which he believes to be the nearest representatives of our earliest ancestors. Dr. H. I. Bleek has a very valuable

paper on the position of the Australian languages. He arrives at the conclusion that the Australian languages are allied to the Dravidian of S. India, while they are as remote as possible from the Polynesian. To these latter the Papuan are somewhat allied, connecting them to the South African. We thus have a pure philologist confirming the views arrived at by Professor Huxley on the one side and Mr. Wallace on the other, from a study of physical characteristics only. Another paper by Dr. Bleek, "On the Concord, the Origin of Pronouns, and the Formation of Classes or Genders of Nouns," is an elaborate exposition of some of the latest researches on the primary groups into which languages may be classified. Among the other more important papers are that by Mr. Hector McLean, "On the Kimmerian and Atlantean Races;" "Report on the Prehistoric Antiquities of Dartmoor," by C. Spence Bate; and "On the Prehistoric Remains in Brittany," by Lieut. S. P. Oliver. Several papers on stone implements, both modern and prehistoric, in various parts of the world, on crania, cave explorations, and many other subjects, render this first publication of the new society unusually varied and interesting.

A prospectus is being circulated of a proposed De Morgan Memorial, to the memory of the illustrious professor of Mathematics at University College, London. It is proposed to take the form of a De Morgan Professorship of Mathematics at University College, for which purpose it is hoped a fund of 8000*l.* may be raised. Mr. Grote left in his will the sum of 6000*l.* for the endowment of a professorship of Mental Philosophy at the same college. Mrs. De Morgan is collecting materials for a biography of her late husband; and to this end solicits the loan of any letters from him, or other documents of interest, that may be in the possession of those who enjoyed a correspondence with him.

New Books.

Dorner, Dr. A. Grundzüge der Physik. 259 Holzschn. Hamburg: Meissner.

Fiedler, Prof. W. Die darstellende Geometrie. Ein Grundriss für Vorlesungen an technischen Hochschulen und zum Selbststudium. 228 Holzschn. u. 12 lith. Taf. Leipzig: Teubner.

Taine. On Intelligence. Translated from the French by T. D. Haye, and revised, with additions, by the author. Part II. London: L. Reeve and Co.

History.

1. **History of Roman Literature.** [*Geschichte der römischen Litteratur.* Von Dr. Johann Christian Felix Bähr. Vierte verbesserte u. vermehrte Auflage. Drei Bände.] Carlsruhe: 1868–1870.
2. **Outlines of Roman Literature.** [*Grundriss der römischen Litteratur.* Von G. Bernhardy. Vierte Bearbeitung. Braunschweig: 1865. Fünfte Bearbeitung. Erste Abtheilung. Braunschweig: 1869.]
3. **Outlines of Lectures on the Literary History of Rome.** [*Grundriss zu Vorlesungen über die römische Litteraturgeschichte.* Von E. Hübner. Zweite vermehrte Auflage.] Berlin: 1869.
4. **History of Roman Literature.** [*Geschichte der römischen Litteratur.* Von W. S. Teuffel.] Leipzig: 1870.

The history of ancient literature has only reached the dignity of a scientific study within a few generations. The necessary biographical and bibliographical materials had indeed been collected with exhaustive diligence, but the dry and monotonous mass had not had life breathed into it, and still lacked the illumination which should separate and group its lights and shadows. The divisions in vogue were purely mechanical, based upon superficial, sometimes even on ludicrously irrelevant, considerations. A change only became possible when philology consciously assumed the rank of an independent science, and appeared no longer as an aggregate of elements in great part quite heterogeneous, but as a uniform science of antiquity, starting from a uniform and dominant leading conception. That philology was raised to this position by F. A. Wolf need hardly be said here. His famous classification of the study of antiquity according to Idea, Contents, End, and Value, in the first volume of the *Museum der Alterthumswissenschaft*, may, after sixty-four years, seem in need of further development (which indeed it has received from Böckh, Bernhardy, Ritschl, and Fr. Haase*) both as regards general conception and definition and as regards particular arrangement and distribution; but it constitutes none the less surely the decisive turning-point of philological study, the single branches of which were then first revealed to be organic members of a great whole, as well as possessing each one a separate organization.

The author of this revolution had long been following this path with trenchant effect, in his glowing lectures, whether of a general encyclopædic character or devoted to single branches of study. In aid of the latter he had published, twenty years before, a few partly unfinished outlines which, scanty as they were, announced by their method the mighty progress to come. To this number belonged the *Geschichte der römischen Litteratur nebst biographischen und litterarischen Nachrichten von den lateinischen Schriftstellern, ihren Werken und Ausgaben. Ein Leitfaden für akademische Vorlesungen.* Halle, 1787. Bernhardy has done well to place the introduction to this short sketch of forty-six pages at the head of his *Outlines*, which, in common with all other subsequent investigations, rest on the foundations therein laid down.

"No one can deny," observes the author, "that a mere collection of lives and notices of writers and their works, and the editions of their works, may contain much that is useful and serviceable, if only as preparing the reader for the study of the works themselves. But notices of this kind when isolated from their context only give a very imperfect notion of what the literature of a nation is or has been. But all such notices *are* separated from their context when they are not accompanied by a general representation of the total sum of culture and scientific knowledge subsisting amongst the people. Without this general knowledge it is almost impossible to appreciate fairly the worth or merits of a single writer, and without it even the lives of authors appear to have no light or interest. . . . A series of lives of authors, good and bad, may be creditably called a Necrology, a Gallery, a Library; but Literary History is incontestably too distinguished a name for it."

These words might be reiterated at the present day, with the single modification that we no longer require the literary history of a people to be accompanied by a history of the whole *ensemble* of its civilisation; but only that the history of ancient classical literature be looked upon as an integral part of the general history of classical antiquity, intimately connected with the development of ancient civilisation and its various special branches of faith and learning, law and custom, art and industry, action and thought, which have to be indicated in the background in the case of literary just as of political history.

In an abridged form, suited to the scale of the work, this demand finds expression in the introductory paragraphs of Hübner's *Outlines* which may be considered as the latest and most approved extension of the Wolfian design. § 1. *Conception and Method.* I. Natural connection between Greek and Roman antiquity; II. Relations of the history of literature to the other branches of classical philology. § 2. *Preliminaries.* I. Nationality and language; II. National character. § 3. *Range of the Enquiry and Division of the Subject.* This outline was originally designed by the author for the use of students attending his lectures at the Berlin University, but it appears equally well suited to assist other young philologists in obtaining a general survey of Roman

* By Böckh, in his lectures on the *Encyclopædia of Philology*, which competent hands are now preparing for publication; by Bernhardy, in his *Outlines of the Encyclopædia of Philology*, Halle, 1832, which, we are informed, are shortly to receive the modifications and additions required by the times; by Ritschl, in the article, sketchy but full of thought and matter, which appeared anonymously on Philology in Brockhaus' *Conversations-Lexicon der neuesten Zeit und Litteratur*; by Haase, in the article on the same subject, in Ersch and Gruber's *Allgemeine Encyclopädie der Wissenschaften und Künste*, which is not less profoundly conceived, and carried out into much greater detail.

literature—not omitting patristic literature down to the sixth century, which is essential to a complete understanding of the subject—and in putting the same to scientific profit. On its first appearance (Easter, 1869) the work, though only reaching to the time of Hadrian, was so warmly received, as satisfying a real want, that a fresh edition, extended as we have seen, was demanded in the autumn of the same year. The work (containing 86 pages and 127 paragraphs) is divided into three periods, in each of which prose and verse are treated separately. I. Latin literature down to the Decemvirate. II. Italic literature, its struggles and prime, down to Cicero, Lucretius, Catullus, and their contemporaries. III. World literature. Under each head is a summary account of the most important literary monuments and personages, their historical significance, and for the most part a list of each author's works, as well as of the modern literature, commentaries, or editions bearing on the subject. In pursuance of his principal aim the author has here selected the most important, and by preference the most recent, results of scientific inquiry. An occasional want of proportion, in the application of single remarks to authors whose real significance is not indicated, must be accounted for by the special requirements of the author's Berlin audience, as indeed he states in his short preface. An index (p. 87–91) adds to the usefulness of the second edition. The statements are almost uniformly accurate and trustworthy; but the friends of an undertaking equally well conceived and executed, are invited to communicate to the author anything that may be of service for the third edition, which will doubtless soon be called for; and the present writer has preferred that course to the ungrateful task of pointing out single omissions and inconsistencies here.

Hübner, like Wolf,* has contented himself with the publication of a kind of skeleton course, to which oral delivery alone contributed the flesh and blood; but the other three works cited above all supply more or less detailed views of Roman literature. It is a good omen for the lively prosecution of this study that at the very time two of these works are appearing in fresh editions, there should be found room for a third which has speedily obtained a wide circulation. The two older works have undergone a long process of revision, and have varied much from their original form. Bähr, it is true, has still kept in view the object which he proposed to himself on the first appearance of his book in 1828: that is, "to supply a work containing the results of all investigations down to the present time, which have had for their object either the history of Roman literature in general, or the history of single writers in particular." Since then he has continued the work of collection through more than forty years with indefatigable industry and a mastery of his subject to which his position as librarian of one of the first libraries in Europe has no doubt contributed, but which remains nevertheless almost marvellous. From two portly octavo volumes, in the third edition, 1844–5, the work has grown in a quarter of a century to three. The author may therefore claim credit for having created an almost exhaustive repertory for the student desirous of taking a survey of this whole domain and acquainting himself, as a prelude to first-hand investigations, with all the literature that has grown up on any particular point; at the same time the unwieldiness of the book might have been lessened by the omission of some obsolete matter and some which is insignificant and even worthless. Thus the author continues to adhere as far as possible to the old standpoint, according to which the chief part of his task consisted in collecting biographical and bibliographical notices, and in registering the opinions passed on them by the learned. It is true that in his latest editions he has endeavoured more and more to obliterate the traces of the heterogeneous origin of the work; but he still appears to give too much weight to incompatible opinions, so that the pictures which he wishes to put before us himself have to be extracted from the midst of foreign and perhaps incongruous elements. However, we see everywhere that, in spite of his advanced age, the author has been labouring diligently to conform to the growing demand of science in the inner substance of his book, as well as to preserve its character for external completeness. Of course all the Gordian knots which he and others have tied before are not to be at once cut asunder with the sharp steel of independent original opinion. Those who look for a decided theory of Roman literature, cast at a single moulding, will certainly be disappointed here; but, on the other hand, numbers will render thanks to the author for the toils he has spared them, and the rare self-denial with which he has smoothed the path they wish to tread. In points of detail the work, so far as we have examined it, also appears to have gained in accuracy and trustworthiness.

Gottfried Bernhardy—the second head librarian of a German university library, which, however, stands far behind the ancient and venerable Palatina—does not yield to his predecessor in comprehensive mastery of his materials, though he does not bring them forward in such outward abundance. The first edition of his work appeared in 1830, a very few years later than that of his colleague, and we can scarcely be wrong in supposing that it was from the first intended by the author to stand in a kind of contrast to the labours of Bähr. Whilst the latter possessed only a slight and objective coherency, Bernhardy's acute and original appreciation of authorities, and his not less acute and sometimes biting criticisms of modern productions, were employed upon an extract from which every foreign substance had been evaporated, and only the homogeneous assimilated. He disdained all suggestions contrary to the results which bore the impress of his own caustic intellect; his style was curt to match, and yet sometimes intricate, bristling with paradoxes recalling the rhetorical Roman literature of the first century, and in fact offering a parallel to it in what might be called "silver German" if the name has not yet been applied. In addition to the not inconsiderable difficulties thus offered to the student, there is another occasioned by the author's having retained Wolf's division into two parallel currents, which mutually complement each other. By this means it became almost impossible to avoid repetitions; things which belonged together were separated, and often could not be made use of until they had been hunted out in the two parts and brought together. The first part set forth, as Wolf had prescribed, "the fortunes of literature under the Romans in all ages down to the general wreck of learning;" the second "the history of all kinds of poetical and prose literature, together with biographies of the most distinguished authors, and notices of their treatment by moderns down to the present time." Bernhardy called one the internal, the other the external, history of Roman literature. For these reasons the book made its way slowly in spite of its acknowledged merits. The mental power of the work was not wasted, for its strong personal colouring excited fellow-labourers in the field to reflection as well as to contradiction; but for practical use or cursory consultation, Bähr's book was the more convenient, and at the end of sixteen years was in its third edition, whilst Bernhardy's work had been twenty years before the public when a second edition was at length called for. In this the same twofold arrangement was preserved,

* For the notes published, after Wolf's death, of lectures carelessly delivered and incorrectly written down, cannot be looked upon as the same as a work published by the author himself.

but the work was doubled in extent, omissions were supplied, and points hinted at before were carried out with greatly enriched details. The author's self-criticism was particularly searching in what concerned his method of exposition. He was early mature, and in the rapid succession of his creations, in the self-conscious craving of his individuality for recognition, his mode of expression had become fully stamped with the marks of his personal temperament. This has its relative justification, and especially in the treatment of Roman literature, as we may concede to the author, who in one of his prefaces (*History of Roman Literature*, 2nd edition) speaks of his subject as having been hitherto, "for whole reaches of time, disposed of frigidly with empty words by a long series of writers, and treated with cool indifference even in times when literary action had become a necessity for the heart." At the same time he has begun to feel that clear and lucid expression and consequent intelligibility must not be sacrificed to the desire for condensation. In the preface to the revised edition of his *Outlines of Grecian Literature*, which had undergone substantially the same process of simplification, he says, what is equally applicable to the changes in the work before us: "If simplicity is rightly held to be the result of maturity, and corresponds to the fruit of successful labour, then the work has gained in harmony; the form ought to be everywhere simple, appropriate, and concise without ostentation." He appears to have attained his end, so far as it was possible to a man of such strongly marked individuality, who could never quite quench the fireworks of his fancy, or reduce to one dead level of polish all the sharp nooks and corners of his intellect—a result not to be desired even were it possible, for Bernhardy is one of those men who will never be able to say "nos numerus sumus." In proportion as the book became more enjoyable to the general reader, it gained favour with the learned caste, and even the rest of the educated world; editions succeeded each other more rapidly (1854–57, 1865, 1869), and in each one the author endeavoured to continue the improvements begun in his second edition, both by continuous and penetrating study and extension of his subject-matter,* and by gradually increasing lucidity of exposition. The completion of the fifth edition will not, it is to be hoped, be long delayed. However much one may differ from the author on single points, his book will never be consulted without profit and pleasure, the latter especially being due to the piquant spice which "for all that and all that" lends flavour to the perusal.

At first sight it might appear that the works above mentioned † would satisfy every requirement. Apart from the propædeutic purpose served by Hübner's very useful abstract, Bähr supplies an exhaustive repertory of facts, and Bernhardy a brilliant and suggestive treatment: nor only so, but both the initiated and the profane, if possessing the slightest modicum of culture, will find in the relevant sections of Mommsen's *History of Rome* an account of the more important literary characters and events during the Republican period, suited to fascinate readers of both classes by its accurate information and the seeming ease of its daring style. But in spite of this apparent wealth there was still room for a work standing midway between those of Bähr and Bernhardy, and intended for readers desirous of obtaining, with the minimum expenditure of time and money, a comparatively complete and fairly trustworthy general idea of the existing sources and authorities. This task has been undertaken by Professor Teuffel, and, after many preparatory years of literary and academic activity, has been successfully accomplished at the first attempt. He himself points out in his preface two specific differences between his work and those of his predecessors: in substance, in that he includes the Christian literature (like Hübner)*; and in form, by the chronological disposition which he has adopted. Out of the whole 1025 pages of the book (not counting preface, introduction, and index) only the comparatively small portion of 76 pages is devoted to general and essential considerations; *e. g.*, the national character of the Romans and their attitude towards literature, and the development of the several literary forms of prose and poetry. The second "special and personal" division extends from p. 77 to 1032, the last 20 pages being taken up with an alphabetical register. He divides his subject into four principal sections, which seem to me, on the whole, to correspond with the actual course and growth of Roman literature, viz.:—I. Introduction to the history of Roman literature, down to 514 A.U.; that is to say, down to the first appearance of Livius Andronicus, and the beginning of a rough, but germinating and respectable, literary activity. II. First Period. From Andronikus to the time of Sulla (514–670). III. Second period. Golden age of Roman literature (671–770). IV. Third period. The Roman Empire after the death of Augustus. If we wish to bring into clearer relief the influence of politics on literature, which was never greater than in Rome, there will appear to be an internal propriety in this division—early history down to its first artistic expression; the two periods of Republican literature; and the Empire after the Augustan period. These political influences will explain how the Republic closed with prose literature at its zenith, and how it was that, furthered and encouraged by the monarchy, poetic art reached the fairest development which it ever did or could reach in Rome. In any case the author's division appears to me preferable to those of his predecessors; for though that of Hübner is based on true historical insight, it throws less light on the purely literary development than the one which commemorates the first introduction of artistic literature on the Greek model into Rome. The subordinate divisions are not so satisfactory, and the minute segments into which the Imperial period is divided have already been objected to; but there is often an internal thread of connection reuniting the disjoined parts, and it must be admitted that the subdivisions have their practical convenience. The attention bestowed upon individual authors has rightly been regulated by the importance of their literary activity and the completeness of the records concerning them, rather than by the accident of their works having reached us in whole or part. The more important writers occupy several paragraphs, some one only, and the less known or less important are grouped together. The paragraphs contain in a condensed form what is treated at greater length in the Remarks, with references to original and modern authorities; in the latter place are also notes on the manuscripts, editions, and other critical aids to the expla-

* The second edition contains 705 pages, the third 814, the fourth 930; in this the introduction, the first part, and the chronological review of Roman literature, occupy together 368 pages; in the fifth edition they receive 380 pages.

† In addition to these, for the use of higher classes in schools, E. Munk's *Hist. of Roman Lit.* (in three small volumes, Berlin, 1858) may also be recommended. It might even be read with interest and profit in wider circles, on account of the numerous illustrations given. The *History of Rome*, by Carl Peter (three volumes, of which the first two have lately reached a third edition), might also with advantage be consulted for a careful and profound general view of the development of literature down to the age of the Antonines, based upon independent command of the subject.

* Bernhardy only accords it a short notice in conjunction with the literature of jurisprudence. Bähr has published a supplementary volume in three parts (Carlsruhe, 1836–40): I. Christian poets and historians; II. Christian theology in Rome, with an appendix on the legal authorities; III. Roman (Christian) literature during the Carlovingian period.

nation of the surviving works. The author has complete control over the wide range of his materials; and we are seldom able to point out an error or an at all important omission. Those which we had observed have been communicated to the author at his own request, and will be made use of in the second edition which may doubtless be looked for ere long. It is therefore unnecessary to mention them here. The descriptions of the periods and of single authors are short and striking, but not always in good taste: here and there the author has failed to emancipate himself from the undergraduate mannerisms of his earliest literary essays. In essentials he carries the reader with him, and especially displays an incorruptible zeal for truth. Thanks are also due to him for his courage in throwing overboard without hesitation all useless and obsolete rubbish, with its attendant references to worthless editions and the like. In no other way was it possible to reduce the ponderous materials into comparatively moderate compass, and to give the book the practical and serviceable character, in consequence of which it had hardly done appearing in Germany before it was almost out of print; whilst, to give it still wider circulation, an English translation is being prepared by a very competent hand. Martin Hertz.

The Chronicles of the Pathân Kings of Delhi. Illustrated by Coins, Inscriptions, and other Antiquarian Remains. By Edward Thomas (B.C.S.), F.R.S.

It is now forty years since the curiosity of the reading world was excited by the announcement that coins were still in circulation or occasionally exhumed in Central Asia, Affghanistan, and Western India, bearing Greek superscriptions and devices, with names some of them historical and well known, but more of which there was nowhere any record. Some of these coins were brought home by Captain Burns and other travellers. The enquiry was immediately prosecuted with ardour, and the result has been that there are now large collections of these coins in public museums and private cabinets, and a long list of Greek sovereigns of the country between the Caspian and India has been exhumed from the dust of ages. The spirit of enquiry thus excited did not stop there. Collections were made of ancient Indian as well as of Parthian and Sassanian coins, so that, so far as numismatic research can be made to supply or assist history, this record has, through the activity and intelligence chiefly of our own countrymen, been saved to the world, and its results exhibited in many publications.

Mr. Edward Thomas, late of the Bengal Civil Service, though not one of the earliest, has been one of the most successful of those who have devoted themselves to the classification and deciphering of the coins thus discovered. He is well known especially for having been the first to decipher the old Pahlawi legends of the Sassanian coins; and he collected and published with valuable comments and additions the articles of the *Journal of the Asiatic Society* in which the late Mr. James Prinsep first brought the subject to notice, announcing each new discovery as it was made, and applying his active intelligence and great artistic skill to their explanation and delineation. But the field of high and classic antiquity was in the course of years exhausted. Still the impulse having been given to these numismatical researches, they continued to be prosecuted until the successive changes introduced into the coinage by the conquering races, who subverted each government and dynasty in turn, were thoroughly discovered and made familiar. Thus we know all the changes made in the devices and superscriptions, as well as in the weight and value, of the coins of each race of sovereigns, and the changes of language and character stamped upon them, until the time when the tide of Mohammedan conquest swept over the whole region of Central Asia, and brought a coinage in the name of the Khalifs of Baghdad up to the very frontier of Western India.

Mr. Edward Thomas and Colonel (now General) Cunningham were among the most prominent of those who devoted themselves to the researches of which we have spoken. But the volume now presented to the public by the former gentleman leaves that field quite untouched, and takes up the subject of Mohammedan coinage from the time only of the establishment of the Pathân Mohammedans at Delhi, that is, from the time when Mu'izz-ud-din Mohammed ben Sam, through his general Kutb-ud-din Aibek, established himself at Delhi, and made it his capital in the year A.D. 1193. The race of sovereigns who were thus installed in North-western Hindustan were called the Ghoris. Their coinage bears the superscription of the Baghdad Khalif of the day, whose feudatory or subordinate the reigning sovereign was content to be considered. The silver coinage of these sovereigns was dirhams of 68 grains, conformable with that of Baghdad (*dirham* being the Arabic form of the Greek word *drachma*); the gold coins of this dynasty, corresponding, we presume, with the deenars of the West, were of 93 grains. The Indian governors, however, established at Delhi, Lahore, and other cities, were all subordinate to the ruling head of the family whose capital was in Affghanistan, and their coinages were not uniform. Mr. Thomas has given these in detail, and, while doing so, has further illustrated the condition of the Hindu coinages circulating at the time, and shown us how several of these were continued, with or without variations, by the local governors. These, however, are for the curious, not for the general reader.

This race of kings or governors, having continued in power and considerably extended their dominion in India, were superseded after a century by the Khiljis, the first of whom, Jalal-ud-din Firuz, assumed the sovereignty, and began to coin money in his own name in the year A.D. 1290. Of this dynasty there are both silver and gold coins extant, as well as the universal copper. Hindustan was now erected into a separate independent sovereignty, and the coins of this race do not universally bear the names of the Baghdad Khalifs. The series of them will not be found to possess any peculiar interest, nor is the history of the dynasty, so far as it is known, very inviting. It continued in power indeed only for thirty years, and was then very nearly succumbing to a Hindu opponent; but the Moslim supremacy was re-established and confirmed by the energy and abilities of Ghazi Beg Tughlak, who in A.D. 1320 assumed the sovereignty, and pursued for five years a career of conquest, until treacherously slain by his son Muhammed bin Tughlak, who reigned till A.D. 1351. His rule was marked by many measures evincing great abilities, but he was a cruel tyrant, notwithstanding which he was one of the very few of these sovereigns who died a natural death. We have specimens both of his gold and silver coinage. Of the latter metal he has the merit of being the first who coined and extensively circulated the tankah of 175 grains of pure silver, a coin nearly corresponding in weight and value with the rupee, which is now the universal silver currency of India.

Mr. Thomas has a special dissertation upon the coins of this king, having found in the travels of Ibn Batutah, and in an Arabic manuscript in the Paris Library, specifications of the weight and value of the different pieces as found by these contemporary travellers. But the most interesting incident of this king's coinage is the fact that he coined copper and brass pieces with an order inscribed upon them that they should pass for silver, and issued them at that value. The superscription after a quotation from the Koran,

that "he who obeys the Sultan truly, he obeys God," directs the copper piece to pass for a dirham, which Mr. Thomas interprets that it should pass for a tankah, but we see no reason for supposing that it could be intended, or that the sovereign could have hoped, that the copper piece could co-circulate and pass at equal value with a pure silver piece of very superior weight; and the value of dirhams, still the coin of the West, must have been sufficiently familiar in the markets of Delhi to prevent the dealers, when ordered to accept a piece as a dirham, from understanding that they were required to accept it as a legal tender for a tankah. Mr. Thomas' account, however, of the coinage of this sovereign is well worth study. The token issue was an entire failure, and the pieces having before the close of a year fallen to a discount approaching their intrinsic value, the government was obliged to call them in by receiving them again at the rate of their issue, submitting to the loss, an unusual act of liberality in an Eastern sovereign. The reign of his successor, Firuz Shah, was long and magnificent (it continued until A.D. 1388), but his coinage, as well as that of the remaining sovereigns of this race, was of the same character as that of Tughlak, though the tankahs seem to have been of less weight.

In 1392, Timur Beg made his overwhelming invasion, and, taking Delhi, reduced the condition of the Pathân sovereigns to the very lowest ebb.

In 1414 A.D. a new dynasty was established in the person of Khizr Khan Syud, but he was content to continue the coinage of his predecessors, and no pieces are found bearing the superscription of his own name; but silver coins are extant bearing the name of Mubarak-Shah, in the shape of tankahs, weighing 174 grains, besides the usual copper pieces.

In 1451, a new dynasty supervened, the founder of which, the Afghan Buhlol Lodi, in the course of a long reign of thirty-eight years, made no numismatic change worthy of notice, except that his copper pieces became known as buhlolis, which Mr. Thomas shows to be the dâms, 40 of which were equal to a tankah or rupee, of the public accounts in the time of Akbar and the subsequent Moghul kings. The grandson of Buhlol Lodi was defeated and superseded by Babar Shah, grandson of Timur Beg, and first of the Moghul emperors, A.D. 1530. This king issued a coinage in imitation of that of Persia, being apparently a revival of the ancient dirham, and bearing the proportion of $2\frac{1}{2}$ to the rupee. These were called babaris, and were of 71 grains, rather larger and more valuable than the ancient dirham.

Babar and his son Humayun, who succeeded to the throne in A.D. 1530, were unable to hold their position against an insurrection of the Pathân settlers in India, headed by Sheer Khan, a man of more than ordinary military and administrative talent. Humayun was expelled and obliged to take refuge in Persia. Sheer Khan assumed the sovereignty under the title of Sheer Shah, in the year A.D. 1540; and one of his first acts was to issue a coin which he called a rupee (*i.e.* silver piece, *rûpa* being the Hindu name of the metal.) The weight of the extant coins of this king is not uniform, but may be assumed at about 175 grains. Upon the death of Sheer Shah, which occurred from the explosion of a mine while besieging a fort in Bundelcund in the year A.D. 1545, his sons as usual disputed the succession, and in the year A.D. 1552 their dissensions enabled Humayun to re-establish the Moghul sovereignty, which his son Akbar so largely extended, and organized with a stability which maintained it for nearly 200 years, until at last superseded by our own. The sovereigns of this race continued the rupee coinage of Sheer Shah, and we have adopted this coin for general circulation throughout India, fixing for it a weight of 180 grains, 165 of which are pure silver.

It is no purpose of Mr. Thomas to explain in detail the coinages of these Moghul sovereigns, which have long been well known. He has, however, in order to make his book complete as one of reference, given a separate notice of the coinage by the Pathân rulers who governed Bengal from their capital of Gour or Lukhnaotee; he has also added notices of other local coinages by different chiefs who established themselves in independence in different parts of Hindustan for the same purpose; and in this respect we consider him to have effected his object in a manner most creditable to his industry and abilities.

Of the period comprised in this work of Mr. Thomas, there are histories or historical notices in the works of occasional travellers, giving some information of the races and sovereigns in question. These Mr. Thomas sought and examined with very untiring industry; and we think he may claim the credit of having, from the discovery of new occasional notices which had escaped the researches of previous enquirers, thrown many new lights upon the conduct and character and administrative systems of the sovereigns whose coins only it was his immediate purpose to describe. His strictures upon the system of weights which prevailed in India, and likewise his endeavour to fix the relative value of silver and gold, are deserving of particular attention.

The work does not touch the coinages of the Deccan and Southern India. These would form a separate study, the prosecution of which (if the enquiry be at all worth prosecuting) will have to be undertaken by some civil or military servant conversant with the history of languages and antiquities of that part of the peninsula of India.

H. T. Prinsep.

Intelligence.

Apropos of Dr. Pauli's review of the *Recesses of the Hansa* (*Academy*, No. 27) it would seem that at length the Hanse towns are ashamed of leaving all such monuments to be edited at the cost of the Royal Academy of Sciences at Munich. As the death of Lappenberg put an end to the negotiations they were carrying on with him, the local historical societies met to form an historical union in May last year. This united society held its first meeting at Bremen on Whit-Tuesday of this year, which was attended by Professors Waitz, Ufinger, Mantells and Herr Mehrmann, the archivist of Lübeck, and about fifty others. Professor Waitz sketched out a plan of operations for the society, which counts upon the support of the town authorities. A committee of five was appointed—Herren Mantells and Mehrmann for Lübeck, Dr. Koppmann, the editor of the *Hanse-Recesse*, for Hamburg, Dr. Ehrick for Bremen, Burgomaster Francke for Stralsund. This committee is to select representatives of the outlying members of the league in Livland and Westphalia.

The scientific society of Belgrade has just published two new volumes of its annual collection, the *Glasnik*, comprising a number of interesting dissertations on various points relative to the history of the Southern Slavonians.

M. Stója Novakovitch, secretary of the same society, and professor at the university of Belgrade, has also published a new edition of the code of the Tzar Douchay, the great Servian emperor of the fourteenth century. This code is of great value for the history of Slavonian legislation. M. Novakovitch's edition is an improvement on any previously published, being collated on a great number of MS., and is used in a commodious form, with a preface and running commentary.

The Historical Society held the last meeting for the session on Friday evening, 16th July, the Right Hon. the Earl of Mar in the chair. The society agreed to place on record the regard which they entertained for the memory of the late president, Mr. George Grote, whose valuable services much availed in establishing the institution. The following papers were then read:—"Was the Old English Aristocracy destroyed by the Wars of the Roses?" by T. C. Kington Oliphant, Esq.; "Memoranda respecting a curious work, 'Scott of Scotstarvet's Staggering State of Scottish Statesmen,'" by the Rev. Charles Rogers, LL.D.

Contents of the Journals.

Götting. gelehrte Anzeigen, June 14.—Bresslau reviews Ficker's book on the Empire in Italy, which continues Waitz's History of the Early German Constitution. The relation of the Italian consuls and podestas to the imperial system is pointed out, and something like an organic unity introduced into the scattered fragments of the constitutional town-history of Italy.—In the same Journal for June 21, Waitz points out that in the "Frankish Annals" of the monastery St. Maximin at Treves we have another version of the history of Charlemagne's family, which is of value as showing the composite nature of versions such as the *Chronicon Moissiacense.* June 28.—A notice of Wappäus' Handbuch der Geographie und Statistik für die gebildeten Stände, the new edition of which useful work is just completed. The editor has devoted much care to South America, and has issued separately a very full "Handbook to Brazil." The continuation of Hettner's History of German Literature in the eighteenth century is praised, and its account of Goethe and Schiller critically analysed. July 5.—Brett's The Indian Tribes of Guiana is reviewed; the legends are interesting, and the missionaries find some points of connection in the religion with Christian ideas. The method of counting is by fives, *five* is "my hand," *ten* "my two hands," hence *twenty* is expressed by "a man."

Literarisches Centralblatt, June 24.—Reviews the new German edition of Brentano's books on English Guilds, and notices the growing literature on trade unions, to which Brentano has written the historical introduction. July 15.—Eckhardt's Jungrussisch und Altlivländisch is a collection of his now well-known essays, which have thrown so much light on the condition of Russia's Baltic provinces, and on the questions at issue between the Germans in those provinces and the Russian government. Egli's Nomina Geographica is valuable as laying the foundation for a generalised inquiry into the origin and reason of local nomenclature; *e. g.*, of the leading reasons of the names of hills, capes, streams, &c. It groups the places named after the colour of the soil, the characteristic plants, and so on.

New Publications.

Bekker, Ernst Immanuel. Die Aktionen des Römischen Privatrechts. Berlin: Vahlen.

Fahne, A. Forschungen auf dem Gebiete der rheinischen u. westphälischen Geschichte. 3 vols. illustrated. Cologne: Heberle.

Foerster, Riccard. Wladislaus Jagello II. Rex Poloniae et Ungariae 1434–1444 ex fontibus et documentis adhuc ignotis illustratus. Dissertatio inauguralis historica. Breslau: Maruschke und Berendt.

Ranke, Leop. v. Sämmtliche Werke. 20. Bd. Leipzig: Duncker und Humblot. [Inhalt: Englische Geschichte vornehmlich im 17. Jahrh. 7. Bd. 2. Aufl.]

Rochau, A. L. von. Geschichte des deutschen Landes und Volkes.

Strauss, Dr. F. Ulrich von Hutten. Zweite verbesserte Auflage. Leipzig: Brockhaus.

Philology.

EGYPTIAN PUBLICATIONS OF MARIETTE AND THE BRITISH MUSEUM.

Les Papyrus égyptiens du Musée de Boulag, publiés en fac-simile sous les auspices de S. A. Ismaïl-Pacha, Khédive d'Égypte, par Auguste Mariette-bey. Tome 1er (Papyrus Nos. 1 à 9). Paris: Librairie A. Franck, 1870.

Inscriptions in the Hieratic and Demotic Character, from the Collections of the British Museum. (Printed by Order of the Trustees.) London: sold at the British Museum and by Longmans and Co., Paternoster Row, 1868.

The first volume of the Mariette publication contains facsimiles of nine Papyri, only one of which (Pap. 8, pl. 39) belongs to the old Egyptian empire, and was found at Saqqarah, near Memphis; the other eight came from various parts of the ancient Thebes, Pap. 1, 2, 4, 5, 7, from Lûqsor, Pap. 3 from Qûrnat-el-murray, Pap. 6 and 9 from the Assassif.

The Papyrus assigned to the Old Empire bears the name of an unknown king, and seems to record some historical event, but I grieve to say that both name and text are almost illegible in their present state: perhaps a close examination of the original would enable us to guess its meaning. *H'eter*'s Papyrus (Pap. No. 3, pl. 6–14) contains a very precious work, a few manuscripts of which—Papyrus *Raïfe* and Papyrus No. 3155 of the Louvre, for instance—are now extant in Europe; it gives at length the *formulæ* and invocations recited during the preparation and the funeral of the mummies. Upon Papyrus 7 (pl. 36–38) are scrawled some portions of a most important document, hitherto unknown. M. Mariette has styled it "the book of the twelve hours," because it seems to hold sundry prayers for each of the twelve hours of the day. The medico-magic spells in Papyrus No. 6 (pl. 33–35) are very like those already published by MM. Chabas, Birch, and Pleyte; M. Brugsch has given in the *Revue archéologique* for September, 1867, the translation of Papyrus No. 5 (pl. 29–32), the Demotic novel of *Setnaû;* and *Amen-mesû*'s Papyrus (Pap. No. 9, pl. 40–44) is a well-preserved "book of knowing whatever there is in the lower hemisphere of heaven," a copy of which work, found at Thebes in presence of H.R.H. the Prince of Wales, was translated by Mr. Birch seven years ago.

The Papyri No. 1 and No. 2 are written in the fine hieroglyphic character of the Ptolemaic period. According to Mariette's statement they are not parts of the same MS.; at all events, they treat both of them the same matter, and throw some light upon a most obscure point of Egyptian geography. The fertile province of *Fayûm*, though it be the richest, is the least known of Upper Egypt. Brugsch has identified it with the [*Neh-*]*t xent* and [*Neh*]-*t peh'û* of the lists;* its real name was *Tā-sebak*, the land of the god *Sebak*, *Tā-she-t*, the land of the basin or lake *Meri-t* (hence the Μοῖρις λιμνὴ of the Greeks), also called *H'ûnt.* The town situated near the place where the Arsinoite canal discharged itself into the lake was *Ro-h'ûnt*, al. *Lo-h'ûnt*, the mouth of the *H'ûnt;* this M. Mariette very ingeniously contrives to identify with the modern *Illahûn.* King *Piânxi Meï-amûr*, after storming the town of *Xenensû*, the *Hnes* of the Hebrews and Copts, the *Heracleopolis* of the Greeks, says:—

"His majesty having navigated to the head of the lake (*er ap-t* She-t), to the place of the mouth of the *H'ûnt* (*er mā* ro-h'ûnt), found the town of *Pa* (*Rā-χem-χeper*), its walls high, its fortress well shut, full of the brave of northern lands."

Hence it results that about the close of the twenty-second dynasty, king *Re-χem-χeper* had given his name to the town near *Ro-h'ûnt.* Not far from *Illahûn* lay the ruins of the celebrated Labyrinth built by king *Amen-em-h'â* the Third, of the twelfth dynasty. M. Mariette affirms that the Greek word Λαβύρωθος is only a transcript of the Egyptian *Rope-ro-h'ûnt*, or with the Bashmûric pronunciation, *Lope-ro-h'ûnt*, the temple of the mouth of the *H'ûnt;* and, upon the whole, I think his identification to be one of the most certain conjectures ever made.

All through Papyrus No. 2 (pl. 2–5) are described the towns of the Fayûm, each of them being embodied into the image of its tutelary deity, and followed by a mystic legend which expresses the connection of the locality with the Osirian myth and the wars of Horus. About half a dozen of the names thus registered can be recognised in some of the modern names, deformed though these be by the bad Arabic pronunciation. The H'ibû of our text is certainly *Behebit-el-Haggar*, *Behebit* being the equivalent of the old Egyptian Pā-h'ibû, *the town* H'ibû; Berg-t, Pā-bā-n-Osir, alias *Nuter h'a'-t nti Sokar em ro h'ûnt*, the divine seat of the god *Sokar* in *Ro-h'ûnt*, Pā-gār, are respectively *Berg*, near *Illahûn*, *Abusyr-el-Molûq*, Ptolemy's Δώνυσος, and *Garah.* An accurate collation of our document, with the maps published by the *Commission d'Égypte* and Linant-Bey, would

* *Geogr. Inschrift.* t. i. p. 117.

probably lead to other identifications I am not able to propose at present.

Papyrus No. 4 (pl. 15–28) purports to have been composed about the classical epoch of the nineteenth dynasty, but the copy at Bûlaq is not the author's autograph. From the style of the handwriting, from various graphic peculiarities (such as the use of the plural sign ⲥ̀ to distinguish the words or prepositions), from the strong tendency which the orthography evinces to pass from the Hieratic into the Demotic stage of transformation, I think it may be assigned to that obscure period which extends from the end of the twentieth to the beginning of the twenty-sixth dynasty. Its title was probably "Head of the Instructions made by the scribe *Ani* unto his son, the scribe X'*onsû-h'otep*," but the commencement is unfortunately wanting. Only fourteen pages have been preserved, the first of which is too mutilated to admit of a translation, while the last five are but sparingly inscribed with various documents (most of them undecipherable) and a few figures rudely sketched. The nine remaining plates contain the concluding part of a moral treatise, being a dialogue between *Ani* and his son. Here we have the earliest known instance of the colloquial form adapted to philosophical matters. Learned though Plato was in Egyptian antiquity, I doubt whether he ever dreamt of his Pharaonic predecessor, the scribe *Ani*.

It is not always easy to make out the meaning of the ancient sage and to estimate the real value of his wisdom.

"Do not let thyself be brought before the jury, lest thy name be stinking and despised. Do not multiply words; holding thy tongue, thou art good. Do not speak loud: God's inner sanctuary is sullied by an uproarious joy. Hast thou adored Him humbly like a loving servant (?), are all thy sayings to Him whispered secretly, He makes thy fortune, He hears thy sayings, He accepts thy gifts.

"Lo! pour a libation of water to thy father and mother who lie in the Funereal Valley; it is convenient for thee so to do, and the Gods, yea, they say they accept it [joyously]; do not neglect doing it by thy parents, so that thy son may do the same by thee. Do not rush into the beer-house, lest there be reported abroad whatever escapes from thy mouth without thy being conscious of what thou art saying; when thou walkest away all thy limbs are cut, and thy drinking-mates aid thee not: they stay to denounce the drunkard's way, and, when [the police] come to seek thee for thee to exculpate thyself, thou art found stretched upon the ground, thou art like a little child. Do not walk forth from thy house, unaware of a resting-place. Mayest thou look upon all the spots which thou likest to remember; mayest thou have before thee a mansion for thee to go to, for it is convenient for thee to be found ending thy house which is in the Funereal Valley, the morning of hiding thy corpse. Be it always before thee, during thy travels of judging with thy eye (?), that, old though thou come to rest into the walls [of this last house], there is no surprising him who does good: he is ready. Therefore, when thou comest to thy travel of departing [from hence], may thy resting-place be found ready, yea! Saying: 'There comes the ravisher'; when it is before thee, do not say: 'I am but a child,' when thou departest, not knowing thy own death. Comes Death; it is master of the wee nursling who is in the lap of his mother, as well as him who is an old man. Behold! I am saying unto thee thy beneficent deeds, which thou must judge in thy heart (?); lo! do them, and thou becomest good, and all sins fall back from thee."*

"The breast of the man is the great hall of a granary which is full of all kind of answers: Make a good choice [amongst them], that, when speaking, the worse remain shut up in thy breast. Whoever answers stiffly is looked upon like a stick; whoever speaks mildly is beloved. Lo! that which thou say'st is with thee for ever. Does even the injured answer with a falsehood, afterwards God discerns the truth, and His chastisement comes. Bringing offerings for thy God, beware of whatever is heinous in His sight; do not make comments upon His guiding; do not stretch Him (?) when He has risen; do not attack Him nor His bearer (?); do not contradict His writings (?!). Beware, when He does . . . . . ; when thy eye contemplates His deeds of ire, pray in His name. He it is who gives His spirits millions of forms, and exalts whosoever exalts Him! The God of this land, *Shû*, is in Heaven, and His forms are upon the earth: incense is burnt in their daily sacrifices. He it is who develops the germs all at His rise, who multiplies the loaves, who gives thee thy mother! . . . . She has given birth to thee after the due months; she has bowed herself over thee, [putting] her breast in thy mouth, for three years . . . . . When I said: 'Lo! Let him go to school!' when thou wert learning the letters, she remained daily near thy teacher, with the bread and beer from her house. Thou art a young man; thou hast taken a wife for thyself, thou hast made thy house ready. May thine eye be watchful on behalf of thy children; be all thy exertions like thy mother's deeds, lest she should become angry against thee, and raise her arms to God, who hears all her prayers."*

* Pl. xvi. l. 17–pl. xviii. l. 5.

I should like to give a complete translation of the book; but I think these extracts, short though they be, will suffice to convey into the reader's mind an idea of its value, and to prove the importance of Mariette's last publication.

Slices of calcareous stone, fragments of terracotta vessels, some carefully written in a splendid hand, some spotted more than inscribed with evanescent and hardly legible characters—such are the materials upon which are to be found the originals of the Hieratic and Demotic documents published in this volume. Of course, the texts scrawled on so bulky a material can not be so extensive as the texts of the Papyri; incomplete though they be, they possess an extreme importance for the scientific knowledge of Egyptian antiquity. The scribes, probably when short of paper, were in the habit of entrusting to *ostraca* their thoughts or the *précis* of their daily labour, and thus enriching their library from kitchens and stone-quarries. Accounts, letters, records of judicial proceedings, memoranda of astronomical observations, religious or magic *formulæ*, nay, portions of literary compositions formerly published by the British Museum, have been preserved and lithographed by order of the Trustees, and are now rescued for ever from the influence of time.

The historical inscriptions belong, some of them, to the xviiith dynasty, and relate certain events which took place under the reign of Amenophis the Third (pl. xxix. No. 138), the others to the twentieth dynasty (pl. i.–iv. Nos. 5620–5622). There are also sundry religious texts, addresses to the deity, very faint extracts from the "Book for knowing whatever there is in the Lower Hemisphere of the Heaven" (pl. v. No. 5623*a*, *c*), found in one of the royal tombs of Biban-el Molûk at Thebes, various sketches of Osiris *Unnower* (pl. vi. No. 8505), Isis suckling the babe Horus (pl. vi. No. 8506); but none of them possess the same interest as the duplicate of literary compositions or the above-mentioned memoranda of the public or private Egyptian life. The editors have signalised two stones containing extracts from the Papyrus Sallier II. (pl. x. No. 5623; pl. xi. No. 5638*a*). I had lately the good fortune to discover in a Parisian Papyrus the original of the text reproduced in pl. xxv. No. 5632. According to Mr. Birch's description, "It is an address or letter, apparently part of a literary composition. The paragraphs are marked off with red stops. It commences, 'Say to your children.'" The Parisian Papyrus contains very mutilated portions of a medical treatise and of a philosophical book, a paragraph of which is to be found in pl. xxv. of the British publication. The text of the ostraca being written in a small and indistinct hand, the ink much faded, I think a translation of its contents will not be unacceptable.

"Lo! Speak unto your children,—Since there is a mouth for thee to preach the word of God!—'I am the divine form (?) of him who obeys,—The man whose resolutions are adopted by his Lord,—because he passes his equals,—and raises himself to marvel!'—Abstain from the works of weakness!—The son who obeys is sinless;—There is no lack (?) of wisdom about him."

The series of astronomical observations recorded on the stone No. 5635, pl. xx., has been studied by Mr. Birch himself, in Lepsius' *Zeitschrift* for 1868, with so much care and

* Pl. xx. l. 9–pl. xxi. l. 3.

success that there is nothing to alter in his translation. No. 5637, pl. xviii., gives a memorandum of the robberies

"perpetrated by the workmen of *Nâxû-m-Mâût*. They went into my house, stole two large loaves and three cakes, spilt my oil, opened my bin containing the corn, stole Northern *dehû*-corn. They went to the house in the wharf, stole half the *kyllesteis* (a kind of acid bread) yesterday [baked], spilt the oil. In the third month of the *Shemû*-season, the 12th day, during the crown-feast of king *Amen-hotep*, l. h. f., they went to the granary, stole three great loaves, eight *sâbû*-cakes of *Roh'ûsû*-berries. . . . . They drew a bottle of beer which was [cooling] in water, while I was staying in my father's room. My Lord, let whatsoever has been stolen be given to me."

The only means of conveying into the *non*-Egyptian reader's mind an exact idea of the contents of this volume would be to translate almost all the pieces in it. As for the small class of persons to whom the Egyptian publications are addressed, they have reason to be truly grateful to the British Museum for the new contribution thus made to our science. May the Trustees complete their work by at least the continuation and the end of their precious *Select Papyri*.

G. Maspero.

Discovery of the Syriac Translation of the KALÎLAH AND DIMNAH (ḲALÎLAG AND DAMNAG), *Composed by the Periodeutês (or Visitor) Bûd, in the Sixth Century of the Christian Era.*

TO THE EDITOR OF *THE ACADEMY*.

Sir,—The important services which your journal, notwithstanding the short period of its existence, has already rendered to science, induce the writer of these lines to send to it for publication the first notice of a literary find, which deserves to be reckoned one of the most valuable and important that have been made even in this century, which has been so rich in great discoveries. With it closes the history of a work which, starting from India, has gone the round of the whole world, and gained itself a diffusion and an importance second to that of the Bible alone.

It results from the researches of Professor Benfey, published in 1859, in his work entitled *Pantschatantra: Fünf Bücher indischer Fabeln, Märchen und Erzählungen*,* that there existed in India, during the sixth century of our era, a book of fables and tales, consisting of from eleven to thirteen sections. At a later period this book underwent in India a transformation, by which the first five sections were separated from the rest and considerably enlarged, whilst the remaining six or eight sections were entirely rejected. This externally mutilated, but internally enlarged, redaction of the old work is the Sanskrit book which is known by the name of *Panchatantra* (or "The Five Books"). It supplanted the original in its own home, and thereby produced its irretrievable loss in India.

Before, however, this transformation of the original was effected in its native land, it had reached Persia, and had been translated into Pahlawî, probably in the first half of the sixth century, during the reign of the king Khusrau Nûshîrwân (A.D. 531–579). According to Professor Benfey's researches, which have received a decisive confirmation by the discovery now announced, it cannot be doubted that, if this translation had survived, we should have possessed in it an, in all important respects, accurate reflex of the Indian original, from which the *Panchatantra* sprang. But the Pahlawî translation is, like the Indian original, lost for ever.

In the eighth century of our era, the Pahlawî work was, as is well known, translated into Arabic by a native of Persia, a convert to al-Islâm, named 'Abd-Allâh ibn al-Muḳaffa' (ob. A.D. 762); and won, partly in this language, partly in primary and secondary translations from it, that wide diffusion which has gained for it a place of such importance in the history of civilisation.

Besides the Pahlawî translation of the Indian original, there existed, according to one report, a Syriac version, also belonging to the sixth century. The Nestorian writer 'Ebêd-Yeshû', who lived towards the end of the thirteenth century, mentions, in his *Catalogue of Authors* (see Assemani, *Bibl. Or.*, t. iii. pars 1, p. 220; and Renan, *Journal Asiatique*, 5ème série, t. vii. 1856, p. 251) a certain Periodeutês (or Visitor) Bûd, who had charge of the Nestorian congregations in Persia and India, probably about A.D. 570, and states regarding him that, amongst other works specified, he "translated the book *Ḳalîlag and Damnag* from the Indian."

Of this Syriac version no trace had been discovered till within the last few years, and the celebrated Orientalist Silvestre de Sacy thought he was justified in saying (at p. 36 of the *Mémoire historique*, which he prefixed to his edition of the *Calila et Dimna*, Paris, 1816) that there was in this statement a confusion of the translator into Pahlawî, by name Barzûyah (or Barzawaihi), with a Christian monk.

The first trace of the Syriac translation was discovered in May, 1868. On the 6th of that month, Professor Benfey received from the well-known Syriac scholar, Professor G. Bickell, of Münster,* the news that he had learned from a Syrian archdeacon of Urumia, Yoḥannân bar Bâbish (who had come to Münster on his travels to collect money), that "some time ago several Chaldean priests, who had been living among the Christians of S. Thomas in India, had brought from there copies of this translation, and had presented them to the Catholic Patriarch of Elkosh (Al-Ḳûsh), near Moṣul; and that he himself had got one of them from the Patriarch."

Although this report seemed incredible, and the behaviour of the Syriac priest was not of a kind to inspire confidence in his statements, yet the information seemed important enough to warrant Professor Benfey in making enquiries in India, where, according to the archdeacon, there existed several copies of the work; for even a decided negative result would be of value to science.

These enquiries had no positive result—that is to say, they did not confirm the statements of the Syrian archdeacon; but neither had they a decided negative result. The traces seemed to vanish in the sand, and to be incapable of further pursuit, when Professor Benfey was informed by a letter from Professor Bickell (dated 22nd February, 1870) that the Chaldee Patriarch Yûsuf Audo, in whose possession, according to Yoḥannân bar Bâbish, there existed a copy of the Syriac translation, was then at Rome attending the Council summoned by the Pope. Professor Benfey immediately put himself in communication, through Dr. Schöll and the Italian scholar S. Ignazio Guidi, with the Patriarch and another Chaldean ecclesiastic, the Bishop Ḳaiyât, and received information, on the 11th June, 1870, that there was an ancient Syriac MS. of this translation at Mâridîn, though it had not been brought from India. Professor Benfey at once wrote to his friend and former pupil, Dr. Albert Socin, who was at that moment on a scientific journey in Asia, requesting him, when he visited the episcopal library at Mâridîn, to make the most particular search for this manuscript. The issue was successful. On the 19th August, 1870, Dr. Socin wrote that he had found the MS., and that, though the priests could not be persuaded to sell it, they would allow an accurate copy of it to be made. This copy has been, since the end of April, 1871, in the hands of Professor Benfey.

It contains, without doubt, the old Syriac version, of which 'Ebêd-Yeshû' speaks; and the only question now is whether it was made directly from the Indian (Sanskrit) original, or from the Pahlawî translation. In either case, since the Sanskrit original and the Pahlawî translation are both lost, it is *the oldest extant reflex of the Indian original*, and stands at the head of all the countless ramifications that have sprung from it.

The high value of this version is greatly increased by the fact that it attaches itself much more closely to the Sanskrit efflux of the original than the Arabic translation does to the Pahlawî. For example, a number of Indian names are either retained in it or literally translated, of which the Arabic recensions, so far as they are as yet known, offer no trace. This, as well as one or two other circumstances, might plead in favour of the statement of 'Ebêd-Yeshû', according to which the Syriac was directly translated from the Sanskrit. But there are other and weighty considerations, which do not allow us to admit that it is independent of the Pahlawî translation; and we can only conclude from the above circumstances that the Pahlawî translation held much more closely to the Sanskrit original than we should suppose from the Arabic version—that the former preserved the Indian colouring more truly in many points where it was obliterated in the latter. This colouring is still visible in the Syriac redaction, and hence it is possible, indeed probable, that *we may be able completely to restore the Sanskrit form of the original in all essential points.*

Upon this subject we need not, however, at present enter, since Pro-

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* "Erster Theil: Einleitung: Ueber das indische Grundwerk und dessen Ausflüsse, so wie über die Quellen und Verbreitung des Inhalts derselben."

* The editor of the *Carmina Nisibena* of Ephraem Syrus, and other works.

fessor Benfey, Dr. G. Hoffmann,* and Professor Bickell have combined to publish, as soon as possible, an edition of the text, with a German translation, and an introduction, explaining the importance of the Syriac version.

Th. Benfey.

Intelligence.

Professor Benfey proposes to publish, if a sufficient number of subscribers can be obtained, a grammar of the language of the Vedas, which will contain all that is necessary for a grammatical knowledge of the Mantras of the four Vedas. It will treat of the phonetic rules, the grammatical formations, and the syntax of the Vedic language, of which, as is well known, the classical Sanskrit is the last phase. The *Vedic Grammar* will appear in an octavo volume of from 600 to 700 pages, the price to subscribers to be 21*s.* per copy.

The Congress of German Philologists, which was to have been held at Leipzig in the autumn, is postponed.

Dr. Jos. Budenz, of the Hungarian Academy, calls our attention to M. O. Donner's treatise, *Der Mythus vom Sampo.* The original signification of the magical mill Sampo, the source of all sorts of blessings, which plays so prominent a part in the Kalevala, has been hitherto somewhat mysterious in spite of several attempts at explanation. M. Donner's entirely new and at the same time simple explanation appears to be the correct one. The Sampo, which is fabricated by the celestial smith Ilmarinen, and is seized and detained in the dark Northland (Pohjola), is, according to Donner, an emblem of the sun, which, when brought back into Kalevaland, makes all things living to thrive and multiply. A variation of the myth so understood is found in the Kalevala itself, in the three last cantos of which poem an account is given of the carrying off of the sun and moon by the queen of the Northland, and of their happy return thence. Donner finds certain grounds in support of his theory—that the Sampo was the sun—in etymology, and refers to the analogy of solar myths among other nations. For the present, however, he has omitted to discuss how far the internal unity of the Kalevala as an epic poem may be held to be affected by the repetition of what is essentially the same solar myth with mere difference of symbolic form.

Professor A. Kiessling, of Hamburg, has nearly finished a new critical edition of the declamations of *Seneca Rhetor.* The Antwerp MS., which appears to be the principal authority of the text, has been recollated, and its readings will be reported with far greater accuracy than in Bursian's edition. Besides this, the editor has traced a second source of the text, independent of the Antwerp MS., in a Brussels MS., the frequent erasures and corrections in which allow in many instances a guess at the original readings, and prove it to belong to the same class with a Vatican MS. of the 10th century, of which Professor Studemund has kindly furnished a specimen. Professor Kiessling is known to be one of the most sagacious critics of the school of Ritschl, and has done much to emend the text of his author, which may be considered one of the most corrupt and difficult in the domain of Latin literature. Specimens of his emendations will be found in his *Beiträge für Kritik des Seneca Rhetor*, in the Easter "Programm" of the *Gelehrtenschule* at Hamburg.

Contents of the Journals.

Grätz's Monatsschrift for July.—On the relation of *Clientes* in the Hebrew Antiquity. Prof. Grätz comes to the conclusion that after the conquest of the land of Chanaan, there were amongst the Jews two kinds of *Clientes*, viz., *Peregrini* and *Autochthons.* The differences of *Proselyti justitiae* and *Proselyti portae* appear only after the Babylonian exile.—Dr. Goldzieher's continuation of his article on Mahomedan Opinion of the Prayers of the Jews.—Neubauer's Description of the Prayer-book of the Jews at Jemen, existing only in a MS. of the Bodleian Library. It is curious that the Jews of that country used up to the last century the Assyrian punctuation.—Review of Dr. Paur's article, "Immanuel and Dante."

Literarisches Centralblatt, June 24.—Notice of some treatises "On the use of the prepositions in Tacitus," shows the gradual development of the historian's usage. Statistics are becoming as valuable in philology as in other sciences. Take such an instance as this, "*ob* occurs Agr. 2, Germ. 3, Hist. 25, Ann. 135 times, while the causal *propter* never occurs after Hist. 1, 65." July 1.—Reviews Orelli's Die hebräischen Synonyma der Zeit und Ewigkeit. The method of taking a whole group of conceptions and working out their gradual development of meaning on the principles of comparative philology gives us a means of enquiry which has been too little used in commentaries on the Old Testament. The value of "Lettere volgari del Secolo xiii. scritte da Senesi" (part 116 of the *Scelta*) is considerable to philology, but the letters also illustrate the commercial relations between Italy and France. July 8.—Kaulen's Handbuch zur Vulgata is favourably noticed, but the author is said to have not fully worked out the relation of the Vulgate to the Itala, and to be somewhat hampered by the Roman Catholic view of the Vulgate being the "authentic" text of the Bible. Spiegel's Eränische Alterthumskunde is said to contain a strong criticism of Rawlinson's view that the substratum of the population even in historical times was Turanian through the whole country, from India to Egypt. July 15.—Gerhard's edition of Pappus of Alexandria's mathematical collections is noticed for the value of the Greek text, though unfortunately no full account of the MSS. is given.

Götting. gelehrte Anzeigen, June 28.—Liebrecht points out the value of Traina's Nuovo Vocabolario Siciliano-Italiano. Sicily has been such a meeting-point of East and West that the vocabulary contains many words of the highest interest: the Sicilian national feeling also shows itself strongly. The comparison with Italian is curious. *Cattivo* has its Latin meaning of *captivus*, and does not mean "bad," as on the mainland. July 5.—Weber gives a short notice of Stein "De vetere quodam lexico Herodoteo," which is of some value as throwing light on the compilation of the glosses in Suidas, and helping us to unravel the chain of grammatical tradition.—The number for July 12 contains a sharp article on Dr. Payne Smith's *Thesaurus Syriacus*, fascic. ii., from the pen of Professor de Lagarde. The tone seems unnecessarily harsh, and might have been relieved by a little irony, but it must be owned that the most severe criticisms are in great measure justified by the official character with which the book is invested. Prof. de Lagarde observes—1. That the lexicons of Bar Ali and Bar Bahlul ought first to have been printed *in extenso*, with various readings, so that we might have had some control over the *Thesaurus.* It often happens that Dr. S. misunderstands his authorities. Sometimes, but not always, he supplies us with the means of correcting him, by printing the original Syriac, *e. g.* on pp. 368, 575. 2. Dr. S. neglects to enquire after the authorities for the statements of Bar Ali and Bar Bahlul. 3. He is particularly weak in natural history. Dioscorides, and the Arabic translations of Dioscorides, should have been thoroughly studied, before referring to Bar Bahlul's articles on this subject. 4. His range of reading is far too limited. Antonius Rhetor is entirely passed over, and hardly any notice is taken of Aphraates. His treatment of the Peshithta is slight and uncritical; and none of the texts printed in this century have been adequately examined. 5. He has no sound philological instinct (a fact which is obvious on the merest glance at his etymologies). In particular, he knows nothing of the Iranian dialects, and but little of Arabic, while his Latin is worthy of Duns and Occam. 6. He has not properly read de Lagarde's various contributions to Syriac lexicography, and sometimes grossly misrepresents that critic's opinions. (We have already had occasion to bring a similar complaint against Dr. Smith's *Bampton Lectures on Prophecy.*) On the other hand, he abounds in references to "tenth-rate" writers, such as Fürst, Fischer, and Levy. 7. His articles on geography, and on the history of literature, are not only superfluous, but extremely inaccurate, and not drawn from the best Arabic and German sources. The reviewer concludes with the recommendation to bring out a revised and enlarged edition of Castell's *Syriac Glossary*, without any references to Bar Ali and Bar Bahlul.

New Publications.

Bickell, Gust. Conspectus rei Syrorum literariae, additis notis bibliographicis et excerptis anecdotis. Münster: Theissing.
Buchholtz, H. Die Tanzkunst d. Euripides. Leipzig: Teubner.
Cornelii Nepotis vitae ex rec. Car. Halmii. Leipzig: Teubner.
Curtius, G. Studien z. griech. u. latein. Grammatik. Leipzig: Hirzel.
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ERRATA IN No. 28.

Page 348, col. i., third line of third literary note: for "Intel igence" read "Contents of Journals."
,, 348, col. ii., line 2 from bottom: for "zithing" read "zittung."
,, 351, col. ii., line 28: for "choose" read "chose."
,, 357, col. ii., line 32: for "constituted" read "constricted."
,, 359, col. i., heading *Miscellaneous*, line 4: *dele* "much more;" last line but one: for "canonic" read "economic."
,, 364, col. i., contents of *Journal Asiatique*: for "Medietarists" read "Mechitarists;" *Roman. Studien*: for "Karle" read "Karl."
,, 364, col. ii., contents of *Hermes*, line 12 from end: for φυγαρχοῦσι read φυλαρχοῦσι.

* The editor of the treatise, *De Hermeneuticis apud Syros Aristoteleis.*

THE ACADEMY.

"Inter silvas Academi quærere verum."

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General Literature.

Tales of Old Japan. By A. B. Mitford, Second Secretary to the British Legation in Japan. With Illustrations, drawn and cut on wood by Japanese Artists. London: Macmillan and Co.

Japan is in a state of transition. The old national civilisation is beginning to disappear as it comes in contact with the European world without, and will soon be a thing of the past. We are the more grateful therefore to Mr. Mitford for his endeavour to bring before us the *Yamato Damashi*, the spirit of Old Japan, while it still has a distinguishable existence, and thus to preserve for posterity a very interesting link in the history of the human race. Mr. Mitford has adopted a course always desirable in such cases, but unluckily not always practicable, many nations being without the consciousness of their own past. In Mr. Mitford's words: "It has appeared to me that no better means could be chosen of preserving a record of a curious and fast disappearing civilisation than the translation of some of the most interesting national legends and histories, together with other specimens of literature bearing upon the same subject." But when we have this "tolerably complete picture of Japanese society" before us, what do we see? A world much more like our own than we were prepared to expect. Human thought and passion are the same everywhere, and express themselves in the same or at least in very similar forms in Greenland, Japan, and "civilised" Europe. Hence the charm, to the thoughtful reader, of works like the present which show the substantial identity of humanity underlying the diversity, be it greater or less, of customs, habits, and usages. But even in manners and customs there are often very remarkable points of resemblance between Japan and Europe noticed by Mr. Mitford, as for instance: "It has been observed that Edinburgh in the olden time, when the clansmen, roystering through the streets at night, would pass from high words to deadly blows, is perhaps the best European parallel of modern Yedo or Kiôto;" and again: "Leagues after the manner of those existing among the German students were formed in different quarters of the city, under various names, and used to fight for the honours of victory. . . . They then, like the 'prentices of old London, played a considerable part in the society of the great cities." The analogy is still closer when our author asks: "As for gentlemen marrying women of bad character, are not such things known in Europe? Do ladies of the *demi-monde* never make good marriages?" Or: "The class of diviners called *Tchiko* profess to give tidings of the dead, or of those who have gone to distant countries: the *Tchiko* exactly corresponds to the spirit medium of the West." In another place Mr. Mitford mentions "a kind of magic still respected by the superstitious, which recalls the waxen dolls through the medium of which sorcerers of the middle ages in Europe, and indeed those of ancient Greece, as Theocritus tells us, pretended to kill the enemies of their clients." But this charm is to be met with not only in antiquity and the Middle Age, but in modern Europe and in the very centre of England (Henderson's *Notes on the Folk-lore of the Northern Counties, &c.*, London, 1866, p. 192). The word "vendetta," which appears so constantly in Mr. Mitford's pages, is reference enough to another custom common to many parts of Europe; and to the other parallelisms of thought and usage between East and West which he has pointed out, we can add one or two more, derived both from the past and the present.

Let us take, to begin with, the story of "The Forty-seven Rônins," which tells how the retainers of a Japanese noble revenged his death, upon the man who had caused it, with the sacrifice of their own lives. Such an example of magnanimous loyalty must have been uncommon even in Japan, or its memory would not be preserved with so much care; but however that may be, there is no doubt that a companion picture might be found to it in Europe by any one who will take the trouble to look. It will be remembered at once what Cæsar tells of the Gallic *Soldurii*: "quorum haec est conditio, ut omnibus in vita commodis una cum his fruantur, quorum se amicitiae dediderint: si quid iis per vim accidat, aut eundem casum una ferant, aut *sibi mortem consciscant*, neque adhuc hominum memoria repertus est quisquam, qui eo interfecto, cujus se amicitiae devovisset, mori recusaret." Here we have at once a Gallic *hara-kiri*. In another place Mr. Mitford tells us that—"The swords of Muramasa, although so finely tempered that they are said to cut hard iron as though it were a melon, have the reputation of being unlucky: they are supposed by the superstitious to hunger after taking men's lives, and to be unable to repose in their scabbard. The principal duty of a sword is to preserve tranquillity in the world by punishing the wicked and protecting the good. But the bloodthirsty swords of Muramasa rather have the effect of maddening their owners, so that they either kill others indiscriminately or commit suicide." The conception of such bloodthirsty swords seems at first sight original and thoroughly Japanese, but is not peculiar to them, for we find it amongst the ancient Scandinavians. The Hervararsaga tells how the sword Tyrfing must have blood every time it was drawn, and, though it always slew the adversary, was fated also to bring about the death of its owner. The same is told of the sword Dâinsleif in the Younger Edda, with the addition that the slightest wound inflicted with it was sure to prove mortal. Hrolf Kraki's sword Sköfnung shouted in its sheath, and flew out of its own accord to join the battle, like Freir's sword (after Skirnisför) which wielded itself. Brynthvari, the sword of the Berserkr Hröngvid, was bound to taste blood every day; and all these stories are completely in harmony with the Japanese conception.

The following is still more remarkable; Mr. Mitford relates: "In the reign of the Emperor Heijô (A.D. 805) there was a sudden volcanic depression of the earth, close by a pond called Sarusawa, or the Monkey's Marsh, at Nara, in the province of Yamato, and a poisonous smoke issuing from the cavity struck down with sickness all those who came within its baneful influence; so the people brought quantities of firewood, which they burnt in order that the poisonous vapour might be dispelled. The fire, being the male element, would assimilate with and act as an antidote upon the mephitic smoke, which was a female influence. Besides this, as a further charm to exorcise the portent, the dance called Sambasô, which is still performed as a prelude to

theatrical exhibitions by an actor dressed up as a venerable old man, emblematic of long life and felicity, was danced on a plot of turf in front of the Temple Kofakuji. By these means the smoke was dispelled, and the drama was originated." Here we have a pestilence banished by dances from which the drama is derived; but the well-known passage in Livy (7, 2) shows us exactly the same incident in the history of Rome, according to which a plague broke out in 390 A.U.C., and was cured by the help of Etrurian dancers, whence the origin of the Roman drama.

Thus far we have found nothing new under the sun, and the lamentations of Terakado Seika, author of the *Yedo Haujoki*, over the disproportionate honours paid to a favourite actor and a good and wise man, might be taken from an English newspaper. Even the *Etas* may find a parallel in Europe. According to Mr. Mitford: "The occupation of the Etas is to kill and flay horses, oxen, and other beasts, to stretch drums, and make shoes . . . they have to perform all sorts of degrading offices about criminals . . . Thus their race is polluted and accursed, and they are hated accordingly." It is not so long that the distinction between honourable trades and those which were infamous has been lost in Europe. We know, for instance, how, when Carl August had his charger flayed in his presence, his valet demurred at passing a thaler from the grand-duke to the flayer, upon which the former indignantly handed the money himself to the poor Weimar Eta. Nor is it very long since the peasant classes in Europe were in a condition exactly corresponding to that of their Japanese brethren. In "The Ghost of Sakura" we learn how the complaints of the peasants, ground down by arbitrary taxes and duties, were admitted at Yedo to be perfectly well founded, while nevertheless the man who laid them before the court was executed for his pains; which reminds us of the peasant who was led straight to the gallows from the audience in which he had acquainted Louis XVI. with the grievances of his suffering neighbours.

Let us turn to another part of the work before us, namely, the fairy tales. These, at least, have a distinct local colouring, though we meet with not a few familiar features. I have already pointed out (*Acad.* i. p. 171) that the "Story of the Old Man who made withered trees to blossom," given first by Sir Rutherford Alcock in *The Capital of the Tycoon*, belongs in its essentials to a very widely diffused group. "The Elves and the Envious Neighbour" is related to Grimm's No. 107, "The Two Wanderers," and those akin to it. "The Suit of Feathers" belongs to a cycle which has left traces all over the world, and extends as far as Greenland. The feather suit of the fairy is the well-known swan's dress which we find as early as in the Edda. The connection between the moon and the hare also makes its appearance in Japan (ii. p. 257), the mountain in the moon being supposed to resemble that animal. This idea, like the Mongol belief that the shadow of the moon is shaped like a hare (Grimm, *D. M.* 679) may be derived from the Indian Buddhists, who see the image of a hare in the moon, and explain the circumstance by means of a Yâtaka (Benfey, *Pantschat.* i. 348); but this would not account for the same connection of ideas being found amongst the Hottentots (Bleek, *Hottentot Fables*, 31–34). In other Japanese stories the hare and badger, and other animals, notably foxes, take a prominent part, frequently turning themselves into human beings, as was done by the six-tailed cat who lived with a prince for a long time in the shape of his dead favourite, and, when she was found out at last, escaped in safety. An Eskimo fairy tale tells in the same way of a man whose wife turned into a fox and ran away howling because he complained of an unpleasant smell on entering his tent (Rink, *Eskimoiske Eventyr*, No. 16). According to another Japanese legend of the same kind, given in the *Tour du Monde*, vol. xix., the Mikado who reigned in the year 1150 was compelled by the disordered state of his finances to resolve upon dismissing a female favourite, who thereupon appeared in her real shape as a white six-tailed fox and fled from the palace. Foxes in fact occupy a very conspicuous place in Japanese superstition, and in the neighbourhood of Yedo there is even a chapel in their honour to which pilgrimages are made. They have the power of deceiving men by enchantments and apparitions, as in the story "How a man was bewitched and had his head shaved by the foxes," which has an exact equivalent in the Eskimo fairy tale (No. 147) where an Angekok (magician) and his son find hospitable shelter on a journey, and when they are going away find that what they took for a house was a hole in a rock, and that they had been the guests of gulls and ravens. In Oriental tales it is not uncommon for animals to take a human form (see my *Notes on Gervasius of Tilbury*, p. 137), but in the West the case is different, and the weasel who turns into a girl in Esop's fable Γαλῆ καὶ Ἀφροδίτη comes from India (Benfey, *Pant.* i. 375).

From the fairy tales we come to the Japanese sermons, which again differ from those to which we are accustomed in Europe in no respect except the skill with which the preacher keeps his hold on the attention of his hearers, whom he does not think it necessary, as Mr. Mitford expresses it, "to bore into virtue." The story, for instance, of the "Lost Son" is quite admirable, and will bear comparison with the parable of the Prodigal. In the appendices the author describes the ceremonies in use at marriages, births, and burials, as well as at the so-called *suppuku* or *harakiri*, so that nothing is wanting to a complete survey of the intellectual state and material habits of the Japanese. The local colouring is often so strong as to strike the European reader with a sense of total dissimilarity, while, as already observed, a little thought discloses points of resemblance which amply repay investigation. The services of Mr. Mitford as an impartial and trustworthy observer in this instructive field can scarcely be exaggerated.

Felix Liebrecht.

The Poems of Ossian, in the Original Gaelic, with a Literal Translation into English, and a Dissertation on the Authenticity of the Poems, by the Rev. Archibald Clerk. Together with the English Translation by Macpherson. In two volumes. Edinburgh and London: William Blackwood and Sons, 1870.

[Second Notice.]

The twelfth-century Irish MS. that contains the two short ancient poems ascribed to Ossian, to which reference has been made in the previous part of this notice, contains also ten poems of the same age and character, the authorship of which is attributed to Ossian's father, "Fingal," who seems to have been regarded at the date of the transcription of this MS., not only in the light of chief warrior, but likewise in that of chief poet, of the old Gael. Nevertheless, it would be absurd to suppose that the poems in question, ancient as they undoubtedly are, can be received as genuine compositions of either Ossian or Finn. All that can be positively asserted respecting their age is that they are certainly older than the year 1100. Be that as it may, however, they are not more different in metrical structure and character than in subject from the modern productions which Scotch editors would fain palm off on an unquestioning public as the veritable outpourings of "Ossian mac Finn." The subject of these old lays is simple and personal, and the narrative natural, smooth, and free from those extravagances of style and language characteristic of an age when,

as O'Donovan has observed, "classical strength, simplicity, and purity had given way to tautology and turgidity."

It is quite inconsistent with the known nature of old Gaelic heroic tales, judging by the numerous specimens of this class which have come down to us, that any ancient Gaelic MS. ever contained, or any old Gaelic *Shanachie* ever recited, as a whole, a single poetical composition of the extent of "Fingal," or "Temora." These heroic tales were merely prose relations, occasionally interspersed with short poems summarising particular events detailed in the prose accounts. In later compositions of the kind, written at a period when the rigid observance of the complex rules of Celtic poetry had fallen somewhat into disuse, and the passion for loose versification had laid hold of the Celtic mind, these interpolations became more frequent and extensive, until in a certain class of stories the poetical altogether took the place of the prose narrative.

Of the older style of Gaelic romantic narrative the best specimens now existing are the *Táin bó Cuailnge* and *Brudin da Derga*, in which there are but a few fragments of poetry, and those foreign to the narrative; and the romantic literature of the transition period is well represented by the tract called *Agallamh na Senorach*, or the "Discourse of the Seniors," the most important and extensive repertory at present remaining of Fenian or Ossianic legends. This remarkable tract, copies of which are preserved in three or four good Irish MSS. of the fifteenth century, contains a sort of Irish itinerary of Ossian and Caeilte (the "Seniors") in company with St. Patrick, who questions them regarding the traditions and history of the various places through which they pass. The dialogue is carried on between the parties in alternate snatches of prose and verse; and it must be worthy of notice, in considering the age at which Ossian came to be regarded as the representative poet of the Fenian heroes, that all the poems in this collection, with two trifling exceptions, are ascribed to Caeilte mac Ronain.

The important part assigned in some of these Ossianic poems to Scandinavian characters, and the alleged expeditions of the Fenian chieftains to Lochlainn, should alone be sufficient to cast not only doubt, but absolute discredit, on the claim set up for them as not merely echoes and traditions, but actual remains, of a pre-Christian age. What evidence is there that the Irish or Scotch Gael knew anything of the Scandinavians, or of Lochlainn, before the first descent of Northmen on these islands at the close of the eighth century? None whatever. But there is abundant evidence of a negative kind to the contrary. There is even good reason to suppose that these ambitious and spasmodic attempts at fine description which, in virtue of their boasted antiquity rather than through their genuine literary merit, have not yet ceased to excite the admiration of many learned men, are simply exaggerated versions of accounts of the conflicts which took place between the Northern invaders and the people of Alba and Ireland. This observation applies as well to the so-called Irish Ossianic remains as to those which pass by the name of Scottish.

Mr. Clerk complains (*Dissert.* xlix) that the Ossianic poems published by Miss Brooke, in the *Reliques of Irish Poetry* (1788), were received as genuine, and that she was not called upon, like Macpherson, to produce her "originals." But it should be recollected that this was nearly a century ago; and that no competent Irish scholar will venture to assert that her originals were a bit more ancient than the materials from which Macpherson constructed his work. Nay, Irish scholars of the present day are prepared to admit that the "Magnus mór," whose death by the hand of Finn mac Cumhaill forms the subject of the poem published by Miss Brooke under the title of "Magnus the Great," was no other than the "Magnus, king of Lochlainn and the Islands," who was slain on a foray in Ulster in the year 1103, as recorded in the Irish chronicles. Nor do they deny that the poem of "Conlaech" is a comparatively modern versification of the very ancient prose tale descriptive of the young warrior's death at the hands of his father Cuchullainn, a copy of which is contained in the "Yellow Book of Lecan." It would be curious if the Swaran of Macpherson's *Ossian* should turn out to be King Swero of Norway (*Ann. Burton. ad an.* 1201).

Mr. Clerk surely presumes too much on the credulity of his readers if he expects them to receive as genuine those passages, and they are many, in which the Gael of Ossian's time are represented as clad in mail (the "Gaelic" term ordinarily used for which in the text is only the English word itself), and practising the bow and arrow (*bogha* and *iuthaidh*); and the editor's opinion "that the word *iuthaidh*, here used for arrow, is to be found in Ossian only," will not increase the chances of belief in this incredible fiction. Nothing can be more certain than that the use of the bow and arrow was not practised by the ancient inhabitants of Ireland and Scotland. There is no Gaelic word for "bow" except *bogha*, which readily betrays its English origin; and the oldest term for "arrow" is *saiged*, from the Latin *sagitta*, not from the Gaelic *sáth* (recte *sadhad*), as Mr. Clerk would have it. The Welsh form *saeth* proves that the word is not Celtic, for if it were, the initial *s* would have become *h* in Welsh, as Stokes points out (*Irish Glosses*, p. 57). In the old lists of warlike instruments used by the ancient Gael, which are preserved in the Irish MSS., there is no mention of any machine answering to the bow, except the instrument called *crann-tabhuill*; but we know from the same authorities that this was used to cast stones. Neither is the bow enumerated by Giraldus Cambrensis in his account of the arms used by the "mail-despising" Irish at the time of the Anglo-Norman invasion (*Top. Hib.* dist. iii. c. 10). It may be therefore assumed that the "bow-string twanging on smooth yew" (*Fingal*, i. 424) did not twang in Ossian's time.

Not less suspicious is the frequent allusion to the appearance of the ghosts of departed heroes, and their conversations with the living. Waiving the important question of the ancient Celtic idea regarding the immortality of the soul, it may be safely asserted that the old legends which are founded on the more exact traditions of pre-Christian Ireland will be searched in vain for any allusion to the appearance of a disembodied spirit. Fairies and sprites, both good and evil, played their parts; but no genuine ghost was either feared or welcomed. Ghosts were so visible in Ossian's age, however, according to the authors of these poems, that even dogs could see them (*Fingal*, i. 477). It is a popular superstition in some countries that pigs see the wind, a greater exercise of vision, perhaps, than seeing Fenian ghosts, even surrounded as they were, like most things in those days, in ever present mist.

The oldest authentic reference in Gaelic mythology to the reappearance of a departed spirit, is that contained in the ancient tale called *Siabhur-charpat Con-Culaind*, or the "Fairy chariot of Cuchulaind," preserved in *Lebor na h-Uidhre*. But the Christian origin of this myth appears evident from the circumstance that the apparition of the chariot and its spectral occupants was effected through the prayer of St. Patrick, for the gratification of King Loegaire, who desired to converse with the dead chieftain. The description of the chariot in *Fingal*, duan i., seems founded on the *Siabhur-charpat*; but the vigour of the prose tale is diluted in Macpherson's text, in which the Cuchulaind's two horses ("strong as the eagle"! and with forelocks like mist) are represented as on either side of the chariot, not

before it. The misrepresentation of the old traditional account is further increased in the modern version by the substitution of new names, and a terrestrial origin, for the old names and lacustrian origin of the horses in the more ancient. *Sithfada* (long-pace [peace?]), and *Dubh-srongcal* ("black-white nose") are no doubt very Ossianic; and to call a horse "son of the ben" (peak) may be very poetic; but if the Scotch had preserved their national traditions like their Irish neighbours, they would not forget that Cuchulaind's horses anciently passed, and still pass, by the names of *Dubh-Sainglead* and *Liath-Macha;* and that they were real water-kelpies, sprung from lakes, as related in legends which were old before the composition of the "Gaelic" Ossian.

But if some scenes are unduly elaborated in these fictitious representations of Gaelic traditions, others are as unduly curtailed.

The account of the momentous combat between Cuchulaind and Firdia mac Damain, which Macpherson compresses into the words "I lifted high the edge of my steel. The sunbeam of battle fell," occupies twelve pages of the *Tain* in the *Book of Leinster*. Now, in the whole range of Gaelic heroic literature there is no episode so full of interest to the poet and historical enquirer as this, nor one which a person desirous of giving a true picture of ancient manners and customs would be less likely to overlook. The combat is stated to have lasted four days, during which the combatants are related to have exercised mutual acts of chivalrous courtesy, compared to which the knightly observances at medieval tournaments were rude. They met each morning with a friendly salutation, and separated each evening after a mutual embrace; and when night came, some of the "healing herbs" supplied to the one were ungrudgingly transmitted "across the ford," to the other. The reason assigned is that they were fellow students in the art of war, not in "Muri's hall," as Macpherson says, but in Dun-Scathaigh (the fort of Scathach, in the Isle of Skye), the etymology of which Mr. Clerk "probably" misunderstands (vol. ii. 139). The interest of this episode is enhanced by the mention of the weapon with which Cuchulaind ultimately killed his opponent, namely the *gai-bolga*, the nature of which has not yet been clearly determined; but it seems to have been a dart which Cuchulaind held between his toes, whilst fighting in the ford, and with which he pierced Firdaidh unawares. It is worthy of remark that in his very brief version of this story, Macpherson's translation is more true to the old tale than the Gaelic text supposed to have furnished his original. Take the name of Firdiadh's father as an instance. In Macpherson's translation Firdiadh is correctly called "son of Damman," whereas in the accompanying Gaelic text the form is *mac Amuin*, "son of Amun," or of "Ammin," as in Mr. Clerk's translation. The difference between the names "Damman" and "Amun" may seem of slight consequence to the superficial reader; and yet it is of real weight in the consideration of the questions whether Macpherson translated from the Gaelic text now printed, or whether this text was not in fact formed from his composition. For if Macpherson found the name "Amuin" in his original, he would scarcely have altered it, by chance, into "Damman," the form under which the name of Firdiadh's father appears in ancient texts; whilst a Gaelic speaker expressing the words "son of Damman" in his vernacular tongue would pronounce them as they appear in the Gaelic text (*Fingal*, ii. 375, 395), in consequence of the partial loss in pronunciation of the initial *d* of Damman, through aspiration. And in this way, probably, we get an insight into the origin of the Gaelic text; for there can be no doubt that Mr. Clerk knows Gaelic better than Macpherson did; and if he renders the Gaelic words *mac Amuin* by "son of Ammin," the inference is plain that in this case at least Macpherson must have used some other text than that now presented to us. It may be added, indeed, that to account for many of the apparent inconsistencies between the Gaelic text and Macpherson's version, we are expressly told that Macpherson was not a good translator. He was certainly a better composer.

Mr. Clerk refers in terms of undeserved censure (*Dissert.* xxii) to the "Ossianic ballads which are so numerous in the Highlands," because, like those published in the Dean of Lismore's book (*ib.* xxxii), they are much inferior to Macpherson's poems, and betray their modern character by allusions to the Christian religion. Some acute critics regard these characteristics as indicative of the genuine nature of the popular Ossianic lays, and the studious avoidance of all reference to Christianity in Macpherson's *Ossian* they consider the result of a preconceived intention to mislead. But if Ossian was ignorant of the religion of the people of these islands, whether Christian or pagan, he appears to have given a true picture of the religion of the "Lochlanneis," as we learn from "a striking confirmation by the celebrated antiquary Finn Magnussen." No doubt Finn Magnussen was considered a great authority when Macpherson wrote; but it is quite refreshing, and quite in keeping with the unvarying course of Gaelic tradition, to find the editor of a volume of even legendary poetry quote Finn at the present day, when his own countrymen, who ought to be the best judges of his veracity, consider his statements quite untrustworthy.

It is difficult to preserve a sense of gravity when one reads of the oracle of Cru-Lodin conversing with Finn (*Carraig-Thura*, 267–294), and thinks that such nonsense actually passes for veritable, ancient tradition with a people so acute in worldly wisdom as the Scotch. But it is not more absurd than the ridiculous myth, which Mr. Clerk is careful to repeat, about the alleged descent of the Clann-Campbell from Diarmaid, one of the Ossianic company, and the Adonis of Fenian mythology, whose slaughter by a wild boar is one of the most widely scattered myths of Ossianic tradition. It is a good illustration of the free and easy way in which certain people build up the fabric of national history and tradition, that the only reason why the Clann-Campbell are stated to be descended from this mythical personage is because their tribe name is Clann-Diarmada. In Ireland there are numerous septs descended from persons named Diarmaid, which name they still preserve in their tribe names; but they trace their descent from ancestors who lived long within the period of authentic history, and whose pedigrees are accurately recorded in the Irish MSS. Nay, in Mac Firbis' collection of pedigrees we have one of the Mac Ailin (or Campbell) family, in which, however, the name of Diarmaid does not occur; but that of Duibhne, from whom the sept of Mac Ailin (*perperam* "Mac Callum") was sometimes called Mac Duibhne, as Mac Firbis remarks, is set down as the direct ancestor, in the 20th generation, of Gilla-espuig Mac Ailin; and the more ancient line is traced to a different source than *Diarmaid mac* Duibh mic Duibhne.

The truth is that the origin of this baseless and very modern notion is attributable merely to the occurrence of the name of Duibhne amongst the ancestors of the family; whilst the surname Campbell is derived from Dubhgall *Caimbél* (or of the crooked mouth), great-grandson of Duibhne.

It is not denied that an ancient poem, orally transmitted through many generations, may become so corrupted through linguistic decay arising from the loss of inflectional and conjugational elements, and the gradual substitution of modern

terms for old and obsolete ones, that its claims to antiquity may be scarcely recognisable. Nay, its metrical structure might even undergo important modifications. But in its accurate representation of the manners and customs of the age to which it belonged, its genuine character wou'd still be apparent. This is not the case with the "Gaelic Ossian," for we have seen that manners and customs are assigned in these poems to the old Gael which they never had. And although it has been sought to give them the semblance of historic consistency and probability by the aid of a fabricated system of nomenclature and a fictitious topography, in which epithets of persons are so often converted into proper names that the same character appears under several different names in the same canto, incongruities of time and place crop up with such frequency as to excite surprise at the loose way in which the materials have been manipulated. Sometimes we have an individual speaking of himself in the first and third person within the compass of a few lines; at others we have objects described as in a certain place, which we learn a few lines further on are in quite a different locality. Persons are suddenly obtruded on the reader's attention of whose existence he had no previous conception. The principal character of the poems (Finn) was actually called *óg*, or "young," at a time when his grandson Oscar was a mature warrior. There is often a want of continuity in the narrative which indicates the omission of things important, and direct contradiction involved in descriptions of the same; and the versification is so barbarous that where there is an attempt at rhyme we have the same word used seven times in the space of a single page, always in company with its fellow. We have Atha (*recte* Ath; gen. Atha) described in one place as "Atha of the dark rough streams" (*Temora*, ii. 176); whilst twelve lines further on it is called "of the failing, scanty streams." Dead sailors (not "dying," as Mr. Clerk translates) are represented as casting looks of sorrow on the waves (*Fingal*, i. 445–6). Warriors draw their spears from their "backs"; and their hands "sleep." And it surely requires an ardent imagination to hear in the hum of "evening flies in drony dance" [the Gaelic text, *mar chuileig fheasgair nan deas mall*, should be translated "like evening flies of the slow feats"] the sound of the majestic advance of Cuchulainn's chariot, "as a storm from the glen of battle." But to enumerate faults of this kind would extend this notice beyond reasonable limits; and we must be content to ascribe them, like other shortcomings, to the "abrupt and elliptical style of Ossian."

As regards the Gaelic text itself, it would be difficult to conceive anything more deplorably corrupt. It is nothing short of an offence against common sense, excluding other and higher considerations, to publish it as the language of an almost forgotten age, even after making due allowance for modernisation. But the Gael of Scotland will have it so; and on this subject it is hardly an exaggeration to say that the Ossianic mist still encircles the Scottish mind in folds as thick as shrouded the spirits of the Gaelic dead long ago, in their damp and inhospitable elysium. It is to no purpose, so far as Ossianists are concerned, that scholars like Zeuss, Ebel, Stokes, and Nigra have demonstrated, on scientific data, that the Gaelic of these poems had no separate existence five hundred years ago, and was but a modern and mutilated dialect of the tongue common to Ireland and Scotland at that time. We know that during the religious troubles in Scotland there were agencies which exercised a very baneful influence on the historical traditions and literature of the Scotch; and that those agencies had much to do with the present mutilated condition of the Gaelic language, few competent judges will deny.

It is encouraging, however, that a few of the more intelligent Gaelic scholars of the present day are beginning to admit, although with considerable reluctance, that, after all, Macpherson may have had no real originals. But Mr. Clerk still fosters the old delusion, and assigns to the language of these poems an antiquity which only the wildest enthusiast can imagine. It may be "freer from foreign admixture than its cognate tongues in Wales and Ireland" (*Dissert.* xxxviii), since it has not been so long in contact with foreign elements as its neighbours; but to refer it to an age "when language knows no inflections" is to invite severe reproof. Mr. Clerk says, nevertheless, that he "founds nothing on the vocables of Ossian." "It is possible," he adds, "that they are as old as the tenth century, and even much older. But in the absence of other writings of those ages, this cannot be proved." (*Dissert.* xxxix.) And yet the editor quotes Zeuss! But it is evident that he has not mastered the labours of that distinguished scholar, nor those of the labours of Ebel, Stokes, and Nigra, or else he would have known that Irish writings of the tenth century, and "even much older," were not forthcoming.

What is the character of this text which belongs to a primitive age "when language knew no inflection," and to which Dr. August Ebrard of Erlangen has had the courage to publish a grammar and vocabulary, and for this indiscretion, singular in a German, has been severely rebuked by a more competent authority (Ebel, in *Liter. Centralblatt*, March, 1871)? The Gaelic of Ossian, then, unchanged through ages as it has been (according to its professors), has two names for the moon, *re* and *gealach*, both very modern; but the old name, *esca*, is wanting. For *star* Ossian uses *reul*, the old term *riun* (pl. *renna*) being forgotten. The air, or firmament, is called *speur*, a word which no linguist could mistake for Gaelic. The English word "gallant" appears always under the undisguised form *gallan;* and the English word "hall" is scarcely disguised in *thalla* (pronounced *halla*). But that "Ossian" uses a double *l* in this case, the word might be supposed borrowed from the Latin "aula." The old Gaels used no halls, however, and the name must have been borrowed from some source, probably the English, as the most modern. For almost every kind of motion, the term used is *siubhal* (pronounced *shool*). Ships walk; planets walk; storms walk. Nay, even the soul of Dubh-mac-Roinn "walks to his ancestors" (*Cath-Loduinn*, ii. 133), although Macpherson translates "came forth," and Mr. Clerk "fled." Even "surliness lies on the walking of the king," as we learn from line 58 of "Covala." To express "waiting," Ossian uses *stad*, which is really only the 3rd pers. sing. of the Latin "sto," the Irish *an*, or *fan* (*fo*-an), being also lost. The rainbow, like the bow, appears under the form *bogha;* and, curiously enough, the old Irish word for rainbow, or arch (*stuadh; stuadh nimhe*, "arcus coeli"), is applied to the waves, with reference, no doubt, to their arched appearance. *Maile* is naturally used to express "mail," or mail armour; for the Gael learned the name, as well as the use of armour, from the Norse (*Vid.* Egilsson, *Lexic. Poët. Ling. Septentr.* voce *mál*). A "boss" is represented by *copan*, vulgariter for "cup"; *stáilin* by steel, strife by *stri* (and sometimes by *spáirn* = sparring?). For "storm" Ossian uses the word *stoirm*, as he does *balla* for "wall," and *páillun* (pavillion) for "tent." To express the various modifications, he has only one word, *beucach*, which is not ancient (or "elegant," as Ossianic poetry is said to be). A "horn" is expressed by *stoc* (stock). And, most vulgar of all, the idea of departure is always conveyed in the expression *dh'fhalbh*, lit. "he emptied," or "cleared out." A "bit," or "bridle," is called *cabstar* (from *cab*, very modern slang for "jaw"); and "deeds" are entitled *cás*, from Lat. "causa." *Riamh*, "before," appears

in the modern sense of "evermore;" and steel "*screeches* on steel." *Cromleac* is used in its modern (and only) sense; for it had no existence before the Gaelic Ossian was written; and *Coigerich* is so changed in meaning, from a mere "borderer" to a "foreigner" (*i. e.* a fellow "over the border"), that, if the Four Masters, who used it to express neighbours, were resuscitated, they would no longer recognise it as Irish.

The edition is creditable to the industry of the editor; but not to his scholarship. He has written a very readable preface, although the Ossianic mania has carried him into giving expression to very serious philological heresies. But no one expects to find in the advocates of Ossian earnest votaries of philological science. The voluminous notes illustrative of the text, and explanatory of the so-called proper names, which must have cost Mr. Clerk such a waste of time, though not of learning, might have been expunged with great advantage to the reader, and benefit to the editor's reputation. For who can regard without surprise such unscholarlike explanations as appear in these notes, where "Inis-nan-con" is at one time explained correctly as "Isle-of-dogs," and in another place printed as a man's name; in which, whilst the editor is in one place unable to give any explanation of the name or era of "Fingal" (vol. ii. p. 141), in another place he says that "it does not require any stretch of imagination to resolve Fingal's own name to "white-white," "bright-bright," "bright light of day"—the proper name of the individual, be it remembered, being "Finn mac Cumhaill," which Macpherson changed into Fingal? The man who tries to derive the modern name of "Matheson" (= Mac Matthias, or son of Matthew) from *maithes*, "goodness;" "Mahon" (Irish "Mathghamhain") from *math-aon; maor* (= Lat. maior) from *math-fear*, deserves some charitable consideration at the hands of the critic. But he has done much to subject himself to very severe censure. Let us hope that this is the last occasion on which the public will be asked to accept as genuine a work which is only an audacious attempt at imposture. W. M. Hennessy.

LITERARY NOTES.

The Kisfaludy Society lately submitted for criticism and approval translations into the Hungarian language of the *Frogs*, *Clouds*, and *Knights*, of Aristophanes, to the veteran poet Arany. He however returned the manuscript unread, assigning as a disqualification for the task that he himself was engaged on translations from the great comic poet. Recent Hungarian translators of the Greek and Latin classics have often been wanting in a complete mastery of the language in which they wrote, while M. Arany is acknowledged to be the most idiomatic writer of Hungarian now living.

In the *Göttingische gelehrte Anzeigen* for July 19, Felix Liebrecht laments the incompleteness of Professor d'Ancona's edition of the *Novelle di Giovanni Sercambi*, published at Bologna as part of the *Scelta di Curiosità letterarie inedite o rare dal secolo* XIII *al* XVII. Sercambi was the earliest but three of Italian novelists; but the only MS. of his tales is in possession of a gentleman who "per amore alla castigatezza del costume" declines to impart it even to the learned world, which has consequently to content itself with 33 novelle instead of 156.

In the *Cornhill Magazine* for August, Miss Thackeray writes of Jane Austen (*apropos* of the memoir and posthumous tales noticed in *Academy*, No. 29) just as she ought to be written of, with profound and unfeigned admiration for the creatures of her fancy, so much more life-like than life, and with the warm personal regard which springs up on finding that a favourite author was also one of those women "true, gentle and strong and tender, whom 'to love is a liberal education.'"

In No. 29 of *Im Neuen Reich* we read an article on or rather a diatribe against Richard Wagner and Hans Makart, by Dr. Lübke. It is not the first time that the well-known art critic trespasses on musical grounds, and in all these cases a particularly unfortunate star seems to rule his pen. The present article again shows his utter want of understanding for the great composer's musical and poetical intentions, and the objections raised against him are based on the most antiquated notions of orthodox philistinism. True grounds for a parallel between Wagner and the painter of the "Plague of Florence" are absolutely undiscoverable. As the chief "elective affinity" between his two victims, Dr. Lübke seems to regard a sort of transcendental sensuality, to illustrate which he describes a party of rich bankers and "ladies of the world," who, after partaking of a sumptuous repast in a hall decorated by Makart's pictures, repair to the opera in order to listen to Wagner's equally voluptuous melodies.

The two last numbers of the *Dark Blue* show an improvement in the poetical contributions, hitherto not the strongest point of that magazine. Mr. Joaquin Miller's "Kit Karsten's Ride" is written in the same metre and with the same verve and colour which the readers of his *Songs of the Sierras* admired in "Arazonian." Also Miss Mathilde Blind's "Song of the Willi" shows imagination and some happy turns of expression, although the refrain is not always treated with the skill and feeling for sound required in this difficult feature of poetry.

Art and Archæology.

Guide de l'Amateur d'Objets d'Art et de Curiosité; ou, Collections des Monogrammes des principaux sculpteurs en pierre, métal et bois, des ivoiriers, des émailleurs, des armuriers, des orfèvres et des médailleurs du moyen-âge et des époques de la renaissance et du rococo. Par Dr. J. E. Théodore Graesse, second directeur du Grüne Gewölbe, et directeur, ad interim, du Musée japonais à Dresde, conseiller aulique, &c. Dresden.

This long title belongs to a very thin book, but one that must have cost much time, the result, indeed, of a wonderfully extended acquaintance with the various productions left to us by the decorative arts of former times. The number of names, initials, or *marques figuratives* alphabetically arranged or added in an appendix is about a thousand, the great majority having some account of the artist appended, his full name, date, and locality. Besides, there are separate tables of the marks found on the arms preserved in the public collection at Dresden, nearly four hundred; and of the marks on Spanish armour; also an alphabetical list of the names found stamped on swords during the sixteenth, seventeenth, and eighteenth centuries. In his preface Dr. Graesse says, "As chief of a celebrated museum I have often been consulted on the signification of monograms found on enamels, mosaics, works in ivory, &c., and I have in vain looked about for these in works relative to the history of the arts. Having myself made a collection of monograms with their explanations, I hope to merit the approbation of all who occupy themselves with the same studies by publishing the result of my labours." To this we willingly assent; at the same time it is clear that a book of this kind on its first publication must be far from complete. In many branches we cannot pretend to test its accuracy; but among engravers, for instance, we find that the few given on account of their having carved in wood as well as engraved pictures, *e. g.* Albrecht Altorfer, Albrecht Dürer, and George Pencz, are not correctly rendered. The pure artist does not seem so interesting to the author as the artist-manufacturer.

The majority of the men mentioned we find to be Germans of the sixteenth century. Italians follow next in number, French artists are still fewer, and almost exclusively enamellers of Limoges. Englishmen appear very seldom. A table of the letters and the years expressed by them, used by companies of silversmiths (hall-marks), would be a valuable addition to this work in a future edition. W. B. Scott.

ART NOTES FROM CENTRAL ITALY.

[First Article.] Venice, Aug. 2.

A recent journey through some of the less frequented regions of Umbria and Tuscany has afforded me opportunity for taking some artistic and antiquarian notes.

Near the beautifully situated old town of Civitacastellana, not far from the Umbrian frontier, though actually within the ex-Papal States now called "Provincia Romana," we reach by a pleasant walk the imposing ruins of Falerii, the cincture of whose walls and lofty square towers stands almost complete. In the midst of those majestic remains (for which I refer the reader to Mr. Dennis' *Etruria*) rises the abbatial church of *Sta Maria di Falleri*, a fine example of the twelfth-century Romanesque, with nave and aisles divided by massive pilasters and a few classic columns, and the peculiar feature of five apses at the east end; also a portal of white marble, with clustering columns and correspondent mouldings carried around the arched tympanum at the summit, still perfectly preserved and with all its details sharply cut and clear as if of recent origin; this being a work of the well-known Cosmati family, who maintained the traditions of the Italian-Gothic style in Rome during the whole of the thirteenth and at least the earlier years of the fourteenth century—as we are informed by an inscription in Gothic letters, *Laurentius cum Jacopo Filio suo hoc opus fecit*, supplemented by another on the opposite side of the doorway, *Hoc opus Quintavalle fieri fecit*, probably there placed by the lord abbot, who ordered this work by the Cosmati—father and son. At the east end the vaulting of this church is still perfect; but the roof of the nave fell in 1829, and the whole building is now left to the natural process of decay in its wildly picturesque solitude, amidst the wreck of the Etruscan city reduced to ruin ages before this Christian fane was built. It is strange that, amidst all this illustration of antiquities, pagan and Christian, in the Roman province, *Sta Maria di Falleri* should have been left hitherto scarcely noticed. That the date of its foundation is anterior at least to the second half of the twelfth century, we may infer from the winding up of a dedicatory inscription near an altar in the north transept, and in the name of a noble lady: *Anno ab Incarnatione Domini MCLXXXVI.* The names of Laurentius and Jacopos Cosmati, with the date 1210, are read on the architraves of the mosaic-adorned and splendid atrium before the cathedral of Civitacastellana, one of the celebrated constructions due to the genius hereditary in that family.

About two miles from Orvieto, on the high ground above the glen which forms a natural defence to that city, we reach the Etruscan necropolis discovered in 1863 by Signor Domenico Golini, only two sepulchres of which are now left open and in any way cared for. The custode tells us that about 400 tombs were opened on this site, all of which, except the two in question, were again filled with earth, or at least closed up, after many objects of value, urns, lamps, gold ornaments, &c., found in their interiors, had been removed. These curiosities are now deposited on sale, as I understand, in the house of Signor Golini, at Orvieto. I was sorry to ascertain that in the two sepulchres accessible, as I have said, the admission of air and damp threatens destruction to the wall-paintings that surround these interiors. The intonaco on which they are executed is peeling off and falling on the ground piece by piece; nor are any precautions taken to avert the danger. Great indeed would be the cause for regret should those ancient paintings eventually perish, for they are about the most beautiful, and truly Greek in character, among extant productions of Etruscan art. They represent funereal banquets, a procession of males and females in festive costume, horses, and other animals, slaves preparing for the banquet and serving the tables; also Pluto and Proserpina seated side by side, and a soul conducted to Hades by Mercury and a winged genius of grim aspect. Some curious symbols introduced among these groups, and apparently unconnected with them, may be alluded to, but not described. The colouring is a mere indication, without attempt at light and shade; the flesh-tint a bright monstrous red; but the masterly drawing, the freedom and correctness of attitude, and, above all, the refined beauty of the heads, would be worthy of the best periods in classic art.

The works for the finish or repair of the mosaics on the glorious façade of the Orvieto Duomo, commenced under Papal government are still in progress; nor have they, I understand, been intermitted during many years.

At Todi I was glad to find that the magistrates have ordered a similar appropriation of art-objects from suppressed convents to that adopted, and successfully carried out during late years, at Perugia, Foligno, Assisi, and other towns. A gallery of paintings and sculptures, removed from cloistral premises, has been formed in a hall of the "Comune" or municipal palace, the most conspicuous medieval building on the piazza of Todi; and this new museum of sacred art was inaugurated on the last occasion of the festival of the "Statuto," or Italian monarchic constitution, the first Sunday in June. Several of the paintings are but passable copies from great masters. The most noticeable original is a large altarpiece, by Lo Spagna, which was sent to Paris, but brought back to Italy before it could reach that capital, in the days of the First Empire—its subject the Assumption, with angels around the glorified Mother, and several saints, St. Francis in the midst, kneeling on earth below. To the same artist is attributed another picture here, the Holy Trinity, with a floating group of angels entirely re-painted, if not quite newly composed; this being almost a replica of a genuine and fine Spagna brought to light a few years ago in the Todi cathedral, after being long hidden behind a wall in a closed-up niche. A few other works in this collection at the "Comune" are of the fifteenth century; and a bronze crucifix by Giovanni di Bologna exemplifies all his power of pathetic expression in such subjects.

At Perugia I found no important addition made within the last two years to the precious collection of Umbrian art at this university. Among commendable public works now in progress at that city is the new *palazzo pubblico* on the site of the demolished fortress, to serve for municipal offices and for the ultimate transfer of the above-mentioned art-gallery. Likewise may be noticed an intelligently ordered restoration of the ancient "Comune," a venerable edifice founded in the thirteenth century, to its original Gothic type, which had been marred in every detail through the fault of the pontific delegates formerly resident here. A project is also entertained for a monument to Pietro Perugino, to be erected in a new piazza of the city. A sculptor here settled, Count Ettore Salvatori, has executed a colossal statue of Perugino, the head copied from his portrait by his own hand introduced in one of the frescoes in the Cambio, with eight relief-busts of the most distinguished among that artist's pupils and imitators round the pedestal. But this has been at the count's own risk; and it is probable that another competitor will be chosen by those empowered to give the commission for this monumental statue. Another monument to be erected in the Campo Santo, near Perugia, has been assigned to, and already finished by, Count Salvatori, in honour of those who fell in the defence of liberal against despotic government at the two sieges of Perugia—the one by which that city was re-subjected to the Papacy, 20th June, 1859, and the other, 14th September, 1860, by which she was finally wrested from sacerdotal sway.

C. I. Hemans.

(*To be continued.*)

NEW BUILDINGS AT SOUTH KENSINGTON.

[Second Article.]

On the east side of the Exhibition Road, facing the International Exhibition and Horticultural Gardens, is the building intended for the new Science Schools, with its exterior all but complete. The western and southern sides of this building are very similar in general design, but as the former is of the greater importance, it will be sufficient to notice it alone. In plan, this part has a wing at each end projecting some ten feet; and the recess formed by the projection of the wings is filled on the level of the ground floor by an open arcade, and at the level of the cornice by a row of bold corbels carrying an arcaded gallery which projects almost to the face of the wings. A moulded cornice is carried round the wings at the same level, and above this rises one additional story to each wing, terminated by a low pediment, and scarcely mastering the arcaded gallery which forms the highest story of the intermediate portion. The material of the wall surface of the entire building, with the exception of the highest story of the wings, is red Fareham brick, which (pointed as it is in this building with white mortar) looks exceedingly well. All the ornamental work is of terracotta. To the height of the cornice the general design is very satisfactory, but the treatment at and above this level

detracts greatly from the total effect. The great projection of the gallery, though in itself an imposing feature, annihilates the value of the wings—a defect which might have been to some extent retrieved had the latter been carried to a greater height. Instead of this the wings are not only abruptly terminated, as I have said, but their top member is, from some unintelligible motive, executed entirely in terracotta. The employment of this material, which by its ordinary use in these buildings is associated with lightness and ornamentation, in a position in which of all others the requirements of the design call for solidity and constructional emphasis, has the effect of marring the most important principle of the composition, viz. the predominance of the wings. The result, as you carry your eye from the bottom to the top of the building, is puzzling and disappointing. Below the cornice are projecting wings and strongly marked angles; above, the whole is reduced to an almost level surface, the change of material in the wings prevents the eye from following the angles, and the mass is stopped abruptly at a dead level. The idea conveyed is that of a giant with a well-formed frame and no head. One point only of actual detail may be added. The soffits of the arches of the lower arcade are being decorated in colours, not only objectionable in themselves, but such as completely neutralise the delicate and beautiful natural tints of the terracotta. It is to be hoped that this decoration is nothing more than an experiment, which will be abandoned as unsuccessful.

Of the three buildings, the Albert Hall is unquestionably the most successful. The general form, that of a rotunda on a slightly elliptical plan, is one which offers great opportunities of striking effects, and these opportunities the general idea of the design is calculated fully to develop. The building fails principally in the proportion of the different stories to each other, as well as in the insufficient projection of cornices, galleries, &c. The cornice immediately above the frieze might with advantage have been more strongly emphasized both in depth and in projection, and the frieze itself proportionately diminished. Again, the gallery immediately below the frieze would have been the better both for a bolder projection and for a greater elevation of parapet. The result would have been that the figures in the frieze would have lost the unpleasantly colossal appearance which they now present, and that the whole story from the gallery to the cornice would have been reduced to a size which would have harmonized better with the general proportions of the building. Further, the increase of projection would have developed more fully the beautiful effect which results from a cornice or gallery following a curvilinear plan. The introduction of an unadorned story above the cornice is satisfactory. The porches are unworthy of the design generally—especially unpleasant are their stilted semicircular arches. The roof, however, is the chief eye-sore of the building; nor is its ugliness entirely to be attributed either to the general form (a low spherical roof being thoroughly capable of artistic treatmeat) or to the practical engineering difficulties attending the roofing of so enormous a space. Neither form nor utility could necessitate either the angular pediments which contrast so inharmoniously with the generally curved lines of the building, or the feature resembling a huge depressed funnel which forms the termination of the whole. The materials are generally the same as those of the other buildings, except that the terracotta is cast in smaller blocks (a more economical and not less satisfactory employ), and that the brickwork is pointed with dark-coloured mortar which produces a purple and less pleasant tint.

In the interior of the building one is at once struck with the far greater prominence of the elliptical form which externally is scarcely more than perceptible. The upper arcaded gallery, lighted by openings unseen from the interior, is a fine feature in itself, and produces highly picturesque effects, as figures are seen grouped or moving behind the arcade, and in a light stronger than that of the interior generally. The figures seen in this position at the same time render the huge scale of the building fully apparent. It is to be regretted that the pillars of this arcade were not set two deep, as singly they look poor in side views. The velarium, though scarcely belonging to architecture proper, is an important feature in the interior, and produces a beautiful variation of radiating lines in perspective, besides giving a soft and pleasant tone to the centre of the building. The proper decoration of this interior, of which the importance can scarcely be exaggerated, will tax artistic taste and judgment to the utmost. It is to be hoped that here at least the local influence, which has made the external frieze a museum of incongruous design, may be so far overcome that the decorative scheme may possess some portion of continuity and rhythm, a quality for the absence of which no variety of interest can compensate.

Basil Champneys.

ART NOTES.

The authorities of the Oxford Museum have just made a purchase of select Greek and Etruscan vases from the collection of Signor Castellani, which will form a valuable nucleus for future acquisitions.

English art-readers are not so well acquainted as they ought to be with one of the most completely got up of contemporary art journals, viz. *L'Arte in Italia, rivista mensile delle Belle Arti*, a monthly periodical published by the Italian *Unione tipografia-editrice*, under the editorship of SS. Luigi Rocca and C. F. Biscarra, who, together with writers so well known as Selvatico, Cavallucci, and the popular political poet dall' Ongaro, are among its chief contributors. Each number contains a folio sheet of text and two or three separate full-page illustrations (unsewn). These contents vary in value, but their form is one of genuine elegance, and some of the etchings, head- and tail-pieces, &c., lately published, have been exceedingly good.

Carl Justi contributes to No. 30 of *Im Neuen Reich* an interesting sketch of the history of the Capitoline Museum at Rome; and to the last number of the *Preussische Jahrbücher* a biographical and critical notice of Raphael Mengs.

New Publications.

Andeley, Mdme. Franz Schubert, sa Vie et ses Œuvres. Didier.
Browning, Robert. Balaustion's Adventure; including a transcription from Euripides. Smith and Elder.
Coolie, The; his Rights and Wrongs. By the author of Ginx's Baby. Strahan.
Deutsche Renaissance. Eine Sammlung von Gegenständen der Architektur, Decoration und Kunstgewerbe in autolithographirten Original-Aufnahmen. Leipzig: Seemann.
Sainte-Beuve. Nouveaux Lundis. Tome XII.
Schroedter, Prof. A. Triumphzug d. Königs Wein. Nach dessen Original-Gemälden chromolith. v. P. Herwegen. 1. Lfg. München: Bruckmann.
Taylor, Bayard. A Translation of Goethe's Faust. Part I. Strahan.
Urlichs, Ludw. Die Anfänge der griechischen Künstlergeschichte. Würzburg.

Theology.

Criticisms on the Text of Genesis. [*Beiträge zur Kritik des überlieferten Textes im Buche Genesis.* Von Justus Olshausen.] In the *Transactions of the Berlin Academy*, June 1870, pp. 380–409.

When we compare the various MSS. of the Hebrew Bible as yet known to us, we are at once struck by the fact that they all belong to the same family. Doubtless the several copyists have made slips and blunders of their own, but on the whole the agreement is remarkable, and we find the same merits and defects even down to the smallest particulars; in other words, these MSS. were all transcribed from one and the same archetype, the merits and defects of which they reproduce. That the latter was anything but a literal copy of the original MS. in the possession of the collectors of the Canon is seen from a comparison of the ancient versions, especially the Alexandrine, which are frequently based on a better text than our own. This last, in fact, has experienced much alteration, not only owing to the inevitable variations of copyists, but also to deliberate tampering with the text. In proof of this position it is only needful to refer to the well-known work of Dr. Geiger, *Urschrift und Uebersetzungen der Bibel* (Breslau, 1857). The question is whether it is possible to determine the age of the MS. from which all known MSS. are derived.

In a highly suggestive review of Prof. Olshausen's work, which appeared in the *Göttingische gelehrte Anzeigen*, Prof. de Lagarde answers this question by a reference to the following passage in the introduction to an Arabic paraphrase of the Pentateuch, published by him in the *Materialien zur Kritik und Geschichte des Pentateuchs*, in 1867 :—

"Solomon, son of David, had built a strong city, as a defence of his possessions, which he named Bâtîr—it is said that it is also called Baalbek—and this was not conquered by Titus. Now the priests brought hither the Thora, and committed it to Shemája and Abtália, the chief of the city of Bâtîr.* Long afterwards King Adrian besieged Bâtîr, and conquered it. Then the most distinguished of the family of David took the Thora and went to Bagdad, where they dwell to this day. When the Jews were scattered into all lands, the sons of David made copies (of the Thora), and sent them to all communities. The priests Hannán and Kajáfá, however, had determined, before the conquest of Titus, to diminish the total of the ages of the patriarchs by 1000 years, so as to be able to deny the appearance of the Messiah, and to say to the Jews, The time when the Messiah shall appear is not yet fulfilled. And to this day they have remained in this delusion."

It seems to me, with Prof. de Lagarde, not at all impossible that this passage may contain a kernel of truth. Even in itself it is not improbable that in the disastrous times of Hadrian a community of Jewish emigrants should have had to make shift with a single copy of the Scriptures, and that the reputation of those who had made use of this copy should have invested it with greater authority than was consistent with the intrinsic value of the MS. But the tradition is confirmed by the accompanying remark that the Hebrew text had undergone deliberate falsification subsequent to the rise of Christianity. Is this charge, we may ask, well-founded? Prof. de Lagarde replies in the affirmative, and rightly so in our opinion. It is impossible to mistake the artificial character of the chronologies both of the Septuagint and of the current Hebrew text. According to the Septuagint, precisely 3000 years elapsed from Adam to Peleg ("the divider"), the system being based on a week of 7000 years, while according to the Hebrew the number of years between the creation and the Exodus amounts to exactly $\frac{2}{3}$ of 4000 years. It is much more difficult to make out whether the first of these systems was that of the collectors of the Canon. The chronological question, on which so much acuteness has been expended, has not yet been brought to a decisive result. But it is, perhaps, not superfluous to remark that the year 3000 is also an important epoch in Babylonian history (see Syncellus, pp. 169, 172, ed. Bonn), while Peleg stands in connection with the confusion of tongues and the dispersion of nations (comp. Syncellus, p. 162, who, however, places the death of Peleg in 2981). The ingenious combination of Bertheau should also be well considered in a final settlement of the question. So much at any rate is clear that the calculation of 4000 years cannot have been made by the collectors of the Canon. The basis of 100 generations, of 40 years each, suggested by Prof. Nöldeke (*Untersuchungen*, p. 111), is entirely arbitrary. I content myself with remarking that less than 30 patriarchs are required for $\frac{2}{3}$ of these 100 generations. As far as we can see, the only possible basis of the 4000 years is this, that just that number of years elapsed between the creation and the birth of Christ. Now, unless we credit the collectors of the Canon with a miraculous gift of prediction, this chronological system must be of post-Christian origin. On the other hand, since the true date of the birth of Christ does not fit into the chronology of the LXX. (for according to this it took place in 5500), there is no reason to suppose a falsification of the LXX., whether in favour of or in hostility to Christianity. Even Preuss (see *Die Zeitrechnung der Septuaginta*) has been unable to adduce any essential argument against the LXX. Still it is difficult to make out why the Hebrew text was altered. It would appear from passages like Mark i. 15 that about the time of Christ's birth calculations were afloat as to the time of Messiah's advent, and we know that there was a prophecy current in the early Christian church, "After five days and a half (*i. e.* after 5500 years) I will come and redeem you," a saying obviously founded on the chronology of the LXX. Prof. de Lagarde supposes that the Jews acknowledged this prophecy, but altered the ages of the patriarchs, in order to be able to say that a very long time had still to elapse before its fulfilment. This explanation is not an unreasonable one. But, we cannot help asking, why should the numbers have been altered in such a way as to amount to precisely $\frac{2}{3}$ of 4000 (or $\frac{1}{3}$ of 8000)? Was it merely to make out that just 1000 years elapsed between the Exodus and the era of the Seleucids (comp. Lepsius, *Die Chronologie der Aegypter*, p. 361, &c.)? We are almost obliged to make some such supposition, since $\frac{1}{3}$ of 4000 was certainly never a sacred number of the Jews. Otherwise the end of the first $\frac{1}{3}$ also ought to coincide with a distinctly important epoch. It is also remarkably characteristic of this chronological trifling that $\frac{2}{3}$ 4000 + 1000, *i. e.* the commencement of the era of the Seleucids, is again just equivalent to $\frac{2}{3}$ 5500.

I cannot, however, go any deeper here into these questions. It seems to follow from what has been said above that this second part of the tradition contains an element of truth. And this entitles us to join with Prof. de Lagarde in allowing some weight to the first part, according to which the archetype of our Hebrew MSS. is not older than the time of Hadrian.

What may not have been the fate of our text in the long interval between the close of the Canon and the age of this MS.? Manifold clerical errors; corruptions owing to indistinct writing; intrusive marginal notes; transpositions of words, or even of entire sentences, omitted by the copyist, noted in the margin by the corrector, and inserted by the next copyist in the wrong place; and, lastly, even arbitrary alterations, due perhaps to pedantry, perhaps to dogmatic considerations;—all this we might anticipate, and all this we actually find. In no other text perhaps has criticism so much work to do. Fortunately the times are past in which a misplaced piety forbade criticism to root out weeds.

Prof. Olshausen has long ago won his spurs in the field of criticism, and these notes on Genesis are amply deserving of recognition. It is of course impossible to discuss them at length. We content ourselves with referring to a few important passages, with regard to which I am obliged to differ from the author.

In Gen. iv. 7, it is clear that the antithesis of שְׂאֵת is wanting. After וְאִם לֹא תֵיטִיב should be inserted נָפֹל פָּנִים הֵן. In the second part the word חַטָּאת seems to have been substituted from euphemistic or dogmatic motives for the original reading, which was perhaps הַשָּׂטָן. The substitution has been made so carelessly that the participle and the pronoun have retained the masculine gender, which belonged to the expelled word. The translation of the corrected verse is, "If one does well, one is of good cheer; if not, one is cast down. Behold, the Wicked One lieth in wait," &c.

Gen. vi. 3. I cannot conceive why Olshausen, after correcting ידון, finds the word בשגם enigmatical. It is so only if we retain the Masoretic vowels. I cannot see a single real objection to the simple reading בַּשְּׁגַם "propterea quod etiam." The verse is connected with the belief that men did not die before the flood, but (with the exception of Enoch) all perished in the catastrophe (see Lepsius, *Chrono-*

* *Bâtîr*, or, according to the Jewish pronunciation, *Bîtêr* or *Bittêr*, is the city in which the well-known Bar-Cochba was besieged by Hadrian.

logie der Aegypter, p. 398, &c.). The sense is, "And Jhvh said, My spirit (*i. e.* the breath of life) ought not to remain in man for ever, since also he is flesh. So his days shall be limited to 120 years."

Gen. ix. 4, דמו seems to be a gloss to בנפשו. On the other hand, the word בנפשו in Lev. xvii. 14 ought to be cancelled; it seems to have arisen out of a marginal note written in recollection of Gen. ix. 4, but after this passage had been already interpolated.

Gen. ix. 26, 27. The author observes rightly that the reading of these two verses cannot be sound. I cannot however accept what he with some hesitation proposes. It seems to me that the words ויהי כנען עבד למו are spurious precisely in v. 27. In v. 26 the difficulty lies in the words יהוה אלהי, for which we ought perhaps to read שִׁכְנִי אָהֳלֵי.

Gen. xvi. 13. Neither Prof. Olshausen's nor Prof. de Lagarde's conjectures seem to remove the difficulty. Possibly the true reading is חֲלוֹם for חֲלֹם "ecquid somnium esse potest quod vidi, postquam ipsis meis oculis conspexi," *i. e.* "certissimè somnium non est, nam ipse vidi." The weakness of the connection between these words and the name of the well which they pretend to explain is by no means an uncommon phenomenon, as these Hebrew etymologies are generally far-fetched and incorrect.

Gen. xli. 56. The words את כל אשר בהם are rightly enough questioned. Besides, according to the ancient versions, we should expect here a substantive meaning "magazines." Prof. de Lagarde offers a conjecture, which well deserves consideration. It occurs to me however that it is simpler to read את כל אוצרתיהם. This word is quite in its place here, and is actually given here in the Targum.

Gen. xlix. 10. Prof. Olshausen remarks with great justice that the preposition עד here can only denote here the "terminus ad quem," and that thus the ordinary explanation is absolutely condemned. But this is equally valid against accepting his conjecture, שַׁלִּיט, for in that case the poem cannot have been composed before the latter part of the regal period. And this is not the only objection I can bring against this reading. But I need not be diffuse on this point, as I feel convinced that my own explanation of this *crux interpretum*, which I communicate here for the first time, will meet with the assent of both Prof. Olshausen and Prof. de Lagarde. I propose then to read the first half of the verse thus, עַל פִּיו יָבֹא שֵׁלָה, "the demand shall be fulfilled according to his will," *i. e.* the tribute imposed by him shall be paid. In a palæographical respect the alteration is not great. By this correction the parallelism between the two halves of the verse is completely restored. The mistaken interpretation is quite accounted for by the defective way of writing שֵׁלָה for שְׁאֵלָה (as in 1 Sam. i. 17). For the expression יָבֹא שֵׁלָה compare Job vi. 8.

M. J. de Goeje.

Intelligence.

The revision of Luther's Bible, undertaken by delegates from Prussia, Würtemberg, and Saxony, is proceeding much more rapidly than might have been expected from the incorrectness of the translation. The New Testament has been ready for some time, and has been introduced by authority in the churches of Prussia. The alterations are neither very numerous nor important, as far as can be judged from a cursory examination of the part already published.

Our esteemed contributor, Prof. Lipsius, of Kiel, has accepted a call to the university of Jena.

Prof. Delitzsch has in the press a new edition of his work on Genesis, and Prof. Ewald a work in four volumes on Biblical Theology. Diestel's *History of the Old Testament in the Christian Church*, and Ritschl's *History of the Doctrine of Justification*, will probably be translated.

A brief abstract of two important articles on Sargon and Shalmaneser by Drs. Schrader and Oppert will be found below, under the heading "History" (p. 404).

In the *Contemporary Review* for August, Prof. Froschammer prefaces an answer of his own to the pessimism of Schopenhauer by a historical notice of the conflicting views on the origin of evil maintained by Egyptian and Persian dualists, by Brahmanism and Buddhism, in the Books of Job and Ecclesiastes, by Plato and Aristotle, the Neo-Platonists and the Stoics, by the Gnostics and Jacob Böhme, by Erigena and Master Eckhart, down to the most consistent exposition of the opposite extremes by Leibnitz and Schopenhauer. His own views are reserved for a following number; but he points out that dualism is equally compatible with optimism aud pessimism, that ascetics are really optimists, and that the natural tendency of mysticism is to nihilism, the purest and least painful pessimism.

The new critical essay of R. A. Lipsius on the *Pilatus-Acten* (see title in full below) shows that the "Gospel of Nicodemus" was written between 320 and 376, to supplant the heathen "Acta Pilati," and also that not only was the Roman procurator convinced of the innocence of Jesus, but that even the Jewish leaders were forced by the weight of evidence to admit the reality of the Resurrection. Dr. L. thus precisely reverses the conclusions of Tischendorf in his *Evangelia Apocrypha*.

Contents of Journals and Selected Articles.

Theologisch Tijdschrift, May.—Dr. Kuenen supports his view of the unhistorical character of the narratives relating to the patriarchs in opposition to de Groot on the orthodox and Bernstein on the rationalistic side. Prof. Hoekstra discusses the references to an "esoteric Gospel" in our St. Mark, on the hypothesis that the work is Gnostic. Dr. van Bell makes a vigorous onslaught on a Dutch dogmatic work of but slight importance. Dr. Kuenen notices two works by our countryman, Dr. Kay, the *Crisis Hupfeldiana*, and *The Psalms Translated*; he does full justice to the author's sincerity, while asserting his complete misconception of modern criticism. The other notices of books require no special mention.

Gött. gel. Anzeigen, June 21.—Rönsch's Das neue Testament Tertullian's; rev. by Lagarde. [In the main favourable; the Fathers must be examined separately before the Greek Testament can be edited critically. The article contains several emendations of Tertullian's *De Spectaculis*, &c.]

Theol. Quartalschrift, 1871, No. 2.—Two Lists of Popes, by Dr. Kraus. [The lists are—1. that of Corbie, inaccurately edited by Mabillon; and 2. that of Mety, published for the first time. A well-merited tribute is paid to the acuteness and thoroughness of Dr. Lipsius in his *Chronology of the Roman Bishops*.]

New Publications.

Dorner, Dr. J. A. History of Protestant Theology in Germany. An English Translation. 2 vols. Edinburgh: Clark.

Lipsius, R. A. Die Pilatus-Acten kritisch untersucht. Kiel: Schwers.

Merx, A. Das Gedicht von Hiob. Hebräischer Text kritisch bearbeitet u. übersetzt, nebst sachlicher u. kritischer Einleitung. Jena: Mauke.

Philosophy and Science.

Observations made in the Pathological Institute of Jena. By Wilhelm Müller. 3rd part of the 6th vol. of the *Jenaische Zeitschrift für Medicin und Naturwissenschaften*. Leipzig.

This part contains the following eight papers:—1. On the structure of the Chorda dorsalis. 2. On the development and structure of the Hypophysis, and of the Processus infundibuli cerebri. 3. A case of Cystomatous Adenoma of the Hypophysis. 4. On the development of the Thyroid Gland. 5. Two cases of Congenital Adenoma of the Thyroid Gland. 6. Two cases of Columnar Epithelioma (Epithelioma cylindro-cellulare) of the Thyroid Gland, with remarks on the theory of the formation of Epithelioma. 7. A case of Fusiform-cell Sarcoma (Sarcoma fuso-cellulare) of the Thyroid Gland, together with Goitre of long standing and metastasis of the lymphatic glands and lungs. 8. On Myxomatous Adenoma of the Thyroid Gland, and its relations to the so-called Colloid Cancer.

It is obvious from these titles that the part before us contains a singular mixture of embryology and pathology, and

moreover embraces a field of comparative embryology that has hitherto remained wholly uncultivated.

In the first essay, upon the chorda dorsalis, Professor Müller gives the results of his observations on the chorda of the Petromyzonidæ, on that of the embryos of Sharks and Osseous fishes, of the Amphibia, Birds, Mammals, and ultimately also on that of the Amphioxus. He shows also the part played by the chorda in the formation of the skeleton. As hitherto believed, the sheath of the chorda, that is to say, the differentiated external layer of the cells of the chorda, forms the base line for the formation of the vertebræ. Professor Müller demonstrates that this sheath has nothing whatever to do with the cells of the chorda, but is formed secondarily by outgrowth from the vascular wall of the primitive aorta, and that first the rudiments of the vertebral arches and then the closed sheath form around the chorda; he thus corroborates and expands a view which had already been expressed by His in his *History of the Development of the Fowl.*

By this research an important conclusion is arrived at, namely, that the chorda dorsalis as such participates only in quite a secondary manner in the formation of the skeleton of Vertebrata, and is very far from being a fundamental organ of their skeleton. We can very well imagine animals with bones in their interior, and even animals with a Vertebrate skeleton, which present no traces of a chorda, while on the other hand we may meet with the chorda in Invertebrate animals which develop no trace of an internal skeleton.

It is well known that such Invertebrate animals have been demonstrated to occur amongst the Ascidioidea by Kowalewsky and Kupffer, though it still remains doubtful whether the Ascidioidea stand in closer relation to the Vertebrate tribes, or whether they are not rather greatly degenerated types. Next year will probably yield important conclusions on this point.

The second paper of Müller relates to the Hypophysis and the Infundibulum cerebri, and is divisible into an embryological and a comparative anatomical part. In regard to the former he has investigated embryos from all classes of the Vertebrata, and in the latter has laid down a very wide anatomical basis, and employed both lines of research to form conclusions that are again of high significance and importance. He maintains that the hypophysis is, in point of fact, an original part of the pharyngeal epithelium, which is separated by a constriction taking place between the basi- and pre-sphenoid bones, and which then undergoes conversion into a gland. "The fully formed hypophysis," he says (p. 421), "exhibits essentially the same structure in all animals possessing a cranium (bei sämmtlichen Cranisten). I therefore draw the conclusion that the gland has to fulfil certain definite functions necessary for the progressive development of the organism, since it is only on this supposition that the descent of the organ through the whole succession of individuals with coincident preservation of its essential attributes becomes intelligible."

The infundibulum, on the other hand, in opposition to the hypophysis, undergoes, as we proceed from the Piscian organization upwards to man, a well-marked regressive metamorphosis. Professor Müller derives its origin from a thickening of the inferior lamella of the deutencephalon, which ultimately leads to the formation of that sac to which we apply the term infundibulum. In this mode Professor Müller separates, under the name trigonum cinereum, all that portion of the proper infundibulum which lies between this and the lobi olfactorii, and consequently to their inner side, and which supports the chiasma nervorum opticorum. Everyone acquainted with the earlier representations of the development of this part of the brain will remark that Professor Müller is in opposition to Carl Ernst v. Baer, who in his extremely suggestive essay on the development of the Vertebrata was disposed to consider the infundibulum as proceeding from a portion of the primary medullary tube, by curving round beneath the prosencephalon. The infundibulum consequently on this view becomes the most anterior part of the whole medullary tube, whilst, according to Müller, this is not the case. This difference is certainly not unimportant, supposing even that we know nothing of the peculiar significance of the infundibulum, and of the whole process that leads to its formation, but especially because this process, as Müller also states, is most strongly marked in Fishes, whilst it already begins to suffer reduction in the Amphibia, which gradually proceeds as we pass to Mammals. It is therefore necessary to study with special attention the process in Fishes, and thence gain a basis to assist us in determining its function. Müller was himself of opinion that, in proceeding upwards from Fishes to Mammals, "conducting tracts gradually disappeared, the existence of which furnished the requisite conditions for the proportionate development of the base of the deutencephalon in Fishes, and that to this physiological modification was to be ascribed the above-mentioned remarkable reduction which this portion of the brain undergoes in the otherwise developing brain of Mammals." This suggestion clearly does not solve the question of the cause of the high development of the base of the deutencephalon in fishes. We shall only obtain information on this point when we have made ourselves acquainted with the actions and general behaviour of this class of animals, respecting which we are at present entirely in the dark. At all events the Ascidioidea and Amphioxus furnish us with no means of determining the question, since they are destitute of the entire segment of the nervous system, whose functions we are now discussing. We must still hope, however, that we shall obtain some partial success, but perhaps only by not connecting too dogmatically our ideas on the actions of Vertebrata and especially of Fishes with the more recent discoveries in regard to the development of Ascidioids and of the Amphioxus. Nor is it necessary that any attention should be paid to the opposition lately made by Dr. Donitz. Dr. Donitz is evidently insufficiently acquainted with the problems of modern morphology—but there are other considerations of a different nature, which, however, cannot here be pointed out.

The third organ, the development of which in normal and abnormal form is here followed out, is the Glandula thyroidea. After a short historical retrospect, Müller describes its characters in the embryos of all Vertebrata, and draws the conclusion that the thyroid gland springs from a constriction of an always azygous portion of the pharyngeal mucous membrane, which first becomes tubuliform, and then buds out acini or follicles. The commencement of the development, however, Müller seeks in a mechanical movement, as would appear to be the case for the first rudiment of the hypophysis, according to his own researches, namely in a firmer adhesion of the pharyngeal epithelium at the point of origin of the primitive trunk of the branchial arteries. Whilst the latter, together with the heart, is displaced backwards at a very early period by the great development of the surrounding parts, the adherent portion of the pharyngeal epithelium projects to form a roundish process directed somewhat downwards, and communicates in the median line by what is in the first instance a wide opening, with the pharyngeal cavity.

Thus it appears that a process of the embryonic period of life gives occasion to the development of an organ which may be followed throughout the entire series of Vertebrate

animals—with the exception only of the Amphioxus. Were the heart with the primitive branchial arteries not displaced backwards in the earlier embryonic periods, it could not take part in the formation of the glandula thyroidea; so says M. Müller. We can, however, only conditionally accept this explanation. If it be granted that the Amphioxus is a slightly altered descendant of the ancestors of the Vertebrata, did the gland in question thus originate between the Amphioxus-like Vertebrata and the Fishes, it would suffice to follow its formation within the series of the Vertebrata alone, and to investigate its nature from this point. We shall, however, still maintain the possibility that the position of the heart and of the primitive trunk of the branchial arteries is only contemporaneously displaced backwards, and not as occasioning the outgrowth of the glandula thyroidea from the pharynx. If, however, we cannot regard as irrefragable the opinion that the Amphioxus is the, as far as possible, unchanged descendant of fish ancestors, we must also give up the possibility of the formation from which the glandula thyroidea of Vertebrata has proceeded possessing a rudiment in the ancestors of the fish, which is itself not in causative connection with this transposition of the heart, and of the primitive trunk of the branchial arteries. Until this is established through the progress of morphology and the genealogy of animals, we must suspend our judgment respecting the process which has led to the formation of the glandula thyroidea. In this, however, we must unconditionally agree with Professor Müller, when he maintains, in opposition to His, "that an organ which remains unchanged throughout the entire vertebrate series is an inherited one, and that in mammals at least, supplied as it is from various sides so freely with a current of blood throughout the succession of organisms, it cannot be completely useless." It now becomes a problem for physiology, by a comparison of the lymph flowing from the thyroid gland with the lymph returning from other organs, and with the blood traversing the vessels, especially in reference to the modifications of albumen, and the so-called extractive matters contained in both, to put an end to speculation regarding its functions.

Up to the present time we have been dealing with pure morphologico-embryological researches; but to draw from these researches definite conclusions on the nature of the pathological formations in man, is an undertaking for which Professor Müller desires to include the widest recognition of science. As, speaking generally, the foundation of a scientific pathological anatomy must be regarded as one of the greatest advances of modern medicine, so will it equally constitute a new era within the domain of pathological anatomy that comparative anatomy and embryology should be made to assist the recognition of the nature of pathological processes and formations.

This is done by Professor Müller in the remaining portion of his work, which is occupied with the consideration of the pathological alterations of the Hypophysis and of the Glandula thyroidea. Our opinion must be always more or less wavering upon the condition of an organ modified by disease, if histological research is not based upon a histogenetic basis, and this certainly cannot always be accomplished. But that *complete* certainty can only be obtained from comparative embryological research is a striking conclusion that may be drawn from Professor Müller's essay.

This, however, is not the only result obtained, however large and important it may be. Whoever regards the progress of mankind as dependent on human knowledge, will be gratified to find how the great idea of evolution is carried by Professor Müller into a region where it has been practically hitherto entirely unknown A bridge has thus been thrown across, connecting two long separated regions of human enquiry: and it cannot happen but that both will prove to be gainers. At the same time, however, Professor Müller's work is the most decisive, and, it is to be hoped, the most effectual protest against the still increasing exclusion of pure biological studies from the curriculum of medical studies on the part of the Prussian government. If the professor of pathological anatomy considers a special and profound knowledge of comparative anatomy and embryology, and of the principles of the Darwinian theory, to be required in order to grapple with the problems presented by pathological anatomy, it cannot any longer be doubted that it was a very short-sighted proceeding by which, in the year 1861, a compulsory knowledge of zoology and botany as fundamental information on the part of young medical men was discontinued at Berlin. We must, on the contrary, stringently maintain that in addition to anatomy and physiology, which are subjects of equal importance, embryology and comparative anatomy should also be regarded as absolutely essential to the completion of medical education, and that it has even become requisite that a new and special chair should be devoted to these subjects in medical universities and schools; and if this be a necessity for Germany, where the study of the history of development has of late years received such great extension, it holds still more for England, where scarcely any embryology is taught or made an object of study. This department of science, founded by Caspar Friedrich Wolff, and greatly extended by Carl Ernst v. Baer, appears to be destined to play an important part in the development of the Darwinian theory. Anton Dohrn.

DEAN MANSEL.

In losing Dr. Mansel we have lost an intellect not in any large sense originative, and so not likely to occupy a permanent place in the history of English thought, but yet in many qualities probably unsurpassed among thinkers of the present age and country. It was his function chiefly to develop principles and pursue methods suggested by others: but over these, through a clear, subtle, precise, and above all intensely patient reflection, he obtained a mastery so firm and thorough that his application of them was not only independent, but often more consistent, and leading to a more coherent system, than that of the thinkers from whom he had learnt. He was commonly regarded as the chief English disciple of Sir W. Hamilton, and was quite content to hold this relation to one of whom he wrote in terms of enthusiastic veneration: but he has also been called (and fairly) a Kantian. The truth is that he laboured along with Hamilton, and under his guidance, at the same impossible task of effecting a compromise between Kantism and common sense. Both thinkers alternately dwelt on the imbecility and the veracity of the human mind: but Hamilton, as sitting in the seat of Reid, put the latter quality more prominently forward, while Dr. Mansel's theological tendencies led him to emphasize the former. The differences in mental habit between the two men are strikingly apparent in their productions: Hamilton's vigorous but ill-combined efforts to harmonize the different elements of his thought resulted in a teaching full of force and interest, but patently incomplete and incoherent; while Dr. Mansel's essay on Metaphysics (originally published in the *Encyclopædia Britannica*) is the most neat, compact, rounded edition of the subject conceivable. It is in logic, and the logical or formal treatment of metaphysics, that his ability is most felt. In the *Prolegomena Logica*, and his edition of Aldrich, he applied a method essentially Kantian, together with an erudition sufficiently extensive and remarkably well controlled, to the renovation of the traditional studies of his university. The former treatise is probably the most original of his writings: it contains his peculiar theory of causality, ably but somewhat paradoxically argued, and his view of the substantiality of the ego, the turning-point of his divergence from Kantism. In this department of speculation he owed somewhat, as he indicates, to the suggestions of Cousin. His popular reputation rests upon the *Bampton Lectures*, in which he entered the lists against rational as distinct from revelational dogmatism, and all criticism of revelation founded thereon. His

main thesis—the incapacity of the finite to comprehend the infinite—was old enough: but the Hamiltonian forms of his argument were novel; and his dialectical subtlety and depth, his confident and trenchant handling of foreign philosophers and native rationalists naturally commanded attention. Still the task of sufficiently depressing natural theology, while retaining in natural religion the requisite basis for revelation to build upon, involved too subtle a procedure for the results to be broadly satisfactory; and it must perhaps be allowed that here (as often before) philosophy proved a doubtful auxiliary to theology from the essential discrepancy between the methods of the two studies: a discrepancy that was almost grotesquely illustrated when, in the controversy that followed the *Lectures*, the author took refuge in a great cloud of witnesses to the "soundness" of his doctrine. From this time Dr. Mansel's attention seems to have been chiefly turned to theology. His only other philosophical work—*The Philosophy of the Conditioned*, a reply to Mill's *Examination of Hamilton*—though containing some effective hits, is on the whole unworthy of him, both in form and in substance. But some years ago his health, weakened by over-study, gave way so much as to unfit him for serious intellectual labour. H. Sidgwick.

Scientific Notes.

Physiology.

Cause of Phosphorescence.—M. Panceri has presented to the Congress of Naturalists and Physicians at Turin the results of some investigations as to the cause of phosphorescence in animals, and especially in fishes. He has come to the conclusion that the cause of this phenomenon is the slow oxidation of fat, which he finds to be always present when phosphorescence is observed in animal substances. In the case of fish, the oxygen of the atmosphere very readily penetrates the skin and acts upon the subcutaneous adipose tissue. The phenomenon is promoted by placing the phosphorescent substance in oxygen, but entirely arrested by its immersion in carbonic acid, fresh water, alcohol, or any solution not containing oxygen. Phosphorescence usually commences immediately after death, and continues until decomposition sets in, with disengagement of ammonia, when it invariably immediately ceases.

Madness in a Horse.—In the *Zeitschrift für Parasitenkunde*, Band ii. Heft 3, a remarkable instance is recorded of madness in a horse, caused presumably by the bite of a mad dog. The horse was brought to the hospital of the Royal Veterinary School at Berlin, having refused its food for two days, and exhibited extraordinary wildness and propensity to bite, not only other horses and inanimate objects, but also its own body, and had already by this means broken several of its teeth, and inflicted severe injuries on its mouth. When confined in a stall in the hospital, it continued to exhibit this biting propensity to a terrible extent, but in a fitful manner; in the intervals of the paroxysms it stood in a bewildered state, and would sometimes suddenly fall as if struck by lightning, then give a violent bite to one of its hind feet, then as suddenly spring up staggering. The loss of blood caused it to become gradually weaker, and in the evening of the day on which it was admitted, it expired without any death-struggle. Except the outward injuries and some interior swelling and inflammation, the organs were found to be sound after death.

Improvements in the Spectrum Method of Detecting Blood.—Mr. Sorby, in a good article on this subject in Dr. Lawson's *Microscopical Journal*, observes that the spectrum microscope used in such enquiries should have a compound prism, with enough but not too great dispersion power, or else the bands would be as it were diluted and made less distinct. A combination of two rectangular prisms of crown glass, with a rectangular of very dense flint, and another of less density, of such an angle as to give direct vision turned towards the slit, appears to be the proper medium, and has other important advantages. The cells used for the experiments should be made from barometer tubing, and be about one-eighth of an inch in internal diameter, and half an inch long, one end being fastened to a piece of plate-glass with purified gutta-percha, like an ordinary cell for mounting objects in liquids. It is, however, a very great advantage to insert between the plate and the cell a diaphragm of platinum foil, having a circular hole about two-thirds of the internal diameter of the tube, fixed so that its centre corresponds with that of the cell. This prevents any light from passing upwards that has not penetrated through the whole length of the solution, which is very important when using direct concentrated sunlight to penetrate through turbid or very opaque liquids. The reagents commonly employed are a somewhat diluted solution of ammonia, citric acid, the double tartrate of potash and soda used to prevent the precipitation of oxide of iron, and the double sulphate of the protoxide of iron and ammonia employed to deoxidize; but in some special cases diluted hydrochloric acid, carefully purified boric acid, and sulphite of soda, are required. Recent stains of pure blood contain little or no colouring matter but hæmoglobin, and when properly diluted give the well-known spectrum with two dark absorption bands in the green. The addition of a little ammonia and a small quantity of the double tartrate produces no change, but on adding a fragment of the ferrous salt, about 1-40th of an inch in diameter, and carefully stirring so as to mix without much exposure to the air, these bands gradually fade, and are replaced by the single broad and familiar band of deoxidized hæmoglobin. When stirred up so as to expose well to the air, the two original bands of oxidized hæmoglobin can be seen again. On gradually adding a little citric acid until the colour begins to change, these bands slowly fade away, and if the amount of blood was considerable, a faint band would make its appearance in the red. The addition of excess of ammonia does not restore the original bands, thus showing that a permanent change is produced by citric acid—the hæmoglobin is changed into hæmatin. This alone serves to distinguish blood from by far the greater number of coloured substances, which, after being changed by acid, are restored by alkalies to the original state. Mr. Sorby proceeds to give a number of other characteristics of blood stains, but does not think there is any probability of our being able to decide by spectrum analysis alone whether a given spot is or is not one of *human* blood.

Zoology.

The Zoological Results of the 1870 Dredging Expedition of the Yacht Norna off the Coast of Spain and Portugal.—This is the title of a paper communicated to the British Association by Mr. W. Saville Kent, of the British Museum. The expedition was organized and superintended by Mr. Marshall Hall, the owner of the yacht, Mr. Kent accompanying him to supervise the collection and preservation of natural history specimens, as also to report on all the novelties or objects of interest that might be obtained. The sponges collected during the expedition appear to have furnished the greater number of forms new to science, embracing more particularly many new representations of the group to which the beautiful *Euplectella*, or "Venus' flower-basket," and the "Glass-rope sponge," *Hyalonema*, belong; the latter, indeed, being amongst the spoils. All these forms were dredged in the deep-sea fishing ground, 400 to 800 fathoms, off Cezimbra, at the mouth of the Sado river; and from the same locality, with the assistance of the native fishermen, they had the good fortune to secure examples of several rare species of deep-sea ground sharks which frequent that coast line, including among others *Pseudotriakis microdon*, a species recently described by Professor Barboza du Bocage, of the Lisbon Museum. *Fusus contrarius* and a species of *Cassis* allied to *C. saburon* are among the rarer shells referred to by Mr. Kent; the former being interesting on account of its identity with a common fossil of the Norwich Crag, and the latter from its affinities with Japanese and Chinese species rather than with any known Atlantic or Mediterranean form. The occurrence in the same waters of a variety of *Hyalonema*, scarcely to be distinguished from the well-known Japanese *H. Sieboldi*, is also commented upon by Mr. Kent, as illustrating another instance of this singular distribution of allied species. Reviewing the whole amount of material collected during the cruise, Mr. Kent separates it into two portions, presenting respectively two entirely distinct facies. The first of these, including that collected from the shore line down to a depth of 100 fathoms, presents an interblending of Mediterranean species with those inhabiting our own more temperate coasts; while the remaining one, embracing all those acquired at a depth of from 400 to 800 fathoms, are remarkable for their boreal or cold water area aspect and affinities, and in this respect, according to Mr. Kent, entirely supporting the deductions arrived at by Dr. Carpenter, from his extensive study of the fauna of these great depths in connection with the expeditions of the *Lightning* and *Porcupine*. Among the more interesting Mediterranean forms taken, especial mention is made of *Dendrophyllia ramea*, a massive branching coral, not before recorded as occurring so far north, as also of various species of *Murex*, *Calappa granulata*, *Cestum veneris*, and other zoophytes usually supposed to be restricted to the more southern arc. Mr. Kent expresses his hope that the entire success attending this cruise may influence other yacht owners to follow the example of Mr. Marshall Hall, and, like him, to devote their craft for the portion of a season to scientific discovery, promising them they will find themselves more than compensated for the sacrifice of time or other interests it may involve by the fascinating nature of the work when entered upon, in addition to their thereby earning for themselves the lasting gratitude of the scientific world. Mr. Kent avails himself of this opportunity of tendering his thanks to the Royal Society for their award of a grant of 50*l.* towards aiding him in the necessary outlay in dredging and preserving apparatus. We understand Mr. Kent has expressed his desire, permission being granted him, to accompany one of the projected government dredging expeditions as assistant naturalist. The above

paper is the sketch of an exhaustive and technical report to be presented shortly by Mr. Kent to the Royal Society.

Deep-Sea Explorations.—Dr. Carpenter has communicated to the zoological section of the British Association the substance of a letter received by him from the First Lord of the Admiralty, in which the government have expressed their willingness to support Dr. Carpenter's scheme of prosecuting deep-sea explorations throughout the Atlantic, Indian, Southern, and Pacific Oceans. This substantial acknowledgment of the services already rendered by this successful deep-sea explorer and his talented coadjutors will be received by every scientific man throughout the kingdom with the same unqualified degree of satisfaction that characterized its announcement to the Association.

The Origin of Life.—In the portion of his inaugural address at the recent meeting of the British Association at Edinburgh relating to biology, the president, Sir William Thomson, while expressing his opposition to the theories of "natural selection and spontaneous generation," most warmly advocates the Darwinian doctrine of evolution. Not only does he admit that all the higher organisms now covering the face of the earth have most probably developed themselves from lower ones, but also indulges in a speculation that these latter are most likely derived from meteoric stones and *débris* fallen from other planets.

Spontaneous Generation.—Dr. Crace Calvert read at the British Association a paper "On the Action of Heat on Germ Life," in which he successfully combats the views of the advocates of abiogenesis. His late experiments tend, moreover, to show that infusorial life resists a far higher degree of heat than has been hitherto supposed. The boiling-point of water has usually been considered sufficient to deprive every living particle of its vitality, but according to Dr. Calvert vibrios will resist a temperature of 300° Fahr., and it is only at the higher one of 400° that their movements entirely cease. The same organic atoms have been subjected by this experimenter to an amount of cold 17° below the freezing-point of water, yet on the ice being melted, these animalcules have gradually resumed their former characteristic activity.

Chemistry.

The Goalpara Meteorite.—This stone, the date of whose fall is unknown, has been described by Tschermak (*Jahrbuch für Mineralogie*, 1871, 412). The exterior is of a greyish-brown colour, the fused crust is very thin and hard, and can readily be removed in flakes, and the form of its surface has clearly been greatly affected by the heat developed in its passage through the atmosphere. The interior is dull grey in colour, and porphyritic in structure, the mass enclosing large granules of two minerals, one of which is rhombic, with cleavage planes forming an angle of 92°, is infusible and unchanged by acid, and is readily identified with enstatite. The second species does not cleave nor fuse, but gelatinises with acid, and is found to be olivine. In the mass enclosing them three other substances were detected: one by its metallic lustre was recognised as iron; in contact with the metal is a second substance of a smoky-brown colour and devoid of lustre; and the third occurs in small yellow granules that the author believes to be magnetic pyrites. The blackish lustreless mass is found to be a hydrocarbon. The final results of the author's analysis of this interesting stone are as follow:—

Iron	8·49	= 8·49 iron.
Hydrogen	0·13	= 0·85 hydrocarbon.
Carbon	0·72	
Silica	23·34	= 61·72 olivine.
Iron protoxide	11·72	
Magnesia	26·66	
Silica	17·02	= 30·01 enstatite.
Iron protoxide	1·60	
Magnesia	10·79	
Lime	0·60	
Sulphur	trace	= trace of magnetic pyrites.
Iron	,,	
	101·07	101·07

The occurrence of carbonaceous substances in meteorites has now been recorded by several observers, and recently by Nordenskjöld, who found with the meteorites that fell at Hessle, near Upsala, on the 1st January, 1869, a black flocculent substance, containing 71 per cent. of a carbon compound. The luminous phenomena so often attending the fall of an aerolite, and the "tail" left by many meteors and shooting stars, may be due to the combustion of compounds rich in carbon.

Hydrogenium Amalgam.—Schönbein observed that zinc amalgam in contact with air and water formed zinc oxide and peroxide of hydrogen. Loew has more recently noticed (*Chemisches Centralblatt*, 1871, No. 26) that by excluding the air the amalgam is converted into hydrated oxide of zinc, while hydrogen is developed, the evolution of gas increasing when chloride of platinum is added to the liquid. On the surface of the fluid amalgam a sponge-like mass collects, which the author discovered to be hydrogenium amalgam. The best method of preparing it is to shake from one to two per cent. of zinc dissolved in mercury with an equal volume of solution of platinum chloride containing ten per cent. of solid chloride. The spongy mass is devoid of lustre, and soon decomposes, but by removing the excess of zinc, as well as the hydrated oxide and oxychloride of the metal with moderately dilute hydrochloric acid, a more stable product is obtained. It has now a metallic lustre, is of the consistence of butter, converts sesquichlorides in protochlorides, potassium ferricyanide into ferrocyanide, and destroys the colour of potassium permanganate. Placed in air in contact with platinum, a rise of temperature takes place with a rapid and energetic formation of water. The author calls attention to the threefold character of hydrogen, and thus compares it with oxygen:—

Nascent hydrogen	H	Antozone	O
Ordinary hydrogen	[H H]	Ordinary oxygen	[O O]
Hydrogenium	[H H] H	Ozone	[O O] O

Arsenic in Sulphuretted Hydrogen.—Sulphuretted hydrogen, prepared from iron monosulphide and commercial sulphuric acid (*Ann. der Chemie und Pharm.* July, 1867, 124), when passed through heated tubes, was noticed by J. Myers to produce, even at temperatures not above the boiling point of mercury, an orange deposit that gave all the reactions of arsenious sulphide. The gas prepared in this manner probably contained arseniuretted hydrogen, which reacts on the sulphuretted hydrogen, in accordance with the following equation,

$$3H_2S + 2AsH_3 = As_2S_3 + 12H,$$

when the temperature is raised. That the gaseous compound of arsenic did not arise from the presence of arsenic in the iron sulphide was demonstrated by treating the latter with pure sulphuric acid, when no orange deposit could be obtained. Pure iron sulphide and zinc, free from arsenic, on the other hand, gave with impure sulphuric acid a gas that at once showed the reactions of arsenious sulphide. Pure sulphuric acid in which some arsenious acid was dissolved comported itself similarly. It was noticed, moreover, that hydrogen in *statu nascendi* reduces freshly precipitated arsenious sulphide; the presence, therefore, of arseniuretted hydrogen in sulphuretted hydrogen, prepared from iron protosulphide and sulphuric acid that contains arsenic, is easily accounted for. This discovery is of importance in the special application of analytical chemistry for the purposes of medical jurisprudence.

New Publications.

Bericht über die Fortschritte der Anatomie u. Physiologie. Hrsg. von J. Henle, G. Meissner u. H. Grenacher. 2. Hft. Leipzig: Winter.

Claparède, E. Les Annelides chétopodes du golfe de Naples. Supplément accompagné de 14 planches. Basel: Georg.

Cooke, M. C. Handbook of British Fungi. 2 vols. London: Macmillan.

Corfield, W. H. A Digest of Facts relating to the Treatment and Utilisation of Sewage. 2nd edition, corrected and enlarged. London: Macmillan and Co.

Hofmann, Dr. A. W. Einleitung in die moderne Chemie. 5te gekürzte u. verb. Auflage. Braunschweig: Vieweg.

Hoûska. Grundriss der formalen Logik. Olmütz: Grosse.

Lewes, G. H. A History of Philosophy, from Thales to Comte. 2 vols. 4th ed., corrected and partly re-written. Longmans.

Mivart, St. George, F.R.S. The Genesis of Species. 2nd edit., with Notes. Macmillan.

Newton's, Sir Isaac, Principia. Reprinted for Sir William Thomson, LL.D., and Hugh Blackburn. Glasgow: J. Maclehose.

Oliver, Prof. D. Flora of Tropical Africa. Vol. 2. London: L. Reeve.

History.

THE EARLY HISTORY OF OXFORD.

On the History of Oxford during the Tenth and Eleventh Centuries (912–1100). By James Parker. Oxford.

Mr. Parker's little pamphlet contains the substance of a lecture delivered before the Oxford Architectural and Historical Society in the spring of the present year. It is in effect an attempt to answer the questions naturally suggested during a previous excursion along the walls of the city, by telling, "firstly, *all* we know of the early history of Oxford, and, secondly, *how* we know it."

It is a little difficult at first sight to see why Mr. Parker has limited his investigations to the tenth and eleventh centuries. It is easy, of course, to sweep away the legends of Greeklade, of Brut, or of Memphric, whom Anthony

Wood so gravely dates as a contemporary of King Solomon, by the simple process of showing their real origin in fablers like Brompton and John Rous. But though the first directly authentic mention of the town is found—as Mr. Parker correctly states—in a couple of entries in the *English Chronicle* under the reigns of Ælfred and his son Eadward, the legend of S. Frideswide stands on a different level from those of Memphric and Brut. In its present form it cannot be dated earlier than the twelfth century, but a glance at its names, and its striking coincidence with what we know of the religious history of Mercia in the eighth century, give at any rate some grounds for attributing to it a higher authority. The letters of S. Bonifice are evidence that outrages such as those attributed to "Didanus," the persecutor of Frideswide, were characteristic of Middle England at the time, while the technical accuracy of his description as "subregulus," under-king or ealdorman (a class of rulers whom we know to have abounded in Mercia, and especially in its southern districts), corresponds with the look of his name, for Didanus can hardly be anything else but the Latinised form of some such English designation as Didda or Diddan. An examination of this legend, and of the origin of the little monastery around which the town probably grew up, would at any rate have come fairly within the limits of Mr. Parker's investigations, and would have carried back the sphere of Oxford history from the tenth century to the eighth.

We are still more at a loss to know why this earlier period of the civic annals closes with the eleventh century. If once the stories of the academic origin of Oxford under Ælfred are dismissed, as Mr. Parker has rightly dismissed them, its history breaks into that of the town alone and that of the town and university together. The latter period begins with the teaching of Vacarius, under Stephen, or with the distinct mention of schools at Oxford which we find in Giraldus. It is not easy to see, therefore, why the reign of Henry I. is excluded from Mr. Parker's enquiries. "That reign," says a prefatory note, "saw the foundation of the Austin Canons at Oseney; they were eventually followed by the Dominicans, and shortly after that by the Franciscans, consequently a fresh era was commenced in the history of Oxford, an era which included the growth of the university." The friars undoubtedly form a part of the strictly academic history of Oxford, but their coming is a full hundred years later than the building of Osney, and it is a simple confusion of history to connect the establishment of the Austin canons in any sense with the growth of the university.

In the second part of his undertaking Mr. Parker has been successful enough. He points out clearly that, with the exception of a few charters of Cnut, all information respecting Oxford must be drawn from the scanty entries of the Chronicle, and that it is not till we reach the period of the Conquest that our authorities become more varied. The invaluable statement in the Domesday Survey throws a flood of light on the social and economical state of the town, while the Annals of Osney and the Chronicle of Abingdon tell something of the doings of the house of D'Oilly in whom the Conqueror had vested the earldom of the county. Architectural remains, too, begin now to play their part in the investigation, and the most valuable part of Mr. Parker's pamphlet lies in his investigation of the fragments of this time which remain in the Castle and churches of the town. Attributing the mound on which it stands to the tenth century, he has "little or no doubt that the tall tower of the Castle, which we now see, was the work of Robert d'Oilli," while he believes, in spite of the "mural mansions" of the Survey, that the stone walls of Oxford date only from the time of Henry III., and that an embankment of earth, surmounted by a stockade, formed its sole defence in earlier times. The plan of the crypt of St. Peter's in the East is shown to be of an earlier type than any part of the existing building, and to preserve traces of a church in which the crypt was connected with the nave in the fashion of Ripon and Hexham, or, to take a grander instance abroad, that of San Zeno at Verona. A valuable map is added, which enables us to trace the boundaries of the earlier parishes into which the town was divided. By this system of rigid adherence to historical authorities, Mr. Parker is enabled to dismiss, not merely the legends of Brut and Memphric, but the stories of a university under Ælfred and that of the siege under the Conqueror. It is quite clear, in the latter case, that the actual text of Matthew Paris reads "Exonia" and not "Oxonia;" but we must wait for Mr. Freeman's coming volume before deciding on the value of the inferences as to its capture, which may be drawn from the ruined houses mentioned in the Survey.

Mr. Parker is hardly as successful in "telling *all* that we know of the early history of Oxford." One of the most interesting bits of information as to the history of the English borough before the Conquest is the story of the litigation between the Abbots of Abingdon and the "boatmen" of London and Oxford as to their right of passage beneath the city walls. Of this we find no mention here, nor is there any discussion of the very curious questions connected with the possessions and administration of the borough, suggested by the customs confirmed by Henry I., and therefore in existence before his day. No reference is made to the tract on the miracles of S. Frideswide, which Prior Philip has appended to his life of the Saint, and which contains many particulars of earlier Oxford life. The settlement of the Jews, which was destined to exercise so remarkable an influence on the academic history of Oxford, is passed over without notice. Useful in fact as this little pamphlet undoubtedly is, it by no means contains "all we know" of Oxford history during the time it embraces. Negatively it is useful in clearing away the earlier myths which have disfigured most accounts of Oxford, and it is written for the most part in a quiet and accurate way. We note, in fact, only one curious error. "The Chilterns," says Mr. Parker, "although now chiefly bare chalk, must have been in Florence of Worcester's time covered with wood, as he speaks of the *Forest* of Chiltern." Forest, in the medieval sense, had nothing to do with trees, and was as often used of bare downs as of woodland.

J. R. Green.

The Diary of Abraham de la Pryme, the Yorkshire Antiquary. (Surtees Society.)

Abraham de la Pryme's *Diary* has long been known by detached fragments, but this is the first edition of the complete text, or rather, we should say, of so much of the text as has been thought worthy of publication. The *Diary*, now we have it in full before us, is far more interesting than the extracts given by the topographers of a bygone generation would have led any one to suppose. De la Pryme was not a mere antiquary interested only in old ruins, coins, and pedigrees, but a student of natural science, and a man keenly sensitive to the changes that were going on around him. Though he retained to the day of his death many seventeenth-century prejudices, he was yet inclined more than most country parsons of his day to look around him for knowledge. His foreign blood—he came of the race of the Flemings who fled, for religion's sake, into England in the reign of Charles I.—gave him a strong interest in continental affairs; and his antiquarian pursuits seem to have

modified that extreme hatred of Roman Catholicism which was but natural in one whose kin had suffered for Calvinism. His father, a rich Yorkshire farmer, would fain have sent him to one of the Scotch universities, thinking that there was a flavour of popery about Oxford and Cambridge. The young man, however, does not seem to have met with any very serious opposition from his father, for he was duly admitted a scholar of St. John's College, Cambridge, on the 7th of November, 1690. The Cambridge party of the *Diary* is really the least interesting portion of the volume. Two or three paragraphs, not new, about Sir Isaac Newton exhaust all that is of any importance. The fact probably is that the student was too busy with his books to put on record his experience, and although there is here and there a good anecdote, it must be confessed that at no time of his life was De la Pryme a very entertaining note-maker.

The book ought, however, notwithstanding this, to take its place on the shelves of all who are interested in the history of the reign of William III. and his successor—for it gives us, though in very neutral tints, it must be owned, a fuller and clearer picture of the ways of living, and manner of thinking, of a rural clergyman of the end of the seventeenth century than any other document that the press has yet made known to us. On the 29th of June, 1695, De la Pryme bargained with the minister of Roxby, in Lincolnshire, who was a pluralist, and held the neighbouring living of Broughton, to be his curate. "He ask'd me what I would have a year. I told him no more than others, viz. £30 per an., out of which I gave £10 a year for my table." The salary of curates with a sole charge was less, it would seem, then than now, even making all due allowance for the changed value of money. The parson who was

"Passing rich on forty pounds a year"

had a larger income than the diarist, who was mulcted in a third part of it for board and lodging.

While Abraham de la Pryme continued to reside in his Lincolnshire curacy, it was his habit to walk, whenever he could spare the time, to the neighbouring market-town of Brigg, to hear the news. Much of what he heard found its way into his note-books; and on one subject of great importance in our financial history he has preserved a fuller account of the feelings of the time than we have met with elsewhere. The great re-coinage of William III., when the old hammered money of our Stuart kings was finally called in and consigned to the melting-pot, was at the same time one of the wisest and most dangerous changes of his reign. King William's shillings are said to have made more converts to Jacobitism than the calumny of the warming-pan did to revolution principles. The object aimed at was good and necessary, but the annals of finance do not furnish us with more absurd blundering than the way in which it was carried out. The sufferings of the country people, who could not procure money for their necessities, were terrible. The diarist has noted almost from day to day the changes of opinion, and the reports he heard, concerning this great change.

The time in which he lived has of late been considered one of the darkest through which the Church of England has passed; the evidence before us seems to show that the amount of Christian zeal displayed both inside and outside the Church has been much underrated. De la Pryme was evidently a God-fearing man; but we find few invectives against the sins of his neighbours, and much to show that in his own very narrow sphere there were many as good as he. Christian charity was perhaps as wide then as now, but we are bound to say it clothed itself in a more homely costume. "God be thank'd I have only one family of those damn'd hereticks in my parish," was his exclamation in 1697, when concluding an account of the Quakers.

The book is carefully and conscientiously edited, but the modernisation of the spelling—we learn from the introduction that it has been in part altered—is very objectionable. Why, too, we would ask, does the Surtees Society persist in omitting the names of its editors from the title-pages of its books? Nine readers out of ten will think the editing anonymous, and will consequently have much less confidence in the useful body of notes with which the text is illustrated than they would have if they knew Mr. Charles Jackson was responsible for them. The name of the editor is given in a resolution of the Society, printed in the volume, but in such a way as to insure none but careful readers finding it.

Edward Peacock.

Selected Articles.

The Assyrian list of governors, by Prof. Schrader, in Studien und Kritiken, 1871, No. 3. [Shows that whenever a thicker stroke than usual occurs between the lines, it indicates the accession of a new king, and that Shalmaneser *must* have preceded Sargon, because—1. Tiglath-Pileser only reigned 18 years, and 2. Sargon came to the throne at the earliest under the Archonship of Ninip-Iluya, so that five years remain between the reign of Tiglath-Pileser and that of Sargon, which must be given to some Assyrian king, and therefore most probably belong to Shalmaneser. In the postscript, the reviewer accepts the statements of Rawlinson and Oppert that Salmanu-asir, *i.e.* Shalmaneser, actually occurs in the Assyrian canon. A complete transcription of this "list of governors" is appended, with a translation. Among other names of countries to which governors were sent there occurs that of Hadrach, thus confirming the Talmudical statement that Hadrach was a place, and not a symbolical name (see Zach. ix. 1). The article should be read in connection with the writer's former paper on "Sargon and Shalmaneser" in the preceding volume of the *Studien*, and Mr. Sayce's reply in the same periodical. Prof. Schrader's rejoinder in the Darmstadt *Theol. Literaturblatt* is considerably strengthened by his present exposition of the case; while the news contained in the postscript, if true, definitively closes the discussion. It is a pity that M. Oppert's general arbitrariness in combination should have prejudiced so many students against his view on this matter.]

Shalmaneser and Sargon, by M. Oppert, in the same. [A summary of the evidence respecting these two kings. According to M. Oppert, the name *Śalmanasir sar* (Shalmanesir king) occurs as the eponym in 722. Sir H. Rawlinson made the same assertion some years ago, which is now confirmed by M. Oppert from personal inspection of the monument.

The Origin of the Dead Sea, by Prof. Nöldeke, in Im neuen Reich, No. 28. [1. An examination of the two Biblical narratives; 2. Objections to the view that the lake was produced by a sudden catastrophe. It is suggested that the lake subsided gradually, and that Jebel Usdum, the hill of salt on the S.W. shore, is a deposit left at a time when the level of the lake was much higher than at present.]

New Publications.

Aboul-Ghâzi Bèhâdour Khan. Histoire des Mogols et des Tatares. Publiée, traduite et annotée par le baron Désmaisons. Tom. I. Texte. St.-Pétersbourg. (Leipzig: Voss.)

Abstract of the Reports of the Surveys and of other Geographical Operations in India. Printed by order of the Secretary of State.

Archiv f. österreichische Geschichte. Hrsg. v. der zur Pflege vaterländ. Geschichte aufgestellten Commission der kaiserl. Akademie der Wissenschaften. 45 Bd. 1. Hälfte. Wien: Gerold's Sohn in Comm.

Graesse, Dr. J. G. T. Orbis latinus oder Vergleichniss der lateinischen Benennungen der Städte u. s. w. in allen Theilen der Erde. Dresden: Schönfeld.

Historiens, Deux, arméniens. Kiracos de Gantzac, xiiie s., histoire d'Arménie; Oukhtanès d'Ourha, xe s., histoire en 3 parties; traduits par M. Brosset. 2 livr. Introduction: fin d'Oukhtanès. St.-Pétersbourg. (Leipzig: Voss.)

Honegger, Dr. J. J. Grundsteine einer allgemeinen Cultusgeschichte der neuesten Zeit. Vols. 3, 4: Das Julikönigthum u. die Bourgeoisie.

Juvalt, Wolfgang v. Forschungen üb. die Feudalzeit im curischen Raetien. 1. u. 2. Hft. Zürich: Orell, Füssli, and Co.

Lanfrey. History of Napoleon I. Vol. I. Macmillan.

Schirrmacher, Prof. Die letzten Hohenstaufen. Göttingen: Vandenböck.

Philology.

Studies in Comparative Philology. [*Sprachvergleichende Studien mit besonderer Berücksichtigung der indochinesischen Sprachen.*] By Adolf Bastian. Leipzig: Brockhaus.

The so-called Indo-Chinese languages are among those which have been least adequately examined. It is true that, so far as the most important of them are concerned, there is no want of linguistic material, such as grammars, dictionaries, and texts, but no one has yet been found to subject these languages to a treatment as rigorously exact as the Indo-Germanic or the Semitic. And yet these very languages are among the most interesting and most important which exist anywhere, since the process of linguistic formation which they present is altogether unparalleled.

The author of these *Studies*, well known by his travels in further India, has undertaken to describe the two most important of the Indo-Chinese group, viz. the Birman and the Siamese. It appears from the introduction and the epilogue, which together nearly fill up the half of the book, that the point of view which principally interests the author is not that of philology or of the science of language, but that of ethnology. As, however, we are convinced that language, if it is to have any ethnological value, must be regarded from the point of view of comparative philology, we cannot quite fathom the author's original idea in writing a description of these two languages. In fact, the method which he has actually adopted is a strictly grammatical one, so that we have really before us two grammars, one Birman, the other Siamese, in the composition of which the best authorities (Judson, Pallegoix, &c.) have been consulted. There are no attempts to institute a comparison between the several languages of further India (unless the remarks on p. 159, &c., can be called an exception), and no allusions to the question as to the relation of those languages to Tibetan and Chinese. And yet no one will deny that these very questions must be settled before the thought of applying these languages with profit for ethnological purposes can be entertained.

But even from the other point of view from which language may be regarded, *i.e.* the psychological, we cannot describe these *Studies* as an improvement on Steinthal's *Charakteristik der hauptsächlichsten Typen des Sprachbaues.* In that masterly sketch we have a perfectly distinct account of the position of these languages in the domain of human speech in general, whereas here we are literally overwhelmed with a mass of details which interest the linguist rather than the student of language.

In addition to this the book is deficient in clearness of outline and convenience of arrangement, an objection to which Dr. Bastian's other works are more or less liable. Everywhere we observe an almost colossal erudition, derived from immense reading, but there is little trace of sound criticism, and as a natural consequence scarcely any synoptic account of the points referred to. The works of Dr. Bastian will always form a rich mine for explorers, but can scarcely be recognised as standard scientific works.

What inadequate ideas the author has formed of the comparative method in philology is sufficiently shown by the table of phonetic changes in p. 73, which, we think, will produce a shudder in any exact philologist. But even in his own special department, that of ethnology, Dr. Bastian has fallen into errors which are not so easily excusable. For instance, he constantly quotes old and often quite valueless authorities side by side with new, a habit which almost gives his works the air of having been written by a dilettante. His views on the value of language for ethnology, which we have learnt of late to appreciate more justly, are singular enough though not original. He is of opinion (p. 252) that a classification of races according to language would be just like that of flowers according to colour. A similar view was expressed several years ago, but in a milder form, by J. Oppert and other scholars, and was soon refuted in a style equally thorough and convincing by Professor Whitney.

Whether Dr. Bastian's proposed substitute for language as an indication of national affinities (p. 255), viz. the creations of the intellect, especially mythologies and religious ideas, will lead to any satisfactory result and be accepted by ethnologists, it is not necessary for us to decide. Meanwhile, however, he will pardon us, we trust, for persisting in a sceptical attitude towards theories resting on so uncertain a foundation.

F. Müller.

Notices of the Jews by the Classical Writers of Antiquity: being a Collection of Facts and Opinions from the Works of Ancient Heathen Authors previous to A.D. 500. By John Gill, Translator of Olshausen's Commentary on St. John, &c. London: Longmans.

The history of pagan opinion as to the Jews is dangerous ground to tread, unless one approaches the subject in the most critical and disinterested spirit of historical investigation. Whether Mr. Gill has any portion of this spirit, whether his general point of view is above or beneath criticism, are questions which we mean to leave undiscussed. And as the form of his essay relieves us from the necessity of judging his performance by a literary standard, the only thing left for us to do is to examine the way in which he handles his facts and documents, so as to ascertain how far he is a sound and qualified interpreter of antiquity.

What strikes one on opening his volume is the misprints in the classical quotations, and the strange disguise under which some of the classical writers are made to appear. Porphyrio figures as "Porphyry," Heraclides as "Heracles;" one is almost led to infer that Apuleius was a poet, and moreover the author of a single work, which might be intelligibly indicated without specifying the name. As for Mr. Gill's references, indeed, they are in many instances so fallacious that it is only charitable to suppose them inserted by way of ornament, on the hypothesis that no one would dream of looking into them too closely. This procedure has its advantages and also its disadvantages, as we ourselves have learnt to our cost in tracing an extract of some length (in pp. 82–87), which Mr. Gill professes in most explicit terms to have translated from Livy, lvii. 38–40. One of the lost books of Livy! our readers will exclaim. Nothing of the kind. There is *not one syllable of Livy's* in the whole five pages; there is hardly a sentence that *could* have been written by Livy. However incredible it may seem, this pretended extract is a cento, made up of a page or so of Strabo and Tacitus, with an introduction consisting of sundry scraps of Josephus, as paraphrased and embellished by an almost forgotten scholar, Johann Freinsheim, of Heidelberg, who worked them into his continuation of Livy published in 1654. To print these incongruous odds and ends consecutively, and allow them to pass as three chapters of Livy, is a little misleading; and it is hardly fair to introduce Josephus and the pseudo-Livy of Heidelberg as witnesses to the virtues of the Jews in the second century B.C. It is clear that Mr. Gill is no respecter of persons, since Heracles, Porphyry, Livy, Josephus, Freinsheim, are all equally welcome to take part in the great historical masquerade which he has got up for the benefit of the religious public. We may add another name to this list by observing what Mr. Gill has to tell us about a certain Polemo who spoke of the Jews in a fragment preserved by Eusebius:—

"Polemo, a Platonic philosopher who died about B.C. 273, author of Funeral Orations for two generals who fell at Marathon, and of lost historical works," &c.

Notwithstanding the charming assurance with which this statement is hazarded, we turn to the *Dictionary of Biography*, and discover that there were several Polemo's in antiquity, one of them being the Platonic philosopher; another, an historian who comes a century late; another, the "author of the Funeral Orations," a Sophist contemporary with Hadrian. By rolling these three into one, our essayist has certainly produced a literary monster of most imposing proportions, and it cannot be doubted that notices like the above add greatly to the erudite appearance of his pages.

As the translated extracts form the bulk of the present volume, we shall quote one or two choice specimens of interpretation, which we select from an embarrassing variety at our disposal. In one of his shorter epigrams (iv. 60), Martial reminds a nervous friend that there is no escaping destiny, go where one will, and winds up with the pertinent reflection, "cum mors Venerit, in medio Tibure Sardinia est"—which Mr. Gill conceives to mean, "When death comes into the midst of the Tiber, that is Sardinia!" Our second specimen shall be our last. There is a passage in Lucan (ii. 592) in which Pompey is made to boast how Cappadocia, Judæa, and Armenia (the scene of some of his greatest successes), have learnt to respect the Roman power; the Latin of the passage is as follows:—

> "Cappadoces mea signa timent, et dedita sacris
> Incerti Judaea dei, mollisque Sophene."

Now Mr. Gill's translation runs thus: "The Cappadocians pay homage to my standards, and Judæa is devoted to the worship of an uncertain God, as is also the gentle Sophene"—a version which, among other things, places the "homage" in the light of a *religious* act, and converts the Sopheni of Armenia into worshippers of the "uncertain God" of the Jews—assuredly one of the most astonishing conversions on record. When we confess to having found this grotesque and pretentious tissue of blunders diverting, our excuse is that we cannot imagine any one capable of mistaking so clumsy a piece of bookmaking for a work of patient and competent research. If we are mistaken in our optimistic view of human intelligence, Mr. Gill has a very grave offence to answer for. He has certainly aired his ignorance in a way which is neither edifying nor creditable in one who undertakes to maintain a theological thesis, and to enlighten the general public on a point of some historical interest.

I. Bywater.

T. Macci Plauti Comoediae. Recensuit au Fridericus Ritschelius. Tomi. I. fasc. I, Trinummum continens. Lipsiae: B. G. Teubner.

Professor Ritschl may indeed be congratulated on *aquilae senectus*: at an advanced age, and twenty-three years after the appearance of his first edition of the Trinummus, he has the courage to begin a new edition of Plautus: and surely all lovers of Latin philology, and especially all friends of Plautus, will join us in wishing that the bold enterprise may be attended with success, and that the editor may live to see the end of his work. But besides the new edition of Plautus, Ritschl has on his hands also the continuation of his *Opuscula* (the third volume of which is quoted by anticipation in the present edition), and of his *New Excursuses on Plautus;* he, moreover, promises a detailed discussion of doubtful points of Plautine prosody in separate "*Vindiciae Plautinae*," and new Prolegomena at the end of his first volume. In the new edition the old Prolegomena are often quoted, and for a complete study of Plautus it will always be necessary to refer to them; they are, however, out of print, and it might perhaps be advisable to have them reprinted and published separately. The new edition contains a more accurate collation of the Ambrosian palimpsest than the old one, though it is impossible to estimate from the commentary the immense merits of Professor Studemund in deciphering the MS., and here also a comparison of the first and second edition will be found not only useful but positively instructive. The other MSS. (*B*, *C*, *D*) have also been recollated for the new edition, and very wisely the readings of the late MS. *E* have been omitted. The quotations of the grammarians are now very conveniently arranged under the text. We would here especially point out the important discovery that the glossary known under the name of Placidus relates almost exclusively to the comic writers—a discovery to which we owe the excellent emendation of v. 652, and the word *denixe*, hitherto unknown to our dictionaries.

The editor has on the whole become more conservative, and less forward in altering the text of his author, than he was in the *impetus* of his first work. Some points will, no doubt, be illustrated by him in his promised *Vindiciae Plautinae:* in some he retains the MS. reading, without entirely giving up his old doubts; *e.g.* v. 480, *nón tibī dicám dolo*, he adds expressly, "in praesens non sollicito;" and certainly we do not wonder that the editor should find it hard to dismiss old favourites and pet theories, though he would perhaps find it even harder to defend them against the attacks of other scholars. Another instance of this is v. 130, where the MSS. give *quid secutus est aut quid interest, dare te in manus*, justly changed in *FZ* to *quid secus est*, &c. In his first edition, Ritschl boldly gave *quid sectiust nam te opsecro* in his text: but though even now he keeps *sectiust*, he merely mentions his conjecture in a note. But what authority is there for *sectiust?* From Ritschl's note it might seem that Varro ap. Gell. xviii. 9, actually read so in the present line of the Trinummus: but, far from it, Gellius reports there a reading of Varro's, with a most perverse interpretation of the crotchety old gentleman, in a passage of the Menaechmi, v. 1047, where again our MSS. differ from Varro, and, as it seems to me, are right in doing so. But to keep to the line in the Trinummus: Brix's note furnishes so many instances of similar combinations of synonymous expressions that the reading of *FZ* may well be considered safe and sound in spite of Ritschl's doubts.

If there is anything which annoys Ritschl in Plautus, it is the existence of hiatus, against which he has waged war during the whole term of his editorial duty, and in fact even his *New Plautine Excursuses* seem to have been called forth by this inveterate hatred of hiatus. We must confess—differing in this point from an accomplished scholar in the pages of the *Academy*—that we do not believe in a final *d* in Plautus, and that the way in which the editor attempts to give it a place in the text of Plautus seems to us quite infelicitous. It should be observed that both Corssen (*Ausspr.* &c. ii. 1005–1009) and C. F. W. Müller have declared against it. If anything should be admitted, it is that the *d* has left its traces in a small number of passages where hiatus may be excused or explained by it. But this is an observation of Bücheler, *Lat. Decl.* p. 47—a passage from which Ritschl seems to have derived the first idea of rehabilitating the *d*, which formerly he had rejected. See e. g. *Proll.* xc. Our space does not permit us to enter upon all the passages in which Ritschl gains a place for his beloved *d*; but a few may be mentioned. V. 206 runs according to the MSS. *quod quísque in animo habét aut habiturúst, sciunt:* see Corssen, ii. 469, who defends the long quantity of the ending in accordance with the habit of Plautus. We need not observe that Ritschl's *animod hábet* appears to us unnecessary, to say the least of it; but we are inclined to write *animo aut habet*, which seems to us the genuine

Plautine expression. Again, 540, Haupt's beautiful emendation seems to be required by metre and idiom alike. In the trochaic line, v. 726, *cássidem in capút—dormibo plácidule in taběrnáculo* was Ritschl's old reading, which I should now defend against himself (see also Corssen, ii. 470) rather than adopt an unsightly *placided.*

To avoid hiatus, Ritschl does not refrain from putting *alternas arbores* in his text, v. 539, meaning it to be a nominative. The only passage quoted in support of this by "stolidus homo Nonius" (to use Ritschl's own expression) is a line of Pomponius—which Nonius simply forgot to punctuate rightly: it ought to be *quot laetitias insperatas! modo mi inrepsere in sinum*, while Nonius takes *laetitias insperatas* as subject. In the passage in question, the hiatus before a cretic word at the end of a line may be defended with many instances.

Another means of getting rid of hiatus Ritschl finds in the aboriginal forms *cubi* and *cunde*, and the former he even has in his text, v. 934, though there is no hiatus to be avoided, and though *cubi* seems to spoil the metre. See C. F. W. Müller, *Nachträge*, p. 29, for an explanation of the nonsensical reading *cubitus* in *B*. As to *cunde*, we meet with it v. 158: *quae míhi mandatast, hábeo dotem cúnde dem*, where surely no Plautine critic would shrink from reading *dotem ei unde dem*, to avoid the hiatus.

To show the fluctuating state of Ritschl's mind as to the whole question of hiatus, it may finally be observed that v. 432, *tempúst adeundi.* Lesb. *éstne hic Philto qui ádvenit*, he formerly admitted the hiatus on account of the change of speakers, merely mentioning Camerarius' transposition *tempús adeundi est* in his note: while now he adds to it expressly "haud scio an vere."

Independently of this general feature, we venture to dissent from the editor in several details. V. 109 we would retain the MS. reading *vidětque ípse ad paupertátem* (Ritschl, *vidětque ipse ad paupériem*), as *videt* would easily drop its final consonant: Introd. to *Aul.* p. xxxiv. Again, 682, we prefer the MS. reading *mé qui abusus súm tantám rem* to Ritschl's *mé qui tantam abúsus súm rem:* like all monosyllables in Latin, *rem* is enclitic, and naturally draws the accent of *tántam* to the second syllable, while losing its own. For the same reason, we should read v. 687 with the MSS. *átque eum agrúm me habere quam te*, where it is perfectly unnecessary to throw more emphasis on *me* by reading *mé agrum*, as Ritschl does. By the bye, do we know anything certain as to the Roman way of pronouncing "elided" vowels? It only seems certain that the German way of entirely dropping the syllable in question does not represent the habit of the Romans: yet to the fancy that a monosyllabic word like *me* would "delitescere in thesi," we owe a great many changes made in the texts by Bentley, Hermann, and Ritschl.

As is only natural, we have dwelt more on those points in which we disagree than on those in which we agree with the editor. But though we are far from having exhausted our list of differences, it seems ungracious to continue it. Ritschl is one of those few scholars whose very errors are instructive, and whom we must not only respect, but even admire, though our opinions may differ from his. We hope soon to see the continuation of this new edition of Plautus, and wish that the editor may find life, health, and spirits to complete it!

W. Wagner.

Intelligence.

A second edition of Mr. Wedgwood's *Dictionary of English Etymology* is announced, in five parts; the first part is to appear on the 1st of October, and the work is to be completed in February, 1872. It has been thoroughly revised, with numerous additions by the author, assisted by the Rev. J. C. Atkinson, the author of an excellent *Glossary of the Cleveland Dialect.* It will now be printed in double columns, in a closer but perfectly clear type, and will be a great improvement upon the first edition.

Dr. Hoffmann of Göttingen is preparing an edition of the Syriac lexicon of Bar Ali from the Gotha MS.

The Vedic grammar (in English) by Prof. Benfey, announced in a previous number, will be published by Trübner and Co., who will be glad to receive subscribers' names.

Buddhist Nirvána; a Review of Max Müller's Dhammapada. By James D'Alwis. Government Press, Colombo, Ceylon. 8vo. pp. x. 137. [The writer strongly opposes M. Müller's view of Nirvána, the Buddhist *summum bonum*, being *absorption*, or *relative annihilation*, by upholding that it is *absolute annihilation.* His motto is the line from the Ratana Sutta (Sutta Piṭaka): *Nibbanti dhírá yathá 'yam padípo*, "sensible persons (who do not long for future existence) are extinguished (or blown out) like this lamp." Mr. D'Alwis further rejects M. M.'s opinion as to the Abhidhamma, which favours the theory of annihilation being of less authority than the two other Piṭakas. He finally criticizes many passages in M. M.'s translation of the Dhammapada referring to Nirvána.]

Buddhism in Ceylon.—We are indebted, through the kindness of Mr. J. C. Childers, to Mr. D'Alwis (the editor of the Námávali) for some particulars of a very remarkable work which, during the last four years, has been going on in Ceylon. This is no less an undertaking than the revision of the entire Buddhist scriptures, with their commentaries, and, when brought to a termination, will place within the reach of scholars as perfect a text of the sacred books in the original Páli as it is perhaps possible to obtain at the present day. In the year 1867, through the exertions of a Simhalese nobleman named Iddamalgoḍa, a synod of the Buddhist clergy was convened at the town of Palmadulla for the purpose of correcting the Tripiṭaka. This synod was under the joint presidency of two eminent prelates, Sumairgala and Dhíránanda, and its members were priests selected for their learning and scholarship from the principal Ceylon monasteries. The procedure was as follows. After the formal opening of the synod, each member was furnished with a manuscript in the Simhalese character, which he took to an apartment assigned to him, and collated with a number of Ceylon, Burmah, and Siam copies of the same work. All obvious errors in his manuscript he corrected at once, but where a passage was doubtful, he merely marked it. On an appointed day each member carried his corrected manuscript to the hall of assembly, where in a public sitting of the synod all the corrected manuscripts were compared together. When the corrections were identical in all the manuscripts, they were generally adopted without much loss of time, but in many doubtful or difficult passages the reading was not finally fixed without long and anxious discussion. The first session of the synod lasted seven months, and was devoted exclusively to the Vinaya, a revised and authorised version of which, together with its Arthakathá and Ṭíkas, was deposited in safe hands. The next meeting of the synod was held after a considerable interval, and was devoted to the correction of the Sútra Piṭaka. On this occasion a somewhat different plan was followed, for the members had been instructed to correct at their own monasteries the manuscripts entrusted to them, and when the synod met, it was able to sit daily until the work of fixing the text of the Sútras was ended. The Abhidharma Piṭaka is now undergoing revision, and the labours of the synod are drawing to a close. When they are completed, a palm-leaf copy of the authorised version of the sacred texts will be deposited in one of the Ceylon monasteries, and the public will be permitted to inspect and transcribe the different books. In the very extensive collation of MSS. made by the synod, it was found that the Ceylon MSS. were generally more accurate than those of Burmah and Siam.

The Moabite Stone, by Dr. Ch. Gimsburg, 2nd edition.—Dr. Gimsburg, in publishing the second edition of his pamphlet, or rather book, on the Moabite inscription, did so, as he states himself in the preface, on the request of a public which is willing to buy the pamphlet, whilst his first edition circulated gratuitously amongst the members of the British Association. This is enough to excuse the author for not waiting till such time as M. Ganneau shall give us the photographs of this inscription. As we have carefully reviewed Dr. G.'s first edition, of which the second is revised reprint, with the additions supplied by M. Ganneau, and the recent suggestions of the scholars, all duly mentioned in our columns, we shall briefly state that the reader will find in Dr. G.'s pamphlet a full account of the bibliography of the publication on the Moabite stone, besides the valuable explanations of the author. A map of the land of Moab, to be found at the beginning of the pamphlet, will facilitate the understanding of the war between Mesha and the king of Israel. We are sorry not to find in the pamphlet the Hebrew transcription of the inscription, as in the first edition. In the bibliography we miss Harkavy's articles in the Hebrew periodical *Libanon*, Derenbourg's and Oppert's remarks in the *Journal Asiatique* of Paris, articles in American Quarterlies, and the last pamphlet of Professor M. A. Levy of Breslau.

An Ancient Manual of Greek and Latin Conversation, edited by Prof. M. Haupt, Berlin.—The forthcoming *Index lectionum* of the winter lectures at the University of Berlin contains a curious ἀνέκδοτον, a small collection of Greek and Latin dialogues, published from a manuscript at Montpellier. The editor appears to be in possession of other ἀνέκδοτα of the same kind, and professes to put forth the present specimen merely to give his readers a taste of his other treasures: *nunc quendam tantum harum rerum quasi gustum dare voluimus.* The manual here edited for the first time is very much in the same style as our modern helps to conversation, and resembles them also in this particular, that the two languages placed in juxtaposition are given equally badly. We have more accurately examined the Greek part, and may assert that it is a very careless kind of conversational Greek, hardly better than any you may hear from modern Greeks: in fact many of the peculiarities of the modern language appear in it. We may mention p. 5, 32, τί στήκεις, ἑταῖρε; "quid stas, sodalis?" which appears to us to be the earliest instance of στήκω = the modern στέκω, for which see Mullach, *Gramm. der griech. Vulgärspr.* p. 261. We do not find an instance of στήκω in Mr. Sophocles' lexicon of late Greek. A verb of somewhat similar formation occurs, p. 10, 20, κοιμᾶσθαι θέλω, ἵνα πρωὶ γρηγορήσω: γρηγορῶ being even now the common word for "to awake." (Of this Mr. Sophocles gives instances.) At p. 8, 12, the Latin is *frigidam habuimus bonam*, which is awkwardly translated into Greek νηρὰν εἴχομεν καλήν: but we do not see why the editor should doubt νηρὰν and even print it without an accent. See Sophocles, *s. v.* νηρός. The feminine appears to be chosen on account of the Latin. Again, p. 9, 10 and 25, πῖν should no doubt be emended to πιεῖν, the monosyllabic form being due to synizesis. P. 8, 12, it ought to be δεξαμενήν, not δεξαμένην. P. 5, 34, we ought to read τὰ χρεία ὄντα (not χρεία), though we are fully aware that this is very bad Greek: yet it is preferable to τὰ χρεία or χρεῖα ὄντα. σαλλακωνα, p. 9, 18, we recommend to the sagacity of practised critics. W. Wagner.

Contents of the Journals.

Philologischer Anzeiger, vol. iii. pt. iv. (April, 1870).—Reviews: Herculanensium voluminum quae supersunt collectio altera. Tom. vi. fasc. 5. [The only passage of interest is one which mentions Anaximenes as an epic poet, contrasting him and Choerilus with Homer.]—H. Diels: de Galeni historia philosopha. [Part of a Bonn prize essay on the common source of the Placita of the pseudo-Plutarch, the corresponding sections of the Eclogae of Stobaeus, and the φιλόσοφος ἱστορία of the pseudo-Galen. Favourably reviewed by E. L. and H. S.]—Q. Curti Rufi libri qui supersunt; für den Schulgebrauch erklärt von H. Vogel.—E. Krah: Curtius als Schullectüre. [Both reviewed, favourably on the whole, by A. H.]—M. Tullii Ciceronis scripta quae manserunt omnia recognovit R. Klotz. Tom. iii. p. 1, 2. [Rev. by H. Busch. Makes an important advance in the criticism of Cicero's Epistles, the part of the text now published.]—Apuleii Metamorphoseon libri xi. Fr. Eysserhardt recensuit. [Rev. by S., who condemns the way in which the text is constituted; acknowledging, however, the service done by the editor in giving a complete collation of the Florentine MS.]—Heinrich Brugsch: Ueber Bildung und Entwicklung der Schrift. [Popular in its character. Traces the art of writing from the first rude painting through hieroglyphics, syllabic signs, Egyptian cursive writing to the Phœnician and finally the Greek and Latin alphabets.]

Zeitschrift für vergleichende Sprachforschung, vol. xx. pt. ii.—W. Corssen: Eine umbrische Gefässinschrift. [Dedication of an ossuary urn to Cubra mater, a deity akin to Lat. Bona dea. Shows that burying and burning were both practised by the Umbrians: also that Greek art had penetrated into that as into other parts of Italy.]—Id.: Zum oskischen Dialect. [Examines some sepulchral inscriptions, especially one found recently on the site of the ancient Capua.]—Id.: Verschiedene oskische Inschriften. [One is from Pompeii; one from Molise, near the ancient Bovianum, shows a prænomen, Bn., for Bannas or Bannius (?); one from Bovianum itself, containing the name of a censor, is given in a more correct form, the result of Corssen's own inspection.]—W. Zeyss: Erörterungen aus dem Gebiete der italischen Sprachen. [The Umbrian prinuvatus or prinuatur is not Lat. privatus, but from a stem prina, formed like ma-nu. Two words for sacrificial instruments, arfeta and krenkatrum, denote respectively a circle—Lat. orbita, in sense = orbis—and an instrument for drawing a circle, connected with κρίκος, circus.]—Sophus Bugge: Bemerkungen über den Ursprung der lateinischen Suffixe clo, culo, cro, cla, cula, cra, cino, cinio, cundo. [Supports the view that this *c* is for original *t*, quoting *cl* for *tl* in Lithuanian, &c., and in Romance languages. The suffixes cinus, cinium, answer in usage to Greek συνος, σύνη, Sanscr. tuana; and may be from tuana through an intermediate κυανα. Perhaps cundus is to be compared with the Vedic participial suffix tuan.]—Birlinger: Zur deutschen Wortforschung. [Schleipfen = pelzen; Eysperbeerlin; Geger = casula; Struot; jöncken; Aerrachen.]—Fr. Spiegel: Die dritte Person Plur. des Perf. Red. Med. im Altbaktrischen.—E. Förstemann: Review of L. Steub, Die oberdeutschen Familiennamen. [Highly laudatory.]

Jahrbuch für romanische und englische Literatur, ed. Lemcke, vol. xii. part i.—Contributions to the knowledge of Provençal Literature, by K. Bartsch. [Revised text (*a*) of a Latin-Provençal poem, first edited by Schmeller, Carmina Burana, p. 167 f., from the Benedictine MS. at Munich, with some metrical remarks; (*b*) of 26 Provençal verses inserted in the Old-French Roman de Renard, first printed by Chabaille, Supplément, p. 176, from MSS. Cangé 68, and Arsenal 60; the other MSS. replace them by Old-French verse; (*c*) a Provençal Christmas song, the only one known of this species in Provençal literature, first printed from the Paris MS. fonds fr. 24,954; (*d*) another religious poem from the Stockholm MS. 44.]—Contributions to H. Oesterley's publication: Romulus, die Paraphrasen des Phaedrus und die aesopische Fabel im Mittelalter, Berlin, 1870, by Dr. E. Mall. The same collection of Latin fables discovered by Oesterley in a MS. at Göttingen is preserved in the London MS. Bibl. Reg. 15 A. vii. and in the Brussels MS. 536, and is the common source of the Old-French fables of Marie de France, as well as of the two Low-German collections of fables.—Additions and corrections to Bartsch's Contributions to the Romance Literatures, in the preceding vol. of the *Jahrbuch*, by Mussafia.—Addenda to the Apuntes biográficos y críticos in vol. 27 of the Coleccion de Autores españoles, by Caroline Michaëlis.—Revised text of El Misterio de los Reyes Magos, by Eduard Lidforss. [This Spanish mystery, first printed by Amador de los Rios, Historia Critica de la Literatura Española, vol. iii., is the oldest document of Spanish literature, and probably belongs to the eleventh century; the MS. is of the twelfth.]—Titoli dei Capitoli della Storia Reali di Francia, by H. Michelant (continuation).—Lemcke reviews favourably four series of publications relating to the English literature of the sixteenth and seventeenth centuries: Arber's English Reprints, the Publications of the Spenser Society, the Roxburghe Library, and Fuller's Worthies' Library.—Gröber reviews favourably Bartsch's Altfranzösische Romanzen und Pastourellen and Fr. Hüffer's Troubadour Guillem de Cabestanh.—Reviews of Comparetti's Osservazioni intorno al Libro di Sindibad, by R. Köhler, and of Eitner's new German translation of Camoens' Lusiades, by Böhmer.—Etymological remarks on *Corbaccio*, *Azzimare*, *Bizzeffe*, by H. Schuchardt.—Contributions to the criticism of Dante's Divina Commedia, by L. Bossler.—Addendum to P. Meyer's Études sur la chanson de Girart de Roussillon, by E. Stengel.—Necrology of Dr. Julius Brakelmann, by Legerlotz.

Revue des Langues romanes, tome ii. part i.—Documents relatifs à l'hiver de 1470 à 1471, by L. Vinas. They are taken from the registers of the town-hall at Gignac, described by the same scholar in the last number of the *Revue*. Besides their linguistic interest, they are curious as relating the precautions taken by the authorities against damages to the olive trees from cattle, after a heavy winter precisely as disastrous to these trees as the last one.—La Vie de Sainte Euphrosyne, texte romano-latin du VIIIe–IXe siècle, by A. Boucherie. [The Latin of this legend is full of barbarisms, and therefore of no little interest for the grammar of the Romance languages. It is contained in the Montpellier MS. 55, which dates from the ninth century. The Bollandists made no use of it, probably on account of its barbarisms.]—Two Catalan poems in the dialect of the country of Barcelona: 1. Al tornarla a véurer (Seing her again), by Victor Balaguer. [A lofty and animated love song, full of poetical grace.] 2. Al castel de Montgri, by Albert de Quintana. [A powerful political song, dated 15th June, 1868, against the violation of the liberties of his country by the late Spanish government.]—La Reino Jano (The Queen Jane) a William Bonaparte-Wyse, a Provençal poem by Frederic Mistral.—A notice on Alphonse Michel and his poems, recently published under the title *Lou Flasquet de meste Miquèu*, Eiguière, chez l'auteur, 1870, by A. Glaize.—Bulletin bibliographique de la Langue d'Oc pendant l'année 1870.—Chronique.

New Publications.

Bickel, Prof. Gustav. Conspectus rei Syrorum literariae. Münster: Theissing.

Böthlingk, Otto, und Roth, Rudolph. Sanskrit-Wörterbuch, hrsg. von der kaiserlichen Akademie der Wissenschaften. St. Petersburg. (Leipzig: Voss.)

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ERRATA IN No. 29.

Page 370, col. i., second literary note: for "John" read "Julius."
,, 370, col. ii., line 7: for "notary" read "secretary."
,, 370, col. ii., line 48: for "Misolah" read "Ayasoluk."
,, 379, col. ii., contents of *Philosophische Monatshefte*: for "Herbert" read "Herbart."
,, 384, col. ii., heading *Intelligence*, third paragraph: for "Tzar Douchay" read "Tzar Douchan."
,, 386, col. ii., line 18: for "this volume" read "the British Museum volume."

THE ACADEMY.

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General Literature.

Balaustion's Adventure. By Robert Browning. London: Smith, Elder, and Co.

This book is a problem in more ways than one; perhaps all the other problems depend upon one, viz. what the author meant his book to be. Is the "transcription" from Euripides intended to be more or less than a translation? Is the adventure of Balaustion the subject of the volume, or only the setting of the real subject? The title-page suggests one answer, and the text suggests another. After the first one-and-twenty pages, we have nothing of Balaustion, for the comments upon the play and the legend are unmistakably Mr. Browning's, and hardly profess to be hers although they are put into her mouth. On the other hand, the title runs, "Balaustion's Adventure, including a Transcript," as if the adventure were the greater, and the transcript were the less. If we might think that Mr. Browning was asked to translate the *Alcestis*, and had devised this framework for the translation without attaching much importance to it, we should be at liberty to admire the strength which is so strong when it unbends, without raising the premature and thankless question whether Mr. Browning is not ceasing to be subtle since he has ceased to be perplexed. Certainly the translation and comment are good enough to stand alone. No Greek tragedy has been better translated, and the commentary will bear comparison with Bishop Thirlwall's famous essay upon the *Ajax* of Sophocles. If the poet has less learning than the scholar, he makes amends by even keener insight, if not into the mind of Euripides, into what is almost more important, the turning points of a poem which has a life and meaning of its own apart from the intentions of the person who was privileged to usher it into the world.

Balaustion herself, with her pretty name, which means the "wild pomegranate flower," is quite interesting enough to serve as a *lever de rideau* to a modern reading of a Greek tragedy. It would be out of place to remind Mr. Browning of all the impossibilities which he has accumulated in his sunshiny sketch of her girlish history. She is the daughter of an Athenian mother who has settled at Camirus in Rhodes. When the news of the Sicilian disaster arrives and Rhodes revolts, she heads a small emigration to Athens at the age of fourteen. Unfortunately she and her companions are driven out of their course off Cape Malea, are chased by a pirate, and find themselves at Syracuse. As Balaustion, when the chase was hottest, has encouraged the crew with a boat-song from the *Persae*, the Syracusans have no difficulty in discovering the Athenian sympathies of the passengers, and are on the point of sending them back to the pirate in the offing. But there exists a *furore* for Euripides at Syracuse, and the danger is over as soon as a voice in the crowd suggests that perhaps there may be some one aboard who knows Euripides as well as Aeschylus. As Balaustion has been quoting him all through the voyage, she is called up at once and recites the *Alcestis* (which it seems she has seen acted at Camirus) with such effect that an old man gives her a talent which she dedicates, and a young man follows her to Athens to marry her. She tells the adventure to four pretty girls just before her marriage, and subjoins her own version of the subject; since in her judgment (which is doubtless Mr. Browning's) the suggestive power of a true poem can convert anybody into a poet. The device is in many ways an ingenious one. It enables the writer, since he is *describing* the play, to omit or condense the mere stage business, of which he is evidently impatient; every now and then it gives him an opportunity of indulging his inclination to present results instead of processes; and last, not least, where the choruses appear as part of a narrative interrupted by the comments of the narrator, there is some semblance of a reason for sinking their metrical peculiarities in the general current of blank verse, which is often really melodious.

Mr. Browning regards Euripides exclusively from Mrs. Browning's standpoint, as—

> "Our Euripides the human,
> With his droppings of warm tears,
> And his touches of things common
> Till they rose to touch the spheres."

He refuses to see that he is a sophist, and that the *Alcestis* is in great measure a sophistical play; he treats it as a purely tragical poem, and regards the conversion of Admetus into a worthy helpmeet to his wife as in effect its principal subject. This view is supported with much unforced ingenuity, and would certainly be necessary to the explanation of the play if Euripides had invented his subject as modern writers invent theirs; but the fact is that the *Alcestis* dates from a period when the selfishness of Admetus was too natural to be shabby; and when Euripides treated it, cynicism was the most natural attitude in the presence of selfishness. The point which struck a sophisticated Greek was that it was very amusing to examine the question whether any person could be expected to die for any other, and if so, what claim, if any, such a sacrifice gave the victim upon the person who profited by it. The character of the victim was not the part of the legend which seemed to them to require illustration: they did not ask if Alcestis had ever loved Admetus, or how it was possible for her to love him still. To Mr. Browning, casuistry is only interesting in its bearing upon character. The first thing which strikes him in Euripides' treatment of the subject is the severity with which the figure of Alcestis is designed. It strikes him so much that he makes Balaustion invent a truly admirable ideal reason for it. Death in the first scene says:—

> "This woman then descends to Hades' hall
> Now that I rush on her, begin the rites
> O' the sword; for sacred to us gods below,
> That head whose hair this sword shall sanctify."

When Alcestis appears, it seems that the audience at once felt the effect of this consecration:—

> "We grew to see in that severe regard—
> Hear in that hard dry pressure to the point,
> Word slow pursuing word in monotone,—
> What Death meant when he called her consecrate
> Henceforth to Hades. I believe, the sword—
> Its office was to cut the soul at once
> From life,—from something in this world which hides
> Truth, and hides falsehood and so lets us live.
> . . . . . .

For certainly with eyes unbandaged now
Alkestis looked upon the action here,
Self-immolation for Admetos' sake;
Saw, with a new sense, all her death would do,
And which of her survivors had the right,
And which the less right, to survive thereby.
For, you shall note, she uttered no one word
Of love more to her husband, though he wept
Plenteously, waxed importunate in prayer—
Folly's old fashion when its seed bears fruit."

The fact is, Alcestis had never been in love with Admetus at all, and had no need of losing her illusions about him or about marriage. She dies for him, not because she loves him personally, but because it is her duty. Every wife ought to prefer her husband, whoever he may be, to herself, and she simply carries this duty to the point of heroism. There is nothing inconsistent with this in her weeping on her marriage-bed; it was the place where a Greek wife received the scanty wages of hard service. She naturally pities her children more than her husband, who is only losing what it would be Quixotic in him that he should not replace when the first burst of inevitable sorrow is over. First of all, she bewails herself with half delirious ejaculations, that show all the skill of a playwright who knew how to give his audience their cue to cry. Then when she is a little calmer, since a stepmother is a matter of course, she tries to secure her children against a bad one. When poor Admetus promises lifelong fidelity, in a business-like way she bids her children take notice of the promise—for what it is worth. She pays her own duty in full measure, and she insists with reasonable anxiety and calm pertinacity on receiving her due in return. The one word which can fairly be represented as conveying a judgment on Admetus is by no means unambiguous. Admetus has expressed a wish to die with her, and she answers—

"We are sufficient, we who die for thee."

On the whole it seems probable that her bitterness is against her husband, but it might almost as well be against the gods below: the lost traditions of the Greek stage might perhaps have supplied a decisive answer on this point. Even then we should have to remember that in a Greek stichomuthia the characters go wherever the gale of dialogue drives them; it is not Alcestis that speaks, but the situation. In order that Admetus may be inoffensive, his sorrow must reach the pitch of self-abandonment; and when this pitch is reached, the retort is inevitable. But a writer who in his own admirable dramas invariably deduces situation from character naturally gives the great artists of antiquity, whom he emulates so loyally, credit for having anticipated that method which he deliberately thinks the best.

The same system is pushed to the verge of paradox when Heracles comes on to the stage. Mr. Browning has his own ideal of the hero, and he reads it with persevering perspicacity into all the words and actions of the hero of Euripides. In doing so, he unquestionably refines and exalts the poem; and there is a class of readers, deserving the highest respect, to whom this will seem more than a sufficient justification. At the same time, it is as certain as anything in Greek criticism can be that the Heracles of Euripides is not the Heracles of Prodicus, any more than the Menelaus of the *Orestes* is the Menelaus of the *Odyssey*. Instead of a "helper of the world," sustained by "the enthusiasm of humanity" and only refreshing himself under a sense of duty, to keep his energies up to the mark, we have a sturdy drudge with a harmless pride in his strength and courage, and a confused sense that one good turn deserves another, whose clumsy consideration and drunken wisdom are as ridiculous as they are meant to be. We should have to quote the whole of the latter half of Mr. Browning's commentary to show how much forcible and imaginative inference he has built up on this uncertain foundation. Perhaps the climax is the ideal indignation lavished on that tamest of Greek "comic servants," who, not knowing that the death of Alcestis has been kept from Heracles, naturally expresses his sense of the impropriety of such boisterous hilarity. Charopè (who is perhaps an Athenian maiden in the same sense in which Mr. Leighton is a Caunian painter) is allowed here, as elsewhere, to hint a short protest in favour of common sense, but is easily overruled by the impetuous transcendentalism of Balaustion, or rather of the poet, who does more than ever at this point to justify the thesis that it is an advantage to a clever man to be on the wrong side of a familiar subject. The criticism on the scene with Pheres is naturally much heightened in tone by the resolute idealisation of the character of Heracles; but substantially Mr. Browning is right in his judgment of the effect of Admetus' odious wrangle with his father coming after his earnest though embarrassed (and embarrassing) courtesy to his guest. The observation that Admetus is shocked by recognising his own developed self in Pheres is especially good. We hardly believe that any delivery could lift the speech of Admetus which begins

"Friends, I account the fortune of my wife
Happier than mine, though it seem otherwise"

to the level of Mr. Browning's commentary; but here, too, he only heightens Euripides without distorting him. He is less fortunate when he treats the essentially farcical scene, in which Admetus unawares rejects his recovered wife out of fidelity to her memory, as a serious stage in the regeneration of his character.

When Balaustion, after interpreting Euripides, goes on to give her own reading of the legend, we see that her creator has inspired himself elsewhere than at Athens. His Admetus is a king with a truly kingly sense of duty, who cannot bear to die and leave his work. He reminds us of the Admetus of the *Earthly Paradise*, who lives above the world because he has within him the dim promise of immortality. He certainly learnt from Mycerinus to complain of the injustice which allows bad kings to reign long. But the delicious fervour of inductive paradox with which Alcestis persuades her husband to sacrifice her to his work, as he would have sacrificed himself, is all Mr. Browning's own, and so is Persephone's reason for sending her back to life—that she double dher husband's strength by leaving him. This part of the poem concludes with a magnificent eulogy on a picture exhibited this year at the Royal Academy. It may be counted fortunate for Mr. Leighton's reputation, and perhaps not unfortunate for Mr. Browning's, that books are in their own nature more durable than pictures.

There are two or three passages where it is hard to think that the Greek has been rightly understood. This is, perhaps, the clearest example of a venial fault:—

εἰ δέ τι κἀκεῖ
πλέον ἔστ' ἀγαθοῖς.

Surely this means, "If even there [in Hades] the good get anything more [by their goodness than the wicked by their wickedness];" it is translated—

"And if there—ay, there, some touch
Of further dignity awaits the good."

G. A. Simcox.

Revue Analytique des Ouvrages écrits en Centons, depuis les temps anciens jusqu'au xixième siècle. Par un Bibliophile Belge. London: Trübner and Co., 1868.

La Parodie chez les Grecs, chez les Romains, et chez les Modernes. Par Octave Delepierre. London: Trübner and Co., 1870.

M. Delepierre has for several years been a zealous labourer in the nooks and corners of humorous literature; and has

already published treatises on Macaronics, the History of Literary Fools, and more recently on Centos. In the last-named work he claims for this species of composition a higher place than some critics would grant it, on the ground that it provides at least an innocent form of relaxation from severer studies. He is, however, obliged to confess that the practice of writing Centos is in itself a mark of decadence in literature, betokening an age of learned ingenuity rather than original genius: and though he endeavours to give dignity to his subject by reviving the theory of Knobel and De Wette—that the Psalm of Jonah is a Cento from the Book of Psalms, attributable to a later age—and by referring the origin of Classical Centos to the irregular recitations of the Rhapsodists, yet he is obliged to begin his connected history of the art with the Medea of Hosidius Geta, a production of probably the 3rd century A.D. The greater part of the volume is taken up with a detailed account of the principal Cento writers, with whom Virgil seems to have retained the supremacy given him in the early efforts of Geta and Ausonius, lending himself apparently with equal facility to subjects of love, politics, and religion. A curious specimen of the latter is found in a Virgilian Cento of the Lord's Prayer, by Giulio Capilupo, written in the 16th century. The author closes his volume with a comparison, rather hinted at than worked out, between Cento and Parody, which paves the way for his most recent treatise, but is apparently introduced in its present place as an excuse for quoting a recent parody of considerable merit, representing, in an adaptation of Edgar Poe's "Raven," a visit of Maximilian's spirit to the Emperor Napoleon.

In his latest volume, remarkable like the other for the beauty of its typography, and less disfigured by misprints, M. Delepierre has given us an interesting disquisition on the History of Parody. In this he acknowledges obligations to several previous writers, though he complains of the confusion introduced into the subject by not distinguishing parody from kindred kinds of composition, such as burlesque and travestie; so that works such as the *Aeneid* of Paul Scarron, and the *Henriade Travestie*, to which we might add *Homer Burlesqued*, have been included under the term. He insists strongly on the necessity (already urged by the Jesuit De Montespin, in a rare treatise on French Poetry published in 1747) that in parody not only the character but the subject of the original serious composition should be changed, the style and, as far as possible, the words of the model being alone retained. Hence he further excludes from consideration that masterpiece of German Satire which is found in the *Epistolae Obscurorum Virorum*.

Among the Greeks parody would seem to have originated with the Rhapsodists, from a desire to introduce variety into their recitations. The favourite subjects of the earlier Parodists were the Homeric poems, the first complete specimen being the *Battle of the Frogs and Mice*, though a small fragment remains of a parody by Hipponax, who is stated by Polemon to have been the inventor of this kind of composition. A longer fragment is preserved by Athenaeus of a parody by Matron of Pitana, in which he sets forth in Homeric hexameters the glories of the culinary art.

The best known Greek parodies, however, are those of Aristophanes, in ridicule of the tragedians: and of Lucian, whose dialogues are interspersed throughout with similar imitations, both of the epic and tragic poets. The *Vera Historia* of Lucian is peculiarly interesting as being avowedly a parody throughout, in emulation of the no less fabulous narrations of Ctesias, Iambulus (whom M. Delepierre curiously confounds with Iamblicus), and others; and also as being the first instance of a parody in prose.

In Latin we might have expected a profusion of parodies, especially from the artificial ingenuity of the silver age; but with the exception of single lines from Virgil adapted to their own purposes by the Satirists, which seem to shew that the kind of humour was familiar to them, we find but few remains among the classical writers. One specimen of singular excellence survives in the parody of the fourth Ode of Catullus, commonly included among the minor works of Virgil. A few more may be added from the literature of the Antonines; but with the decline of letters, parody, which presupposes general familiarity with its originals, naturally decayed: and its first efforts, when learning began to revive, were directed almost exclusively to religious subjects. Nothing was too sacred to be thus turned into ridicule. M. Delepierre refrains from giving more than extracts from some of his examples, but they are sufficiently profane to shew the blasphemous nature of the rest. Bible, Liturgy, Creeds, Sacred Hymns, all are parodied in the interests of drunkenness and licentiousness; and we learn from a decree of the Council of Trèves that it was even necessary to forbid the clergy themselves from turning portions of the Mass to ridicule in this way.

In the 16th and 17th centuries the tide turned once more in favour of the classic writers, and first Catullus and afterwards Horace and Martial were especially selected as subjects for parody. The fourth Ode of Catullus appears to have been a prime favourite; in 1642 no less than fifty parodies of this alone were published in a single volume.

France, as might be expected, has furnished a large contribution to the stock of parodies of all kinds, from the beginning of the 17th century to the present time. Among them M. Delepierre draws special attention to the dramatic parodies, as peculiarly characteristic. In these whole plays are caricatured, not as in our modern burlesque, with gross extravagances bearing no relation to the original drama, but with the form and general disposition of the original retained, the characters and plot alone being changed so as to bring out the author's weaknesses in strong relief, while his identity is unmistakable. Of such parodies more than fifty were represented at the King's Theatre in the first half of the last century; and Voltaire alone furnished certainly not less than fifteen models for the class.

In discussing English parodies M. Delepierre draws a broad line between the present and preceding centuries; the earlier specimens being almost exclusively political, and drawn from sacred sources, whilst with the present century purely literary parodies first came in vogue. The former part of his canon, however, though supported by many instances of profanity quite on a par with that of the 13th and 14th centuries, appears to be too arbitrary. He himself quotes as an exception a parody on Milton by John Philips, pronounced by Steele to be "the finest burlesque poem in our language;" but he entirely ignores the parodies of the *Anti-Jacobin*, which, though political enough, are scarcely open to the imputation of profanity. With the later English parodies our author seems to be familiar, and we are glad to find due honour awarded to *Rejected Addresses*, *Bon Gaultier*, and *Punch*. He appears, however, to give the palm to a less known volume of *Posthumous Parodies*, published by John Miller in 1814.

A few specimens of German parodies, and a slight sketch of the insignificant contributions of Spain and Italy, conclude this little work, which we commend as full of information and amusement; though we doubt whether many of its readers will rise from its perusal with the satisfaction promised by its author, "d'apercevoir qu'ils en savent beaucoup plus que moi."

John R. King.

LITERARY NOTES.

C. M. Sauer has recently published a judicious and impartial study on Alessandro Manzoni (Prague: Fr. Ehrlich, 1871), revised and greatly enlarged from a "Schulprogramm" of ten years ago. The writer distinguishes between the political and the poetical Manzoni, and devotes himself to an exclusive estimate of the latter from the point of view of modern Italian literature and the literary art in general. He places the poet very, but not unjustly, high. The Papal predilections which have brought Manzoni so much unpopularity were without serious influence on his art. The psychological reasons of this will have to be traced by a later generation, when the poet, already in his eighty-sixth year and standing quite alone in the world, shall have left it, and the personal sympathies and antipathies attaching to him shall have become silent. Meanwhile we warmly recommend Herr Sauer's interesting pamphlet.

Provençal literature was long considered to have become extinct with the fourteenth century, and a few attempts towards its regular revival at that period were in fact failures. Still there continued to exist, even as late as the seventeenth century, several not despicable poets singing in their mother-tongue, although hardly known beyond the bounds of Provence. The present movement of literary restoration in Southern France throws new light from time to time on these obscure writers. The *Folies* of a poet named Sage (ob. 1642), and the *Obros de Piere Gondouli* (flor. circa 1700), have been printed more than once, and by them the dialect of Montpellier has been illustrated. Other poets sang at the same time in the dialects of Toulouse and Beziers. Some ten or eleven pieces of a third Montpellier poet, hitherto unknown, have now been printed for the first time in vol. i. of the *Revue des Langues romanes*, with a valuable preface by "L. G." (probably Léon Gaudin). This is Jacques Roudil (born January 31, 1612; died probably at the end of 1684), a writer the more worthy of remark as having been a Protestant, and, at a time when almost all the gentry of his native town changed their faith, having clung to his convictions and preferred persecution to apostacy. He was one of a family of lawyers, and himself distinguished in that profession. His poems are preserved in a MS., probably original, which exists in private possession under the title *Las obras mescladissas d'un baronn de Caravêtas imprimidas à Cantagril per Janas Buscaliensis*, 1677. Its 177 pp. contain poems in Latin, French, and Provençal, chiefly the last; Roudil handling his dialect with far more ability than Sage (who borrowed too much from the French), and in a style far more correct and unexaggerated than that of Gondouli. His work reflects admirably the tone of good society in Montpellier, where French in his time was confined to a privileged few. We may soon hope for a complete edition of it.

Dr. Edmund Stengel kindly sends us the following items of testimony in support of the statement made by Mr. Arnold in his edition of *Wyclif*, and confirmed by Mr. W. W. Skeat in his review of that edition (*Acad.* vol. ii. pp. 346-348), that cases of burning for heresy occurred considerably earlier than 1401, the date of the passing of the statute *De Hæretico Comburendo*. The Old-French *Roman de Durmart le Galois*, a poem of nearly 16,000 verses, which Dr. E. S. is at this moment preparing for the press, contains the following story. Nogant, a vassal of Queen *Fenise* of *Irland*, has raised war against her, and besieges her in her castle *Limeri*. Unable to overcome the castle by his own force, he sends to King *Artus* for help, accusing the besieged queen and her adherents of heresy (verse 12734: *Ce sunt unes mescreans gens*). At a later time, when even Artus cannot conquer the castle on account of the valour of Durmart, and has asked the queen as well as Durmart to come out and defend themselves against Nogant's accusations, this latter repeats in open assembly that the queen maintains a false faith (v. 14288, 89: *Car trop li plaist a maintenir La fause loi(s)qu'ele maintient*), and demands that she should be burnt or put to death (v. 14302: *Ele doit estre arse u defaite*). The queen, in defending herself, is ready to undergo the fire-ordeal (v. 13375: *Et je irai parmi le feu*). The *Roman de Durmart* certainly does not belong to the fourteenth century, but probably to the second half of the thirteenth, the writing of the latter part of the manuscript (*MS. Bern* 113, in which it stands on ff. 236–283) pointing unmistakably to the end of the thirteenth. Dr. Stengel is further referred by Dr. Jacob Burckhardt to the chronicler Adhemar (*lib.* iii. *cap.* 59, *ap.* Pertz, *Script.* vol. iv. p. 143) for evidence of cases of burning for heresy occurring so early as the eleventh century. Adhemar tells how in 1022 A.D. ten *canonici* of Orleans were found out to be Manichæans. King Robert ordered them to be degraded, *et demum igne cremari*.

Art and Archæology.

The Parthenon. [*Der Parthenon.* Herausgegeben von Adolf Michaelis. Text, 1 Band 8vo.; mit einer Hilfstafel—Atlas, 1 Band fol.] Leipzig: Breitkopf and Härtel.

The present work of Herr Michaelis puts the Parthenon, the foremost monument of classic art, for the first time within the reach of the public in all its completeness, and thus satisfies a want long felt by students and lovers of art. The author has accomplished the important and difficult task that he has undertaken in a manner which calls for the warmest acknowledgment. He has collected materials, which lay scattered in every direction, with a completeness hitherto unknown, and has sifted and arranged them so as to facilitate their survey to the utmost. His researches are distinguished by critical good sense and precision. The method which he has followed in drawing up the plates of the atlas, so as to enable the reader to distinguish at a glance between what is of certain and what of questionable authenticity, deserves universal imitation in publications concerned with monuments like the Parthenon, of which our knowledge is derived from sources of such very unequal credibility. Our knowledge of the sculptures of the Parthenon rests in the first place upon the preserved originals, on which alone, of course, implicit reliance can be placed, and which are the standard and test of materials coming from other sources. These other sources consist of casts and drawings taken from the monuments before their destruction had proceeded so far as at present; and they are of every conceivable degree of value. Even casts do not always reproduce the actual state of the original, for Michaelis has shown that the ordinary cast of one plinth of the eastern frieze (pl. xiv. 42) has been tampered with, and an essential modification of the motive introduced. In his plates Michaelis has followed a method analogous to that usual in critical editions of the classics, in grouping together on the one hand the materials for judging the several fragments themselves, and in presenting on the other the collateral testimonies of various value which have come down to us. The state of the several fragments as we have them is reproduced in detail, and on a larger scale than the rest, in lithographs after the originals. These illustrations correspond in a measure to the text printed at the top of the page in classical editions, while the variants which are supplied by casts or drawings correspond to the critical notes under the text, and are given in different style and on a smaller scale after the authentic copies. Praise of so convenient an arrangement would be superfluous; it is scientific, and practical in the best sense of the word.

In the space at our command we can scarcely do more than allude to the many questions and controversies relating to the Parthenon, which are definitively treated by Michaelis. We must be content with giving our readers a general idea of the plan of the book. The first section, after a short topographical introduction, discusses the building of the Parthenon. As to the chronology of the building —which according to the usual theory was not begun till after the banishment of Thukydides the opponent of Perikles

(*i.e.* 443 B.C., Ol. 84)—Michaelis supposes, with great probability, that the building was resolved on in the year 454, and begun forthwith. The destination of the edifice, to serve as a state treasure-house, stands in close relation to the financial reforms projected in that year, and as the Parthenon was probably also intended from the beginning to serve for the celebration of the Panathenaic festival, this supposition falls in with the circumstance that 454 was the year of the Great Festival. It also allows an interval before the opening of the Parthenon in 438 (Ol. 85, 3), in which it is just conceivable that human powers might have brought the building, with all its ornamental wealth of form and colour, to a successful end; whereas the ordinary view, which puts the beginning of the work some ten years later, leaves the rapidity of its execution nothing less than miraculous. Then follows an analysis of the architectonic elements of the Parthenon, its internal disposition, and the destination of the separate chambers—Bötticher's view, that the temple was not intended for purposes of worship, being very rightly adopted here. The meaning of the plastic ornamentation is then discussed, and, finally, the vicissitudes are briefly reviewed to which the building has been exposed from its completion down to the present day.

The second section is devoted to a searching criticism of the authorities which contribute to our knowledge of the Parthenon; and it is here that the author explains the method, above referred to, which he has followed in the arrangement of his illustrations.

The third section explains the plates of the atlas, first the views and plans given in pl. i. and then the architectonic materials given in pl. ii. After an excursus on the former temple (built probably by Peisistratos) which stood on the site of the Parthenon and was burnt by the Persians, Herr Michaelis turns to the consideration of the separate sculptures, illustrations of which occupy the remaining plates. With the book in his hand, the present reviewer has examined the Parthenon marbles in the British Museum, and is glad to be able to assure the author that, except in a few insignificant details, his designs are accurate, and the accompanying remarks of the text perfectly just. Space forbids our entering into detailed criticism of all the names which Herr Michaelis proposes to give the different figures on the pediment, but we must allow ourselves one remark on the Nike of the eastern pediment (pl. vi., fig. 6, 7). Michaelis says of its position: "The figure of Victory must be placed to the left, almost entirely in profile, only so far obliquely that it would be able to hurry past the nearest of the central figures." This assertion, which the author rests upon æsthetic considerations, receives striking confirmation from external tokens. The Nike is incomparably less carefully finished on the right side than on the left; on the former only the general outlines are given, while on the latter the treatment of the drapery, and especially the chiselling of the more delicate folds, proves that the sculptor has laboured with the greatest industry at that part of the figure. It is only natural therefore to suppose that this side was exposed to view and the opposite one turned against the wall; and this is confirmed by another circumstance, namely that the surface of the marble on the left is much more weatherbeaten than that of the right side. To conclude with a fact to which Signor Alessandro Castellani called my attention; if, as Overbeck, Bursian, and Rouchard assume, the figure of Victory should be turned towards the right corner of the gable, the wind would be blowing in opposite directions in different parts of the group. On the left-hand side of the pediment the wind comes from the left corner in which the Sun God is rising to view, as is proved by the floating garments of Iris, whose original place in the group is known from Carrey's drawing. But if we suppose the Nike to be turned towards the right-hand corner, the drapery of the figure takes a direction which can only be explained by an opposite wind blowing in the same group from the corner where the steeds of night are disappearing. The arrangement proposed by Michaelis follows nature in assuming a uniform condition of the atmosphere; and though the point cannot be regarded as settled without a thorough investigation of the way in which Greek art usually treated the movement of the air, yet I think it may be maintained that a composition so unconstrained, so self-complete, and so thoroughly penetrated with a living apprehension of nature as this group, is not likely to contain an outrage on natural possibility for which no æsthetic motive can be discerned. At any rate, the wonderful feeling of nature which rules in the group, the impression that the birth of the goddess occurs at the moment when the sun rises out of the sea and the fresh morning breeze from the water gambols through the air, will be sensibly impaired if this is the case.

With respect to the question whether the sculptures were originally painted in polychrome, Herr Michaelis expresses himself with the reserve imposed by the number of centuries during which the monuments have been exposed to the weather, and the numerous cleansing processes which they have passed through more recently. Even in their present condition, however, I think it is possible to form some conclusion as to their former colouring. Such a result, I should say, may be derived from the treatment of the boots of the horsemen in the frieze. The flaps which hang down from the boots are often very little worked out, and only outlined with a shallow stroke of the chisel, as in the riders in pl. x. slabs x. 26, xi. 29; pl. xi. slab xxii. 54, 56; pl. xiii. slab xlii. 133. If this faint surface indentation was all that served to indicate this feature, it would have been completely invisible as the frieze was originally placed and lighted. Evidently it was intended to be brought out by the colouring, and the chisel-marks were only to show the painter where he was to stop. Sometimes, in fact, the sculptor seems to have omitted to give the painter even so much guidance as this, for in many of the figures of horsemen the sole of the boot is expressed in relief, but any further indication of the upper edge of it is wanting entirely (see, for instance, pl. ix. slab ii. 2; pl. xiii. slab xxxvii. 114, 115); no doubt it was left for the painter to bring it out in colour.

In close connection with the question of polychrome is that of the use of metal adjuncts in the marbles. While Michaelis accurately enumerates the holes which were meant to fasten the garlands on the heads of the figures in the frieze, he seems to have overlooked another mode of securing the ornamental head-gear. Sometimes the figures have a peculiar depression in the forehead and the occiput (pl. xiii. slabs xxxii. 98, 99, xxxiii. 101, xxxv. 109, xxxviii. 118), which is most plainly marked in the horseman in slab xxxiv. 121, where it is distinctly visible in the illustration, and referred to by Michaelis in the text as a fillet. These hollows, it seems to me, can have served no purpose but that of securing the wreaths or fillets, most probably the latter; and if these heads were encircled with fillets, we have an arrangement exactly like that of the fine Ephebus head in the Cassel Museum, which Conze has recognised as belonging to the Attic type.

The last plates and the text accompanying them give the complete materials for a reconstruction of Pheidias' Chryselephantine statues.

The appendices contain inscriptions relating to the cost of the building, a hitherto unedited fragment of a statement of accounts relating to the Chryselephantine works, notices

of the treasures in the Opisthodomos, Pronaos, Parthenon, and Hekatompedon, of the objects preserved in the Chalkothek and Skenothek, and of the treasures in the temple of the Brauronian Artemis. The introductions to the different sections give a summary account of the administration and ultimate fate of each temple's treasure-store. Inscriptions bearing on the restoration of the Parthenon and its basis, and on the deficiencies in the great gate of the Hekatompedon, are also quoted and discussed.

Appendix II. supplies all the materials for enquiries relating to the Panathenaea; and, in conclusion, we have all the older reports relating to the Parthenon down to the year 1688, and the documents concerning Lord Elgin's acquisition of the sculptures.

An excellent index facilitates the use of the book. The print and paper leave nothing to be desired, and the "get-up" is worthy of the publishers. As to the illustrations, it was necessary, as Michaelis observes in his preface, in order to keep the expense of the work within anything like reasonable limits, to follow the Periklean precept φιλοκαλεῖν μετ' εὐτελείας. They are, however, with a few trifling exceptions, substantially faithful.

These few remarks, scanty as they are compared with the rich contents of Herr Michaelis' work, may still suffice to commend it to readers of the *Academy* as its high excellence deserves. Fellow students with Herr Michaelis in his own branch of study will peruse it from beginning to end with pleasure and profit, and derive manifold encouragement to further researches. The educated layman, though he may pass over the appendices and the descriptive analyses of the separate sculptures, will read with enjoyment the chapters of more general interest, and find himself attracted not only by the importance of the investigations, but also by the warmth and vigour of the author's descriptive style.

W. Helbig.

ART NOTES FROM CENTRAL ITALY.

[Second Article.]

A literary work already written though not yet sent to press, by a gentleman of Perugia, will provide a descriptive catalogue of all the art in the Umbrian provinces, illustrated by no fewer than 700 photographs from the paintings and sculptures referred to. Signor Guarolabassi is the energetic writer who has long dedicated his time to this undertaking. Another publication promised at Perugia is the *Descrizione del Cambio*, by Signor Adonio Rossi, the learned *bibliotecario* of the public library, and author of other works on local subjects. The most esteemed work hitherto known, descriptive of the Cambio as an institution and of the frescoes by Vannucci and others that adorn its walls, is *Il Cambio di Perugia*, by the Abate Raffaelle Marchesi. I was sorry to hear of the death of that accomplished priest, which occurred a few days before my arrival at Perugia last month. The Abate Marchesi had been appointed by the new government to the chair of Forensic Eloquence at the Perugian university, and was also Professor of Latin Literature at the Lyceum. He died at the age of about sixty, and received the honours of a public funeral, the bier being borne by students of the university to a distant place of interment—the village of Magione near the lake of Thrasymene.

At Foligno a monument, consisting of a colossal statue—the head from a supposed portrait—was undertaken a few years ago in honour of the eminently devout and refined artist Niccolo Alunno, the pride of his native city. A young sculptor named Ottaviani undertook this work in the hope, if not certainty, of its being ordered by the authorities for erection on a public promenade. His accomplishment of his task certainly deserved praise, so also his moral courage and energy; but I regret to learn that, though some time ago finished, the monument has not yet been located where it might stand for the honour both of the indvidual Alunno and the city Foligno.

Città di Castello still retains the artistic wealth for which it has been long celebrated; and many of the most precious art-works here—as the nobly beautiful altarpiece by Signorelli at S. Cecilia, the Madonna crowned by angels with Cecilia and numerous other saints around her—are left in the monastic churches for which they were executed. Here also, however, has been formed about a year ago a collection of art-works from suppressed convents, placed by order of the magistrates in a palace formerly belonging to the Bufalini family. Among its contents we see a Deposition from the Cross with numerous figures, considered a masterpiece of Raffaelle da Colle, and till recently hanging over an altar. Other paintings in this incipient museum deserve little attention. By far the most interesting among its contents are three terracotta reliefs by Luca della Robbia, for the present laid horizontally on the floor of a room where they are to be erected should the place prove suitable. Most important and largest in scale is the Assumption, the figures white on a blue *fondo;* the whole composition, which has the form of an altarpiece, being surrounded by a brightly tinted border of foliage and fruit. All the refinement of feeling and chastened sense of beauty distinguishing this artist's best works claim our admiration here. The virtuous loveliness and ecstatic yet lowly devoutness in the blessed Virgin, the aërial grace of the floating angels, and the dramatic variety in the group of apostles round the open tomb, which they find filled with flowers in place of the glorified body, are scarcely to be done justice to by any description. Another large-sized terracotta by the same artist, the Adoration of the Divine Infant by Mary, Joseph, and the Shepherds, exemplifies his success in polychrome, being brightly and variously coloured; the composition also fine, and the heads full of beauty and character. Near this is seen a smaller medallion-work, also by della Robbia, of the Virgin and Child, the figures white, with a border of coloured foliage and flowers—alike worthy of the artist and distinguished by his most attractive qualities.

Another "Assumption," with the Annunciation on the arched tympanum above, by the same artist, and a happy example of his merits, sentiment, and delicacy, is in a small church, *S. Francesco* at Pieve S. Stefano, a prettily situated market-town about ten miles from Borgo S. Sepolcro, where I had occasion to make a short stay. I am not aware whether this terracotta relief (white figures on blue ground) has been made known through critical reports as it deserves to be.

At Borgo S. Sepolcro, the artistic wealth of the cloister, abundant indeed in that interesting old city, yet enjoys an exceptional immunity. Here one learns to appreciate a painter whose imaginative powers can scarcely be recognised before one has visited his native place — Piero della Francesca (*ob. circa* 1484), almost all whose truly representative works are at this city and at Arezzo. I may here mention what is not generally known, that one of this great artist's admired works, a large pencil-picture in several compartments set in a rich Gothic frame, now hanging in a corridor leading to the sacristy of the cathedral, is understood to be at the disposal of the capitular clergy, who are ready to sell it as their own property. On the principal panels are SS. Peter and Paul; on pilasters and pinnacles miniature figures of other saints; on the predella a Crucifixion and four *storie* from the life of St. John the Baptist. Conception and execution are such as to justify all that fame has awarded to this first master of the local school.

C. I. Hemans.

ART NOTES.

From M. Théophile Gautier's account of the late adventures of the Melian Aphrodite, it would seem to follow that the interpretation of the figure as victress at the Judgment of Paris (originally maintained by Clarac, but abandoned by most authorities in favour either of the conjecture of Millingen or that of Quatremère de Quincy) may have to be revived. What grounds M. Gautier may have for speaking anew of the discredited fragments of hand and arm as authentically belonging to the figure, we cannot tell. But when he tells how the upper and lower parts of the figure came apart again at their joining, and showed that, when they had been put together on their first discovery, the upper part had been tilted by the help of wedges slightly more forward than according to the original motive of the statue, then we seem to see evidence in favour of the old supposition. A more erect attitude of the body would be more consonant with the action of holding aloft the apple, and would

do away with the necessity (which lay at the root of Millingen's reconstruction) of supposing a weight sustained by the arms to account for and balance the forward stoop. At all events it is to be hoped that the original relations of the parts, and not (as seems proposed) the fictitious ones to which we have been used, will be adopted in the rejoining now necessary. And, since curiosity is again astir in this connection, is there no chance of a recovery of that missing fragment of pedestal which bore the inscription of Alexandros the son of Menides of Antiocheia?

The treatment of the eyes in ancient statuary receives a new light from a bronze figure which has just arrived at the British Museum, having been rescued by divers from deep water off the coast of the island of Rhodes. This is apparently a Roman figure of Cupid, broken in three parts, and covered with marine growths and shells; of no great artistic value except for the rarity of having the two eyes in their places, and consisting of small garnets cut to a point.

Under the title "Contributions to the History of Greek Painting," H. Blümner discusses (*Rheinisches Museum*, vol. xxvi. pt. iii.) the passage in Pliny in which Eumarus is said to have been the first who depicted the human figure in a variety of positions; also another passage in which Polygnotus is described as painting women in diaphanous robes, which the writer imagines to be an error on Pliny's part. The view of A. Michaelis, that in the pictures by Polygnotus in the Lesche at Delphi the centre was displaced, is subjected to an elaborate criticism, and condemned as untenable.

In the last number of Lützow's *Zeitschrift für bildende Kunst*, Hermann Lücke gives a sketch of the history of Danish art from the last century, taking in general rather a depreciatory tone, and especially censuring the efforts of the Danish genius in recent days to keep itself clear of German influence. The chief part of the paper is naturally taken up with Danish sculpture from Thorwaldsen to Jerichau, and its most interesting section is that one which concerns the work of Hermann Freund in illustration of the native Scandinavian mythology.

The barbarity of commercial utilitarianism, it seems, is fast invading the chosen city of German art—Nuremberg itself; and Dürer's walls are condemned in the name of municipal improvement. At present it is only decreed to raze the ramparts and fill the moat in certain places here and there, "for the sake of air and light;" but the correspondent who with praiseworthy indignation reports the sacrilege to one of the art-journals of his country seems to have small faith in the ultimate moderation of its perpetrators.

Music.

Musikalisches Conversations-Lexicon. Eine Encyclopaedie der gesammten musikalischen Wissenschaften. Herausgegeben von Hermann Mendel. Vol. I. Berlin: R. Oppenheim.

Herr Hermann Mendel, hitherto known to the German public by his biographies of Nicolai and Meyerbeer, is the editor of a new musical encyclopædia, the first volume of which (A—Biel) has lately been issued. Amongst the contributors we count the names of some of the best musical writers of Germany, such as G. Engel, the well-known Berlin critic, and W. Rust, the great connoisseur and able editor of Sebastian Bach's works. The new work is planned on the largest scale, and comprises not only the biographies of musicians, prominent amateurs, and other persons connected with music, but also an explanation of all technical expressions in music, with comprehensive essays on harmony, counterpoint, the history of music, and other important subjects. In his preface the editor states that his work has been called forth by the acknowledged demand of our time; and although there certainly has been no want of books of reference in musical science, we cannot help agreeing with him in this. Most encyclopædias give, like that of Fétis, mere biographical anecdotes, or else limit themselves to technical explanations, as Koch-Dommer's *Musikalisches Lexicon*. The valuable *Lexikon der Tonkunst* which Schilling published about thirty years ago, and which combined both these branches of knowledge, is now to a great extent antiquated. Another drawback of former publications is the utter want of criticism displayed by their editors in adopting statements, chiefly of the biographical kind, from foreign encyclopedic sources. Mistakes of this kind one can easily follow through English, French, and German dictionaries, sometimes slightly disguised and modified by the translator, but still pointing back unmistakably to one common source. "Sie erben sich," to use Goethe's words,

> "wie eine ew'ge Krankheit fort;
> Sie schleppen von Geschlecht sich zum Geschlechte."

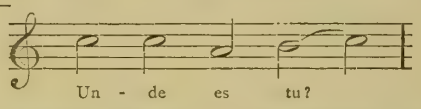
Herr Mendel himself has not kept quite clear of this system of international loans, and chiefly in the smaller notices the influence of Fétis becomes occasionally very noticeable. Still it must be granted that his work contains an unusual amount of original and well-digested knowledge. This favourable result, as well as the exhaustive completeness of the subjects treated, could only have been attained by the system of divided labour which Herr Mendel has adopted and which we cannot but heartily approve.

We think, however, that he has not always used the necessary restrictions, and in consequence his pages are occasionally encumbered with obscure names and nearly useless details. Sometimes the connection with music of the persons mentioned is very slight indeed—for instance, that of King Alfred the Great, whose claims to a place in a musical dictionary seem to be but indifferently founded on his playing on the harp being mentioned by old chroniclers. On the other hand, we think the honour of mention is decidedly due to a man like the well-known French musical critic Charles Beauquier, whose work (copied though it may be for the greater part from Hanslick's *Schönes in der Musik*) still remains remarkable as one of the few attempts made in France towards philosophically analysing the principle of the beautiful in music.

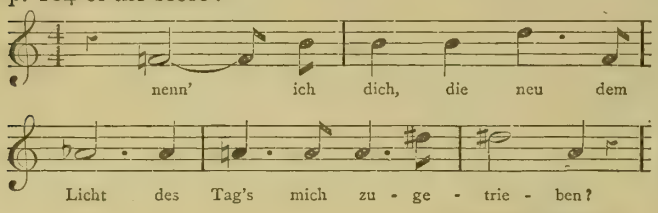
Another important question for any musical writer or editor must be, which side to take in the vital difference of opinion at present dividing all thinking artists into two parties—a differenee which may be appropriately described as the contest between music poetical and music absolute, or between music of the past and of the future. It would be difficult to say what position the *Lexicon* is going to take before the names of Liszt and Wagner have appeared in its columns; still, to judge from the biographical sketch of Berlioz—a name almost as representative as that of the two German composers—it would appear that Herr Mendel has adopted the better part of valour by touching the delicate subjects alluded to with as much discretion as possible. The French reformer is treated with much greater respect and even sympathy than might be expected from the strongly adverse position which the editor has taken up towards similar tendencies in his own country.

Amongst other biographic articles, we may mention that on Johann Sebastian Bach, by Dr. W. Rust, which contains excellent material. Prof. Mach has written an essay on "Akoustik," which expounds the theories of Helmholtz in a concise and comprehensible manner; and Herr Billert contributes an equally learned historical sketch of the music of the old Egyptians. As to Herr Tappert's interesting article on "Accent," we should like to tender a few remarks. Wagner (says our author) sometimes expresses the interrogative meaning of a sentence by emphasising melodically (*i. e.* giving a higher note to) the grammatically weak and unaccentuated second syllable in trochaic words like *fōlgĕn*, *wōllĕn*. This

would be in accordance with the old ecclesiastical system, where the *accentus interrogativus* is always expressed by a rising in the melody; as, for instance, in the following formula :—



Wagner's principle, however, of emphasizing the weak syllables and thereby expressing a query, seems to be essentially of the rhythmical kind. I have collected a great number of cases, chiefly from his later works, where at the end of an interrogative sentence the last note is lower than the last but one, but where the *brevis ultima* of a word is put in the arsis or strong part of the bar. A striking example of this we find in the following passage from *Tristan und Isolde*, p. 184 of the score :—



Franz Hüffer.

THE LIBRETTO OF WAGNER'S "DER FLIEGENDE HOLLÄNDER."

TO THE EDITOR OF *THE ACADEMY.*

Sir,—I had proposed to address to you a few remarks on the poem of Wagner's *Flying Dutchman* on the occasion of its performance in London, as promised for this year by Mr. Mapleson. Now that the last hope of the *impresario* abiding by his programme has vanished, I will not on my part follow his example, and therefore beg leave to communicate in a few words what I think may throw some light on the genesis of the libretto in question.

The story of the *Flying Dutchman* can be traced back as far as the sixteenth century, and, like that of his fellow-sufferer by land, the Wandering Jew, seems to be an outgrowth of the thoroughly revolutionised and exalted state of feeling caused by the two great events of those times—the discovery of a new world by the Spaniards, and of a new faith by the Germans. Captain Vanderdecken, as is generally known, tries to double the Cape notwithstanding a heavy gale blowing dead in his teeth, and finding this task too much for him, the obstinate Dutchman insists that he will carry out his purpose even if he should have to sail till doomsday. The Evil One, hearing this oath, accepts it in its most literal meaning, and in consequence the unfortunate sailor is doomed to roam for ever and aye over the ocean, far from his wife and his beloved Holland. However, the poets of later ages, pitying the weary wanderer of the main, have tried in different ways to release him from this desolate estate. Captain Marryat in his well-known novel has not been very fortunate in this respect. Another *dénouement* of the story was invented by Heinrich Heine, and upon this Wagner has avowedly based the poem of his opera. In Heine's fragmentary story, *The Memoirs of Herr von Schnabelewopski*, the hero (who, by the bye, shows only slightly disguised the characteristic features of the great humourist himself) tells us how on his passage from Hamburg to Amsterdam he saw a vessel with blood red sails, very likely the phantom ship of the Flying Dutchman, whom shortly afterward he saw *in ipsissima persona* on the stage of the last named city. The new feature added to the old story is this—that, instead of an unconditional sentence, Vanderdecken is condemned to wander till doomsday, unless he shall have been released by the love of a woman "faithful unto death." The Devil (stupid as he is) does not believe in the virtue of women, and therefore allows the doomed captain to go ashore once every seven years, and to take a wife. The poor Dutchman has been disappointed in the attempt of finding such a paragon of faithful spouses for many a time, till at last, just after another period of seven years has elapsed, he meets a Scotch (according to Wagner, a Norwegian) merchant, and readily obtains his paternal consent to a proposed marriage with his daughter. This daughter herself has formed a romantic attachment for the unfortunate sailor, whose story she has heard and whose picture hangs in her room. When she sees the real Flying Dutchman she recognises him at once by the resemblance with his likeness, and, heroically deciding to share his ill-fortune, accepts the offer of his hand. At this moment Schnabelewopski-Heine is (by an unforeseen and indescribable incident) called away from the house, and, when he comes back, is just in time to see the Dutchman on board his own ship, which is weighing anchor for another voyage of hopeless despair. He loves his bride, and would save her from the fate that threatens her if she accompanies him. But she, "faithful unto death," ascends a high rock and jumps into the waves, by which heroic deed the spell is broken, and the Flying Dutchman, united with his bride, enters the long closed gates of eternal rest.

Heine pretends, as we have said, to have seen this acted on the Amsterdam stage; this statement, however, he withdrew afterwards, and emphatically claimed as his own the invention of the beautiful and eminently dramatic episode. The former statement was also in so far inaccurate that he never sailed from Hamburg to Holland; his voyage was, on the contrary, directed to London, and here it most likely was that he really made the acquaintance of the *Flying Dutchman* in a theatrical capacity. The story of the Phantom Ship seems to have been at that time (1827) to a certain extent popular in England. A very impressive version of it had appeared in *Blackwood's Magazine* (May, 1821), and this was made the groundwork of a melodramatic production of Fitzball, a playwright of those days, whose adaptations were almost as numerous and as "original" as those of some contemporary stage favourites. The piece in question is extremely silly and bad in every respect. Mynheer Vanderdecken here is the slave and ally of some horrid monster of the deep, and his motive in taking a wife is only to increase the number of his victims. In this wicked purpose, however, he does not succeed—the heroine escaping his snares and marrying (if I remember rightly) a young officer whom she had loved against the will of her father. This piece was running at the Adelphi Theatre about the time of Heine's visit to London; and nothing is more probable than that the German poet, who conscientiously studied the English stage, should have seen it. For the circumstance of the Dutchman's taking a wife, Heine would in this case be indebted to Fitzball, in whose piece there also occurs an old picture connected with the story. It would thus be most interesting to note how Heine developed out of these trivial indications his noble idea of the Dutchman's deliverance by the love of a woman. And Wagner, on his part, has heightened the dramatic pathos of the fable by making his hero symbolize a profound philosophical idea—thus raising the conception of his character from that of a popular tale into that of artistic significance, or, to speak with Edgar Poe, out of fancy into imagination. The pitiful figure of Mynheer Vanderdecken becomes an embodiment of life-weariness, longing for death, and forgetfulness of individual pain and struggle or (which is the same thing) of existence.

Still we must acknowledge, it would seem, that the modest germs of these grand conceptions were furnished to the German poet and composer by the English playwright; and must further note that it was on a voyage to the British shores that both the one and the other conceived the idea of his work.

Franz Hüffer.

New Publications.

Bodenstedt, Friedrich. Erzählungen und Romane. Vols. I.–IV. Jena: Costenoble.

Campardon, Emile. Documents inédits sur J. B. Poquelin Molière. Paris: Henri Plon.

Chansonnier huguenot du XVIe siècle. Paris: Tross.

Franz, Robert. Offener Brief an E. Hanslick über Bearbeitungen älterer Tonwerke, namentlich Bach'scher und Händel'scher Vocalmusik. Leipzig: Leuckart.

Grosse, Julius. Gegen den Strom. Idealer und Carricaturen-Roman in neun Büchern. Braunschweig: Westermann.

Lindau, Paul. Kleine Geschichten. 2 vols. Leipzig: Fleischer.

Overbeck, J. Griechische Kunstmythologie. Vol. I. Part I.: Zeus. Leipzig: Engelmann.

Sacken, Eduard von. Die antiken Bronzen des K. K. Münz- und Antiken-Cabinets in Wien. Vienna: Braumüller.

Schmitz, Franz. Der Dom zu Cöln, seine Construction und Ausstattung. Historischer Text von L. Ennen. Parts XI. and XII. Cologne and Neuss: Schwann.

Philosophy and Science.

Kant's Psychology Exhibited and Explained. [*Kant's Psychologie dargestellt und erörtert* von Jürgen Bona Meyer, Doctor und Professor der Philosophie in Bonn.] Berlin: Hertz, 1870.

The great efforts of Germany in philosophical speculation at the beginning of this century have been followed, as was natural, by a period of exhaustion or at least of rest. If, however, there is at present little thinking on philosophical subjects that can be called original, the interval is well spent in recording, retracing, and criticising what has been done. Perhaps, also, the somewhat too ambitious and rapid movement of speculation in its heroic age made necessary this careful review of its results before it could be determined what true and lasting elements they contained. At any rate no time has been richer in this kind of critical and historical literature. And it is but natural that Kant, as the starting-point of modern thought in Germany, should have received a large share of this renewed attention, and that many treatises should have been written upon every important point of his system. For all German writers on such subjects, whatever their other differences of opinion may be, are agreed in this, that Kant gathers up in his *Kritiken* the result of all earlier philosophy, and makes a new beginning from which all future speculators must start.

Professor Meyer is one of those who believe in Kant, but reject as almost worthless the speculations of that line of idealists generally regarded as his legitimate successors. He holds of Kant through Fries and Herbart, and scarcely mentions Fichte or Hegel but to condemn them. The aim of his treatise is mainly to prove two things:—first, that Kant's whole philosophy is based upon empirical psychology; and, secondly, that Kant's own unconsciousness of this fact, or rather his direct denial of it, is the source of the greatest errors both of himself and of his disciples. In order to prove these two propositions, Professor Meyer first gives an account of Kant's division and classification of the different departments of philosophy, and especially examines his reasons for placing the *Kritik* of pure reason among the metaphysical or *à priori* sciences. He then traces the speculative history of Kant himself, and attempts to show that it was by the methods of empirical psychology that he arrived at the fundamental conceptions of his three *Kritiken*. Next he tries to explain the causes of Kant's error in altogether refusing to admit the bearing of empirical psychology upon logic, metaphysics, or ethics. And, lastly, he examines Kant's view of rational as well as empirical psychology, as well as the criticisms of other writers upon it. Whatever be our opinion of the results at which Professor Meyer arrives, we must respect the thoroughness and carefulness of the enquiry. He gives, indeed, in regard to every debateable point, so complete a collection of all the relevant passages in Kant that the reader has all the data before him. We think, however, that the result is only to prove that Kant was quite accurate in his account of his own procedure, and that the *Kritik* is based on psychology only if psychology be understood in a sense in which it includes all philosophy. We shall attempt in a few words to show this.

The *Kritik* of pure reason is, in Kant's view, the first or propædeutic part of metaphysics, in which we are lifted above the region of experience, though only by the analysis of experience itself. It seeks to answer the question—"What is experience," or, in other words, of what elements is experience composed, and how are these elements combined in that fixed and permanent order of coexistences and successions which science, and even ordinary common sense, finds in the world? Kant attempts to prove that such experience presupposes not only a given matter of sensation, but also the pure intuitions of space and time, the *à priori* forms of coexistence and succession, and certain *à priori* principles to give unity to the coexistent or successive manifoldness of sensation, and make it into definite objects of thought.

Now this analysis of experience may in one sense be said to be a process of self-observation and reflection. All philosophy has been defined as an endeavour after clear self-consciousness. All philosophy is "thinking upon thought," and its first step is to analyze experience with a view to determine what are its primary elements. And if we choose, we may call this psychological investigation; but it has nothing to do with psychology in the ordinary sense of the term. In other words, it has no more to do with the mind as a special object of thought than with the outward world as a special object of thought. It has to do in the first place with those logical and metaphysical principles which are implied in the notion of any object whatever.

Now this distinction, an important one always, is of special importance with Kant. In his view the "ego," as the subject of all thought, the "I think" which accompanies all our mental representations, is not itself cognisable as an object. We know, indeed, *that* it is, through our consciousness of unity of mental function in cognising other objects. But we cannot know *what* it is, for we cannot make it in itself an object to mind; it is not presented to us in any intuition. We know mind, as its states are presented to us by the inner sense, just as we know the natural world through the outer sense. And it is this knowledge of mind that constitutes the science of psychology. But such science is all but wholly empirical. To make psychology take cognisance of the *à priori* conditions of all knowledge would be to turn all science and philosophy upside down. The categories have no more to do with the knowledge of mind than the knowledge of matter; nay, as Kant remarks in the preface to the *Metaphysical Principles of Physics*, the absence of the intuition of space in the case of mind makes our rational or *à priori* knowledge much more limited in the case of psychology than of physics, where we have mathematics to aid us. Dr. Meyer, though he says a good deal about the distinction between our knowledge of *à priori* necessities of mind and our empirical knowledge of its phenomena, yet fails to see the necessary consequence. He is altogether carried away by the notion that a knowledge of the categories is a knowledge of mind, and because it is knowledge about "knowing" and not about "being," he thinks it must necessarily fall under the head of psychology. He forgets that "knowing" and "being" are the same thing in different aspects, and that all philosophy has to do with "being" as it is *known*.

He may however allege this excuse for himself (as indeed he has alleged it) that the mistake is one shared by Kant, who has himself at times spoken of his *Kritik* in language that would justify its being put under the head of psychology. Thus, in the preface to the second edition of the *Kritik*, Kant speaks of the mind as the instrument by which we acquire knowledge, and asserts that we must carefully examine the nature of our instrument if we would avoid errors in its use. But this ambiguous and metaphorical argument was very naturally met by the answer that we have no other instrument with which to examine the mind but the mind itself. And, in fact, mind in the sense in which psychology has to deal with it is one of the most difficult and complex of objects, and therefore should rather be among the last to be examined. And Dr. Meyer has quoted several other passages in which there is a similar ambiguity. Kant constantly carries about with him the supposition of an incognisable "thing in itself" behind phenomena, and hence he is unable to identify knowing and being, except for the objects of our experience. Hence to

him the principles that underlie all experience are only principles of *our* knowing, which other beings may transcend, though we cannot. And therefore these principles are, so far, merely psychological, *i.e.* principles of the human mind. Still this does not prevent Kant from distinguishing the science of nature from psychology, and the *Kritik* of pure reason from both.

For these reasons we think that Professor Meyer has failed in the main object of his book, though incidentally it contains much valuable illustration of Kant.

Edward Caird.

Bernstein's Nerve and Muscle.—[*Untersuch. über den Erregungsvorgang im Nerven- und Muskelsysteme.* Von J. Bernstein, Prof. d. Physiol. an der Universität zu Heidelberg.] Heidelberg: Winter.

Some little time ago Professor J. Bernstein published an investigation on the negative variation of the nerve current, of considerable interest, inasmuch as it was an attempt to trace by means of the negative variation the exact course of a nervous impulse along a nerve in action. The present volume contains that and several other researches carried on subsequently in the same line of thought; and, though the author has not yet succeeded in completing his studies—so that his work is in large measure fragmentary—his results deserve the close attention of all who are interested in attempts to get at a molecular interpretation of the phenomena of nervous and muscular action.

It is well known that whenever a nerve enters into a state of activity, the so-called negative variation of the nerve-current may be detected by means of a tolerably sensitive galvanometer. Possessing an adequate knowledge of the matters with which he deals, Bernstein regards this nervous variation neither as the be-all of negative action nor as a thing wholly of nought, but, simply taking it in hand as an easily appreciated token of complex molecular processes, he attempts by its help to track out the sweep of a nervous impulse along a nerve. In this way he has been enabled to determine that nervous impulses pass along nerves in the form of waves, which in the case of the nerves of a frog have a length of 18 millimetres, a duration of from ·0006 to ·0007 second, and travel at the rate of about 28 metres in a second.

The muscular fibre, like the nerve fibre, also presents a negative variation of its current, the effect on the galvanometer preceding the visible contraction of the muscle, and often making its appearance even when the contraction from various circumstances is missing. We may therefore speak of a muscle impulse antecedent to and causative of a muscle contraction, and generally analogous to a nervous impulse. Like the nervous impulse, the muscle impulse travels in the form of a wave; but there is a marked contrast between the characters of the two waves, for the muscle wave, according to Bernstein's determination, with a wave-length of only 10 millimetres, lasts for as much as ·004 second, and accordingly travels with a velocity of not more than 3 to 4 metres in a second.

This difference between the nerve wave and the muscle wave is just what would naturally be expected. The work of the nerve is simply to transmit impulses; there is no conversion of movement of molecules into movement of masses; all attempts to detect any loss of energy in the form of heat during the simple passage of a nervous impulse along a nerve have hitherto failed, and the wave of impulse travels along a nerve with at least undiminished strength and velocity. In the muscle, on the other hand, there is conversion of movement of molecules into movement of mass, energy is given out in the form of heat, and the molecular wave of impulse is transformed into the mass wave of contraction. We have in the characters of the muscle wave, in its slowness and its shortness, the tokens of the coming transformation.

These determinations of the nerve wave and muscle wave occupy the first two chapters of Professor Bernstein's work. The third chapter deals with the relation which the impulse wave bears to the state of activity in muscle and nerve. Through a series of experiments with very rapidly repeated galvanic shocks (which lead to a sort of interference phenomena, the impulse waves overlapping each other, and the muscular contractions which would otherwise follow being absent), the author is led to the conclusion that the condition of activity is dependent on the velocity with which the impulse wave changes its height. Hence when wave follows wave so rapidly that every given point seems always to be at the crest of the impulse wave, and there is consequently no change, excitation and contractions are absent. But the results of this section, which should be compared with those of Engelmann (in *Pflüger's Archiv*), are not so complete as those of the two previous chapters.

In the fourth chapter, which deals with the processes occurring in sensitive nerve-centres as the result of stimulation, the author is of course obliged to leave the safe path of objective experimentation; nevertheless his discussion of the subject is worthy of attention. He is particularly happy in the use he makes of the resistance offered by the nerve cells of the spinal cord (as contrasted with nerve fibres) to the transmission of nervous impulses, in working out his views on the radiation and localisation of sensation. By it he is led to a modification of Fechner's "psychophysical" formula (that sensations vary as the logarithm of the stimulus divided by the limit of appreciable stimulation), which expresses the specific resistance of the nerve centre to the passage of impulse waves. Even granted that the integral equation at which the author arrives does little more than express in a different fashion the suppositions with which he starts, it is at least something to have attempted to reduce to a definite form ideas hitherto all too indefinite.

The last chapter recounts a number of experiments made with the constant current on the frog's heart, with a view of investigating the molecular processes occurring in automatic nerve-centres; but this portion of the work seems to be the least complete and satisfactory of the whole. M. Foster.

Scientific Notes.

Chemistry.

On the Quantitative Separation of Nickel and Cobalt from Iron.—Professor E. H. von Baumhauer, while engaged in the examination of some meteorites, found the different methods for the separation of iron, nickel, and cobalt so unsatisfactory, that he has subjected them to a fresh examination (*Verslagen ende Mededeelingen der Koninklijke Akademie van Wetenschappen* [2], vol. v. p. 266; Amsterdam, 1871). While so engaged, he got Rammelsberg's paper on the same subject, in which that chemist points out the difficulties of the analysis, the low results obtained, and while himself preferring to precipitate the iron with barytic carbonate, criticizes the methods recommended by Berzelius. They are, 1. Precipitation of the ferric hydrate by ammonia in excess to keep the oxide of nickel in solution. 2. Precipitation of iron as succinate in a neutral solution. 3. Precipitation of the iron by boiling with sodic acetate, from a solution neutralised with sodic carbonate. Baumhauer operated upon solutions of the chlorides of the metals, containing 1 part nickel or cobalt to 10 of iron. By process 1, he obtained 73 per cent. of the nickel, and 52 per cent. of the cobalt. By 2, 75 per cent. nickel, and 69 per cent. cobalt. By 3, 82 per cent. nickel, 91 per cent. cobalt. By 4—Rammelsberg's process with barytic carbonate in the cold—92 per cent. nickel, 85 per cent. cobalt; but in the hot, only 25 per cent. nickel, and 44 per cent. cobalt. He says, therefore, that even taking the maximum of these metals in any analysis, as Rammelsberg recommends, the results are still far from being accurate. Other methods he tried with similar success. Thom-

son's method by precipitation of the iron and aluminium with sodic phosphate gave nickel in the precipitate. Again, by heating the mixed dried oxide in a platinum boat in hydrochloric acid, a sublimate containing nickel was obtained. Werther's method of boiling the precipitate oxide of iron with dilute acetic acid failed either by the whole of the nickel not being removed, or by the whole of the iron not precipitating even with protracted boiling. V. Baumhauer was therefore led to inquire why it was that the oxides of nickel and cobalt, which are readily soluble in excess of ammonia, do not dissolve in presence of ferric hydrate. He is of opinion that it is not due to any combination between the proto- and sesquioxide, but that it is simply physical. The bulky gelatinous hydrate encloses part of the salts: on boiling, the precipitate may contract, but it still retains them, very much as white of egg retains salts and alumina colouring matters. Washing, even with solvents, does not remove these mechanically retained substances. He accordingly has tried a process which is a modification of that of Berzelius, and of which the following is an outline. The acid solution with some ammonic chloride is precipitated with ammonia, the precipitate allowed to settle, the fluid poured off through a filter, and the precipitate washed with ammonia water; it is then filtered and washed, the first fluid being kept separate. The precipitate is then carefully removed from the filter (without damaging the latter, as it has to serve for the whole operation) into the beaker, the filter washed with warm dilute hydrochloric acid which is received in the beaker, and dissolves the precipitate. After solution, ammonia is poured over the filter to remove traces of acid; this is also received in the beaker, and then strong ammonia in excess is added to throw down the iron: the whole is left for some hours, then diluted with water, and passed through the old filter. This operation is repeated, so long as the filtrate gives a brown colour with ammonic sulphide, due to traces of nickel or cobalt. The bulky filtrates, containing quantities of ammonia and ammonic chloride, are evaporated to dryness on the water bath and ignited in a porcelain dish. A platinum dish is inadmissible, because the nickel, which undergoes reduction during the volatilisation of the sal ammoniac, alloys with the platinum. The fluid from the first precipitate is put into the same dish, evaporated, ignited in the air, and then in a current of hydrogen, to reduce the chlorides of nickel and cobalt. On treatment with water and dilute hydrochloric acid these two metals remain, while manganese, magnesium, calcium, and the alkalies dissolve. The ammonia precipitate is dried, ignited, and weighed; and thus, if the alumina is wanted, it can be found in a silver crucible with caustic soda. The author admits that the process is not at all elegant, but by it he obtained of the iron present, 99·7 to 100·5 per cent.; of the nickel, 99·4, 99·7, 99 per cent.; of the cobalt, 99·8, 100·2, 99 per cent.; numbers which are better than those by any of the other processes.

On the Olivin from the Pallas Meteoric Iron.—In the analysis of the meteoric stones called chondrites, all that is soluble in hydrochloric acid, after the nickeliferous iron has been removed by the magnet, is called olivin, which is a silicate of magnesium and iron. There are always found traces, however, of alumina, lime, magnesia, oxide of nickel and alkalies, which, except the nickel that is supposed to have escaped the magnet, are regarded as derived from a silicate or silicates insoluble in hydrochloric acid, but partially decomposed by it when strong and hot. The circumstance of nickel being found in terrestrial olivin induced v. Baumhauer (ibid. p. 362) to look for it in cosmical, and with this aim he examined an East Indian meteoric stone. To separate the nickeliferous iron from the silicates he employed a solution of sublimate, according to Rammelsberg's method. The only precaution is to convert any iron and nickel which may have oxidised back to the metallic state, by heating the residue from the digestion in sublimate in a current of hydrogen, digesting again, and repeating this process if necessary. Two grammes of the meteor were first cleared by the magnet and the residue treated five times with sublimate solution, the residue evolved sulphuretted hydrogen with hydrochloric acid. The silica having been filtered off and the iron oxidized, the solution was treated thrice as above described to separate the iron and nickel. The iron precipitated was afterwards fused with soda for alumina. The fused mass had a green colour, from a trace of manganese. The filtrate evaporated and ignited, gave a residue consisting mainly of magnesia. This was evaporated to dryness with sulphuric acid, redissolved, filtered from a trace of calcic sulphate, and then mixed with some ammonic sulphide which produced a brown colour. After standing in a warm place for 24 hours in a close vessel, a slight black precipitate was obtained which before the blow-pipe gave the reactions for nickel, and when dissolved in aqua regia and treated with ammonia gave a blue solution. Nickel was therefore present, but whether as a constituent of the mineral or from a trace of the metallic matrix could not be determined. Having thus obtained indications of nickel, v. Baumhauer thought it worth while to ascertain anew, whether the pure cosmic olivin in the Pallas meteor, surrounded as it is by iron containing some 11 per cent. of nickel, does not contain this element. Neither Berzelius nor Stromeyer could find nickel in this olivin, which caused them some surprise, as Stromeyer had found it in other olivins, and Howard found 1 per cent. in the Pallas iron. V. Baumhauer extracted from a specimen a little of the olivin grains. As these were contaminated slightly on the outside with oxide of iron and nickel, they were crushed in an agate mortar, and the purest pieces carefully picked out and rubbed fine. He thus got a pure yellow powder which lost no weight by ignition in a current of hydrogen. The substance was dissolved in hydrochloric acid, and the silica separated. The silica dissolved in fluoride of ammonia, with the exception of a very minute residue, the nature of which could not be determined. From the hydrochloric acid solution the iron as before was precipitated and redissolved three times, dried, weighed and fused with soda. A green colour showed that it contained a little manganese. The filtrate from the iron was, as before, evaporated and ignited. The magnesia residue, converted into sulphate, dissolved, heated with ammonia and then with ammonic sulphide. A brown colour appeared, and, after standing covered in a warm place for a very long time, a quite unweighable precipitate was got, which gave the reactions of nickel before the blowpipe. A comparison of the analyses of this substance leaves no doubt about the formula of the Pallas olivin, it is represented by the formula $FeMg_7Si_4O_{16}$ or $\dot{F}e^2\dddot{Si} + 7\,\dot{M}g^2\dddot{Si}$. The author declines to say whether the trace of nickel he found exists as a constituent of the olivin, or mechanically enclosed in it, or adhering to it externally.

Neglect of Analytical Chemistry in Recent Times.—Dr. Fresenius has published the following request from analytical to modern chemistry (*Zeitschrift für analytische Chemie*, x. p. 202, 1871):—"The aim of analytical chemistry, it is well known, is to investigate the differences of bodies, and to ascertain their behaviour with other bodies, so as to have a foundation for methods of distinguishing them from one another, of recognising them in presence of one another, of separating them from one another, and of determining their amount. The older chemistry and its representatives always gave analytical chemistry their most cordial support; because it was the universal custom for every one who discovered an unknown body carefully to study its properties, its distinguishing features, and its reactions, and scrupulously to make them public. In this way analytical chemistry had the ground for its operations levelled and prepared. I remember, just to give one example, how exact was Graham's account of the distinguishing reactions of the mono-, bi- and tri-basic phosphoric acids. Modern chemistry and chemists, alas! no longer display this friendly feeling towards analytical chemistry, so that those who cultivate it find themselves in consequence in a very difficult position. The number of new compounds in text-books based upon modern views is very great. I need only mention pyro- and meta-boric acid, dichromic acid, dimolybdenic acid, pyrosulphuric acid, dihydroxy- and perhydroxy-titanic acids, the many new silicic acids, &c. &c. (*Academy*, ii. p. 376, col. *b*). The expectation was not quite unreasonable that the discoverers of these new compounds would have discussed these enrichments of the science first of all in the journals, and have demonstrated their characters and reactions; but this has not been done, and even in the text-books no such accounts are to be found, for the obvious reason that their limited space does not admit of them. If the characters by which these newly discovered bodies are distinguished from the earlier known bodies which approach them closely were obvious, the cultivators of analytical chemistry might be required to make them out for themselves—but this is not the case. And in fact if any one were to ask analytical chemistry how to distinguish pyrosulphuric acid, contained in anhydrous acid sulphate of potash (potassic pyrosulphate), from sulphuric acid contained in the hydrated acid sulphate of potash (acid potassic sulphate), or how to separate chromic acid, contained in neutral chromate of potash (potassic chromate), from dichromic acid in acid chromate of potash (potassic dichromate), she would be completely at fault. It is obvious that there is something abnormal here, and I hope I shall be thought justified in requesting the discoverers of the multitude of new compounds to be found in recent text-books of chemistry to supply the omission indicated. Possibly a solution will also be thereby given to the curious problem, how it is that such compounds as those above mentioned could be discovered only by the advocates of modern chemistry."

Geology.

Volcanoes.—The *Geologist* for August commences with a long paper on "Volcanoes," by Mr. Henry Woodward, F.G.S. Beginning with the mighty forces, Upheaval and Denudation, represented by the two elements of Fire and Water, which are incessantly remodelling the surface configuration of this fair planet, and apparently many another one, the author points out how intimately they are dependent on one another for the most potent results that they achieve, and how it is that the water, losing its way down through the chinks and crannies of the earth's crust, arrives at that molten interior we know, by the laws of deduction and geometrical progression, must exist some thirty miles below the surface, and where it is seized upon by the fire and compelled, in the form of steam, to lift earth-weights amounting to as much or more than the drop of water ever did above ground in the service of denudation. The distributions of the numerous active and extinct

volcanoes through every portion of the globe, with the modifications of the form of the craters, and the principal products of volcanic action and the method by which these are liberated, next follow. Interesting detailed accounts of the phenomena presented by the leading active volcanoes occupy the greater portion of the paper, to which are appended descriptions of the principal hot springs, the intimate connection subsisting between them and the volcanoes being clearly demonstrated. An article on "The Shell-growth of Fossil Oysters," by Mr. J. W. Judd, and another on "The Carboniferous Deposits of Shropshire," by Mr. Daniel Jones, F.G.S., are two other valuable contributions to this same number of the *Geologist*.

Constitution of Coal.—Principal Dawson's communication "On Spore-cases in Coals" to No. 4, vol. i., of the *American Journal of Science* is reprinted in the *Monthly Microscopical Journal* for this month. The author here opposes the views lately gaining ground that these minute bodies or "sporangites" form an essential part of coal: he regards their occurrence rather as accidental, and considers they are more likely to have been abundant in shales and cannel coals, deposited in ponds or in shallow waters in the vicinity of Lycopodiaceous forests, than in the swampy or peaty deposits which constitute the ordinary coals. These latter, again, are for the most part made up of accumulations of Sigillariæ, while the spore-cases appear entirely to be the produce of Lepidodendron and its allies.

New Fossils.—The following accessions to palæo-zoology and botany are recorded in the *Quarterly Journal of the Geological Society*, issued for August:—A large Reptilian skull, from Brooke, Isle of Wight, probably Dinosaurian, and temporarily referred to the genus *Iguanodon* by Mr. J. W. Hulke; a new species of *Eurypterus*, from Perton, near Stoke Edith, Herefordshire, described and named by Mr. Henry Woodward as *E. Brodiei;* various new fossil tree-ferns of the genera *Rhachiopteris* and *Caulopteris*, from the Devonian formations of North America, by Prof. Dawson; and a new Chimæroid Fish, from the Lias of Lyme Regis, by Sir Philip Egerton, M.P., F.R.S., who introduced it to the Geological Society under the name of *Ischyodus orthorhinus*. The resemblance of this fish to the existing *Callorhynchus antarcticus* is very striking.—The *Comptes rendus* for July 10 announces the discovery, by M. H.-E. Sauvage, of a new Reptile, belonging to the Mosasaurian type, in the upper Jurassic deposits of Boulogne-sur-Mer. He refers it to Professor Owen's cretaceous genus *Leiodon*, of which *L. anceps* has hitherto constituted the single species. *L. primævum*, the new species created by M. Sauvage, demonstrates the genus to be a more ancient one than *Geosaurus*, and to have been contemporaneous with *Stenosaurus*, *Pliosaurus*, *Megalosaurus*, and the *Pterodactyles*.

Fossil Bats.—At the meeting of the British Association, Professor Van Beneden, of Louvain, read a paper on "The Bats of the Mammoth Period compared with existing species." The learned professor, after devoting much study to the remains of species collected in the caves of Belgium, finds they do not differ in any way from those now existing in the same country.

Difficulties of the Hypothesis of an Amazonian Glacier.—Professor James Orton, in a paper extracted from the *Annals of the American Academy of Sciences*, vol. xix. p. 185, severely criticizes Agassiz's theory of an Amazonian glacier. He announces the discovery of extensive beds of tertiary fresh-water shells in beautiful preservation at several points on the Upper Amazon, in the very deposits considered to be the mud produced by the grinding power of the glacier. He shows that all critical tests of glacial action are absent; and he exhibits in a striking manner the overwhelming difficulties in the way of conceiving the existence of such a glacier. The *mer de glace* has a slope of about 14°; the Amazon valley for 1600 miles has a slope of only 0° 8′ 5″, or about 2½ in. in a mile. Now, even if we make the extreme supposition that a glacier could move along this almost perfect level as fast as the *mer de glace* on a slope more than a hundred times as great, it would yet take 20,000 years for the ice to pass from the foot of the Andes to the Atlantic coast. But in order for the ice not to melt during these 20,000 years, on the equator and almost at the sea level, the mean temperature of the atmosphere must have been at or below the freezing-point! What, then, must have been the temperature of the extra-tropical parts of the earth? and how did the tropical fauna and flora manage to exist at all during this glacial epoch? The proofs of continuity of the forms of life from the Miocene through the Pliocene and post-Pliocene to the modern epoch are so complete, that the supposition of so gigantic a revolution in the climate of the globe as an Amazon glacier implies, requires an overwhelming mass of facts to support it; and it must ever be a matter of surprise that a man of Professor Agassiz's reputation and ability should have put it forth with so little consideration of its consequences, and resting on such a scanty basis of facts that it has not gained a single scientific adherent.

Zoology.

New British Zoophytes.—The *Annals and Magazine of Natural History* for August contains a supplement to the "Catalogue of Zoophytes of South Devon and Cornwall," published by the Rev. Thomas Hincks in the pages of the same journal for 1861–62. As many as 241 species, including Hydroid Zoophytes and Polyzoa, were then recorded, and the same author now adds 24 species to that list, several of them being new to science. Among the Hydroida, an interesting form is made the type of a new genus under the name of *Gymnocoryne;* it belongs to the family of the Corynidæ, the chief characters distinguishing it from the other genera of the same group being the absence of a distinct investing polypary, and the disposition of the uppermost tentacles in a complete circle. *G. coronata*, the single and typical species, is of very minute size, not exceeding one-sixth of an inch in height; it was dredged in Salcombe Bay, attached to a deserted bivalve shell. A new *Campanularia*, *C. calceolifera*, is also described from the same locality. To many other species hitherto only known in part, Mr. Hincks now supplies the important characters of the reproductive capsules.

New Sponge.—To the same magazine Mr. H. J. Carter contributes the description of a new sponge belonging to the genus *Tethya*. The remarkable peculiarity of this form consists in its hemispherical head or body being supported on an infundibular expansion of spiculæ, which serves to support it in an upright position on the sandy bottom of the sea which it inhabits. *Tethya cassula* is the title conferred on the unique specimen furnishing this description, by Mr. Carter; it was brought, in company with numerous other new and interesting sponge forms, from Port Elizabeth, Cape of Good Hope. Mr. Carter avails himself of this opportunity of suppressing Prof. Oscar Schmidt's generic name of *Tetilla*, proposed by him in substitution for *Tethya* when applied to the species *T. cranium* and *Polyura;* at the same time he adopts Nardo's generic title of *Donatia* for all those forms of which *T. lyncurium* constitutes the type.

Intelligence.

The first general meeting of the German society for the study of anthropology, ethnology, and the prehistoric condition of man, will be held at Schwerin (Mecklenburg) from the 22nd to the 24th of next September.

New Publications.

Darwin, Charles. Die Abstammung d. Menschen u. die geschichtliche Zuchtwahl. Aus dem Engl. übers. v. J. Vict. Carus. In 2 Bdn. 2. Bd. 1. u. 2. Abdr. Stuttgart: E. Schweizerbart.

Dupont, E. L'Homme pendant les âges de la pierre dans les environs de Dinant-sur-Meuse. Bruxelles: Mucquardt.

Röntgen, Rob. Die Grundlehren der mechanischen Wärmetheorie etc. Für Ingenieure, Maschinenbauer u. Industrielle. Mit 49 eingedr. Holzschn. Jena: Costenoble.

Städeler, weil. Prof. Dr. G. Leitfaden f. die qualitative chemische Analyse anorganischer Körper. 5. Aufl. durchgeseh. u. ergänzt v. Prof. Dr. Herm. Kolbe. Zürich: Orell, Füssli, and Co.

Zeitschrift der Gesellschaft für Erdkunde zu Berlin. Hrsg. von Pr. Dr. Koner. Vol. VI. Part III. Berlin: Reimer.

History and Geography.

A Life of Anthony Ashley Cooper, First Earl of Shaftesbury. 1621–1683. By W. D. Christie. 2 vols. Macmillan.

In 1859 Mr. Christie published a volume of papers illustrating Shaftesbury's life to the Restoration, then intending to make a second similar volume with the papers collected for the remaining and more important portion of his life. It has since seemed better to the author to use these materials in forming a connected biography of Shaftesbury, the most important of the original papers being, however, inserted in appendices. Dryden's undying satire on the "Ahitophel" of Charles II.'s time has been a powerful cause of the earl's condemnation by later ages—a satire implicitly accepted by Hume, and only changed in expression by Macaulay. Shaftesbury himself formed in old age the design of placing his own story before posterity, and vindicating his fame from the calumnies of contemporary faction; but the fragment we possess of this autobiography terminates at the moment of his entrance into public life, before attaining the age of twenty-one. His distinguished grandson, the author

of *Characteristics*, cherished the hope that his illustrious friend and tutor Locke, the intimate friend of Shaftesbury in his later life, would write a biography which would do him justice. But Locke died, leaving only a small collection of materials. These, together with the family papers, were used by Martyn in compiling a life, which was corrected and printed by Kippis (the editor of the *Biographia Britannica*), and re-edited in 1836 by Mr. G. Wingrove Cooke, the author of the *History of Party*. But this work is too imperfect both in conception and execution to be of any permanent value, and Mr. Christie has endeavoured with the fuller historical materials now at our disposal to construct a fairer and more trustworthy account of the great earl's career. As the whole of this period has been the subject of fierce debate, and as the great modern parties then took their rise, the work naturally contains a series of discussions on Shaftesbury's conduct at each of the great crises of the history. This must necessarily be the case in considering the conduct of any of the statesmen of that age who had to steer the vessel of the state while the wind was rapidly veering to all points of the compass. Of Shaftesbury's early life, the autobiography enables our author to give a good account, which is thus summarised:—"An orphan at the age of nine; at war, while a boy, with the voracity and injustice of relatives; forced, as he says of himself, to learn the world faster than his book, and called early by business to the thoughts and cares of manhood; Sir Anthony Ashley Cooper grew up to manhood under circumstances which may serve to account for something harsh and jarring in the course and character of the Earl of Shaftesbury."

When the Civil War broke out, he at first took side with the king, but soon went over to the parliament, perhaps diapproving of the treaty made by Ormond for the king with the Irish rebels, and the favour shown to Roman Catholics. Several other important men went over at the same time, and there does not seem to be any reasonable suspicion of their motives. Mr. Christie's defence of all this early part of his life is well supported. Cooper acted with the Presbyterian party, and like many another good citizen conformed to and acted under the various governments that held the sovereign power. He was one of the commission for the reform of the laws, and some of its measures he afterwards procured to be passed by the Barebones Parliament. In the latter part of Cromwell's career, however, Cooper took side with the Presbyterian party against him, and acted with Monk in bringing about the return of Charles II., though he advocated the plan of making conditions, while Monk succeeded in bringing about an unconditional restoration. He has been blamed for sitting in judgment on the Regicides, and especially by Lucy Hutchinson, whose husband was one of those who were tried. But it had been expressly stipulated that there should be expiation for the execution of Charles I., and Cooper, like Holles or Grimstone and the Presbyterian chiefs generally, had stood aloof from the whole proceedings of the Regicides. These leaders had endeavoured, in the first instance, to prevent all exceptions for life from Charles II.'s Indemnity, and afterwards, when they were unsuccessful in this, to reduce the number of such exceptions as much as possible. The whole proceeding was a compromise, and the Convention Parliament had to settle the terms of it. Cooper, now Lord Ashley, opposed the Corporation, Uniformity, and Militia Acts, and other violent measures of the new parliament; but the tide ran too strong, and even the king and Clarendon could effect little or nothing in favour of the Presbyterians, strong as the Declaration of Breda had been as to them. Lord Ashley spoke also in favour of the king's dispensing power, but later, when he found that the king and the Duke of York really intended to use it in support of the Roman Catholics, he opposed it. Here, again, his conduct seems consistent, or at least true to his main object. Throughout, he was free from any suspicion of corruption—in an age when French bribes were freely taken on all sides; and his personal honour, as, for instance, in his conduct when Denzil Holles was accused (see the use made of this in *Gent. Mag.* 1731, p. 290), was freely acknowledged. The charge of profligacy seems to depend partly on a jest of the earl's made to Charles II., and partly to have been supported by the fact of bodily infirmities which we know to have proceeded from another cause, viz. the injuries sustained by a fall from his carriage. Even Dryden praised him as a judge. But we now come to the two main charges against him, which Macaulay summarises thus:—"It is certain that he was a principal member of the most profligate administration ever known, and that he was afterwards a principal member of the most profligate opposition ever known." But it is certain that Shaftesbury was individually innocent of the profligate stoppage of the Exchequer, and of the profligate secret engagements with Louis XIV. of what is indiscriminately called the Cabal Ministry. A ministry did not then consist of a body of men holding the same political views, and Charles' negotiations were carried on without the knowledge of almost all his ministers. We know now that Charles II. had early concluded a treaty with the French king, in which he had engaged to restore the Roman Catholic religion, and that nothing but the danger of the attempt made him postpone it. This was not known in England at the time, and Shaftesbury's sudden change into opposition arose from his discovering Charles' Roman Catholic designs and engagements. Why was it wrong to oppose a king who sought to betray and enslave the nation? At this last point, however, we fear that we must part company with Mr. Christie. His defence of Shaftesbury's acts as a member of the Cabal is, to a great extent, though not entirely, successful; but the proceedings about the Popish Plot and the Exclusion Bill are not so defensible. Lord Russell believed in Titus Oates' statements, but Shaftesbury was greatly his superior in ability, and we cannot think he believed the accusation against the queen of being privy to a plot for the assassination of the king; yet he protested, with two other peers, against the refusal of the Upper House to entertain the charge. The exclusion of the Duke of York was justifiable in itself—in fact, it was only an anticipation of what it was found necessary to do at the Revolution; yet Shaftesbury's violent conduct as to it seems to show that he had lost the statesmanlike power for which he had been so conspicuous. Halifax seems now to take the place which would have been once his. The nation was not prepared for the measure; was it the part of a wise statesman to force it on the nation? In supporting the worthless Monmouth, he necessarily alienated William of Orange; was this the interest of Protestant England? Mr. Christie has perhaps accounted for Shaftesbury's conduct at this crisis, but he has not succeeded in justifying it. His pleading is successful against Dryden; after all, if Dryden called Shaftesbury Ahitophel, he called Charles II. David, and spoke severely of those who dared to say that the king was really a Jebusite (*i.e.* a Roman Catholic), though he was probably fully aware of the real state of the case. Mr. Christie has also pointed out a not inconsiderable number of errors in Hallam and Macaulay (Lord Campbell's dicta on the matter are, as usual, based on no evidence); but he becomes here too much of the advocate of a cause instead of the impartial biographer. He has perhaps not made full use of the pamphlet and sermon literature of the time, as

illustrating the virulence of party feeling against the earl. For instance, a profane discourse was published on Shaftesbury's death, entitled "A Funeral Sermon preached on the occasion of the Right Honourable the Earl of Sh——'s Interment in Dorsetshire, by W. B., 1683." What could be done for his hero, he has done, and the work, as a whole, is a most valuable addition to our history of that stormy period, for which, as well as for his edition of Dryden, English students owe him their heartiest thanks. Charles W. Boase.

The Book of Ser Marco Polo the Venetian, concerning the Kingdoms and Marvels of the East. Newly translated and edited, with Notes, by Colonel Henry Yule, C.B., late of R. E. Bengal, Hon. Fell. of the G. S. of Italy. Two Volumes, with Maps and other Illustrations. London: John Murray.

After giving an account of M. Pauthier's edition of the travels of Marco Polo in the *Journal asiatique* (No. 6, 1866) I expressed a belief that future writers would content themselves with supplying a few detached explanations of points which had escaped the discernment of the learned French commentator, without being obliged to undertake the complete annotation of the work afresh.

The present publication has falsified my prediction, and enriched English literature with a new work upon Asia, which is equally remarkable for its attractive style and for the solidity of the researches on which it is based.

A complete collection of all that has been written about the travels of the noble Venetian would make a respectable library, and at first sight it might seem strange that so many commentators have not exhausted all that there is to be said about a text of comparatively limited extent. But this will cease to be surprising if we consider that it was not till 1818 that the example was first set, by Marsden, of applying serious and scientific treatment to the mass of curious and veracious facts which Marco Polo had collected during twenty-seven years of his active life, and which for a long time had been looked upon as so much amusing fiction. Thus the number of his interpreters increased in direct proportion to the time which separated them from him, and to the consequent difficulty of entering into his ideas and estimating the relative importance which he attached to them. This remark applies both to the general facts recorded in Marco Polo's work and also especially to the difficulty of restoring the correct names of men and places mentioned by the traveller; since every nation and every age have methods, so to speak, of their own for reproducing the sounds of foreign languages, and the necessity for a truer and uniform system is not felt equally by every people at the different stages of its civilisation. It is true that our wider knowledge of the countries visited by Marco Polo helps to diminish the difficulty of recognising the native names under the disguise which the Venetian ears made them assume; but the further we are from remembering the peculiarities of Italian and French pronunciation in his time, the greater, of course, is the difficulty of correcting them.

The material execution of this new edition of Marco Polo leaves little to be desired. The type of the text is admirable, and the notes are very legible; the two volumes contain a number of instructive plates derived from the most authentic sources, with accurate and comprehensive indices and tables of contents. The maps which accompany the work might have been executed with rather more elegance; they are roughly engraved, and the outline of the mountains, in particular, is too strongly marked for the scale of the small maps, and produces an unfavourable effect. I think, too, it would have been more instructive if the work had been accompanied by a general map of the countries described by Marco Polo, instead of cutting up his vast itinerary into fractions each one of which can only face a single page, so that the reader has to look either backwards or forwards to find the cartographical expression of what he is reading.

As to the general literary effect of the work, I can only admire the skill with which the accomplished editor has acquitted himself of his difficult task, and though in the preface he modestly takes refuge behind a list of the learned friends who have come to his assistance, he appears to have made the greater part of the necessary researches himself; besides which, as Arago has observed, a question well put is half answered, and it is often half the matter to know what questions to ask. More than any of his predecessors, Colonel Yule has had the happy idea of going to Italy for his inspiration, in order to bring the great Venetian of the fourteenth century before us in a life-like form. Accordingly the most successful portion of the work is without doubt the "Introductory Notices regarding Marco Polo and his Book." He not only pays more attention than former biographers to the family of Polo and to the origin of those famous merchants, but he stands nearly alone in giving us curious details about the old age of the great traveller, conducts us to his death-bed, and reproduces in facsimile his "last will and testament," the text of which had been published more than once before. This life is written with much taste, and we especially recommend it to our readers.

The researches of MM. Paulin Paris and Pauthier have made it certain that Marco Polo's work was written in the first instance in French. Colonel Yule has followed up this idea very happily by resting his proof of the antiquity of the text published by the Geographical Society of Paris on the presence in it of all the various forms taken by proper names in the different later editions. The 12th chapter of the introduction, "Contemporary Recognition of Polo and his Book," is very interesting, and shows that the writer is both well acquainted with the literature of Western Europe during the middle ages, and that he has spared no labour in making this part of his subject as fresh as it is instructive. In the following chapter, which treats of Polo's influence on the progress of geography, one could wish to see some mention of the Byzantine, Arab, Persian, and Chinese travellers before and immediately after Marco Polo. The omission cannot be excused by the fact that their works have not been long accessible to Western scholars; for in an exhaustive work like that of Colonel Yule, it is not enough to determine Polo's influence on the geographical knowledge of his contemporaries in Western Europe: his place has to be fixed amongst those whom Humboldt called "Artisans of the Kosmos," the men, that is, whose discoveries have contributed to enlarge our acquaintance with the earth and the universe. As to the principles followed by the editor in the choice of a text, or, as he styles it himself, "eclectic formation of the English text of this translation," I must confess that they appear to me rather hazardous. It is so natural to suppose that every translation must be a translation of some one text recognised as the work of the author translated, that one is almost at a loss to know what an "eclectic text" can be. All Colonel Yule's predecessors have followed the natural and obvious course: thus Marsden translated Ramusio's text; the Geographical Society of Paris edited and annotated a portion of the text of Rustician of Pisa; M. Pauthier has commentated on the manuscript offered by Marco Polo himself to the Count of Cepoy; Neumann took the old German version for the basis of his researches, &c. &c.; and though all these writers, like the Geographical Society, have referred in their notes to the various readings contained in other versions, there was

always one to which they adhered by preference, and to which the reader could turn with confidence in order to check or estimate the value of their work. Colonel Yule has thought fit to abandon this method. He begins by translating M. Pauthier's text, and then not only alters the division of that text into chapters (which of itself adds enormously to the difficulty of comparing it with others) but he completes or abridges it at will, as he says, "with the exercise of my own judgment on the various readings which that editor (M. Pauthier) lays before us"—and that without imitating his predecessors in accurately quoting the variants, as we shall presently see.

Thus in vol. i. ch. xx. p. 116, we read: "You then enter another desert, which extends for four days; it is very much like the former except that you do see some wild asses. And at the termination of these four days of desert you find another city which is called Cobinan." In M. Pauthier's text this passage is to be found in ch. xxxvi. t. i. p. 92, and stands as follows: "Après ces trois journées de désert si treuve l'en un autre désert qui dure quatre journées, et ainsi est de la manière de l'autre, sans ce qu'on y trouve des oes sauvaiges. Et au chief de ces autres quatres jours de désert fenist le regne de Creman; et treuve l'en une autre cité qui a nom Cabonant." Here the wild geese of M. Pauthier's text are turned into wild asses, of which we hear nothing in any of the variants, and the important remark that "after four days' march in the desert the kingdom of Kirman ends" is omitted altogether, for no apparent reason, and even to the detriment of Colonel Yule's theory of the name Cobinan, in which, following Mr. Abbott, he sees the Kouh Benan of modern times. I say to the detriment, for I was at one time inclined to identify Cobinan with the present Kain Bendanat, and it is exactly the clause omitted by Colonel Yule, to which I had not paid sufficient attention, which led me to admit the accuracy of his explanation; for if Cabanant or Cabanan were the same as Kain Bandanat, its distance from Kirman is so great that the phrase omitted would be superfluous; whereas the district referred to touches Kirman, to which, down to the present day, it is joined or not in accordance with the convenience of the Persian administration.

In § 90 Colonel Yule writes: "As regards the reading of proper names and foreign words, in which there is so much variation in the different MSS. and editions, I have done my best to select what seemed to be the true reading from the G. T. and Pauthier's three MSS., only in some rare instances transgressing this limit." Then, after giving some examples of the manner in which this method is applied, he continues: "In two or three cases I have admitted a reading which I cannot show *literatim* in any authority, but because such a form appears to be the just resultant from the variety of readings which are presented, as one takes the mean of a number of observations in surveying, when no one can claim an absolute preference." The first part of this method might be admissible if there were a comparative table of the forms in which the different versions give the names of the places mentioned by Marco Polo; but this is wanting in Colonel Yule's edition, and the latter part of his method is entirely arbitrary. The arithmetical mean of the numerical results of certain observations is something clear and precise; it is the sum of the numbers observed divided by the number of the observations, but a "phonetic mean" is quite too impalpable. Thus if I take with equal care three observations of the azimuth of the same object and find the value of the angles to be 23° 31′ 00″, 23° 30′ 00″, and lastly 23° 30′ 24″, I have a right to take as the final result 23° 30′ 28″, and this is the mean of the three preceding values; but what is the mean between *Baldascian*, *Badascian*, *Badasciam*, *Badausiam*, and *Bolasian*, different forms of the name of the same province all found in Marco Polo? When we know that Badakshan is meant, the choice becomes easy, but without such knowledge it would be impossible or completely arbitrary. The license allowed by this method necessarily leads to some doubtful results, and as an instance we can quote Colonel Yule's explanation of the word Raobarles. We read in vol. i. ch. xviii. p. 91: "The plain whereof I speak is a very hot region, and the province that we now enter is called Reobarles." The notes to this chapter are occupied with an interesting discussion of "Adam's apple," the francolin, the Zebu, and the Karaunahs; the editor does not come back to Reobarles until the note to p. 107, where he says that it is Rudbar-i-lass, that is to say, Robber's River District, and he is confirmed in this hypothesis by the name Rúdkánah-i-Duzdi mentioned by Messrs. Abbott and Smith, and by a passage in a letter from Colonel Goldsmid, where the latter says: "There is no doubt that these Arab-Persian combinations constantly occur, and my own impression is that I have often heard, in my travels, the word *less* used for robber." Colonel Yule ought certainly to have mentioned that the three MSS. collated by M. Pauthier all have this name written *Beobarles*, as the French editor expressly states (t. i. p. 76, note 2), while in giving the preference exclusively to the form Reobarles, he has gone further than Marsden, and composed a mixed Persian and Arabic word which seems to me impossible, for the following reasons:—(1) Roudbar, a pure Persian word, is scarcely ever accompanied by a special designation, except in Mazanderan, or Ghilan, where the number of Roudbars close together makes it necessary to distinguish them to avoid confusion; such are Ressmé Roudbar, Zeitoun Roudbar, Kelledji Roudbar, &c. (2) Geographical names composed of Persian and Arabic words are by no means common. Out of 2035 names of places in Persia of which the description has been translated by M. Barbier de Meynard from the great geographical dictionary of Yakout, there are scarcely a dozen words of such a form as Deiri Kirdshir, Dinarabad, &c., and even here the Arabic part of the compound has been adopted into the Persian language, and always precedes the purely Iranian word. (3) The word *less* has not been adopted in Persia, as can be seen by referring to Richardson's dictionary, and no Persian would use it instead of the word *duzd*, "robber," so that unless Colonel Goldsmid's memory deceived him, he must have heard it somewhere on the confines of Arabistan, certainly not in Laristan. The word sometimes enters into the composition of purely Arab names of places, but always in the plural, as Kasseilloussous, near Kengover. As to the name *Roudkhaneh-i-duzdi*, even supposing it to have been correctly taken down by Messrs. Abbott and Smith, it would not mean *Robber's river*, but the river of robbery, or of a single robber. If therefore Colonel Yule rejects the form *Beobarles* and my explanation of it as *Biobanilar*, he ought to return to Marsden's explanation—one not absolutely inadmissible after all, especially if we remember that the name was probably pronounced as in French, without sounding the final *s*, as in Arles, Marles, Charles, &c.

We should not have dwelt so long on a few trifling imperfections but that Colonel Yule's admirable work leaves little room for criticism, while we wished to avoid the appearance of indiscriminate admiration. Nothing that we have said affects the general opinion expressed at the beginning of this notice, which we will end by wishing a large circulation to this edition of Marco Polo's Travels, so well suited to familiarise the public with the history and geography of the East.

N. de Khanikof.

Contents of the Journals.

Historische Zeitschrift (von Sybel), 1871, part iii.—A. v. Reumont gives a vivid account of the tyranny of Walter de Brienne at Florence; the only occasion on which free Florence suffered from that ever-recurring danger of the Italian republics. The discontent of the lower classes, and the way in which the military chief of the state obtained a *plebiscite* in his favour, and the changes he made in the administration, and the unanimous national uprising to get rid of his oppressive rule—all this reads like a reproduction of the politics of the Greek states as they are described by Aristotle. Walter became Constable of France, and fell fighting against the Black Prince at Poitiers.—Meyer von Knonau describes the "Bellum diplomaticum Lindaviense," how the nuns of Lindau on the Bodensee forged a charter of the Carolingian Emperor Louis II. to support their claims against the town of Lindau. The detection of the forgery forms a chapter in diplomatic science. The able German critic Conring really settled the question against the defence made by the Jesuits. —Voight gives a most interesting analysis of the legend of Frederic Barbarossa, the Kaiser who is at present entranced under a hill, but will one day awaken to restore Germany. In its earliest form the legend really relates to Frederick II., the last and greatest of the Hohenstaufen; and the Franciscans, who applied Joachim of Calabria's prophecies (partly based on the Sybilline oracles and the legends as to the return of Nero) to him, looked on him as a sort of Antichrist. The legend was only attached to Barbarossa at a late period, and in a favourable sense. And this is in one sense the true value of legend; it represents the living and changing tendency of popular views and feelings. The legend became a dream of German unity, and in so far a prophecy of the future. With the poetical form of the legend we may compare the ballad in Scott's *Minstrelsy*.—Besides an essay on the Vatican Council (the setting free of the Church by the fall of Jerusalem is made a type of the results to follow from the fall of Rome), there are a number of smaller reviews relating to the Reformation and the religious war in Germany.

Intelligence.

Central Africa.—Letters from Dr. Nachtigal (see *Academy*, No. 18, p. 140) received at Gotha in May, and published in the latest number of *Petermann's Mittheilungen*, give the intelligence that this traveller was still detained at Kuka, on the shores of Lake Chad, at the date of his latest communication in January of this year. The rains from the middle of July to near the end of September, and the mortality from fever consequent upon the inundations, were exceptionally severe in 1870, only equalled in the memory of the natives by those of the year during which Dr. Barth resided in the country, so that the people begin to imagine a mysterious connection between the visits of Christians and an excessive rainfall. Dr. Nachtigal had the intention of penetrating farther southward at the end of December 1870, or of accompanying a native expedition headed by the crown prince of Bornu; but his followers have been so reduced by fevers as to make any movement impossible; and rumours of war from several of the surrounding states have prevented any action on the part of the authorities until more exact news arrives. Meanwhile Dr. Nachtigal has occupied himself in making meteorological observations, in studying the chronic diseases of Kuka and its neighbourhood, and in obtaining information about the Budduma, the island pirates of the Chad; he has also collected very complete geographical, ethnological, and historical notes on the kingdom of Wadai, on the opposite side of the lake, a portion of which is now published.

New Publications.

Archiv f. österreichische Geschichte. Hrsg. v. der zur Pflege vaterländ. Geschichte aufgestellten Commission der kaiserl. Akademie der Wissenschaften. 46. Bd. 2. Hälfte. Wien: Gerold's Sohn in Comm.

Arneth, Alfr. Ritter v. Johann Christoph Bartenstein u. seine Zeit. [Aus "Archiv f. österreich. Geschichte."] Wien: Gerold's Sohn in Comm.

Hermann, Dr. Robespierre's Leben. I. Theil. Ein Beitrag zur Geschichte der ersten französischen Revolution. Programm des köln. Gymnasiums zu Berlin. 1871. Auch separat im Buchhandel.

Second Report of the Royal Commission on Historical Manuscripts. Printed for her Majesty's Stationery Office.

Siegel d. Mittelalters aus den Archiven der Stadt Lübeck. Hrsg. v. dem Verein f. Lübecker Geschichte u. Alterthumskunde. 9. Hft. Lübeck: v. Rohden in Comm. [Part II.: Siegel der Holstein-Schauenburger Grafen aus den Archiven der Stadt Lübeck. Gezeichnet u. erläut. v. C. J. Milde.]

Philology.

Catalogue of Syriac MSS. in the British Museum acquired since the year 1838. By W. Wright, LL.D., Assistant Keeper of the MSS. Part I. London: 1870.

The importance of this catalogue requires no lengthened explanation. Like that of the Rich collection of Syriac MSS. in 1838, it was delayed by a fire in the printing-office, and we congratulate the author that he has so soon succeeded in repairing the damage. The MSS. described in the first volume were mostly procured from the famous convent of St. Mary in the Nitrian desert; they go back as far as the fifth century B.C., and come down as late as the present century. Almost all editors of Syriac MSS., since Dr. Lee's edition of Eusebius' *Theophania* in 1842, have drawn from this unexhausted treasury, but we cannot help mentioning again one of the gems of the collection, No. 3, which presents the oldest dated MS. of any portion of the Bible (A.D. 464). We may also draw attention to Prof. Wright's description of those MSS. which contain the traditional reading of the Biblical text, which M. Martin has appropriately styled "a Syrian Masora." And we must not omit to notice No. 421 (dated A.D. 675), a hymnal, and very likely an autograph of the famous Jacob of Edessa, which at any rate may serve as a specimen of what a learned and critical Syriac writer could accomplish. As regards the undated MSS., which constitute a large proportion of the whole, we fully rely on the authority of the compiler. Nothing but a close examination of the peculiarities of the dated MSS. can enable any one to infer the age of the undated ones, and there is no living scholar who has had such ample opportunities for gaining palæographical knowledge, and has for so many years devoted himself so zealously to this study, as Prof. Wright.

The difficulties to be overcome in making this catalogue were no slight ones. For instance, the superscriptions and subscriptions of the MSS. were, by their position on the outside pages, peculiarly liable to injury, and besides were often so carelessly written that they are not to be read without spoiling the eyes, particularly in such a *chiaro oscuro* as prevails in the British Museum. Prof. Wright has deciphered and reproduced these notes, whether in Syriac, Arabic, Greek, Coptic, or (seldom) Turkish, with the minutest accuracy, even down to the "trials of the pen" of the Syrian scribes. He has also given an abridged translation of them, and suggestions as to their connection with the history of the respective MSS.

It is precisely the great variety of the contents of these subscriptions which gives this catalogue much of its value for Syriac scholars. Not unfrequently we meet with short notices of contemporary events. Thus on pp. 23, 53*b*, we find a reference to the frontier of the Roman and Persian empires under various Sassanian kings; on p. 65 there is a nearly contemporary notice of the capture of Damascus by the Arabs A.D. 634–5; on p. 113*b*, an account of the beginning of the first Crusade; on p. 153*b*, of a provincial council of Jacobites from Tagrit, held in the neighbourhood of Harran; and, on the whole, the many names of places connected with the Syriac Diaspora form an important contribution to our geographical knowledge. There are also not a few notices bearing on the history of the Syrian churches and clergy, of the schools, and of literature, and occasional inventories of the property of a monk or a church; rules for using a library; rewards given for copying MSS.; deeds and family documents (p. 113*b*). Very often, too, the writers give vent to their feelings, especially to their satisfaction at having finished their task of transcription or correction, or to their preternatural humility, proving at the

same time their insincerity by the affectation of their style (see p. 179). On the other hand, they are by no means sparing in their (Biblical) anathemas against those, for instance, who dare to make erasures in a borrowed book, though they themselves have no scruple in erasing the names of arch-heretics like Nestorius.—We need hardly mention that the extracts printed in this catalogue will enable the reader to supply many a *lacuna* in his Syriac lexicon; the author has evidently made his selections with a view to this object. But even Syriac grammar may be illustrated from the same source. Notice, for instance, the *scriptio plena* and *defectiva* on p. 82; comp. p. 70*a* (below). We may learn, too, from this passage that as early as A.D. 624 the consonant 'Ain was not distinguished in pronunciation from Alaf; comp. p. 149*b*. Notice also the Arabic transliteration of Syriac words on p. 134*a* (below). It must be added, in conclusion, that although Prof. Wright has explained a large number of doubtful passages, there yet remains many a problem to be unriddled. Thus we cannot help questioning whether the verb *parresh* in Syriac ever meant "to translate;" and even on p. 116 *mparshê* seems to us to mean rather "those who furnished the Psalter with such *divisions* and *selections* as refer to the liturgical service (*e.g.* the *hullâlê*)," a meaning which the author himself sufficiently illustrates in other places. (See p. 74*a*, and comp. the derivations of the same verb on pp. 123*b*, 126*b*, 127, 128, 131*b*, 133 note, 157*b*.) It would be interesting to enquire how the custom of the Syrian *purrâshâ* might have been derived from the Jewish Parashahs. On pp. 119*b* and 126*b* there are two Syriac inscriptions, which state that the Psalms were translated from the Palestinian tongue into Hebrew. How, it may be asked, can so strange an opinion have arisen?

We are glad to learn that the preface will appear in the second volume, which will be, if possible, even more interesting and important than the present. Furnished with comprehensive indices, the work will be an indispensable supplement to Assemani's *Bibliotheca*. The accuracy of the printing is remarkable; we have perused carefully almost three quarters of the first volume, but scarcely found a single misprint.

G. Hoffmann.

Contribution to a Knowledge of the Vedānta; an Academic Trial-Essay. [*Bijdrage tot de kennis van den Vedanta*; academisch proefschrift, van A. Bruining.] Leiden.

The attention which is being at present paid to the study of Indian antiquity, not only in Germany, where Sanskrit literature has from an early period in this century been cultivated with increasing ardour, but also in France, Russia, Italy, Denmark, and Holland, must be a source of gratification, not only to Orientalists, but also to the constantly increasing number of persons who take an interest in comparative philology and the religious history of mankind. Without referring to what is in progress in other countries besides Holland, I wish, before describing the work whose title stands at the head of this notice, to refer (1) to a paper on the caste system (*Indische Theorieën over de Standenverdeeling*), by Dr. H. Kern, Professor in the University of Leyden, in which he states his opinion, derived from data furnished both by a hymn of the Rigveda and by the Zend-avesta, that the division into classes existed before the separation of the Indo-Aryans from the Perso-Aryans; and (2) to an able article on the Vedas (*Vedenstudieën*), by Mr. Van Limburg Brouwer, of which the first portion appeared in the June number of *De Gids*, and which the author commences by remarking that whilst the Old Testament history formed till lately the exclusive introduction to our knowledge of the development of mankind, modern science has now, in the hymns of the Veda, placed a new Biblical history alongside of the former, which presents us with the picture, not of an alien people, but of the early condition of a nation belonging to the same Aryan stock of which we Europeans are ourselves a branch.

The work of Dr. Bruining belongs to the department of Indian philosophy—a subject which has not yet been much studied in Germany, where attention has been hitherto chiefly, and very properly, directed in the first instance to the hymns of the Rigveda, which are both linguistically the most interesting portion of Sanskrit literature, and also form the basis of the mythology and religion of India. The Vedānta doctrine, which forms the subject of Dr. Bruining's treatise, had been already discussed, along with that of the other Indian systems, in Mr. H. T. Colebrooke's well known and standard essays on the philosophy of the Hindus. The work under notice is an academic *proefschrift*, or trial-essay, written, according to the custom of the continental universities, to establish the writer's title to a degree, in this case that of Doctor of Divinity. The ground on which Dr. B. vindicates his selection for such a purpose of a subject unconnected either with Judaism or Christianity is significant. He observes that it is scarcely necessary to advert to the great change which theological science has of late years undergone, so that it has become a science which embraces all religions. This being assumed, the religion of India is, he goes on to say, in a high degree deserving of attention on various grounds.

Dr. Bruining first treats briefly, in an introduction, of the Vedas, of Indian tradition, of the various philosophical systems orthodox as well as heretical, refers to the objects proposed by the Mīmānsā and Vedānta, and to the different schools of the Vedāntists, and then supplies a short account of Śankara āchārya, the commentator on the Vedānta (who lived in the eighth century of our era), to whose conception of the system, as expounded in his commentary on the aphorisms of the Vedānta, his own dissertation confines itself. The author then discusses in three chapters, first, the formal aspect of the Vedānta, viz. its aim and character; scripture and tradition; reason;—secondly, its material aspect—Brahma; Brahma and the phenomenal world; result—the practical conception; Brahma and the individual soul; the soul in the state of bondage; its deliverance; general conceptions occurring in Śankara's discussions;—and, thirdly, the parallel phenomena in the Christian domain, under which head, after some preliminary remarks, he treats of Erigena and his predecessors.

I may here state a few heads of the Vedānta doctrine, as explained at length by Dr. Bruining. Brahma is, according to the Vedānta, not merely the supreme and infinite, but the one only Spirit, which embraces in it all intelligent spirits, and is also the soul, the proper essence, of the entire universe (p. 40). He (or It) is at once absolute Knowledge and absolute Being (p. 43). According to Dr. Bruining, the Vedānta gives contradictory accounts of Brahma's relation to the phenomenal world, inasmuch as it both (1) represents the latter as non-existent, a mere figment of ignorance—thereby denying any real distinction between Brahma and the world—while on the other hand (2) it declares Brahma to be the cause of the world, so that the latter is regarded as actually existing; nay, is expressly affirmed to have, like Brahma, real existence as its characteristic. In conformity with the latter view Śankara combats one of the Buddhist sects, which admits only the existence of subjective conceptions, and, in opposition thereto, he maintains the real existence of outward objects (p. 45). According to this view, the external world is a creation, but will again be absorbed in Brahma, out of whom (or which), as its material

cause, it has proceeded. The contradiction between these two views Dr. Bruining considers to be not entirely inexplicable, since it arises out of the fact that Śankara's doctrine is not, at least in the first instance, the product of thinking, but of a belief in the authority of Scripture, and consequently rests upon no main guiding principle followed out into all its consequences. On the other hand, the relation of so-called individual souls to Brahma is described (but only improperly) as being not, as in the case of the external world, that of effects to their cause, or that of productions to their constituent matter, but of parts to a whole. This formula, however, merely serves to give a conception of unity, but is not to be understood in the strict sense, as Brahma is one and undivided (p. 63). Still there is in some respects a great difference between Brahma and the individual soul. The latter stands to the former in the same relation as space contained within a jar stands to infinite space (p. 65). The soul is limited and bound by certain bodily conditions. This bondage arises from ignorance and illusion (p. 66). Regarding this ignorance, Śankara's conception is very indistinct, owing, again, to an internal contradiction. On the one hand, the soul is said to be free, to be no actor (or agent), but only a witness of action (pp. 68, 73). The idea that the soul is bound is an error, arising from ignorance of its true nature. And yet this erroneous belief exists, and produces real and lasting consequences. The soul thus becomes an essence belonging to the finite world, influenced by finite objects, experiencing pleasure and pain, and loses its natural qualities, omniscience, purity, freedom, &c., which, according to Śankara, are darkened, like fire hidden under ashes. In this state, the soul must be regarded as the acting subject. At the same time such activity is foreign to its proper nature (pp. 69, 73). Deliverance from this state is to be attained by the knowledge of soul as the only real existence, free from the phenomenal world, and one with Brahma. The means of attaining this condition are study of the Veda, and contemplation. As soon as it is attained, emancipation immediately follows. The knowledge of Brahma is not only the means of deliverance but also deliverance itself. Liberation from corporeal and earthly existence does not, however, follow until all the consequences or fruits of a man's former actions have been enjoyed, and so exhausted.

I regard this treatise, which contains an exposition of many principles of Śankara's doctrine which, I believe, have not hitherto been reproduced in any European language, as a valuable contribution to our knowledge of the subject of which it treats. It is to be hoped that Dr. Bruining will not be satisfied with this excellent beginning, but continue to prosecute his Indian studies, and sooner or later present the ripe fruits of them to the public. J. Muir.

Greek Lexicon of the Roman and Byzantine Periods (B.C. 146 to A.D. 1100). By E. A. Sophocles. Boston: Little, Brown, and Co., 1870.

Mr. E. A. Sophocles, of the University of Cambridge, Massachussets, U.S., is known to students of later and modern Greek both by a very useful grammar of his language and by his extensive dictionary of later Greek published by the Smithsonian Society some time ago. The present work appears to be, with the omission of the very latest words peculiar to the beginning of the Romaic period, an improved and augmented re-issue of the former work. In omitting the Romaic portion, Mr. Sophocles has, we believe, acted very wisely, as he must have come to the conclusion that his glossary was far from being complete in this part, and in fact could not be complete as long as the principal works of the early Romaic literature remain unprinted. For this department Ducange's *Glossarium ad scriptores mediae et infimae graecitatis* (Lugduni, 1688, 2 vols. fol.), and Koraes' contributions and collections in his Ἄτακτα will, for some time at least, remain the works to be consulted. But in the period to which the author has now confined himself, he has furnished a very important contribution to our knowledge of the "lees" of the Greek language—as he himself modestly designates it on his title-page. We do not mean to say that he has exhausted his subject, but knowing the immense difficulties of a work like the present, where the author was obliged to collect almost all his materials by independent labour without drawing much from his predecessors, we will not be so unjust as to blame him for it. After all, a good and complete dictionary must be the result of the labour of ages and of many scholars; but Mr. Sophocles may be congratulated on having produced a work which will be the basis of subsequent collections. We would especially recommend the present work to students of the Greek fathers and of theological literature, a branch which Mr. Sophocles appears to have searched with unflagging industry and unwearied patience.

The introduction prefixed to the work contains an interesting and accurate conspectus of the principal grammatical differences of later and medieval Greek from the old language, which will be found to supplement in many instances the collections of Mullach in his *Grammatik der griechischen Vulgärsprache.* In a few details we venture to differ from the author's views; *e.g.* p. 35*a*, 5, we would consider such plurals as γεννάδες, Πέρσες, Σκύθες, ἱππότες as mere misspellings instead of Πέρσαις, &c., the modern form of the nom. plur. of the first declension. The Aeolic acc. plur. in αις seems to have been adopted for the nom. also in the later language, just as in the singular the original acc. φλόγα, πλάκα, θυγατέρα, &c. furnished the modern nom. In some instances the re-casting of the work has produced some slight inaccuracies in as far as the quotations in the Introduction and the Lexicon itself do not agree. *E.g.* p. 30 we are told to see ἀράδα—a word which does not occur in the Lexicon, and which (by the way) we do not believe to be of German origin: cf. Latin *ordo.* In the same way, βέρεδος (βέρηδος, βέραιδος) has generally been considered an importation from the Latin *verēdus*, and though Mr. Sophocles doubts the derivation of *verēdus* from *vehere* and *raeda* (the genuine spelling, not *rheda:* see C. Wagener, *Lat. Orthogr.* p. 34), it is sufficiently supported by the authority of Festus: *veredos antiqui dixerunt, quod veherent rhedas;* and Mr. Sophocles' derivation from the German *Pferd* entirely reverses the actual state of things, as will at once appear from the old German forms *parafrid*, *parefret*, *parevrit*, *parfrit*, *pherfrit*, from which we finally get *pherit*, and *pfert* in Middle High German (comp. also the English *palfrey*, French *palefroi*): and all these forms are clearly referable to the late Latin word *paraverēdus.* Both *veredus* and *paraveredus* seem to have been in official use, like so many Latin words which passed into the popular language: cf. ῥήξ, δούξ and σπήτι (or better σπίτι, from ὁσπίτιον), and perhaps even φάρας and φαρίον (modern φαρί) may be corruptions of παραβέρηδος.

In his Introduction, p. 23, Mr. Sophocles might have omitted the paragraph on the Turkish period, as it does not concern his work, and is, moreover, disfigured by various errors: *e. g.* Martinus Crusius' *Turcograecia* is neither a historical work nor was it published in 1550; and according to Sathas, Νεοελλ. φιλ. p. 204, Emmanuel Γλυζώνιος (not Γλυζόνιος, as Sophocles has it) wrote in ancient Greek. Again, p. 52, the author informs his readers that in 1498 Emmanuel Georgilas *published* the first Greek poem in rhymed metre;

the present reviewer may be excused for saying that hitherto he was under the delusion that he himself had *published* the poem in question for the first time in his *Medieval Greek Texts*. But it should also be mentioned that isolated rhymed passages occur in an earlier work of the same Georgilas, his Θρῆνος τῆς Κωνσταντινουπόλεως.

We would finally draw special attention to the very complete chapter on *Accentual Rhythm*, pp. 48–52, in which we have met with much new material, showing that in this part as well as in all others the author has founded his work on independent study.

We venture to express a hope that Mr. Sophocles will lay us under a still greater obligation by elaborating an accurate and complete dictionary of the modern language, with copious references to the principal writers of the Greek literature of our time, which even now covers a vast field, and almost surpasses the power and range of one scholar. Mr. Sophocles would be especially fitted for a task of this kind, as he is a sound scholar, without the prepossessions and prejudices of a modern Greek λόγιος against the modern elements of his language which require historical elucidation and accurate investigation. A scholarly work of this kind would be a great boon to all philological students of modern Greek. W. Wagner.

Intelligence.

Translation of the Granth, the sacred book of the Sikhs.—We learn from the last Report of the Panjab University that the Committee, consisting of Babu Novin Chander, Rai Mul Singh, Dr. Leitner, and two Sikh Bhais, which had been formed some years ago for the purpose of translating the sacred books of the Sikhs, has been dissolved, and that Dr. Trumpp, with the assistance of Bhai Chanda Sing, will carry on the work at the expense of the Secretary of State for India. Dr. Leitner, the Registrar of the Panjab University, has placed all copies of the Granth at Dr. Trumpp's disposal, and has visited Amritsar in his company with the view of making enquiries for suitable Sikh coadjutors. The Report states that Professor Max Müller, at whose suggestion the Panjab University had undertaken the translation of the Granth, has now advised the University to take in hand the works of Kabir, the forerunner of Nanak.

Stamm's *Ulfilas oder die uns erhaltnen Denkmäler der gothischen Sprache*, neu bearbeitet von Dr. M. Heyne, Professor an der Universität Basel (Paderborn: F. Schöningh). This is the fifth edition since the first appearance of this work in 1851. The fourth appeared only two years ago, and the third in 1865. This rapid exhaustion shows how much the book is appreciated, and indeed the new editor of the last three editions has spared no labour to render the book more and more perfect. In the present edition the last remnants of Stamm's work have disappeared, and the whole authorship of the book devolves now practically on Prof. Heyne. The transformation has taken place gradually. First Prof. Heyne confined himself to introduce corrections of the text, necessitated by the researches of the indefatigable Swedish scholar Uppström, whose premature death has been justly lamented by all Germanists. The vocabulary, which was rather imperfect in the former editions, as giving no references, came next. The clear disposition and completion of references in its new shape gained the work the applause of all linguistic students, whilst it remained as before the standard book for lecturers on Gothic at the universities. Prof. Heyne gave, by his Gothic glossary, a new proof of his particular ability for that branch of philology. This he first manifested in the glossary to his edition of *Beowulf* (Paderborn, 1863; 2nd ed. 1868); next in the glossaries to his editions of the Old-Saxon poem *Héliand* (1866), and the *Kleinere altniederdeutsche Denkmäler* (1867); and now in the letter "H" of Grimm's *Deutsches Wörterbuch*, of which three parts have appeared, and the fourth has just left the press. Also, in the new edition of *Ulfilas*, the vocabulary has been improved and enlarged; but the chief improvement is that the grammar which Stamm had added, and which was useful only for the less advanced sort of undergraduates, will be replaced by a new one, suiting at once the wants of the pupils and the demands of scholars who wish to refer to it. The part containing the grammar and the last part of the vocabulary is not yet published; but we look for its appearance with a confidence which the author of the *Kurze Grammatik der altgermanischen Dialekte* (Paderborn, 1862; 2nd ed. 1870) certainly will not betray. The 2nd ed. of this later work, as we hear, is nearly exhausted already.

In vol. lxvii. of the *Sitzungsberichte der phil.-hist. Classe der Wiener Akademie*, Prof. A. Mussafia (whose industrious researches on almost every branch of Romance philology fill a good many pages of the former volumes) publishes two interesting studies, one written in Italian: *Sulla Visione di Tundalo*, the other in German: *Darstellung der romagnolischen Mundart*. The first paper traces the history of the Visio Tundali (or Tnugdali), which in its primitive shape has been recently edited by Oscar Schade (Halis Saxonum, 1869) from a MS. preserved at Giessen, unfortunately neither the oldest nor the best one. Mussafia quotes a great number of MSS. preserved at Vienna and Berlin, and gives a great many corrections of the printed text gathered from the Vienna MSS.; reviews the various translations of the *Visio* in the vulgar tongues, and insists specially on the two Italian versions, both of which have been printed recently. The second paper is an excellent disquisition on the dialect of the Romagna and more specially of the Faentine district. It reposes chiefly on the large and trustworthy dictionary of Morri, and will be as gratefully accepted by Romance scholars as the similar study on the Old Milanese dialect in a former volume of the *Sitzungsberichte*. Mussafia promises to continue his researches on Italian dialects, and to illustrate the other chief dialects of the so-called Aemilian class. We hope that a last year's rumour may soon be verified, to the effect that the long-promised French translation of Diez's *Grammatik der romanischen Sprachen* should be enriched by a supplementary volume, containing researches on the Italian, Provençal, and French languages, by Mussafia, P. Meyer, and G. Paris.

The programme of the Winter Lectures at the university of Greifswald is preceded by a series of emendations in Plautus by the pen of Professor W. Studemund. The learned writer proves by the evidence of the Ambrosian palimpsest that in the Casina the name of Stalino is an error of the Palatine MSS. instead of *Lysidamus*, as that character will henceforth have to be called. In the same way, Silenium in the Cistellaria will from now appear as *Selenium* (=Σελήνιον). Besides these general observations, the writer emends a passage in the Cistellaria, and in a line now first published from the palimpsest, and belonging to the same play, enriches our dictionaries with a new word, *confusicius: similest ius iurandum amantum quasi ius confusicium* (cf. Most. 277, *una multa iura confudit cocus*). Another new word is given by Professor Studemund seemingly on the authority of the palimpsest, but in reality on mere conjecture: *exconcinnare*, and here it is not so easy to feel convinced. In the last section several fragmentary lines quoted by scholiasts or grammarians are both explained and emended.

In a former number (27, p. 344) we drew attention to a manual of Latin orthography published by Messrs. Ebeling and Plahn. We are glad to add now that Messrs. Teubner at Leipzig have also taken this important matter into renewed consideration, and that a *Hülfsbüchlein für lateinische Rechtschreibung* will be published by them, the author being Professor W. Brambach, whose larger work on Latin orthography is at present the reputed authority on the subject. Messrs. Teubner are, moreover, going to print their classical publications for school purposes in adherence to the spellings given in the forthcoming *Hülfsbüchlein*. Archaic writers, whose spelling necessarily deviates from the classical standard, will be dealt with in a special section of Professor Brambach's new work.

Mr. A. Cuthel, of Blairlodge School, Falkirk, communicates to us a new and simple interpretation of the much-vexed ablative in Virgil, *Aen.* iii. 420,—

> "arvaque et urbes
> *Litore* diductos angusto interluit aestu,"—

of which Mr. H. A. J. Munro has signified his approval. Assuming the explanation of previous commentators from Heyne to Conington to be unsatisfactory, our correspondent proposes to take *litore* as a simple ablative of place, and to translate "The sea severed the fields and cities *on the shore*, and flows between them with narrow tide"; supporting his suggestion with Virgil's well-known usage of the ablative of place (in which construction the same word *litore* occurs nineteen times in the *Aeneid* without preposition).

Messrs. Teubner have just published a collection of Professor W. Teuffel's Essays on subjects chosen from the history of Latin and Greek literature. The work contains eighteen essays, originally published during the last twenty-five years, full of interesting *aperçus* on classical life and literature, and many master-pieces of philological research.

The same firm has also issued a *Nomenclator philologorum*, *i. e.* a biographical dictionary of philologists whose labours bear upon Latin and Greek philology. The work is, however, rather hastily got up, and in its present shape abounds in errors, not to mention the numerous omissions and imperfections. Yet we can imagine that in a second edition, carefully revised, the work may be turned into a very useful companion for philologists. As it is now, nearly all that relates to English philologists is either erroneous or so imperfect as to render the statements useless.

In the last number of the *Mittheilungen* mention is made of a new work by A. Rossbach, on the history of Greek religion, in three volumes. From the lengthy account given there, we may expect that the work will be very thorough and fully abreast of recent investigation.

The author concludes his preliminary account in the following manner: "The history of Greek religious thought forms the most important section of the pre-Christian religious history of Europe, and is intimately connected, nay, has decisively influenced, the development of Christian thought both in doctrine and church-practice."

Dr. Ginsburg, correcting an inadvertence in our notice of the second edition of his pamphlet on the Moabite Stone (*Academy*, No. 30, p. 407, col. ii. *ad fin.*) calls attention to the facts that the Hebrew transcript, so far from being omitted, is given with the vowel points inserted according to our own suggestion; and that the issue of his second edition was antecedent to that of Professor Levy's *brochure*.

The annual meeting of the German Oriental Society will take place at Halle on September 26.

Contents of the Journals.

Gött. gel. Anzeigen, Aug. 2.—Sachau's Inedita Syriaca; rev. by Dr. Hoffmann. [An elaborate critical analysis. Dr. H. is inclined to think that the Syriac translations of Lucian, Themistius, and Plutarch, were made by the translator of περὶ κόσμου in Lagarde's *Analecta*, *i. e.* by Sergius of Resaena. He adds some various readings for the Greek text of Lucian, *De Cal.*, derived from the Syriac version, and some emendations of the various Syriac texts published by Sachau.]

Zeitschrift für Deutsche Philologie (von Höpfner und Zacher), vol. iii. part iii.—Beiträge zur deutschen Metrik, by Amelung. [By his accurate researches Herr Amelung shows (*a*) the existence of a hitherto ignored metrical law in the Middle-German poems of the twelfth century, especially in that entitled *König Rother*, according to which one accented syllable may be followed not only by one unaccented—as in the M.-H.-G. poems—but by two also, so that we have a dactylic rhythm; (*b*) the Low-German origin of this metrical law, proving it to hold good in the Old-Saxon poem *Heliand*, and in later L.-G. poems. The dissertation *De Anglosaxonum arte metrica*, by H. Schubert (Berlin, 1870), was not yet known to the author.]—Zu Reinke Vos, by A. Lübben. [Correction of two passages of his edition of Reinke Vos (Oldenburg, 1867).]—Der handschriftliche Text des Ludwigsliedes nach neuer Abschrift des Herren Dr. W. Arndt, by J. Zacher. [The text differs very little from that published by Willems in the *Elnouensia*, 1837 (2nd ed. 1845). It is only curious that the reading *jah*, which occasioned considerable discussions *pro* and *contra*, is now finally proved to be merely a false conjecture of W. Wackernagel, the MS. bearing *joh*.]—Ueber die Heimat und das Alter eines nordischen Sagenkreises, by Kölbing. [A short notice of an important lecture delivered by Gísli Brynjúlfsson before the Society of Old Northern Archæology at Copenhagen, on the 19th April, 1870, according to a report in the *Dagstelegrafen*, 25th April, 1870.]—Die Confluenz der Consonanten und die süddeutschen Philologen, by A. v. Keller. [Short addition to a previous article in this periodical (ii. p. 254 ff.) by Hildebrand.]—Altvil, by Lübben. [The article "Altvil" was first destined for the Low-German Dictionary which is in course of publication. Its author is Dr. Leverkus, who died last year. As the unfinished article was too long for that work, it is published here.]—Mundartliche Namen des Cretinismus, by Rochholz. [The editor says he has come, by his own researches, to some explanations differing from those of the author of this elaborate paper, and promises to publish them in a short time.]—Zum Vocalismus der deutschen Dialekte. Der Au-Laut. By Gradl. [Interesting study.]—Beiträge aus dem Niederdeutschen, by Wöste.—Reviews: (*a*) Dietz's Luther Dictionary, by R. Hildebrand [favourably]; (*b*) Jegór v. Sievers' Herder in Riga (Riga, 1868), and A. Kohut's J. G. v. Herder (Berlin, 1870), by B. Suphan; (*c*) Redlich's Poetische Beiträge zum Wandsbecker Bothen (Hamburg, 1871), by R. Weinhold; (*d*) Joly's Benoit de Sainte-More (Paris, 1870), by Dr. E. Wörner.

Revue des Langues romanes, vol. i. part iii. (for contents of vol. ii. part i. see last number).—Crides de la Court de Monsieur de Lauzière au diocèse de Lodève en 1610, edited by L. Vinas from three paper leaves found in a village near Lodève, and written at the end of the sixteenth century. [The document, like the Publications d'Assas, brought out by the same scholar in the first part, is chiefly of philological interest, to which attention is drawn in the introduction and in some foot-notes.]—La Passion du Christ. Franco-Venetian poem, edited by A. Boucherie. [Continuation and end.]—Les Préterits en *egui* dans la Langue d'Oc, by C. de Tourtoulon. [T. tries to refute an objection made by P. Meyer against one of his former assertions, but we think he has not sufficiently understood M.'s briefly expressed objection. The preterite terminations *egui* of the Pamier dialect and *eri* of the Toulouse dialect must be explained differently just because it cannot be proved that *le* g *fort s'est transformé en* r, as T. assumes.]—Études sur la Langue des Troubadours, by A. Moutel. [First article about the free formation of words: a paper of scarcely any value to philologists, and not free from strange assertions. Besides the author's terminology, we learn little or nothing about what we expect from the title.]—Œuvres choisies de Roudil, edited by L. G(audin). [See above, *Literary Notes*, p. 412].—Notice sur le Poëte-potier J.-A. Peyrottes, by Le Rouquet. [He published a volume of Provençal poems in 1840, but his unpublished satirical poems are the best and most original productions of his muse.]—La Vigne et le Vin chez les Sémites et les Ariens primitifs, by Paul Glaize. [Interesting paper, but far better suited for the *Revue linguistique*. G. tries to show, by means of comparative philology, that the preparation of wine is of Semitic origin, though the grape was known also to the Aryans from the earliest times.]—Bibliographie and Chronologie. Part iv.—Documents relatifs aux Guerres du xve Siècle, edited by L. Vinas, from the Register B B 13 of the archives of the town of Gignac. [Two documents, chiefly in Provençal: the one is dated from the 25th May, 1465, ordering that all arms should be brought to the consuls of the town; the other is of the year 1470, and fixes a holiday and general procession of the inhabitants on the 18th November, 1470, in honour of the peace just concluded between France and England.]—La Chirurgie d'Albucasis, partly edited by C. de Tourtoulon. [Continuation and end.]—La Guerro, by Th. Aubanel. [Poem in the dialect of the borders of the Rhône, full of vigour: the refrain, *Femo, poudès faire d'enfant* (Women, you may breed children, *sc.* that the war has something to destroy), shows clearly that the author is no partisan of war.]—L'Agnel e lou Bouchè (The Lamb and the Butcher), by Achille Mir. [Poem in the Carcassonne dialect. Some notes about this dialect are prefixed, by B. Cantagrel.]—Prouvença, poem by O. Bringuier. [Continuation and end.]—Li Dindouleto (The Swallow), by Th. Aubanel. [Nice sonnet.]—Œuvres choisies de Roudil. [Continuation and end.]—Bibliographie, Chronique, table of contents, and title-page of vol. i.

Rheinisches Museum, vol. xxvi. pt. iii.—H. Blümner: Contributions to the History of Greek Painting. [See above, *Art Notes*, p. 415.]—J. Savelsberg: Latin Particles ending in *d* and *m*.—O. Ribbeck: On the Latin Anthology. [The poem No. 725 in Riese is reduced to form by conjecture and transposition.] H. Wachendorf: Coniectanea in Demosthenem. K. Dziatzko: On the Prologue to the Mercator of Plautus. [Wishes to excise about 35 lines of it.]—F. Susemihl: Studies on Aristotle's Poetics. IV. [Criticizes chapters 15 and 16.]—C. Wachsmuth: A Decree of the Egyptian Satrap Ptolemaios I. [An inscription in hieroglyphics found in Cairo, and recently published by Brugsch, is shown to relate to events which occurred in 312 B.C.]—J. Steup: On Thucydides' Account of the Plague at Athens. [Discusses the text, and suggests that it has not had the benefit of final revision by the author.]—F. Ritschl: On the Literature of Plautus. II. [Contains some very interesting information about Camerarius.]—W. Teuffel: Probus in Martial and Gellius. [Maintains in opposition to Steup that the Valerius Probus in Martial and Gellius is identical with the one in Suetonius.]—F. B.: On the Latin Anthology. [A note on poem No. 725 in Riese.]—Anon.: On Calpurnius.—E. Bährens: On the "Orestis tragoedia."—F. Ritschl: On Cicero. [Proposes in *De Oratore*, i. 59, 'paeanem aut hymnum recitarimus' for the 'paeonem aut munionem citarimus' of the MSS.]—Erotemata philologica. 3. [An editor of Sophocles seems to have regarded μίαν as an iambus!]

New Publications.

Brunnhofer, Dr. Herm. Γαλα [γαλακτος], lac [lactis], der graeco-italische Name der Milch. Ein monograph. Beitrag zur ältesten Empfindungsgeschichte der indogerman. Völker. Aarau: Sauerländer.

Haug, Prof. Dr. Mart. Essay on the Pahlavi Language. [From the Pahlavi-Pazand Glossary edited by Deslur Hoshangji and M. Haug.] Stuttgart. (München: Ackermann.)

Janichs, Lic. Dr. Geo. Animadversiones criticae in versionem syriacam Peschytthonianam librorum Koheleth et Ruth. Breslau: Schletter.

Journal of the American Oriental Society. 9th vol. Leipzig: Brockhaus.

Lobschird, W. A. A Chinese and English Dictionary. Trübner and Co.

Newman, F. W. A Dictionary of Modern Arabic. Trübner and Co.

Ovid, Remedia Amoris. Altfranzösische Uebersetzg. [Ein Thl. d. allegorisch-didact. Epos "Les Echecs amoureux."] Nach der Dresdener Handschrift hrsg. v. Dr. Gust. Koerting. Leipzig: Fues.

Studien, Indische. Beiträge f. die Kunde d. indischen Alterthums. Im Vereine m. mehreren Gelehrten hrsg. v. Prof. Dr. Albr. Weber. Mit Unterstütz. der deutschen morgenländ. Gesellschaft. II. Bd.: Die Taittirîya-Samhitâ. I. Thl. Leipzig: Brockhaus.

ERRATA IN No. 30.

Page 393, col. ii., line 18: omit the words "of the labours."
,, 393, col. ii., line 20: omit the word "not."
,, 393, col. ii., line 8 from bottom: after the word "modifications" add "of sound."
,, 407, col. ii., line 21 from bottom: for "Dr. Gimsburg" read "Dr. Ginsburg," *bis*.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, September 30, *and advertisements should be sent in by September* 26.

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General Literature.

Correspondence between Lessing and his Wife. [*Briefwechsel zwischen Lessing und seiner Frau.* Neu herausgegeben von Dr. Alfred Schöne.] Leipzig: S. Hirzel, 1870.

The value of Lessing's correspondence with Frau Eva König is principally biographical, and this is in itself a reason for republishing it as an independent work. The letters, as given by Lachmann and Maltzahn, separated from their answers and mixed up in strict chronological order with those to and from Mendelssohn, Nicolai, and other friends are naturally passed over as destitute of literary interest; and the only other form in which they have hitherto been accessible is the original two-volume edition, brought out by Karl Lessing in 1789, only eight years after his brother's death, carelessly printed, and with all the omission of names, &c., necessitated by consideration for survivors. Dr. Schöne has done his work as an editor conscientiously, correcting the dates of some letters, filling up blanks in others, supplying an alphabetical list and notices of all the persons mentioned in the correspondence, and adding from various sources a few letters bearing on the death of Lessing's wife and his relations with his stepchildren. In spite of this care, it must be admitted that the volume contains little to attract the general reader, unless, indeed, it may amuse the vulgar curiosity of which great men are the victims to know that Lessing did not order a new coat for his wedding, or to imagine him answering the enquiries of his betrothed as to the wages of cooks and maidservants in Wolfenbüttel. Neither Lessing's letters nor those of his friend touch on any but purely personal and domestic topics, with now and then a little harmless gossip. In the correspondence we see Eva König exactly as she was; the woman, practical, affectionate, constant, and eminently sensible, whose bright eyes and faultless character made the greatest man in Europe happy for a twelvemonth. But of Lessing himself we see only one side, and that during one period of his varied life, the Wolfenbüttel librarianship; and from this point of view, the doubt arises whether the letters in the present collection need have been reprinted, when they are only of use as materials (of primary authority, it is true) for the historian of Lessing's life or the student of his character.

When Lessing left Hamburg in 1770 only half the work that is now associated with his name was accomplished. He had been trying his strength for twenty years against the champions of bad taste in every form, and the fruits of his struggle were, briefly, the *Literaturbriefe*, *Laokoön*, and the *Hamburgische Dramaturgie*. While Germany was still groping in the dark for a national literature, it was startled by the revelation that, though neither Gottsched nor Klopstock nor the imitators of Voltaire were in the least likely to found one, the public was not on that account at the mercy of literary cliques and varying fashions. Scientific criticism appeared in Lessing's writings as a reality before it had even been recognised as a possibility. He not only assigned the worthless publications of the day to their right place positive and relative, but he did so in accordance with fixed principles, which he may almost be said to have created in discovering them. It would be difficult to frame a sound critical generalisation which should not be forestalled or implied somewhere in his works, and it would be easy in the same compass to find a dozen axioms any one of which the author of *Laokoön* could have expanded into an exhaustive masterpiece. The works of these twenty years, rightly estimated, make Lessing the first, the one critic of modern times in all that concerns the imagination, dramatic, plastic, and lyric art. But the greatest critic cannot go on making bricks without straw; Lessing grew tired of criticising seriously a literature which did not exist; the second part of *Laokoön* was to wait till he had visited Italy, and the *Dramaturgy* was cut short because the Hamburg public did not know a good play from a bad one, and the Hamburg actors were anxious that they should not learn how. The *Antiquarische Briefe* happened to be the readiest vehicle, and the unfortunate Klotz the first victim of Lessing's accumulated gall.

It is at this point that the *Briefwechsel* begins. Engelbert König and his wife were amongst Lessing's most intimate friends during his residence in Hamburg; he was godfather to one of their children, and it was to his care that Engelbert recommended wife and family shortly before his own early death. König was a silk merchant, and his affairs were left in considerable confusion: the letters tell at length of his widow's troubles and energy, and how she continued to superintend the silk and tapestry business until she had realised a sufficient provision for her children and was free to consult her own happiness in a long deferred marriage. Dr. Schöne protests against Stahr's supposition that Lessing left Hamburg because the neighbourhood of Frau König was dangerous to his peace of mind, and his first letters (June 1770) might certainly only be those of a friend. But before long *Meine liebste Madam* changes into *Meine liebste, beste, einzige Freundinn*, and in less than a twelvemonth we find hints which can only be understood as referring to known desires of Lessing's, parried by his correspondent out of prudential considerations: the formal betrothal probably took place during a visit of Lessing's to Hamburg in September, 1771.

There can be little doubt that in accepting the office of librarian in Wolfenbüttel, with the munificent salary of 600 thalers, Lessing was actuated by the desire for a field of action as different as possible from his late theatrical engagements. Hitherto each change of residence or employment had been the signal for the display of fresh power in an unsuspected direction; and in reverting to the severer studies of his youth he was only following out his destiny, to revolutionise every pursuit that interested him. But he had too exuberant a personality to be able to live only the life of an author. While he was at Breslau, engaged part of the day with his duties as military secretary, and partly employed in collecting the materials for his *Laokoön*, he used to relieve the strain upon his faculties by varying it with the strongest excitement to be found at the pharo tables. Similarly at Wolfenbüttel, the care of his library, the completion of his plays, and his gathering wrath against the new *Vernunftreligion* left plenty of room for dreams of domestic felicity. He took a most comprehensive and scrupulous view of his official duties, and comforted himself with the thought that in discharging them "he learnt a great many

things, even if not a hundredth part of them were worth learning." But he would not have been able to endure the monotony and isolation of his position if he had not lived from day to day in the hope of shortly seeing the family of his best friend gathered round him, and if he had not had meanwhile an affectionate correspondent to whom he could write of his toothache, his ennui, his money difficulties, his lottery speculations, and especially of the happy day after which he should not have to write to her again. And if, instead of the years of morose and tedious study at Wolfenbüttel, Lessing had resumed his nomadic career as an intellectual "sparrow on the house-top," to use his own expression, there would have been no German rationalism, no constructive theological criticism, only an arbitrary habit of piece-meal disbelief: Lessing would have only half revenged himself on Voltaire.

It was in 1774 that he began to publish, without the author's name, the so-called *Fragmente* from the works of Professor H. S. Reimarus, father of Elise Reimarus, with whom he corresponded after his wife's death, carefully keeping the most startling passages to the last. A hornets' nest is nothing to the swarm of enraged theologians who, failing the author, attacked the editor of the *Fragments;* but we must take his private circumstances into account in considering the temper of his reply in the pamphlets *Anti-Götze.* In 1775, he accompanied Prince Leopold of Brunswick into Italy, and was detained there so long that his marriage could not take place till October, in the following year. After this he seems to have enjoyed a short interval of unbroken happiness; his position at Wolfenbüttel was improved, his wife was all that he had believed; he was, for the first time in his life, tranquil, contented, at peace with himself and the world; his old friend Moses Mendelssohn observed his softening mood with delight, and only wrote to enquire which had contributed most to the result—freemasonry or a wife? In December, 1778, a son was born and died; the father praises his good sense in a letter which may have inspired Heine's lines—

"Dem Einen die Perle, dem Andern die Truhe."

There is something inexpressibly pathetic in his conclusion: "Ich wollte es auch einmal so gut haben, wie andre Menschen. Aber es ist mir schlecht bekommen." The mother died three weeks later. Lessing had never been a sentimentalist, and after a few short utterances of the profoundest grief, he turned with characteristic stoicism to the "laudanum of literary and theological controversy" for relief and distraction. His own pleasure in life was gone, and for that very reason he belonged more entirely to the struggle. A heart-broken man, he cared nothing personally for either orthodoxy or the *Aufklärung*, and only followed his reason where it led him. Hence the impression in the *Anti-Götze* of cold fury and calculated indignation, a sense of doing well to be angry, of hewing Agag in pieces out of calm conviction. And hence again the success of the onslaught, for it was Lessing's tone that procured attention, and, at last, credit for his arguments—not his arguments that excused the bitterness of his tone. The *Briefwechsel* gives us no excuse for following him into the conflict, which began literally by his wife's death-bed; but it might, perhaps, have been expected to contain more numerous allusions to *Emilia Galotti*, completed in 1772, when the exchange of letters was most constant and rapid. Of course the omission was due to the pressure of other topics more interesting to Lessing than volumes of superfluous praise and still more superfluous criticism; superfluous, because Eva was not likely to be more fortunate than Goethe or Schlegel in pointing out the real weakness of the piece, while the author of the *Hamburgische Dramaturgie* had condemned his own mistake in advance. Lessing chose his subject, a father sacrificing his daughter's life to her honour, in obedience to the principle that tragic effects depend on situation, not on character (*Werke*, vii. 232). As the work grew, he began to feel that a middle-class Virginia was an anachronism in the eighteenth century; but instead of giving up his situation, he attempted to reconcile it with altered circumstances and habits of thought. He succeeded so far as to make Emilia's conduct psychologically possible, for we *may* suppose her to have died as much to revenge Appiani as to avoid the prince. But, on any hypothesis, he made the mistake of substituting a complex study of character for the simple tragic incident; the merest bungler can see that there is something the matter with the catastrophe, but few critics could have pointed out as clearly as himself the exact nature of the error committed. *Emilia Galotti* is supposed to have exercised an unfavourable influence on the fortunes of its author, by alienating the Hereditary Prince of Brunswick, who had taken some touches in the play to himself. It was he whom Lessing afterwards described as likely to sell his library and librarian together on the first opportunity, but this was an injustice, for when subsequently pressed to do so by Prussia, he preferred to raise money by the sale of 4000 of his subjects to England, then at war with her revolted colonies. Indeed, according to the notions of his class and his limited resources, he cannot be said to have behaved altogether ill to his illustrious *protégé*. Lessing's salary at its lowest was exactly twenty times the wages of a superior cook in Wolfenbüttel, and it was not generally known that he was waiting to marry till it had been increased. The letters which we owe to the delay contain nothing to prevent our regretting it, and only confirm the impression of the writer's character, to be gathered from other sources, as exceptionally admirable and amiable.

H. Lawrenny.

SWEDISH AND MAGYAR VERSIONS OF THE FINNISH EPIC.

Kalevala. Öfversatt af K. Collan. Helsingfors: 1868.
Kalevala. Forditotta Barna F. Pest: 1871.

"To produce a great epic is a rare gift which fate accords to few nations," so says Steinthal in the brilliant and original essay on epic poetry, in which he sets forth the combination of conditions under which alone national poetry can arise with a rich multiplicity of parts while preserving its inner unity and epic connection. The Finns are numbered amongst these privileged peoples. At the last moment, just as their national epic was beginning to die from remembrance, they were fortunate enough to find collectors for what remained, while it was still possible for a *diaskeuast* like Lönnrot to discern the secret unity of the collected songs, and to arrange them into the epic which now, under the name of *Kalevala*, is rightly ranked as the κτῆμα εἰς ἀεί of the Finn nation. In Finnland, however, the growth of popular poetry into an organic whole, and its preservation in that form, is only due in part to the natural poetic talents of the people; the myths which they had inherited from an earlier period, when they lived together with other kindred Ugrian tribes, were a not less essential element, and supplied the popular mind with satisfying and vivifying materials. Though the Finnish epic of the present day professes to sing the struggle of the sons of Kaleva, viewed as national heroes, with a people in the north (Pohja, Pohjola), and is in consequence rightly designated by the Finnish bard as a song of his race, or tribe, *suku-virsi*, yet the background

of the poem, even in its present form, is thoroughly interwoven with mythical elements, and on closer inspection the principal characters themselves (Väinämöinen, Ilmarinen, Lemminkäinen, Louhi) can easily be recognised as faded divinities. In the case, for instance, of Ilmarinen (Ilmari), the skilful heavenly smith, this appears from the agreement between his name and the Wotjakish *inmar* (by mutation for *ilmar*), "God," or in that of Väinämöinen, from the important part which the *Kalevala* assigns to him in the creation and cultivation of the earth. It can thus scarcely be doubted that the subject of the Finnish epic in its first period was derived from Ugrian mythology, and as this naturally formed a coherent system of ideas respecting the world and nature, the poem under its influence tended constantly to connect together separate details, and to reduce them so far as possible to internal unity. Without the essential congruity of the various parts which was already contained in the original subject-matter, the Finnish epic, reduced for want of sufficiently important events in the history of the people to songs celebrating occasional forays and bride-winnings, or, more properly speaking, abductions, would have hardly succeeded in powerfully exciting the imagination of the whole nation. It would certainly have not gone beyond the production of historical ballads, relating to actual historical facts without any connection with one another. Of these we find specimens in *Kanteletar*, book iii. Positive proof of the mythological origin of *Kalevala* is supplied by the Sagas of another Ugrian people, which has preserved more of the ancient Ugrian tradition than any other. The Woguls have preserved an account of the creation (*mâ kulitem majt*), which coincides in several remarkable features with the details that appear in the *Kalevala*. In the latter the creation is effected by *Ilmatar* (daughter of the air or skies) and her son Väinämöinen, in the former by *Elm-pi* (son of the air), who in other respects also often takes the part assigned to Väinämöinen in the *Kalevala*. The same subject is treated by a Wogul poem (êri), fragments of which have been preserved. These coincidences (to which may be added the allusion to bear-worship in the *Kalevala* and Wogul songs) show sufficiently that at the outset the Finnish epic had to do with inherited Ugrian materials; and one might go even further, and maintain that a certain poetical form belonged to the common Ugrian period. That the Finns alone succeeded in developing a living popular epic out of the old materials is due partly to the unfavourable outward circumstances of the other Ugrian nations (who in some cases lost possession of their ancient mythical treasures altogether); and still more in later times to the stimulating influence of the poetically gifted German (Scandinavian) races, with whom the Finns are shown by the clearest evidence of language to have been in communication at an early age (cf. Thomsen, reviewed in the *Academy*, vol. ii. No. 14). The adoption of fixed rules of versification may be traced to this influence, and as the form exactly suited the Finnish system of word-building, it came into universal use for popular poetry. But there are also numerous traces in the *Kalevala* of modifications introduced from without into the Ugrian heritage of myths, by which the latter was enriched and enlivened with fresh motives for epic elaboration. This is not surprising when we consider that parts even of the new Christian Gospel were incorporated with the Finnish epic cycle, as, for instance, in the 50th canto of the *Kalevala*, the birth of the Christ-child of the Virgin *Marjatta*, or the way in which Väinämöinen bequeaths the gifts of song and play to console his people when he departs from earth in a kind of Biblical ascension. The partial degradation of the old Ugrian myth into Finnish heroic legend is simply a result of the tendency of national life to perfect and complete itself, while the obscurity of much that is undoubtedly mythical in the *Kalevala* is explained by changes in the popular notions of the universe, which changes were accelerated by the influence of foreign forms of civilisation, as we find to have been the case with many other nations, including the Germans.

Two translations of the *Kalevala*, which have appeared recently, approach to the original in form; one of these, in Swedish, is by K. Collan, and the other, in Magyar, by F. Barna, is actually in an Ugrian idiom, and therefore in one related to Finnish. It might have been expected that a translation into Magyar, a kindred language, and one to which the artistic form of popular poetry is familiar, would have represented, if not the sense, at least the warmth and feeling of the original better than could be done, for instance, by a Swede, who is restricted to a less varied, a colder, and a more severely intellectual Indo-Germanic idiom. It remains to be seen how far this presumption is borne out by the two works before us.

In considering first the accuracy and faithfulness of the two translations, it must be remembered that both are hampered by the same metrical restraints, and have a claim to some indulgence. But, after making all allowances, it appears from the comparison of a sufficient number of cantos that Barna's translation is in this respect far inferior to the Swedish one of Collan. We will leave out of account the few instances in which the Magyar translator has misunderstood the text: e.g. *kinek teher a leányka? anyjának nem bizonyára*, "To whom is a girl burdensome? certainly not to her mother;" instead of, "Who is it longs after a daughter? who but her mother?" where the Finnish *ikävä* is rendered wrong: or 32, 442, *ha meglálod ötet itten*, "when thou seest him (*sc.* the bear) here," instead of, "when thou hearest that it will become serious," where the sense of "serious" for the Finnish *tosi* is overlooked. Still more numerous are the departures from the literal sense of the original, which, without exactly disturbing the connection, strike us as unnecessary because easily avoidable. In all these cases the Swedish translation follows its original much more closely, the variations consisting only of the enforced substitution of tamer or more general expressions for special ones, notably for verbs descriptive of sound or movement, in which the Finnish language is very rich. Of this kind is 31, 322: *som ej tvenne vingar ejer*, "who does not possess two wings," while the Magyar *ket szárnyán nem szállhatkelhet* scarcely yields to the original (*kahen siiven siuotelle*) in vivacity of expression. Even in the case of difficult and peculiar constructions Collan succeeds in doing full justice to the sense; as in 31, 101 ("one saw the boy would grow up to something"): *till båd, manamod och klokhet, till en verklig hjeltestyrke*, where the Finnish (*mietyväksi, miestyväksi, oikein urostuvaksi*) means literally "to one who is intelligent he will become a man, he verily will become a hero." Thus it seems that the Magyar translation, even if we suppose it to have received a number of possible corrections and improvements, would still have no chance of surpassing the Swedish one in fidelity to the sense; and this shows that the linguistic affinity, which consists in the possession of about 800 common roots, is of no very special advantage to the Magyar translator, who gains nothing by being able to translate *kala*, "fish," by *hal;* or *elä*, "to live," by *él*, seeing that the sound and sense of a poem have nothing to do with considerations of comparative philology. Some problematical views about the identity of words are inopportunely obtruded into the Magyar translation; as when the Finnish *saari*, "island," is rendered by *sár-rét* (marshy meadow; *sár*, mud); or *talo*, "house and yard, farmyard,"

by *telek* (plot of ground, site of the house); and the obsolete Magyar *ük*, "grandmother," is unsuitable for *eukko* in *luonnon eukko*, which is only "mother of nature." Against these defects of the Magyar version we must set the fact that Swedish has long been used for translation from Finnish, while the intercourse between the two nationalities in Finnland and the linguistic influence of each upon the other must necessarily have led to a more precise settlement of the equivalent terms in the two languages. In addition to this it may be observed that Barna's Magyar translation is the first attempt made in that language, while Collan's translation has been preceded by at least two partial renderings into Swedish.

The formal character of the *Kalevala* is determined by the peculiarities, in the first place, of the versification, and in the second of the language. An approximate reproduction of both is only possible to the translator in the measure permitted by the resources of his own tongue and the prevailing taste in poetry of his public. In this respect the Magyar language has a decided advantage over the Swedish. The metre of the *Kalevala*, as of most Finnish popular poetry, is a trochaic dimeter, well suited to the language, because the cadence of the verse coincides with the natural accent of the words. Alliteration is commonly used, but without apparent effort. The constant recurrence of lines of similar or parallel sense often leads to the repetition of the same verbal termination at the end of lines which are not exactly intended to rhyme. This is a peculiar feature of Finnish, which in general is averse to monosyllables, and indicates modifications of the idea as a rule, and grammatical relations for the most part by an increasing number of suffixes, in which further appears a twofold vowel variation (with *a*, *o*, *u*, or *ä*, *ö*, *ü*) following the vowel of the first syllable of the root. The formation of words in this manner usually leads, in the parallel verses, to as much assonance as the regular rhyme; but the latter, as not resting on the significant root-syllables, acts as a purely sensual element. The assonances are still further multiplied when the same termination (as for instance in an attributive noun) appears in the middle of a line as well, as in the following verses: *korkeilta koivikoilta*, | *mataloilta haavikoilta;* or *lähtehistä häi'lyvistä*, | *heiluvista hettehista;* or, *näillä raukoilla rajoilla*, *poloisilla Pohjan mailla.* The poetical form of the *Kalevala*—with its simple cadence, its parallelism, its alliterations, and its frequent assonant terminations—appears created on purpose to suit an even, soft, wave-like course of thought, which at the same time admits a sort of childish pleasure in the jingle of words. This element is unmistakeable in the occasional play upon a word, repeating it with slight variations. The Swedish translation gives up all attempts at alliteration, and only aims at reproducing the trochaic cadence, and, of course, the parallelism of sense in successive lines. Even the rhyme has been dispensed with, as it could scarcely have been preserved without some sacrifice of literal accuracy, besides which a rhyme falling on a significant syllable would have been unduly emphatic in comparison with the accidental terminal rhymes of the Finnish. To compensate for the loss of these auxiliary advantages, the Swedish translation preserves the trochaic cadence more clearly and uniformly than even the original, where it constantly happens that false trochees, which do not coincide with the accent, are admitted, while the caesura is only laxly observed (compare lines like 2, 69, 70; *tulipa merestä Tursas*, | *uros aalloista yleni*; | *tunki heinäsen tulehen*, | *ilmivalkean väkehen*). The Magyar translator was more bound to retain the trochaic dimeter, as it is very commonly used in Magyar songs, and especially for narrative poetry; it is enough to mention the fine ballad *Kádár Kata* in Kriza's *Vadrozsák*, No. 2, or the ballad *Molnár Anna*, also from Transylvania, given in the last collection of Magyar popular poetry, edited by the Kisfaludy Society. He might also have adhered closely to the national treatment of this metre, and have preserved throughout either the rhyme or a corresponding assonance. This was the more to be expected as the suffixes of Magyar words constantly reproduce of themselves the terminal rhymes of the parallel verses in *Kalevala*, whilst intervening unrhymed couplets would have rudely interrupted the feeling of satisfaction just excited by the recurring assonance. The observance of the trochaic cadence is not particularly strict in Magyar poetry, though the accent, as in Finnish, falls on the first syllable, and the secondary accent usually on the third and fifth; one obstacle is the unavoidable employment of an unaccented article (*az*, *a*) before words, which does not exist in Finnish, while in Swedish the article is suffixed so as actually to facilitate the uniform maintenance of the trochaic cadence. The Magyar translator has handled his metre throughout in accordance with the poetical rules of his native tongue, so that the Finnish poem must have quite a familiar sound to Magyar readers, though here and there two false trochees in succession might have been avoided (for instance, nem terülök *a földre le*, or, halálát hogy *mint lelje meg*). The Magyar language is besides enabled, as has been hinted before, to accommodate itself to a very great extent to the Finnish forms of speech, so as to produce a corresponding effect by the use of identical or similar means. We here make especial allusion to certain eminently characteristic formations, which are of frequent occurrence in the *Kalevala*, such as the frequentative and momentaneous forms of verbs and the diminutive forms of substantives. These are important means for sympathetic description and the expression of lively activity or of childlike heartiness. When we have further observed that Magyar possesses a considerable number of onomatopœic verbs, and that it has not quite lost the naïve taste for playing on words, we have said enough to show that a Magyar translation of the *Kalevala* might offer, over and above literal fidelity, the closest approach possible to an exact reproduction of the spirit peculiar to the original, and of the effects which it would produce on the feelings of the hearer. The present translation is praiseworthy as helping to pave the way for such a work in the future, while Collan's Swedish version appears already to have reached the utmost limits of possible approximation in that language.

Jos. Budenz.

LITERARY NOTES.

M. Em. Campardon, *archiviste aux archives nationales*, has just published at H. Plon's, Paris, four unedited documents referring to Molière, which, though they do not contain anything of paramount importance, contain enough to warrant their publication. We learn that Molière shared the common fate of great authors in being plundered by the booksellers, from document No. 1, giving an account of a seizure made, at Molière's request, at his bookseller's, Jean Ribou, of an apparently pirated edition of one of his earlier plays, *Le Cocu imaginaire.* Nos. 2 and 3 are valuable for the additional evidence they afford of the frequent interruption of theatrical proceedings by brawls and acts of violence chiefly referable, as in the present instances, to great men's attendants who supported, sword in hand, against the porter of the Comédie Française, their fancied privilege of free admission to the pit. No. 4 might be of use to the biographer in search of materials for determining the approximate amount of Molière's fortune: it is a legal complaint brought by the poet and his wife against a solicitor's clerk for attempting to defraud them of 7000 *livres*, the legacy of Molière's mother-in-law, the celebrated Madeleine Béjard, who is curiously enough

described in this act as ". . . Béjart, *spinster*." Facsimiles of Molière's signature are appended, which read thus :—

J. B. P. Moliere, in No. 2,
and J. B. *Poquelin* Moliere, in No. 4.

This latter form, with the Poquelin spelt in full, is described by M. Ed. Fournier as the "signature *rarissime*" of the great poet.

The editorship of the *Archaeologia Cambrensis* being left vacant by the death of the Rev. H. Longueville Jones, the Cambrian Archæological Association have appointed the Rev. D. Silvan Evans as editor of their journal. We may hope, from the name of the new editor, that a new life will be infused into that periodical, and that it will take in a wider range of subjects. In late years, the *Archaeologia Cambrensis* has dealt chiefly with local archæology and local history, giving notices of mansions and of abbeys, and printing documents which interest a very narrow circle of readers. The *Archaeologia*, being the only English periodical connected with Wales, should be less exclusive in its contents, and might be made more European without being less Cambrian. We trust that the new editor, who is a thorough Welsh scholar, will devote a portion of the journal to literature and to philology. Medieval Welsh literature, which is unpublished to a great extent, is of no small importance for the history of literature in Europe during the middle ages. We expect that the *Archaeologia* will publish some of these valuable texts, and that it will give essays on Welsh literature and philology ; for the Greek ἀρχαία does not apply to stones only, as some people seem to fancy.

The friends of Hungarian literature will be glad to hear that there is a prospect of the *Budapesti Szemle* ("Buda-Pest Review") being revived. This periodical, the only representative of our quarterlies in Hungary, appeared twice a month down to the end of 1869. It was then suspended on account of the comparatively small interest felt in intellectual matters on the part of a public engaged in realising the material advantages of the political changes of 1867. The members of the Hungarian Academy, we are told, at last sensible of the want of some central organ of the intellectual activity of the country, propose to recommence its publication. They have offered the editorship to the well known critic, M. Paul Gyulay, who has made his acceptance of the appointment conditional on his receiving sufficient literary support.

Art and Archæology.

Brazilian Rock Inscriptions. By Prof. Ch. Fred. Hartt. (From *The American Naturalist* for May, 1871.)

So little is known of Brazilian antiquities that Mr. Hartt's paper, short though it be, will be very valuable for American students. It consists chiefly of nine plates, on which are faithfully engraved the rude childish paintings or drawings, which the author has been able to copy in his last expedition to the Amazonas river.

The figures given in the plates, from plate ii. to plate viii., have been discovered by M. Hartt himself, some of them at Alcobazā and Jeaquerapuā on the left bank of the Tocantins river near the first falls, others in the Serra do Ereré, on the northern side of the valley of the Amazonas, about twelve miles west of the Villa de Monte-Alegre. The Tocantins inscriptions are incised on large surfaces of dark red or brown quartzite swept annually by floods and exposed to the view during the dry season. The Ereré drawings are traced for the most part in red paint, on cliffs of sandstone, sometimes high up in almost inaccessible situations, sometimes near the base. Many drawings are very faint from being washed by the rains or exposed to the fires of wandering Indian tribes, and cannot be traced out. They comprise, amongst utterly unrecognisable objects, representations of the sun, moon, and stars, the sun being composed of two or more concentric circles, with or without a central spot, and furnished with rays, while the moon remains ignominiously without rays. Human forms and human figures, *never drawn in profile*, occur frequently. "The stiff angular position of the arms and legs is interesting, the upper arms being held at right angles to the body, the forearm bent at a similar angle and usually upwards. The legs are wide apart, the thigh extending often straight out from the body." Upon the whole the figure thus delineated presents a strong resemblance to the hieratic shape of the Egyptian beetle. Birds, four-legged and long-tailed animals, fishes are occasionally found, but, in most cases, difficult to identify.

Plate ix. gives accurate reductions of sketches drawn after the figures traced on seven stones in the Serra da Escama and communicated to the author by M. Fereira Penna at Parā. The set reproduced in plate x. has a history of its own. In 1728 Captain Pinto da Gaya, sent out to discover the marks fixing the limits between French Guyana and Brazil, found on the top of the Mont d'Argent several Indian scrawlings which he had all exactly copied and submitted with his report to the Portuguese government. These copies M. Fereira Penna placed in the hands of Mr. Hartt, who had them reduced by the aid of photography.

Mr. Hartt holds it most probable that "the rock paintings and sculpturings were made by tribes which inhabited the Amazonas previous to the Tupi invasion." He thinks also that "the Ereré figures have a deep significance. A people that would go to so much trouble as to draw figures of the sun and moon high upon cliffs on the tops of mountains must have attached a great importance to these natural objects, and I think that these figures point to a worship of the sun by the tribes which executed them." It seems very probable Mr. Hartt is right in thinking so, although there be no historical authority to support his opinion. G. Maspero.

NOTES ON ART AND MUSIC.

Carl von Lützow, in the last number of his *Zeitschrift für bildende Kunst* (August 18), announces the discovery, in a village of Austria, of an important Adoration of the Kings by Hans von Kulmbach. The work has passed into the private collection of Herr Fr. Lippmann, its discoverer.

In the last number of the *Revue des deux Mondes*, M. Félix Ravaisson discusses, in a long and only half satisfactory paper, those questions connected with the "Venus of Milo" to which we drew attention in our issue for September 1. M. Ravaisson deserves the thanks of students for his exact and careful account of the mode in which the first modern custodians of the statue are proved (since the recent dissolution of the binding plaster) to have tampered with its original motive. As to the upward inclination of the plinth necessary to give a horizontal plane to the faces of the upper and lower halves of the statue at their junction, as to the improved action and truer line of gravity to be gained for the figure by such an adjustment of the plinth, as to the disturbance of proportion caused by the introduction of two wooden wedges of a very appreciable thickness at one point of the junction, all that M. Ravaisson has to say commends itself explicitly and intelligibly enough. And his concluding remarks on the iniquity of "restoration" and the duty of preserving the antique as we find it are admirable. But why does he make no allusion whatever to the famous lost inscription ?—and why, in that large section of his paper devoted to the interpretation and criticism of the statue, does he give so little reason for his confident adherence to the view of Quatremère de Quincy, and introduce so much neither over-relevant nor over-critical matter as to the relations of Mars and Venus in ancient art? M. Ravaisson seems here to write like an archæological beginner or *dilettante;* the speculation that the original artist of this figure worked under the influence of Melanthes, the preacher of a re-action towards severity, is certainly more ingenious than scientific.

The art-exhibition at Munich, opened in July for the purpose of raising a fund towards a national Invalid Hospital, seems to have been supported with remarkable unanimity of zeal by all the schools and cities of Germany, and, pending its pecuniary result, is pronounced a success from the artistic side at any rate.

The second volume of a Spanish work of great *luxe* and not less scientific value, the *Museo Español de Antigüedades*, is shortly to be expected. This admirable publication is edited by Dr. Juan de Dios de la Rada y Delgado, with the assistance of the distinguished archæologist and brilliant writer Francisco Tubino, and other less known *savants*.

German critics speak favourably of a monumental series of fourteen oval paintings just executed by Berdelle for the vault above the staircase of the new Polytechnic at Munich—a building constructed from the designs of Gottfried Neureuther, and shortly to be opened as a school of the higher technico-scientific instruction. The subjects are chosen exclusively from Hellenic sources, with an eye to this destination, and comprise the birth of Athene, the overthrow of the Titans, the mission of Triptolemos, Aphrodite Euploia, Theseus and Peirithoos, &c.

A writer in the *Allgemeine Zeitung* (September 3rd), summing up the position of art in his country, is disappointed that the "Heldenperiode" through which Germany has just passed, with the full consciousness of its heroism, should have produced no corresponding inspiration in the field of art. He confesses that art, and painting especially, has its vitality still chiefly confined to the realistic and domestic spheres: that Makart and Feuerbach, the two most important idealists of the contemporary schools, are idealists in a voluptuous and not a heroic sense; but nevertheless looks forward with confidence to the early advent of some worthy representative of German national greatness in this particular.

No. 36 of the *Musikalisches Wochenblatt* contains the facsimile of an interesting letter of H. Berlioz to R. Wagner. The document is valuable on many accounts as showing on the one hand all the characteristics of the whimsical *esprit* of its author, but also touching in its serious parts upon the fundamental ideas of musical production. We extract the following striking passages:—"You are quite right in deploring my ignorance of the German language, and in what you say about the impossibility of appreciating your works without knowing it. I have repeatedly said the same to myself. The flower of the expression withers almost always under the weight of a translation, delicate though this translation may be. There are accents in *true music* which require their peculiar word; and there are words which require their peculiar accent. To separate the one from the other is as much as making a she-goat the wet-nurse of a young dog and *vice versâ*. But then you see I have such a diabolical difficulty in learning languages; I scarcely know a few words of English and Italian. I am glad to hear that you are about to melt the glaciers by the composition of your *Nibelungen*. It must be wonderful to write in the presence of great nature. This again is an enjoyment which is refused to me. A beautiful landscape, high rocks, or the grand aspect of the sea, always absorb me completely, and prevent my idea from manifesting itself. I feel and cannot express. I could not make a drawing of the moon unless I saw her image at the bottom of some well."

We have just received the prospectus and preface by the author to a new edition of R. Wagner's complete works. The same will be published in nine volumes by the enterprising firm of E. W. Fritzsch in Leipzig, and contain the author's theoretical writings on music and the libretti to all his operas.

New Publications.

Archiv f. ornamentale Kunst. Hrsg. auf Veranlassg. d. deutschen Gewerbe-Museums zu Berlin. 4. Hft. Berlin: Springer.

Atlas kirklicher Denkmäler d. Mittelalters im österr. Kaiserstaate u. im ehemaligen lombardisch-venetianischen Königreiche. Hrsg. v. der k. k. Central-Commission zur Erforschg. u. Erhaltg. der Baudenkmale. 14. u. 15. Lfg. Wien: Gerold's Sohn.

Bossert, A. La littérature allemande au moyen âge et les origines de l'épopée germanique. Paris: Hachette.

Fechner, Gust. Thdr. Ueb. die Aechtheitsfrage der Holbein'schen Madonna. Discussion u. Acten. Leipzig: Breitkopf und Härtel.

Hiller, Ferd. Ludwig van Beethoven. Gelegentliche Aufsätze. Leipzig: Leuckart.

Katalog der Holbein-Ausstellung zu Dresden, 15. August bis 15. Octr. 1871. Dresden: Schönfeld's Buchh. in Comm.

Les anciens Poëtes de la France. Tom. x. Publié par MM. Guessard et de Montaiglon. Paris: Franch.

Theology.

Chronology of the Early Roman Bishops. By R. A. Lipsius. [*Chronologie der römischen Bischöfe bis zur Mitte des vierten Jahrhunderts.*] Kiel: Schwers, 1869.

The history of the Antenicene Church has long suffered from the want of an assured chronology of the Roman bishops. Certain leading events are known to have taken place in certain episcopates; but episcopates, unlike reigns of emperors, are not marked by coins and inscriptions. Literary records are abundant, but on the surface conflicting. The subject has at various times absorbed much fruitless labour, fruitless because usually ill directed. In 1850 Mommsen's essay *On the Chronographers of the year* 354 pointed the way to fresh investigation. But the first printed application of rational and coherent criticism to the whole field of evidence is contained in the present volume.

The author's previous writings on early Christian literature have displayed rare vigour of mind and sagacity of judgment, as well as the more obvious qualifications for the task. He proceeds here on the only sound method, studying first the composition of each leading document, and enquiring how far the various documents can be traced to common sources. The manifold materials are brought together and set out with thorough care and completeness. Of the secondary evidence much is for the first time collected in a convenient shape; and not a little appears for the first time in print, thanks to the liberality with which the Berlin editors of Pertz's *Monumenta* have permitted the use of their manuscript collections, and to the co-operation of Sachau and others. The criticism of the materials is invariably patient, clear, candid, intelligent; often exhaustive. These 280 pages supersede nearly all that has been written on the principal subject before. It would be satisfactory to think that Lipsius has answered all the intricate questions of documentary criticism which block the way. This he has attempted; but with imperfect success. He has, however, left a tolerably clear path for the historian, besides contributing many helpful observations on a long line of events.

Most of the weak points in the book arise from a defective appreciation of chance. Lipsius is not only too ready to scent out artificial arrangements of numbers: he cannot bear to leave a petty coincidence without assigning a cause for it. His familiarity with the shifts of authors in adapting their materials does not extend to the lapses of scribes in their analogous but different work. He is slow to recognise mechanical errors, though some have been pointed out by him with singular acuteness. The result is seen in the boldness with which he dissects catalogues into their supposed component parts on the strength of faint and dubious indications, and exalts differences of reading into differences of tradition.

The investigation consists of two parts, the criticism of documents (pp. 2–141) and the restoration of the chronology (142–262). The Greek or Eastern documents, beginning with the short lists of names in Hegesippus and Ire-

næus (to whom should have been added Epiphanius), claim the first place. Three or four are directly connected with Eusebius, the rest being late and secondary. It is at the outset unfortunate that Lipsius has not tabulated and examined the Eusebian lists for the other sees, Alexandria, Antioch, and Jerusalem. Poor as might have been the direct results, there is no better exercise for learning by clear examples the various mechanical errors incident to Greek lists of names with numerals; and it is only by a simultaneous view of the four sees that the nature and limitations of Eusebius' work can be fully understood. The relations of the three primary Eusebian authorities are determined for Lipsius by the assumption that in the earlier part of the series the Armenian version of the *Chronicle* is alone authentic. In the first chapter of the *History* Eusebius refers back to his Χρονικοὶ κανόνες; and the Roman chronologies of the *History* and the Hieronymic *Chronicle* virtually agree together, while in the Armenian version the beginnings of the Roman episcopates, and of these alone, are removed to other years. Lipsius is thus driven to the strange theory that between the writing of the *Chronicle* and this latest edition of the *History* (that is, in an interval of a few months at most), Eusebius discovered a second list which in the *History* he substituted for the first; and that Jerome in like manner, when he came to redact the *Chronicle* in Latin, expelled the Roman episcopal entries which he found, and replaced them with others derived from the *History*, perhaps further revised after some Latin authority. But the imagined first list has no substantive existence. The Eusebian *dates*, as Lipsius rightly maintains (p. 6), were not copied from an earlier record but *computed* from a list in which the simple term of duration was affixed to each name. Now the peculiarity of the Armenian chronology ceases to be startling the moment we look away from the dates to the term-numerals. It then becomes patent that we have before us not two chronologies but two copies of a single list. After the first two names, every difference is at once explained by the exchange of B with H (4 times), of the early uncial E with Θ (3 times), by the insertion or loss of I before other numerals (twice), or by the confusion of the round numbers 10 and 12 (once). The places of the Roman bishops in the Armenian table are evidently regulated by the Armenian term-numerals; but the countings and shiftings have been loosely performed. Whether it was the Armenian translator or a preceding Greek reviser that thus altered the *Chronicle* into conformity with some corrupt Greek text, itself probably derived from the *Chronicle*, is uncertain and immaterial. As a check on the modifications introduced by Jerome, this part of the Armenian version is highly useful; but it represents a corrupted and disordered text, and its Roman episcopates have certainly undergone deliberate revision. As Lipsius has identified the earliest complete Greek catalogue with a spurious chronology founded on a bad copy of itself, it is well that he distrusts its information.

In the criticism of the Eusebian authorities Lipsius lays much stress on the death of Urbanus and accession of Pontianus as a dividing-point, because here first the dates roughly coincide. But once more a coincidence of Eusebian dates must from the nature of the case be accidental and illusive where it is independent of concordance in the term-numerals, unless some extraneous fact suggests that the term-numerals have been purposely altered so as to lead up to a synchronism, of which there is no trace here. Whatever interest the accession of Pontianus may claim in the first Latin catalogue, it means nothing in the Eusebian records. After St. Peter and Linus their mutual relations disclose no change of sources through the whole series.

A passing word will suffice for the Byzantine and Oriental authorities. Lipsius has added to their number from the Syriac MSS. of the British Museum a list out of a chronicle by Elijah of Nisibis, which fully deserved publication. If he has failed to restore their complicated pedigree, his remarks are as usual fertile in suggestion.

But it is on the Latin catalogues of various kinds that Lipsius has bestowed his best labour. For every record except the earliest the manuscript evidence is more than doubled in amount, much more than doubled in value; while masterly comments bring order out of confusion. The proper Pontifical memoirs are extant at present in three successive stages of growth: (L) the Liberian, or "Buchevian," or "Philocalian" catalogue of 354, in which the biography is in various degrees rudimentary; (F) the Felician memoirs, of about 530; and (P) the full-grown Gesta Pontificalia of 687, wrongly ascribed to Anastasius. All contain both dates and term-numerals throughout. The dating is consular, and the compilers of F and P had no dates before them except those of L. The term-numerals on the other hand, which give months and days as well as years, sometimes exhibit in F a departure from L such as cannot at once be set down to error of transcription; and the variation repeats itself among the numerous copies of P. Lipsius shows however that, where Liberian numbers appear in MSS. of P, they are not more than a late introduction of scribes. But whence came the peculiar Felician numbers, which recall Eusebius? They agree in part with those of certain undated lists, otherwise remarkable by their freedom from some characteristic Latin errors. These lists, to which the Berlin stores have made important additions (and another is promised in a late number of Hilgenfeld's *Zeitschrift*), end with Hormisdas (ob. 523). But by a brilliant combination Lipsius succeeds in reaching an earlier date. He supposes a lost catalogue written under Leo, say about 440, with probable indications of having once ended with Silvester, that is, a century earlier. Its readings are to be traced not only in the Hormisdane and Felician lists, but also in a perplexing eclectic Veronese text, and probably, through a lost Greek chronicle, in the Byzantine authorities. So far well. When Lipsius goes on to maintain that his Leonine catalogue contained biographies, and to find here the origin of some historical statements occurring in the Verona MS., he passes into conjecture beyond the reach of verification. He is certainly wrong when he tries to separate the Hormisdane and Felician numerals for years from those for months and days in the period ending with Urbanus, and to argue that the true Leonine record thus far exhibited years only. The sole evidence for this theory lies in certain phenomena of L, which point to an inverse conclusion as soon as a latent double dislocation is observed and corrected.

The Liberian catalogue, the most interesting of all our documents, is in truth a little world of difficulties. The text itself depends on two late MSS., while the younger catalogues, partially founded upon it, have been more fortunate in transmission. This uncertainty of text is too often neglected by Lipsius, even when Roman numerals are in question, though confusions of x, v, ii, and the loss or gain of an i or two, are abundant in all similar records. But the chief peculiarities of the list are undoubtedly original, and afford some definite materials for analytic criticism. Lipsius' suggested explanations are always ingenious, but often too complicated to be right. He has seen clearly that the catalogue taken as a whole falls into three sections, not, as Mommsen supposed, into two: the break at or about the death of Lucius is at least as important as that between Urbanus and Pontianus: unless the death-days celebrated

in the Calendar form an exception, it is only in the intervening quarter of a century that the apparently contemporary historical notices present themselves. But Lipsius has failed to observe that the form of consular notation does not change till the second epoch, and that consequently we have no means of knowing whether these short narratives connected with Pontianus and his successors were obtained by the compiler under Stephanus or Xystus II. (254–8) from the same record that supplied the term-numerals. If they were not, the *chronology* of these episcopates in L has no special authority beyond what arises from comparative nearness to the compiler's own time. Moreover, the same consideration destroys the only tangible evidence for an early episcopal record ending with Urbanus. The accession of Pontianus is a *terminus a quo* for the history in L; but not, as far as we know, a *terminus ad quem* for chronology in either L or Eusebius.

Lipsius has indeed two plausible supports to his theory in the seeming connection of Hippolytus with the Liberian catalogue, which he accepts from his predecessors, and in the conflict of Eusebian and Liberian numbers for a group of early episcopates as contrasted with their subsequent approximate agreement. Both appearances however are deceptive. The Greek chronography, of which one Latin recension is preserved along with L in the Roman collection of 354, includes a work which may rightly be ascribed to Hippolytus; but if so, it cannot itself be his, although it is a compilation contemporary with him. The title of a lost list of Roman bishops, found in the table of contents prefixed to a different recension, may date from either the third or the fourth century: the document to which it refers may have been either part of the secondary Greek chronography or a later Latin accretion. In no case has it anything to do with the true Hippolytean nucleus; and there is no other evidence that Hippolytus occupied himself with the Roman bishops before his own time.

Again, the seeming peculiarity of some of the early Liberian numbers is an accidental consequence of the dislocation noticed above. The inclusion of both Cletus and Anacletus, which is confined to L and its posterity with the doubtful exception of an obscure poem, must have arisen from the use of a document in which the form *Cletus* stood alone (so the Hormisdane MSS., with various Latin authorities and Epiphanius); while yet the form *Anacletus* (so all the Eusebian documents, with Irenæus and the African list in Optatus and Augustine) was familiar to the compiler; the Liberian position of Clemens next to Linus being also found in the last-mentioned list of bare names. The duplicate intruder Anacletus had now to be provided with a term-numeral; and a woeful medley was the result, for somehow two came in instead of one; not only the proper XII of the Hormisdane *Cletus* and Eusebian *Anacletus*, but a superfluous XIII, probably either a careless repetition of the XII or a similar anticipation of the VIII proper to the next name "Aristus" or Euarestus. This XIII usurped the place of the VIII, the VIII of the succeeding numeral, and so on. If we tabulate the chief authorities by putting the same names in the same line, Eusebius' years show themselves in substantial agreement with Leonine years, while Liberian years are conspicuously different. But if, disregarding names, we push the Liberian numbers and consulates one place higher up in the list, then for six episcopates after Anacletus the Liberian years are found to tally with the Eusebian years, never differing by more than one year; and almost equally with the Leonine years. This is strictly true for the consular intervals; and was evidently true for the term-numerals throughout in their original state, for Pius' XX must represent either XVI (consular interval) or XV (Eusebius). Pius himself, the last of the six, is in his right place; but that is because Anicetus has been thrust in before him, while Anicetus' proper number XI disappears for want of a name to receive it. Thus the dislocation ends in and is neutralized by the second Liberian medley, on which Lipsius has toiled much with little profit. After Pius and Anicetus the apparent discordance vanishes. On the other hand, the Liberian numbers for months and days have been supplied from an approximately Leonine list, but with a dislocation in the opposite direction. Months and days closely resembling those of the Hormisdane bishops, fifth to ninth, are attached to the Liberian bishops, fifth to ninth, again in disregard of the names; and so become detached two places from their proper years. The needed tenth Liberian number seems to be repeated from the ninth, III, VI for III, III. Thus a displacement of years, accompanying an intrusion of Anacletus, must have preceded an introduction of months and days in blindly numerical order from a different list, the second process perhaps not taking place before 336. Whether all the episcopates down to Lucius, the 22nd or 23rd in order, were included simultaneously in the two operations, it is impossible to say: there is at least no evidence to the contrary.

While it can hardly be doubted that in these and other instances Lipsius has failed to interpret the documents rightly, the failure affects the literary more than the historical problem. Except in isolated details, he never gives precedence to a bad authority, though he loses the not inconsiderable help which L and the Armenian Eusebius might have afforded him after being duly rectified. The arguments which induce him to trust mainly to Eusebius (and chiefly the *History*) till Urbanus, and to L afterwards, are unsound; but it happens that the result is not far wrong.

Three streams of evidence, Eusebian, Liberian, Leonine, are now before us, leading back to a single lost original provided with term-numerals. But the ancient datings being discarded, how are we to lay down a new dating on a sure base? To count from the beginning is to ensure delusion: St. Peter has his fabulous 25 years, some of the following names are, for various reasons, involved in doubt, and the unverified tradition of a subsequent age cannot be trusted for the earliest durations. A backward reckoning is the only resource, and we must travel far to reach a fixed starting-point. The martyrdom of Xystus II. in 258 is the first beginning or end of a Roman episcopate that can be rigidly fixed to a year independently of the Catalogues. Fabianus' martyrdom lies, however, within narrow limits, and Lipsius does well to place it in 250. In treating 235 as a safely *recorded* date for the banishment of Pontianus, he has to make a precarious assumption; but the year is probably right. From that point, at all events, we must trust to calculation, while a knowledge of the dates of some ten preceding episcopates is much to be desired. Fortunately the sum of differences in full years between the primary authorities does not exceed two years in about 106: so that, even with the uncertainty due to fractions of years, the place of an episcopate on a chronological table can be determined within five or six years; and in the second century that is much.

The second division of Lipsius' work calls for no special examination here. Though by far the most readable part of the book, it has not the same distinctive and original character as the preliminary researches into sources. It abounds, however, in fresh criticisms of permanent value; and the excellence of the workmanship never fails, even where the conclusions are most open to question. The style throughout the book is a model of compactness and clearness.

F. J. A. Hort.

The Minor Prophets, with a Commentary Explanatory and Practical, and Introductions to the several Books. Part IV. Micah i. 13 to Nahum, end [and Habakkuk, beginning]. By the Rev. E. B. Pusey, D.D. &c. Oxford, Cambridge, and London: J. Parker and Co.; Deighton, Bell, and Co.; Rivingtons.

It was time that Dr. Pusey should do something to justify the position which he has so long enjoyed. For more than forty years he has been the occupant of one of the most richly endowed chairs in the University of Oxford, but although a succession of learned works has flowed from his pen during that period, they have not been usually of a nature to enhance the reputation of a Hebrew professor. Of late, however, there have been many indications of an increase in Dr. Pusey's activity as a student of the Old Testament. And the appearance of the fourth part of his great work on the *Minor Prophets* induces us to draw attention to his critical principles, so far as they can be gathered from this new portion of his commentary. Nothing is more characteristic of Dr. Pusey than his incessant iteration of the same views, and a single section of a work like the present gives a better epitome of the author's critical position than the book in its complete form could afford. His ideal of Biblical criticism is so well known that we need only describe it briefly as in strict conformity with Jewish and early Christian tradition. The extent to which this conformity reaches is hardly realised by general readers. No one is surprised at meeting with foregone conclusions on the meaning of a prophecy or the credibility of a sacred narrative; but respect for Dr. Pusey's office inclines most people to assume that, in questions of mere textual criticism and translation, the Regius Professor of Hebrew has kept pace with the scholarship of the age. To a certain extent, indeed, he has done so; it is impossible to read the notes in small print without discovering the wholesome influence of Gesenius. There is also a constant endeavour to bring out the full force of the idioms of the original, which renders many of these notes a useful study for beginners. But here our gratitude is at an end. Independence of judgment and philological acumen are as rarely displayed by Dr. Pusey as by the average English commentator. Perhaps he appears to least advantage in commenting on Micah, owing to his extravagant fidelity to the Masoretic text; see, for evidence of this, the notes on Micah ii. 6, 8; vi. 9; vii. 3, 4, 11–13.

But it would be ungracious to dwell on the slight philological element, to which the author himself attaches but a secondary importance. Even his extraordinary feats of exegesis, with their absolute disregard of the context, may for this time pass unnoticed. The essential question for the reviewer relates to the subjects of the "higher criticism." And he has to ask in particular, What is the commentator's attitude towards those who presume to deviate from the Jewish tradition? There need be no ambiguity in the answer. The intellectual movement referred to is, according to the Regius Professor, not merely one among many manifestations of the modern tendency to historical enquiry, but the direct result of infidelity. It is unnecessary, on this assumption, to direct the reader's attention to the more plausible forms of "negative" criticism; unnecessary, for instance, to mention that Knobel, De Wette, and Kuenen have deduced from internal evidence supplied by the book of Nahum itself a result which nearly coincides with the traditional view, though Knobel and his followers (including in this respect alone the highly orthodox Keil) deny that Nahum i. 14 contains a circumstantial prediction of the death of Sennacherib. On this assumption, too, it is quite permissible to be a little careless whether your opponent can be expected to admit your premisses; permissible, for instance, to answer Hitzig (p. 371) by assuming dates for various Hebrew writings, which that fastidious critic has presumed to question; permissible, too, to confound opposite points of view, and to misrepresent (of course unconsciously) the meaning of your opponent, even when he is so clear and precise a writer as Dean Stanley or Professor Hitzig. Choice examples of this theological licence might probably be gathered from any of Dr. Pusey's works, but we confine ourselves at present to those which occur in the 100 pages before us. Thus on page 341, note 9, Dr. Stanley is represented as seeking "to depreciate the law" (read, the Levitical ritual, which is not quite the same thing) in comparison with the prophets, by which Dr. Pusey merely shows how much he has to learn from the best "orthodox" German critics, who fully recognise the *principle* of historical development; on p. 360, Ewald is made to say* that the prophecy of Nahum "is grounded on the certain danger *that Nineveh is as good as fallen*" (read, "into which Nineveh has fallen"), and hence his theory of prophecy is described as naturalistic, and as differing only by a thin disguise of rhetoric from that of Hitzig; and on p. 371, note 3, Hitzig is represented as accounting for "the pronunciation" נָפִשׁוּ "by making it kal נפש, a word not extant in Hebrew," whereas that critic expressly says that נָפִשׁוּ is equivalent to נָפְצוּ, *i.e.* פוּשׁ is a collateral form of פוּץ, and illustrates the substitution of ש for ץ in פוּשׁ by the form נפש in Arabic.

Enough has been said to show that Dr. Pusey's work is pervaded by an intense theological prejudice, or, to speak more precisely, by a peculiar view of the history of modern thought. Into a criticism of that view we have neither space nor inclination to enter. To those who believe it to be an unsound one, the redeeming feature of the work will be its fulness of historical and geographical illustration. The introduction to Nahum contains a complete abstract of the discoveries of Rawlinson, Oppert, and others (George Smith is not once mentioned), so far as they bear on that prophecy—discoveries which we for our part should be unwilling to employ so unreservedly, without testing the process by which they were gained. It is enlivened by a good deal of sharp criticism of Ewald and Hitzig, though a better acquaintance with the points of view of those writers might have made the criticism somewhat more cogent. The argument against Hitzig, in particular, seems to us inconclusive, for would not a high-minded Jew feel the indignity of paying tribute to Assyria, and long for the humiliation of his insolent foes? From the small-print notes we may select two of special interest, one on טפסר, "doubtless a Ninevite title, probably signifying 'noble prince,' from טבסר, as Prof. Lee conjectured" (p. 358); the other on פלדות, Nah. ii. 3 (p. 372), where the opinion of Justi, the great Persian scholar, is cited, from a letter to Prof. Max Müller, to the effect that פלדות cannot be from פלד, the Arabic فولاذ, "steel," being borrowed from the Persian پولاد, not conversely, as Freytag and Vüllers assume.

On the whole, while the learning and conscientiousness of the author are thoroughly admirable, we doubt whether many students of any school or party, except of course the Catholicizing one, will admit that he has essentially advanced the study of the prophets. In philological tact and exegetical insight he is scarcely on a level with Keil; a comparison with Delitzch is altogether out of the question. But the closest parallel which suggests itself is between Dr. Pusey and his great predecessor Pococke, whose commentary

* This strange mistranslation has been already pointed out by a competent writer in the *British and Foreign Evangelical Review*, July, p. 598.

on the Minor Prophets reminds us of that which lies before us even in the arrangement of its pages. There is the same narrowness of theological views, without however the ascetic, devotional element so striking in Dr. Pusey, the same Rabbinical learning and exaggerated respect for Jewish critics and lexicographers, which are natural enough in the seventeenth century, but are curiously misplaced in a Regius Professor of Hebrew in 1871. T. K. Cheyne.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—One of the most serious difficulties in the decipherment of the Moabite inscription is presented by the lacuna near the end of line 23, which, as it is occasioned by a blemish in the stone and not by the loss of a fragment, can never be repaired except by conjecture. Dr. Ginsburg, in the very complete summary of opinions which he has recently published, says that seven suggestions have been hazarded as to the filling up of the blank. But it has, I believe, hitherto escaped notice that the stone itself suggests a restoration of the text, much more probable than any of those hitherto suggested by the scholars who have studied the inscription.

The passage in line 23 runs thus :—

ואנך עשתי כלאי האש//////ין בקרב ה[קר

Of the mutilated word, האש····ין, the three first letters, האש, are certain; the two last, ין, are less distinct, and did not appear in M. Ganneau's first edition of the inscription.

In attempting to restore the lost word, these three things are to be kept in view : (1) that it begins with the letters האש : (2) that it follows the verb עָשִׂתִי, *I made;* and (3) that it is followed by בְּקֶרֶב הַקִּר, *within the city*.

Now, in line 9 of the inscription, we meet with a word which exactly answers these requirements, viz. האשוח : for (1) it begins with האש, (2) it follows the verb, *I made*, and (3) it is followed by *in it*, i. e. *in the city*, which is as nearly as possible equivalent to בְּקֶרֶב הַקִּר of line 23. It is, therefore, highly probable that the mutilated word in line 23 is the plural of אשוח, and should be written האשוחין, or rather (as ' in the Moabite writing was omitted from the plural termination, and is not certainly present here in the inscription) האשוחן. With regard to the preceding word, כלאי, I see no reason to doubt that it is the const. state of כִּלְאַיִם, with the Arabic sense of *both of* (compare חלף, in the sense of *succeed*, in line 6) ; but what object was denoted by the Moabite term אשוח is as yet uncertain : all that can be gathered from the inscription is that it must have been some important object *within the city*, and the apparent connection of the term with the root שׁוּחַ may seem to point to some underground excavation, such as a pit or reservoir for water. Duncan H. Weir.

[An article on the historical bearings of the Moabite Stone by Prof. Schlottmann will be found in the *Theolog. Studien u. Kritiken*, 1871, No. 4. It contains, *inter alia*, a criticism of Prof. Weir's ingenious explanation of the "forty years," published in the *Athenæum* for May 21.—Ed.]

Intelligence.

We understand that a new edition of the Harclean Syriac version of the New Testament is in course of preparation by the Rev. H. Deane, B.D., Fellow of St. John's College, Oxford. The only complete edition at present is that of White, printed at the Clarendon Press, 1778–1803. The only separate portion which has been printed is the Gospel of St. John, which Bernstein published in 1853. Only two MSS. of this version of the Gospels were accessible to White at the close of the last century. The number of MSS. which will be collated in forming this edition will most probably be not less than twenty. The first fasciculus, containing the Gospel of St. Matthew, will appear in the course of next year. We are also informed that the Prussian government has most liberally undertaken the expenses of Professor de Lagarde's projected critical edition of the Septuagint.

Society of Biblical Archæology (9, Conduit Street, W.).—The following eminent continental archæologists are announced as contributing papers for the next session :—Prof. Brugsch, M. F. C. Chabas, M. Clermont-Ganneau, and the Chev. de Saulcy. The first part of the Society's *Transactions* will be ready early in the spring, containing articles by Dr. Birch, J. W. Bosanquet, M. Ganneau, Prof. Lowne, Lieut. Prideaux, G. Smith, and H. Fox Talbot.

Contents of the Journals.

Zeitschrift für wissensch. Theologie, 1871, No. 4.—Ritschl's History of Justification, &c., rev. by A. Hilgenfeld. [An examination of Ritschl's able but startling attempt to prove the ecclesiastical affinities of the Reformation theology.]—The Pauline Christology, by O. Pfleiderer. [A careful exegetical study, showing that the Pauline doctrine about Christ depends on that of the relation of the σὰρξ to the πνεῦμα.]—The Construction of the Fourth Gospel, by W. Hönig. [Traces evidences of design in the minutest details of this Gospel, with the view of showing that it is in the main unhistorical.]—Exegesis and Criticism of Ecclesiastes, by F. Hitzig. [Objections, to which we may recur later, to Grätz's Herodian hypothesis.]—Keim's Galilean Spring, by A. Hilgenfeld. [Objections to Keim's critical analysis, especially to his retention of the narratives of the Capernaum centurion, and of Jesus' eating with publicans and sinners (heathen), as parts of the original document on which our Matthew is based.] Notices : Fritzsche's Libri V. T. apocryphi, and Libri pseudepigraphi, reviewed [the latter rather unfavourably] by A. H.—Vogel's and Ranke's Itala fragments, by H. Rönsch.—Scholten on St. Luke, by A. H. [Unsuccessful attempt to prove the purely Pauline character of the Acts.]—Rovers on 2 Cor. xii. 12, by A. H.—Hofmann on the Epistles, by H. Holtzmann. [An interesting paper, based on the view that the characteristic exegetical difficulties of Ephesians arise from the writer's inexact reproduction of Colossians.]—Lipsius on the Acta Pilati, by A. H. [Maintains, against Lipsius, that Justin and Tertullian consulted earlier Acta Pilati.]—W. v. Göthe's Studies on the Life of Bessarion, by A. H.

New Publications.

Augustine. The Origin of the Two Cities. [De Civ. Dei xi–xiv.] Transl. by Walker. Longmans.

Benni, C. B., Syriac Abp. of Mossoul. The Tradition of the Syriac Church of Antioch. Burns, Oates, and Co.

Grau. Entwickelungsgeschichte des neutestamentl. Schriftthums. Bd. I.

Keim, Th. Geschichte Jesu von Nazara. II. 2. Die galiläischen Stürme. Zürich : Orell, Füssli, and Co.

Science and Philosophy.

*RECENT WORKS ON CHEMISTRY.**

[Second Article.]

V. **Lehrbuch der Chemie.** By Dr. E. F. v. Gorup-Besanez. 4th edition. Vol. I. Part I. Brunswick : Vieweg and Son, 1871.

VI. **Anleitung zur qualitativen und quantitativen zoochemischen Analyse.** By Dr. E. F. v. Gorup-Besanez. 3rd edition. Brunswick : Vieweg and Son, 1871.

VII. **Anleitung zur Ausmittelung der Gifte.** By Dr. Fr. Jul. Otto. 4th edition. By Dr. Robert Otto. Brunswick : Vieweg and Son, 1870.

V. The regular appearance every three or four years of a new edition of this manual is a good indication of the esteem in which it is held in Germany. This is due partly to the care bestowed on its arrangement and composition, partly to its size. It is in three convenient volumes, which contain respectively Inorganic, Organic and Physiological Chemistry. The last volume constitutes the distinguishing feature of the work, and makes it of special value to the medical student and physiologist; the first two are of general interest, and can be used by all classes of chemical students. For them, whether attending lectures or attempting to acquire the science by private study, it seems well adapted. The inorganic division, of which this is the first "Abtheilung," is neither a bare outline of facts nor a theoretical view of the constitution of chemical compounds, but is a profitable and to beginners interesting description of well-marked and fundamental chemical phenomena.

The first volume is in three sections, an introduction of

* *Academy*, No. 29, vol. ii. p. 374.

68 pages, the non-metallic elements, and the metals. The introduction treats of those general properties of matter, knowledge of which is required before beginning the study of chemistry proper. It contains, further, a simple description of the nature of chemical attraction and the physical conditions under which it is manifested, and in particular an excellent statement of the laws of combination by weight, which in English text-books are very often slurred over altogether, or deduced from the atomic hypothesis. It should never be forgotten that on these laws or generalisations rests the chemical system, and while any one who will may point out the advantages of the atomic hypothesis, the student may justly claim to be made first of all acquainted with the laws themselves. Impressed with their importance, the author has devoted 16 of his 68 pages to their explanation, and has said nothing about the atomic hypothesis till he has concluded the non-metallic elements, when he reviews the modern doctrines.

The second section of the volume is occupied with the non-metallic elements, of which oxygen, hydrogen, nitrogen and sulphur are treated in this "Abtheilung" with considerable but not tedious detail. A characteristic of this section is the appendix to each chapter, containing in full experiments on the preparation and properties of the elements and their compounds. These are besides copiously illustrated by woodcuts of the apparatus required and of the mode of operating. Lecturers upon elementary chemistry, who may be at a loss sometimes for good lecture experiments, will find these valuable, and so will students in recalling what they have seen. But private students, for whom one would imagine these experiments very suitable, will have to content themselves with seeing how the experiment looks on paper, unless they have the inclination and means to furnish a regular laboratory, or unless they can contrive apparatus simpler than what is so sumptuously portrayed in these pages. The present edition has got some new experiments: a method of showing increase of weight by combustion (with a drawing), preparation of sulphuric anhydride (with a new drawing), preparation of the leaden chamber crystals, oxidation of ammonia to nitric acid. Besides entirely new woodcuts, several of the older, which one would be glad to see in an English text-book, have been replaced by others still finer.

The only theoretical change of importance is in the disuse of the term "equivalent." What was called in the previous edition the "equivalent formula"—for example, HNO_6, or HO,NO_5 of nitric acid—is now called the "combining weight formula," while HNO_3 retains the title "atomistic molecular formula."

There is no gain in this change, for while it avoids the confusion between the old and new meanings of equivalent, it draws a distinction between the "combining weight" and the modern "atomic weight," which is needless and hurtful. "Combining weight" is so convenient and correct a phrase to express the fact that substances combine in definite proportions, quite apart from any theory as to the mode of combination or the precise ratio, that it should not have its meaning limited to one set of numbers. It may be proper to observe, that it is the old notation which is employed in the text, though the new formulæ are given at the beginning of each chapter.

The complaint made in the previous article, about the habit of omitting to explain the system of chemical nomenclature, must be again repeated. It is somewhat remarkable that the author, who is in general so systematic and lucid, should have lost sight of this important topic.

The historical observations, which are inserted in a few places in the book, deserve attention. At present they must be passed over, but we reserve the right of considering them if opportunity offers.*

VI. The third volume of Gorup-Besanez' *Lehrbuch* treats, as is remarked above, of physiological chemistry. This "Guide" may be considered as doing for that volume what the experimental appendices do for each chapter of the inorganic portion. The only difference is in the aim of this work and its greater detail.

Comparison with the first edition, published some twenty years ago (Nürnberg, 1850 and again 1854), shows what increase in knowledge of the subject has been made during the interval. While some few things remain unchanged, the whole subject has almost been remodelled. New bodies have been discovered, known bodies have been found where they were hardly to be expected, the constitution and decompositions of bodies have been minutely investigated, new reagents have been employed, entirely new and far more delicate methods of investigation have been applied, and thus the darkness which hung over many zoochemical problems has been to a slight extent dispelled. Animal chemistry, physiological and pathological, was formerly a vague subject, which yielded nothing but a few equally vague reactions and substances. Zoochemical analysis is now rapidly becoming one of the chief helps in constructing scientific physiology and in the scientific treatment of disease. The feeling against the fruitlessness of theoretical experiment, when compared with the general empirical success of collective experience in medicine, at present prevents zoochemical analysis taking the position which it must ultimately occupy, but when the time, which is not very far off, arrives, it will form an essential part of the training and equipment of every medical student. So far as we know, the subject is neither studied nor taught systematically in this country, and, as an almost necessary consequence, there is no recent English treatise upon it.† There are some very large books, indeed, on some of its sections, but the chemical part is overlaid with clinical and therapeutic details, so that these books are best suited for the practitioner.‡

In this work the author deals only with the chemical investigation of animal substances. In the introduction he expounds the order in which the subject should be studied. Provided with a knowledge of qualitative and quantitative analysis, as obtainable from the writings of Fresenius, the student makes himself familiar with the properties and modes of separating and estimating known animal substances. Thereafter, he is qualified to look intelligently and with confidence for these substances in unknown mixtures. When this branch of analysis comes to be commonly studied, it is possible that the author's notions upon this course, which seems the natural one, may appear old-fashioned and his plan very tedious, and that the attempt will be made to dispense with preliminary study, and to proceed at once to the examination of the solids and fluids of the body. The two methods cannot but have very different results. By the latter, one may become a quick analyst or assayer according to a given plan, without necessarily any great knowledge of the subject, and without the power of devising a new method or of getting over an unlooked-for difficulty; by the former alone, the scientific investigator can be trained. The latter may suit the mass who are always in a hurry; the former only will satisfy the individual who wishes to be the master of his subject.

* Since this was written, "Abtheilungen" 2 and 3, completing volume i., have been received.

† There is, however, an English translation of Gorup-Besanez' work by Slater (London, 1854).

‡ It will be remembered that in Neubauer and Vogel's treatise the chemical and medical parts are kept separate, with great advantage.

It is to assist him that this book has been prepared, and like the thirteenth edition of Fresenius' book, after which it has been constructed, it contains all that he is likely to need. There are chapters upon the operations, reagents, and apparatus required in animal chemistry. This is followed by an elaborate account of the separate substances, under the heads of "occurrence," "preparation and separation," "deportment with reagents," "mode of detection." Both inorganic and organic substances are included in this. The last part of the work contains the chemical examination of the solids and fluids of the body, and the method of ascertaining their quantitative proximate composition. The whole arrangement of this could hardly be improved. Every precaution is taken to avoid error, to facilitate the analysis, and to ensure that nothing of importance is omitted. Under the different quantitative methods, as for example in ascertaining the amount of hæmoglobin in blood, there is first of all given the principle of the method, the apparatus and solutions required (with a woodcut), then the mode of operation divided into a series of steps, and, lastly, an example of the required calculations. Of especial value is the clear and succinct statement of the normal and abnormal ingredients of the different fluids and tissues, and the valuable account of the localities in which any one body has been found. Thus, if presented with a substance, say some milk or a bit of bone, the analyst can discover at once what bodies he may expect to find in these natural products, so that he can shape the course of his analysis to include them.

There are very few things which we could wish altered in this book. One is the notation, which might be renovated; a second is the reproduction of the figures of crystals, which were given in the first edition. These could be inserted in the text, as is done by Kühne, Frey, and others, or given on a separate plate at the end, as in the first edition, and by Neubauer and Vogel. Instead of this, the author refers to the atlases of Robin and Verdeil and of Funke, both of which are undeniably excellent. They are not, however, always readily accessible, at least to students in this country, and, whether or not, a work on this subject should have plates of its own.

There is only one other work which the present suggests: Hoppe-Seyler's *Handbuch*, of which the third edition appeared last year. But although treating of the same subject, their merits are so different that it is not exactly just to compare them. Of the two, Gorup-Besanez' is better arranged and clearer; Hoppe-Seyler's is more original, and in some respects fuller and completer. This is particularly apparent of course when Hoppe-Seyler describes his own methods for the examination of blood, bile, &c.; but it is also seen in the insertion of various substances (not very well defined, it is true) which Gorup-Besanez has passed over. Gorup-Besanez' *Anleitung* is the work of a clearly segregative mind, which is able to survey the whole subject as a dissected map, many parts of which may still be wanting, but of which it has got hold of the main divisions and the chief bearings, and which it delights to complete and fill up as fresh discoveries are made. Hoppe-Seyler's *Handbuch* is rather the work of one who is actively engaged in pushing his way into remoter regions, and wants a guide-book for the ground he has already traversed. The want, perhaps, of natural bias toward logical system has made his manual a little irregular, and the different parts are not sufficiently marked, even by the printer. Curiously enough, neither is up to the very latest available information and precautions which have been described by other zoochemists, but, notwithstanding, both works are indispensable to those engaged in this branch of chemical analysis.

VII. This pamphlet contains the results of chemical research rather than of literary study. It aims at giving merely the best methods of detecting, separating and identifying the common poisons, without attempt at strict scientific arrangement, at recapitulation of all the processes which have been proposed, or at comprehension of all substances which might possibly be used as poisons. It exhibits, in fact, the course of reasoning and of operations which the author would have employed in an actual case, because, as that consisted of methods which he had often tested, and of the value of which he was therefore assured, he could rely upon the results. That it embodies these results of the author's experiments and experience is a special merit of the book, of so much importance is it in these enquiries to know what has and has not succeeded in the hands of others. The very first section is full of advice as to the conditions which render a toxicological analysis valid and conclusive, and as to statement of results and drawing of evidence. This is followed by an explanation of the course. The peculiar modification of the analytical problem, presented to the toxicologist, almost necessitates a certain amount of arbitrariness, and when the result is usually of such moment, scientific arrangement must be modified to attain it. According to the plan of this book, phosphorus and prussic acid are first detected or proved absent, then the alkaloids, and, lastly, the common metallic poisons, namely, arsenic, which receives due attention, antimony, tin, copper, mercury, lead, zinc, and chromium. This last has been introduced because of a curious case of food contaminated by anhydro-chromate of potassium, which came under the author's notice.

Under these are given not only the standard methods, as Mitscherlich's for phosphorus, Marsh's for arsenic, Stas' for the alkaloids; but they have their weak points and merits alike criticized, and many minutiæ are enlarged upon, which are hardly to be found in text-books, but which are of importance for the successful conduct of the examination. The only difficulty arising from the system of consecutive description without distinct paragraph headings is, that one is sometimes at a loss to know what is to be done next, without reading the whole section over. It has, however, been to some extent removed by a brief recapitulation of the course, at the end of each chief division.

The English translation of this work (by William Elderhorst, M.D., 8vo., Baillière, New York and London, 1857) never came, we believe, into general use in this country. It certainly could not, as its representative, do so now. The subject has been rearranged, and much that was good in 1857 has had to give place to what is now considered better. There are, besides, entirely new sections upon dialysis (a method, it may be remarked, which does not meet with the author's approbation), upon the detection of blood stains by now well known processes, and lastly, in an appendix, a number of alkaloids not included in the text, with reference to Dragendorff's recent investigation of the same. Still, there are some palpable omissions. Reinsch's test is not given, and one of the commonest poisons, oxalic acid, has not been admitted, though it was inserted in the English translation. Some recent improvements also seem to have escaped the author's notice; for example, the use of magnesium, instead of zinc, in the detection of arsenic.

The want of a full table of contents and of an index will be at once felt by any one who has consulted Gorup-Besanez' *Anleitung*.

The preceding are illustrated by the woodcuts, which form one of the features of the scientific publications from Vieweg's establishment. In this respect they are as unlike as possible to English scientific books, in which the wood-

cuts, even when not inaccurate, are coarse, or blurred, or in some way disagreeable to the eye. Of this the books which follow in our list are only too striking a proof. At the same time all German books are not equally well illustrated. Hoppe-Seyler's work, for example, has only fourteen woodcuts against Gorup-Besanez' sixty, and the fourteen are by no means so well done. But the *Analyse* of Neubauer and Vogel and Arendt's *Lehrbuch* are excellently illustrated, far above what is usually seen in this country. One has only to look at the New Sydenham Society's version of Neubauer's book to be convinced of this. J. Ferguson.

Essays on the Platonic Ethics. By Thomas Maguire, LL.D. &c., Professor of Latin, Queen's College, Galway.

Professor Maguire's little book is a singular phenomenon in the present state of Platonic study. It is the work—absolutely and without qualification—of a disciple. It conducts the reader briefly to the simple conclusion that "theoretically Plato's system is perfect." There is a conflict understood to be going on between "the Academy" and "Modern Positivism." Dr. Maguire meets Mr. Grote as champion of the latter in single combat, and modestly hopes that, after the result of the struggle, "the Academy need fear no new assault."

Dr. Maguire seems by no means deficient in either familiarity with his author, or power of comprehending him, or penetration and closeness of reasoning where he is professedly dealing with modern philosophical views. And yet it is hard to say who will be interested in these essays. We have in them, as might be expected, not the real Plato, but Plato commented and interpreted up to the requirements of modern psychology. Of the mode in which this is done, one or two examples will suffice for most of our readers. We have to deal with Plato's obviously inadequate tripartition of the soul into reason, appetite, and θῦμος. The disciple explains that this last, "in accordance with Plato's habit of calling a class after its most marked species," . . . . "contains the emotional moiety of the will, and the sentimental and moral feelings of our psychology." Or take the famous Socratic proposition that "Virtue is knowledge." On this point we can trace an unconscious conflict in Plato's mind. His central metaphysical aim is the construction of a supreme science that shall be also virtue: while yet his psychological analysis almost forces him to approximate to the truer view of Aristotle. The disciple, however, finds no difficulty in the paradox. He only has to explain that "Plato would class under the head of ignorance all the laws of emotion, which Brown has so well explained on psychological principles."

The best excuse we can find for this way of treating Plato is supplied by Mr. Grote himself. Mr. Grote was a historian, and a philosopher, and a philosophical historian: but he was not exactly a historical philosopher, and had nothing better to do, after expounding the views of his author, than to try and condemn them by the standard of the latest empiricism. Such a procedure naturally provokes a rejoinder "from the Academy." But Mr. Grote's results had attractions which the answer inevitably lacks. In the first place, the modern adversary has much less temptation to blur the outlines of ancient thought than the modern apologist. Further, Mr. Grote's manner of direct and simple controversy enhanced the fresh and vivid presentation of the Athenian world which is the great charm of his work. We had the English Benthamite in the market with Socrates, and in the garden with Plato: and the result, though incongruous, was enlivening, and stimulative to the historical imagination. Dr. Maguire's commentation has no compensating interest: and we cannot but regret that he has not devoted his scholarship and ability to a work more adapted to the age in which he lives. H. Sidgwick.

Scientific Notes.

Physiology.

Influence of Heat on Animals.—M. Bernard has recently been delivering a course of five lectures at the Collège de France on this subject. They are reported in the *Revue scientifique* for August. In the first two lectures he deals with the effect of heat upon the body of the animal generally. He describes the apparatus he originally employed, consisting of a chamber, across the interior of which a netting was stretched to suspend the subject of the experiment, and to the bottom of which the heat was applied. He shows that in all cases—in mammals, birds, and other animals—exposure to a high temperature produces an increase in the rapidity of the action of the heart; that the animal's breathing becomes hurried; and that, after a certain period, which is more quickly attained in birds than in mammals, the heart, if the temperature be sufficiently high, stops suddenly: the whole temperature of the animal being at the same time raised several degrees above its standard temperature. In his third, fourth, and fifth lectures, M. Bernard proceeds to describe an improvement that suggested itself to him in the construction of his stove, namely, to equalise the temperature of the animal's cage by surrounding it with another containing water, the boiling temperature of which was raised by the addition of sulphate of soda or other salts. On placing a bird or rabbit in the cage, the air of which was about 150° F. and dry, anxiety was quickly manifested, the respirations became tumultuous, and death speedily ensued (in four minutes in the former case, in twenty in the case of the rabbit). The temperature in the rectum rose from 104° F. to 122° F. (bird), or 115° F. (rabbit), and the heat in both animals was absolutely quiescent, whilst cadaveric rigidity was established with extraordinary rapidity, and the arteries as well as the veins contained black blood. M. Bernard then proceeds to point out the difference, already insisted on long ago by Bichot, in the behaviour of the muscles of organic life and the striated muscles in regard to temperature, and adduces an experiment showing that the former are actually more sensitive than the thermometer to slight variations of heat, an increase of temperature instantly calling forth peristaltic movement in the intestines of a rabbit which have become quiescent after exposure to the surrounding air. This action is direct, and is not communicated through the nervous system. This may be shown by placing the foot of a frog, in which the movement of the heart has been retarded by cold, into warm water: the warmer blood reaching the heart, instantly accelerates its action; and this occurs equally whether the nerve has or has not been divided. No such direct exciting action is observable in the muscles of animal life. Hence M. Calliburcés divides muscles into the *thermosystatiques* and the *athermosystatiques*. The gizzard of a fowl is thermosystatique immediately after the bird is hatched, but after a few days it assumes the characters of the muscles of animal life, and is then athermosystatique. The exciting action of heat of course has a limit, and this is shown by the heart of an animal exposed to a gradually rising temperature beating faster and faster till at length it stops dead, with complete loss of irritability. The cause of this cessation is, he thinks, partly chemical, and due to the coagulation of the santonin or myelin, though, when life is prolonged for several days, other causes as yet undetermined and affording a field for investigation co-operate. It is noticeable that within certain limits heat accelerates, and cold retards, ciliary movement. M. Bernard next proceeds to consider the action of heat on the blood. He shows that if 100 c. c. of blood be drawn from the inferior vena cava of a rabbit killed in the stove, the composition of the gases obtained from it is carbonic acid 37·2 c. c., oxygen 1, and nitrogen 3·4 c. c., the oxygen having almost entirely disappeared, and the blood being black both in the arterial and venous system. In animals exposed to cold, on the other hand, the blood in both the arteries and veins is scarlet. The effect in the former case, he thinks, is partly a rapidly induced post-mortem one, the increased heat causing the red corpuscles to use up the oxygen with great speed; since, if the blood be drawn *instantly* after death, that of the arteries will still be found to be scarlet. If blood be drawn directly from an artery into a closed glass tube, and be then gradually raised in temperature, it suddenly assumes a dark colour; between 140° and 158° F. it undergoes coagulation, and will not again recover its bright colour when agitated with air. Thus a temperature of 140° F. is required to deprive the blood corpuscles of their vital properties, though muscles lose theirs at a temperature of about 113° F. In his last lecture, M. Bernard gives the results of his investigations on the action of heat on the nerves, and shows by experiments on curarized frogs, that the motor nerves are not killed at a temperature which proves fatal to the manifestation of the vital properties of the

muscles, whilst sensory nerves lose their vital properties at a still lower temperature than the muscles. He concludes the course by some general observations on the action of those poisons, like the sulphocyanide of potassium and antiarine, which resemble heat in acting rapidly on the muscular tissue of the body.

Electromotor Properties of Embryonic Tissues.—The last part of the *Zeitschrift für Biologie* (Band vii. Heft ii.) contains an interesting physiological paper by M. G. Valentin, in which he gives the results of a series of experiments he has performed to determine when the electromotor properties of muscle and nerve first become apparent in the tissues of the fowl previous to hatching. Before the eleventh day the tissues are not sufficiently differentiated to admit of any conclusions being drawn; but after this time the ordinary muscular current between the natural longitudinal and the artificial transverse section may be demonstrated. At this period the striæ are scarcely, if at all, visible. In like manner the nerves, whilst still in a very undeveloped state, possess their usual power of conducting motor impulses, their ordinary electromotor relations, and exhibit the reversal of the current (negative variation) during excitation. It is thus seen that both muscle and nerve acquire their electromotor properties before their structure is perfected.

Absorption of Insoluble Substances.—M. Anspitz publishes in a pamphlet which is the reprint of his papers in the *Wiener medizin. Jahrbüchern* the results of his observations on the absorption of starch corpuscles of rice when injected into the abdominal cavity and into the subcutaneous connective tissue. He shows that such grains, which vary in their size from twenty times that of a mammalian blood corpuscle to rather less than such a corpuscle, are undoubtedly capable of absorption, and that they probably gain entrance into the circulation through the lymphatic system, the openings of which into the serous cavities have now been demonstrated by many observers.

Botany.

Mimicry in Plants.—Prof. Thistleton-Dyer read a paper on this subject at the recent meeting of the British Association at Edinburgh, in which he objects to the use of this term as applied to plants. He considers that in all large natural families of plants there is a more or less distinctly observable general habit, or *facies*, recognisable by the practised botanist, but not always as easily to be expressed in words. What have hitherto been spoken of as mimetic plants are simply cases where a plant belonging to one family puts on the habit characteristic of another. The cause of the phenomenon he believes to be the influence of similar external circumstances in moulding the plants into the similar form most advantageous to them; and gives as an illustration the closely resembling bud-scales which are found in widely separated natural orders of deciduous trees as modifications of stipules.

Parasitism of Cuscuta.—Dr. Hugo Mohl describes, in the *Zeitschrift für Parasitenkunde*, Band ii. Heft 3, two curious species of dodder, both Mexican, in which the flowers present the appearance of springing directly from the plant on which they are parasitic. *Cuscuta strobilacea* occurs in the form of warty bodies on the hairy stems of a *Triumfetta*. These warts are clusters of flowers, very densely packed, and inserting their penetrating roots deep into the stem of the *Triumfetta*. The twining stems of the *Cuscuta* have entirely withered and disappeared before the plant comes into flower. The structure of the *Cuscuta Sidarum* is very similar. The stems disappear, and the clusters of flowers strike their roots into the stem of the *Sida*, the flowers, when developed, appearing in small flesh-coloured squarish clusters, on pedicels a quarter of an inch in length; and as there are frequently a considerable number of these clusters on one stem of the *Sida*, they present a very remarkable appearance.

The Madras Fungus-foot.—In the *Monthly Microscopical Journal* for August occurs a report of a paper presented by Mr. Jabez Hogg to the Royal Microscopical Society, containing the results of his researches into the nature of the *Mycetoma*, or "Madras Fungus-foot." This disease had been previously considered due to the ravages of a microscopic fungus; but after making a careful section, and examining a foot attacked by the complaint, Mr. Hogg has arrived at the conclusion that the disease is not due to a fungus, but originates from a form of fatty degeneration or disintegration commencing in the bones of the foot, and gradually extending into the surrounding tissues. A somewhat similar appearance is presented by the amyloid "lardaceous" disease, which attacks various other parts of the body.

The Classification of Fruit.—Prof. A. Dickson, of Glasgow, read a paper at the recent meeting of the British Association at Edinburgh on Fruit Classification, the system which he suggests approaching most nearly to that indicated by Schacht in his "Grundriss." Prof. Dickson is of opinion that the most convenient mode of classification is in the first place rigorously to restrict the definition of a "fruit" to the mature or ripe pistil, excluding the modifications undergone by the parts of the pistil in ripening, and treating as of minor importance the characters involved in the description of the flower, such as the superior or inferior position of the ovary, &c. The different kinds of fruits are thus classed under five principal heads, as follows:—(1) *Capsules*, which are dry, and dehisce, allowing the seeds to escape; these may be either simple or compound: (2) *Schizocarps*, dry, and breaking up into indehiscent pieces, which do not allow the escape of the seeds: (3) *Achenes*, dry, indehiscent fruits, not breaking up; these may be either superior or inferior: (4) *Berries*, usually indehiscent, in which the seeds are imbedded in a pulp: and (5) *Drupes*, usually indehiscent, in which the endocarp or interior layer is distinctly defined, and more or less indurated, and the outer portion of the pericarp is of variable consistence, fleshy, leathery, or fibrous. This classification Dr. Dickson considers more practical, if less philosophical, than one depending on the nature of the part disseminated for the propagation of the species.

Geography, &c.

Our well-informed contemporary, *Das Ausland*, contains (Sept. 4) interesting details respecting the expeditions set on foot by the Russian Geographical Society. These are no less than seven in number. First in order come the ethnographical researches of J. P. Kusnezow in the north-west of the empire. In a letter dated July 15, the explorer states that he has found peculiarities in the language of Wilkomir, which place the existence of a transition from the Lithuanian to the Lettish language beyond all reasonable doubt. He believes that the Lithuanian race, at any rate so far as its existing members are concerned, has never materially varied in the situation or extent of its territory. S. J. Poljakow has concluded his researches in the region to the S. and S.E. of the lake of Onega, and gone to Pudosh and Bodloosero. Prince P. A. Krapotkin has carried on important geological investigations in Finland and Sweden. Another expedition relates to the state of the corn trade in Russia. The Archimandrite Palladius is engaged in ethnographical researches in the region of the southern Ussuri. His diary of his journey from Pekin to Blagoweshtshensk will appear in the *Abhandlungen*, and a certain number of copies will be transferred to the book trade. Mr. Maklai has been sent to the Pacific Ocean; Mr. Neumann and other *savans* to the Tshuk region; and an important expedition has been engaged in researches of various kinds, geological and ethnographical, connected with the Angara, a river in Siberia.

More Dredging.—We learn from the *Pall Mall Gazette* that Professor Agassiz is about to set out from Boston on a deep-sea survey of the oceans bordering America. He has at his orders a new United States coast survey steamer fitted for the purpose. She will carry a dredging apparatus capable of working at a depth of 3000 fathoms; and the Professor intends making a zigzag course between the eastern coast of America and the deepest part of the Atlantic as far as Cape Horn, and so up the western coast to San Francisco, dredging all the way. He anticipates a new revelation of the condition of animal life from those unknown depths.

Chemistry.

On the Artificial Formation of Dulcite.—An important contribution to our knowledge of the sugars is afforded by a communication of M. Bouchardat in a late number of the *Comptes rendus* (lxxiii. 199). The relation between the products obtained by the action of dilute acids on cane sugar and the hexatomic alcohol mannite is well known; these compounds are all characterized by yielding saccharic acid on oxidation. Linnemann also succeeded in directly converting inverted cane sugar by hydrogenation into mannite, thus establishing experimentally the relationship of these two bodies. Berthelot first pointed out that a similar relation probably existed between invert sugar of milk, galactose, and the hexatomic alcohol dulcite, or an isomeride of dulcite, all of these yielding mucic acid, isomeric with saccharic acid, as characteristic oxidation product. M. Bouchardat has succeeded in realising Berthelot's prognosis, and announces that by the action of nascent hydrogen on an aqueous solution of galactose he has obtained a body which, in composition and properties, is identical with dulcite, $C_{12}H_{14}O_2$, a sweet substance first obtained from Madagascar manna, and since extracted from *Melampyrum nemorosum*.

On the Synthesis of Uric Acid Derivatives.—The memorable researches of Liebig and Woehler, Baeyer, and others, have led to the discovery of an enormous number of decomposition-products and derivatives of uric acid, which has become a substance of extraordinary interest to the chemist and physiologist. Hitherto, however, all attempts to synthesize any of these bodies have been fruitless. M. Henry describes, in the *Comptes rendus* (lxxiii. 195) the synthesis of oxaluric acid by a method, an extension of which will probably lead to the artificial preparation of several other uric acid derivatives. By the action of phosphorus, pentachloride, or oxychloride on potassic-ethylic-oxalate he obtains the ethoxyl-oxalyl chloride, $Cl.CO.CO.OC_2H_5$; this latter body, when acted on by urea, gives rise to ethylic oxalurate and hydrochloric acid, according to the equation:

$$Cl.CO.CO.OC_2H_5 + H_2NCONH_2 = H_2NCONH.CO.CO.OC_2H_5 + HCl.$$

The author expects by substituting cyanamide for urea to obtain parabanic acid, from which, as is well known, oxaluric acid only differs by containing the elements of one molecule of water more.

On the Normal Alcohols of the Ethylic Series.—Lieben and Rossi, in a series of memoirs in the *Ann. Ch. Pharm.* (clviii. &c.), describe the mode of preparation and properties of the various normal alcohols of the ethylic series from the first member—methylic alcohol—up to amylic alcohol. Their method of ascending the series consists in converting the normal acid into the corresponding aldehyde—butyric acid to butyric aldehyde, for example—by distillation of a mixture of its calcic salt with calcic formate, and conversion of the aldehyde into the alcohol—butyric aldehyde into butylic alcohol—by the action of nascent hydrogen. By converting the alcohol so obtained into the iodide or bromide, and acting on this with potassium cyanide, the cyanide is formed, from which the acid next above in the series may be prepared, and from this again, by a repetition of the above processes, the corresponding higher alcohol. Their observations lead them to the following general conclusions as to the points of distinction between the normal and isomeric alcohols:—1. The normal alcohols possess the highest boiling-points, and exhibit the greatest stability. 2. Their simple and compound ethers and animes possess relatively the highest boiling-points, and their haloid compounds are least readily decomposed with separation of the hydrocarbon of the C_nH_{2n} series. 3. On oxidation they yield acids containing the same number of carbon atoms; the acid formed being distinguished from the isomeric acids by its higher boiling-point and greater power of resisting oxidation.

Physics.

On the Influence of Calcination of some Metallic Oxides on the Heat evolved during their Combination.—The *Comptes rendus*, lxxiii. 270, contains an account of an investigation by M. Ditte on the influence of temperature on the physical properties of magnesia, the properties examined being the density, the dilation, and the heat evolved on dissolving in dilute sulphuric acid. The author finds that the higher it is heated the less the dilation; on the other hand, its density increases, and, at the same time, the quantity of heat disengaged on its dissolution also increases. He specially insists on this latter result, which he also obtained with oxide of zinc, inasmuch as it is contrary to the generally received opinion that the heat of a body diminishes as its density increases. In the following table the numbers in the first column give the temperature to which the magnesia was first heated; the second, the density at zero; the third, the coefficient of dilation between 0° and 100°; the fourth, the heat evolved by the dissolution of one equivalent:

350°	3·193	·00031	16655 calories.
440°	3·201	·00024	18417 ,,
Dull-red heat . .	3·248	·00017	19234 ,,
White heat . . .	3·569	·00016	22094 ,,

This variation of physical properties appears also to hold good for the combinations of magnesia with water. The hydrated magnesia is denser and harder the denser and harder the anhydrous material employed in its preparation; also the heat disengaged on its dissolution in acid is in direct relation to the heat disengaged by the anhydrous magnesia. Thus when the magnesia was first heated to 350°, the density of the hydrate was 2·326, and 14244 calories were evolved on its dissolution; heated to 440°, the density was 2·363, and 14431 calories were disengaged; heated to a dull red, the density was 2·604, and 18344 calories were disengaged.

On the Influence exercised by the Crystallization of Oxide of Cadmium on the Heat disengaged during Combination.—M. Ditte has also determined the amount of heat evolved on dissolving the two modifications of oxide of cadmium, which are obtained the one on strongly calcining nitrate of cadmium in the form of small, brilliant, black, crystalline needles; the other by heating the carbonate or hydrated oxide, or by burning the metal in air, as an amorphous orange powder. Both modifications were first heated to the same temperature. The black, crystalline oxide disengaged on dissolving in dilute acid:

Per gramme	229·6	calories.
Per equivalent . . .	14238	,,

The orange, amorphous oxide disengaged:

Per gramme	234·1	calories.
Per equivalent . . .	14513	,,

The dissolution of the crystalline modification, therefore, gives rise to the evolution of less heat than that of the amorphous modification, the difference in favour of the former being 273 calories, so that it would appear that, when a body crystallizes, it parts with a small amount of heat. Favre's experiments on the calorific phenomena accompanying the oxidation of carbon and sulphur, and those of Troost and Hautefeuille on silicium, also point to the same conclusion.

The Influence of the Moon on Meteorological Phenomena.—The question whether the moon has an appreciable influence on meteorological phenomena has been the subject of numerous enquiries, without, however, any definite results being obtained, some affirming that it has, others, again, denying it. *Poggendorff's Annalen*, Supp. Bd. v. 603, contains a critical mathematical discussion by H. Strenitz of the observations on the height of the barometer, the rainfall, the direction and force of the wind contained in the *Greenwich Meteorological and Magnetical Observations* from 1841–1847, and in the *Astronomical Observations* from 1848–1867. After submitting the results to examination by the method of least squares, he comes to the conclusion that in our latitudes the moon does not exercise sufficient influence on the variations of the barometer, rainfall, direction and force of the wind, that it can be detected during a period of twenty years by our instruments and methods of observation. If, however, it really has an influence, it must be looked upon as so small as to be beyond all determination.

IN MEMORIAM.

We have to regret the premature death (of fever, in the Tyrol) of one of our most promising young contributors, Mr. R. C. L. DEAR. Few persons in England have such a mastery of the more difficult problems of modern metaphysics as Mr. Dear possessed. And although the too engrossing duties of an educational career at Oxford might have retarded the prosecution of independent research, those who knew the quality and assiduity of his work as a teacher at the University are well aware that, had he lived, he might have left his mark upon the Philosophical Literature of his time. ED.

New Books.

BROCA, P. Mémoires d'Anthropologie. Tom. I. Paris: Reinwald.
SCHENK, Dr. A., u. Dr. Ch. Luerssen. Mittheilungen aus dem Gesammtgebiete der Botanik. 1tes Heft. Leipzig: Fleischer.
SCHMARDA, L. K. Zoologie. 1. Bd. Wien: Braumüller.
SIEBOLD u. Kölliker. Zeitschrift für wissenschaftliche Zoologie. 21. Bd. 2. Hft. Leipzig: Engelmann.

Philology.

Inscriptiones Parietariae Pompeianae Herculanenses Stabianae. Ed. Carolus Zangemeister. Vasorum fictilium inscriptiones ex eisdem oppidis ed. Ric. Schoene. (*C. I. L.* vol. iv.) Berlin.

IN this the fourth and last published volume of the *C. I. L.* we are presented with a collection of the wall inscriptions and the writings on earthen vases from Pompeii. The names, indeed, of Stabiae (Castellamare) and Herculaneum appear upon the title page, but the number gleaned from those places is about ten to over three thousand from the former. As might be expected from the character of the two former volumes of the *Corpus*—the third has not yet appeared—the collection has all the appearance of being complete and accurate, and far superior to any that has been made before. It much exceeds in size and in trustworthiness that of the Padre Garrucci. The facsimiles are evidently much more exact, only it is a pity this volume was not made to supersede Garrucci's work entirely by the addition of some at least of the grotesque *drawings* which accompany and illustrate many of the graffitti, and which we must still look for there. To have facsimiles at all was an innovation on the theory of the *C. I. L.*, and no blame therefore can attach to Herr Zangemeister, who has evidently done all that was allowed him.

The first detailed notice of this peculiar class of wall inscriptions was due, as many of our readers are aware, to a scholar of our own country. In 1832, Mr. Christopher Wordsworth—now Bishop of Lincoln—then just elected Fellow of Trinity College, spent some days of an Italian tour in collecting the inscriptions which he found upon the walls of Pompeii. Very few had been noticed by Gell or Jorio, or by the government excavators, and he had difficulty in getting leave to copy what he saw. The results of his work were not made known till five years later, when he published thirty inscriptions,* mostly in verse, selected from a larger number, the original notes of which I have now

* *Inscriptiones Pompeianae*, or Specimens and Facsimiles of Ancient Inscriptions discovered on the Walls of Buildings at Pompeii (London: Murray, 1837 and 1845).

before me. It is not surprising that copies of inscriptions in a very peculiar character, being first written down in small note-books, and that under difficulties, and then edited so long after, should be sometimes merely conjectural. But the little book opened a new field to antiquaries, and as such receives a handsome tribute of praise from the present editor, as it did on its first appearance from other foreign scholars, such as Garrucci and F. Lenormant. It is satisfactory to find that Herr Zangemeister has obtained all of those in my father's note-books, and has almost always made out the difficulties which he found in deciphering them, besides correcting in many places the reading of his printed text. In one instance, however, at least, we may correct the *Corpus* from the inedited copy. No. 1860 should certainly run thus, or nearly thus—

QVOI SCRIPSI SEMEL ET LEGIT MEA IVRE PVELLAST
QVAE PRETIVM DIXIT NON MEA SED POPVLI EST,

a sentiment which might be abundantly illustrated from Catullus and the later amatory poets. No. 2052 may perhaps be conjecturally restored:—

"Quaecumque in vino nascitur *vinum sapit*."

And may not the first word of 1239 be (ΠΗ)ΓΑCHVC for Πήγασος, and the date of the consuls be (Pom)ponio (et Sisenn)a, A.D. 16? In 1618, is it too fanciful to supply as follows—"*O pater pater* | *prolipo pen*(*ates*) | *inma*(*turus*), *prolipo* being, of course, for προλείπω, a similar mixture of Greek and Latin being not uncommon on these walls? In 1817, I would suggest *quod pretium teg*(*etis*)? and other supplements will no doubt occur to many readers of these inscriptions. On the whole, however, the editors have done as much as was safe, and have said little that will have to be unsaid. If we feel the want of anything, it is of a little more explanation, though often the index will take the place of a commentary by giving the complement to a word or the parallel form.

About a fifth part only of this second-rate watering-place has been excavated, and it has given us no less than 3300 inscriptions. There are, indeed, among them none of transcendant importance; all are short, most very short, while the great bulk are the merest trifles, or the grossest and most trivial obscenities. But there is in the residue much of historical and philological interest. The matter is so varied that scarcely any principle of arrangement was possible except that here adopted. First, there is the great division of inscriptions *scrawled* from inscriptions *scratched;* of those, that is, in charcoal, chalk, or coloured earth, from graffiti proper, scratched with the stilus upon the stucco. Each of these classes are arranged according to localities, the whole of the excavated portion of Pompeii having been mapped out and named street by street and house by house, in a somewhat arbitrary though convenient manner.

The first class, however, is divided also into three sections: (1) "tituli picti antiquiores;" (2) "recentiores;" (3) "edicta munerum edendorum;" then, after the main body of graffiti, come the alphabets and "quadratariorum notae;" then the inscriptions on earthen vases (edited by Herr Schoene), followed by an appendix, additions and corrections, and excellent indices and lithographed facsimiles. There is besides a final list of addenda at the beginning, and a collection of spurious or suspected matter.

Our readers will probably be glad to have some account (1) of the chief grammatical results deducible from this collection; (2) of the general character of the inscriptions.

1. Generally these inscriptions are valuable as being more certain in date than any other collection of equal magnitude. None of them can be later than A.D. 79—the year in which Vesuvius finally overwhelmed the town—and therefore they give us data of remarkable clearness for the usage of the first century A.D. The language is in general Latin, such as was written by a low class of people, though some few Greek and Oscan inscriptions are to be found; but there are small traces of a so-called "vulgar Latin," none certainly enough to warrant the assumption of a distinct class dialect for this place and date, though there are many vulgarisms and misspellings.

As touching on *pronunciation* and *orthography*, we may notice that this collection bears out Mr. Munro's dictum that *ae*, when mis-written, more often represents *short* than long *e*. Out of the fourteen instances given in the index, six only are for *long e*, of which four are in Greek names—the others being *aegisse* and *Caeserninus*—and I can see no reason why the latter is not at least as correct as *Ceserninus*. On the other hand, we have *haberae*, *laesaerit*, *maeae*, *Numaerio*, *quaecunquae*, *Senaccio*, *Venaeria*, and *Aepaphroditus*, to which we should add *timaeo*, though the editor, for reasons unknown, prefers to regard it as a proper name (No. 1859; see index).

As to the confusion of *b* and *v*, Professor R. Ellis has already quoted the instances that are to be found in a late number of the *Academy*. They must go for what they are worth on his side of the argument, but it is noticeable that they are confined to three proper names, *Bibius* for *Vibius*, and *Vesbius* and *Vesbinus* for *Vesvius* and *Vesvinus*. If the practice was common, and meant much, it is strange there are not more.

As to the hard sound of *c*, we have a slight addition to our argument in the name *Equitiaes* (1825) when compared with the AECETIAI POCOLOM of *C. I. L.* i. 43. This confirms the already conjectured form *aequitia* or *aecetia* parallel to *aequitas*, just as *saevitia* to *saevitas*, and somewhat as *malitia* to *bonitas*. The reading COSMVS EQVITIAES MAGNVS CINAEDVS, &c., spoils, I may remark, the point of a good story in my father's book, where he reads COSMVS NEQVITIAE EST MAGNVSSIMAE.

On the other hand, we do observe the soft sound of *x* creeping in. It has *s* substituted for it in three instances, and stands itself for *z*, apparently, in the name *Byxantice*, and for *ss*, probably, in *Olyxis*. The omission of *n* before *s* is naturally very frequent; of the more uncommon omission before *t* we have two cases in *Froto* and *metula*, the only other early instances being *dedrot* and *Ateleta* for *dedront* and *Atalanta*, in *C. I. L.* i., though the practice later could not have been uncommon (comp. Madvig's emendation of Cic. *Phil.* xii. 12, 29, *cogitantes* for *cogitetis* or *cogitatis*, and others in King's note).

We have, as might be expected, eight or nine instances of the disputed but probably Grecising genitive in *-aes*, but only one, and that quite a doubtful one, which is not in a proper name—*lunaes*, No. 1306. There are also several of the curious "metaplasmus" of declension in Greek words, such as *Scepsini*, *Simurini* (dat.), and *Mysine* (abl.), though not carried so far as in later times, *e. g.* in *Agapenis*, *Zosimeni*, *Philemationi*, which we find in the Catacombs.

In construction we have *cum* with the accusative several times, e. g. *cum discentes suos* = "with his pupils" or "apprentices"; and *dignus* more often with a genitive than an ablative, probably on the analogy of ἄξιος, *e. g.* in the frequent election formula recommending a candidate as *Dignum Rei Publicae*.

Another slight peculiarity of idiom is seen in the words under the sketch of a soldier holding out a cup to a slave (No. 1291), and saying DA FRIDAM PVSILLVM, "a little cold water," *frida* being the vulgar contraction for *frigida* (*aqua*); and also probably in the similar phrase ADDE CALICEM SETINVM, "another measure of Setine." The two words seem to be in apposition, as in the German "Ein Glas Wein," &c.

As to vocabulary, these inscriptions do not furnish us with a great variety of new words. Some rather uncommon ones, if not otherwise wholly unknown, are found in the names of the various clubs, guilds, and colleges which took great part in the elections, and were, as we learn from Tacitus, dissolved as illegal in consequence of a riot, in which the men of Nuceria were roughly handled by those of Pompeii (Tac. *Ann.* xiv. 17, A.D. 59; comp. especially Nos. 1293 and 1329, 2183). Some, I imagine, were merely convivial, such as the *dormientes* and the *Seribibi*, and perhaps the *furunculi*. Others, like the *pilicrepi*, consisted of players devoted to fives, or, rather, *trigon*. Others are more distinctly guilds or corporations, such as the *aurifices*, *pomari*, *offectores* ("infectores qui alienum colorem in lanam coiciunt; offectores qui proprio colore novam officiunt"—Festus, p. 192 M), *saccari* or porters, *sagari*, "mantua-makers," *stationari* (policemen or postmen?); and, lastly, two otherwise unknown, *salinienses*, salt-workers, and *piscicapi*. All these, and others, are called upon to vote for candidates at the municipal elections.

2. The general character of these inscriptions has been indicated as very various, though generally very trifling. We may mention as the most important the placards of candidates generally for the office of aedile or duovir, the programmes of gladiatorial and other shows, and advertisements of various kinds. There are, besides, a host of minor ones scribbled on the walls of the court-house (*basilica* or *bassilica*), as well as in the streets, inside taverns and drinking rooms, on the walls of slaves' cellae, in workshops, on the quays by the seaside—in short, in every possible place, so as to give good cause for the reflection several times repeated in this volume—

> "Admiror paries te non cecidisse ruinis
> qui tot scriptorum taedia sustineas."

The majority of these minor sorts are amatory, abusive, or simply indecent: and in reference to the latter, we may remark that there is no sign of offence or disgust at them, such as we sometimes find appended to others of an abusive kind. But as a set-off to these, one that is really touching must be given. It is the regret of a school-boy for his dying friend, more striking as it stands out in the midst of much foulness (No. 2258A):

> AFRICANVS MORITVR
> SCRIBET · PVER RVSTICVS
> CONDISCES CVI DOLET PRO AFRICANO.

We must not omit the quotations from poets of the day, some evidently made by boys whom we find repeating in scraps and garbling what they had learnt to write from dictation in school. The first two words of Lucretius' poem are the only reference to be found to his writings (No. 3072 and perhaps 3139), but short pieces of Virgil and the elegiac poets occur frequently in a more or less correct form. "Arma virumque cano" bears its silent testimony to the recognised beginning of the *Aeneid* (No. 2361; comp. 1282, 3198, and *C. I. L.* ii. 4967, 31, where the first two lines, except *venit*, are given from a tile of an early date, found at Italica), and there are at least six other fragments of the *Eclogues* or *Aeneid*, though none from the *Georgics*. In one case, "Rusticus est Corydon," for "es," confirms the reading of two important MSS., though not generally received (No. 1527; comp. 1524, *Ecl.* ii. 56). Several lines of Propertius and Tibullus also occur, but, curiously enough, not a word of Horace. Ovid, naturally, was a favourite, sometimes alone, sometimes in company with Propertius, sometimes serving to eke out the scribbler's own fancies, as when to the line

> "Candida me docuit nigras odisse puellas"

we find appended

> "odero si potero, si non, invitus amabo"
> (Ovid. *Amor.* iii. 11, 35),

though we must remark that the first also is closely imitated from Propertius, i. 1, 5.

The electioneering placards, which take up a large space at the beginning of the book, may be very briefly described. They consist, generally, of the name of the candidate and of the desired office, followed by the monogram ☞ = "oro vos faciatis," with or without the names of those who support him—*rogant*. Sometimes he is lauded as D. R. P., sometimes we have other terms of praise, as *iuvenem innocuae aetatis*, *verecundum adulescentem*, *iuvenes probos*, *quorum innocentiam probastis*, *iuvenes egregios*, &c., and often some particular club or guild is called upon to vote for their candidate, *pilicrepi facite*, *piscicapi facite*, &c.

The gladiatorial programmes have also their regular formulae. Take, for instance, No. 1189—

> A SVETTI CERtI
> AEDILIS FAMILIA GLADIATORIA PVGNAB · POMPEIS
> PR · K · IVNIAS · VENATIO ET VELA ERVNT.

In others we have the number of the gladiators, their quality, and the number of their fights, to which a later hand has sometimes added their fate; *v* standing for *vicit*, *p* for *periit*, and *m* for *missus* (see especially No. 2508). Sometimes there are rough sketches of the combatants, with the names, &c., underneath; but these are not properly programmes. To the attractions of gladiators are added sometimes that of the "*venatio*," or fight with wild beasts, and the adjuncts of *vela* and *sparsiones*. We have an advertisement of a venatio alone, No. 1989—

> HEIC · VIINATIO · PVGNABIT · V · K · SIIPTIIMBRIIS
> IIT · FIILIX · AD · VRSOS · PVGNABIIT,

which shows the character of the entertainment. The awnings, no doubt, made a great difference both to the pleasure and the comfort of the spectators. The impression on the eye of the many-coloured light bathing the brilliant crowd is familiar to us from a passage of Lucretius, and the importance of this element in gaining popular applause is testified by other well known lines of Propertius describing the shows of Marcellus (iii. 18, 11 *seqq.*). The sparsiones seem to have been of two kinds, a scattering of scent or perfumes about the theatre, and a scramble for presents. The former is referred to by Seneca as gradually rising from the centre to the very top of the building (*Q. N.* ii. 9), and the latter is described at some length in one of Statius' minor poems, the *Kalendae Decembres*:

> "Iam noctis propioribus sub umbris
> dives sparsio quos agit tumultus."—*Sylv.* I. vi.

We are reminded that it was not always summer in Pompeii by the addition in one case of the formula QVA DIES PATIENTVR, "weather permitting." We have not space to enter upon the difficult questions raised by the interpretation of many other interesting inscriptions, such as the two advertisements 138 and 1136. In the first we may suggest that *cenacula equestria* may mean "first-class lodgings," on the analogy of *praetoria*, which in the Latin of the silver age has commonly the sense of "mansions" or "palaces." The list of *pe(n)sa*, or wool spun by a family of female slaves, is also curious (1507). The same apposition as noticed above is apparent here, *e.g.* in *pesu(m) stamen*, *pesu(m) trama(m)*. The form *pesu(m)* itself is noticeable as showing the origin of the French *pois*, which is only written *poids* from a false idea of its derivation. No. 679, in which mention seems to be made of CHRISTIANI, has been and will continue to be a tantalizing puzzle.

The inscriptions on earthen vases are of less general interest, though they have their historical use in helping to fill up the "fasti consulares." From them also we find that many other things besides wine were stored in amphorae and lettered, such as figs, olives, barley-meal, polenta, rice

and bean cosmetic (*lomentum*), depilatory unguent (*psilothrum*), as well as various sorts of pickle, especially *liquamen*, or *liquamen optimum*, which, we are told, means a kind of garum. This reflection may help us to understand the immense accumulation of potsherds in such a heap as the Monte Testaccio at Rome, and others at Alexandria and Cairo (see Burn's *Rome and the Campagna*, p. 209).

John Wordsworth.

Dictionnaire d'Étymologie daco-romane. Éléments latins comparés avec les autres langues romanes. Par A. de Cihac. Francfort-s.-M.: 1870.

The great superiority of this work over the very similar one of Professor Diez lies in its presenting a comparison of the whole of the Romance languages, whereas Diez treated only the three dominant branches—Italian, Spanish, and French.

The Wallachian or Daco-Roumanian language is spoken not only in the Danubian Principalities but also in the provinces of Bessarabia and Ardeal, and is found again southwards in the Pindus, close to the frontiers of Greece. The Rouman has been undeservedly neglected among the Romance sisterhood. Dating its origin from the rude legionaries of Trajan and Aurelian, it is probably the oldest of them all. How a language spoken over so large a tract of land could have remained so long almost totally unknown to the European world is a mystery hardly less explicable than the monstrous popular error which assigned to the Wallachian a Sclavonic extraction, simply and solely because until some dozen years ago the language continued to be written in the Cyrillic character. This alphabet was adopted about 1400 A.D., after an attempt by one of the popes to unite the Roumans to the Catholic Church. And the slow return to the Roman character is to be attributed in great measure to the opposition of the Russians; though perhaps not less, as the Hon. Henry Stanley suggests, to the difficulty of agreement among professors as to the system to be adopted for rendering the Cyrillic characters by Roman type. No book, therefore, of the kind before us, at present and for some time to come, would be complete without some expression of the author's views on Rouman orthography. M. de Cihac has added one more to the many attempts to settle this *vexata quaestio;* and though, so far as the pronunciation is concerned, his system is all but perfect, yet we venture to think there are some points which philologers will concede with reluctance. The difficulty of settling the rival claims of thirteen or fourteen different systems of orthography may be better appreciated by comparing the following specimens selected from Alexi's *Grammar* and M. de Cihac's *Dictionary*. *E. g.* Alexi has *dupò que* (Fr. *depuis que*), *quându* (Lat. *quando*), *vestmêntu* (*vestimentum*), *ḑicu* (*dico*), *fôrè* (*without*, Lat. *foris*), *vêndu* (Lat. *vendo*), *sciu* (Lat. *scio*), *nèquè* (Lat. *neque*): for which M. de Cihac gives *după că*, *când*, *veştmînt*, *zic*, *fără*, *vînd*, *ştiu*, *nice*. It will be seen at a glance that the examples from Alexi exhibit an attempt to combine correct pronunciation with correct etymology. Where the pronunciation has changed, hooks and accents are used to indicate this change, in order not to sacrifice the etymology. Max Müller, writing in 1854, would solve the problem by using the "Missionary Alphabet." But there is yet much to be said for Alexi's rational system before it is finally abandoned. It may, we fancy, be made to answer its purpose with tolerable success, with the aid of one or two more diacritical marks; and these not even M. de Cihac has been able entirely to dispense with. For example, we should like to write the last vowel of *quăndu* thus, *ŭ*, to denote that it is hardly, if at all, heard. Again, Alexi's *vestmêntu* might borrow from M. de Cihac the *ş* with a cedilla, thus—*veştmêntŭ*. In *fôrè* the *o* of the Latin *foris* is preserved, both vowels in this word being represented by the same Cyrillic character. So with *dupò*, regarded as a mutilation of Lat. *de post*. It may seem strange to our ideas that *nèquè* and *nici* (here *c* = Italian *c*) should be identical in pronunciation; but is it much more strange than the varying sound of Italian *c* accordingly as *e* and *i* or the other vowels precede? Again, if *sc* before *e* or *i* is invariably pronounced *sht*, what need can there be of M. de Cihac's *şt*—e.g. *ştiu* for *sciu* = Lat. *scio*? In neither of these two cases can there be any ambiguity.

An important innovation in this Dictionary is the suppression of the "u muette" in words like *focu* (*focus*), *fumu* (*fumus*), or, as we would write them, *focŭ*, *fumŭ*, "comme tout à fait superflu." The editor attributes the presence of this *ŭ* to a vicious habit of using it to represent the Cyrillic mute letter Ь, added to words ending with a consonant. But was it always an "addition"? No doubt a false analogy sometimes annexed it to words where it had no place; but in words like those quoted—*i.e.* the Latin *ŏ*(*ŭ*)-stems—was it not rather kept from a consciousness of its original and legitimate presence, though it might be heard very slightly, if at all, in the spoken tongue? What further entitles us to such a conclusion is the fact that this *ŭ* actually reappears, if not as etymologically warranted, at least as an aid to pronunciation, when the definite article is added—*e.g.* *focŭ*, fire; *focŭ'l* (no longer "ŭ muette"), the fire. Alexi gives four forms of the masculine definite article, *il*, *lu*, *le*, *ul;* the last of which is not recognised by M. de Cihac. We presume, therefore, that he does not explain the *u* of (*e.g.*) *focŭ'l* as part of the article. Alexi observes that the form *ul* is used only after words ending with a consonant, of which there are but few. The examples he quotes are *os-ul* (Lat. *os*, *ossis*), *vas-ul* (Lat. *vas*, *vasis*), *uger-ul* (Lat. *uber*), *ager-ul* (Lat. *acer*). But of these four examples it is curious, to say the least, that the first appears as an *o*-stem in Varro's *ossu-m*—the classical plural of the second presupposes a form *vasu-m*, actually found in older Latin—and Palladius, writing about A.D. 200, uses *acru-s* as an *o*-stem. So with *tener* (Lat. *tener*, an undoubted *o*-stem), which, with the article, should perhaps be written *tênerŭ'l*, not *tener-ul*. Cases which cannot be thus explained we might lay to the blame of false analogy.

In writing a comparative dictionary of a group of languages, we should naturally assign the foremost place to the oldest. If, then, the Daco-Roumanian is, as we believe it to be, the most ancient, and the most true to the original, of the Romance languages, M. de Cihac has done valuable service to students in making this language the basis of his work, and bringing it thus prominently forward. To the Latin scholar the comparison of this language cannot fail to be interesting. It is indeed less rich than its younger sisters of Western Europe; but its vocabulary smacks more of the classical Latin of the Augustan age than Italian itself. It is altogether more vigorous, and in not a few instances has resisted the tendency to weaker articulation which Italian so often exhibits. Moreover, in a surprisingly large number of Wallachian words the Latin meaning is retained, while it has become completely changed in the sister branches. But the point wherein the Roumanian is perhaps most valuable to philologers is its *deviations* from the Latin, which may possibly be pre-existing forms and not always corruptions—may in fact be Græco-Italic. "These deviations from Latin" (says the Hon. Henry Stanley, in the preface to his charming selections from Rouman poetry) "are very regular . . . . The following are some of the most frequently recurring changes:—the sound of *c*, *k*, and *q*, of the Latin changes to *p*, as *apa* for *aqua*, *peptu* for *pectus*, *patru* for *quattuor;* *cl* changes to

ch or *k*, as *închide* for *includere ; ex* changes to *sc* or *sk*, as *scoate* and *scutura* for *excutio ; l* changes to *r*, as *soare* for *sol*, *miere* for *mel*." We suggest, *en passant*, that, if *sol* be really connected with the Sanscrit *swar*, the form *soare* may be a relic of the time when *sol* had not lost its *w*-sound, and undergone the so-called weakening of *r* to *l*, or at least a recurrence to that stage. Compare *scoate* for *ex-quatere*, and *persoana* = Lat. *persona*, Portuguese *pessoa* (the ground-form being the same as of the Sanscrit *swan* = *sonare*). The *o* appears to be used here exactly as the later Greeks used it to represent the Latin *u*, as in Κόϊντος for Quintus.

The work before us professes to be a comparative dictionary of the Romance languages, but the compiler has not hesitated to quote words foreign to this group where it seemed necessary, especially from modern Greek, Servian, Russian, and Albanian. The plan adopted in this book is to head each article with the primitive word, e. g. *frate*, brother, and to give its equivalents, first in Latin and then in the other languages; then come the derivatives one by one, or two or three together, and the parallels to them if there be such; if there be no satisfactory parallels, the French rendering merely of the word is given. Thus after *frate* follow *frătuţ*, *frăţel*, *frăţică*, *frăţicel* (It. *fraticello*), *frăţior*, *frăţişor*, *frăţesc*, &c. So that, besides fulfilling its proper function, the work before us is really a valuable dictionary, in the ordinary sense of the term, of a considerable section of the Wallachian language. Moreover, from an examination of this book a considerable insight into the syntax of the language may be obtained. Idiomatic phrases are not unfrequently appended. For instance, under *gură*, month, we have *a se tăcé din gură*, se taire ; *a se lua de gură*, se disputer. A page and a half is devoted to the word *pun* (Lat. *pono*) and its derivatives, and among the idiomatic phrases quoted are such as these : *a pune la mănă pre cineva*, pincer, attraper, tromper quelqu'un ; *a aduce pre cineva in prepus*, faire soupçonner à quelqu'un. Sometimes we come across brief etymological disquisitions, as under the heading *la*, which Diez derives from Lat. *illac*, though in Roumanian it assumes the force of a preposition ; according to M. de Cihac it is simply the preposition *a*, preceded by a euphonic *l*, to give more substance to so short a particle. The Italian *là*, *lì*, says he, old Spanish *ala*, &c., together with the Fr. *là*, from *illac*, *illic*, are all *adverbs of place*. Then he illustrates eight uses of *la* in Wallachian, all of them prepositional ; e.g. *me duc la culcat*, Lat. *eo cubitum* (word for word, "me duco ad collocatum"). Besides the words of every-day life, we often meet with merely technical terms, so long as they are purely Wallachian, and not French or other introductions. Under *gură* we find *gurarul*, with the following explanation : "*au salines* gurarul *est un ouvrier qui travaille à l'orifice de la fosse*."

Where the plural of a noun is at all irregular, it is mentioned. In verbs the examples of the Latin dictionaries is followed, and the characteristic parts follow the present tense. In each the corresponding parts of the Latin verb are appended. Thus *pun*, *pusei*, *pus*, *pune*, is illustrated by *pono*, *posui*, *positum* (*postum*), *ponere*. This is generally followed by a *noun* corresponding almost letter for letter with the Latin infinitive ; e.g. *punere* = Fr. *position*. Herein we notice a striking difference between M. de Cihac's procedure and that of his predecessors in Rouman Lexicology. For instance, Alexi in quoting the above verb gives it thus : *punu*, *punere*, *pusu*, making *punere* the infinitive instead of a noun. In any case this is a remarkable illustration of that identity of the two which philologers insist on. There is yet another, perhaps very limited, section of readers to whom M. de Cihac's book may prove useful—students of Natural Science. We can hardly turn over a page without finding the equivalent in Wallachian of some Linnæan animal or vegetable. Thus we learn that *Aethusa Cynapium* is *petrinjel cănesc* (Lat. *caninus*) ; *Pimpinella saxifraga* is *petrinjel silbatic* (i.e. *petroselinum silvaticum*) ; and *Herb Paris*, or *Paris quadrifolia*, is *poama vulpei*.

Examples like those given above might be multiplied, but enough has been said to give the reader a general idea of the value of the work. In conclusion, we have only to express a hope that M. de Cihac's promised second volume, containing the "éléments étrangers" of the language, will prove as attractive as his first, and that its publication will not be long deferred. E. S. Roberts.

TO THE EDITOR OF *THE ACADEMY*.

Tanjore, July 21, 1871.

Sir,—Since I last wrote to you, I have examined about 10,000 MSS. here. I hope that the results, when published, will prove satisfactory to Sanskritists. There is scarcely a single Sanskrit work of importance which does not exist here in several copies, though unfortunately often in a number of different characters. Of new works I may mention the Bṛihat-Kathāmañjari of Kshemendra. This turns out to be almost identical in matter with the Kathāsaritsāgara. The tales are almost the same, even in the names ; the arrangement (as far as I have been able to examine the MSS.) is much the same, but the style is not so good. The tales are told in a very bald way, and shorter than in the K. S. S. ; though here and there one finds long and tedious descriptive passages. In the case of tales current in popular (vernacular) versions in India, this text seems to be nearer the original than the K. S. S.

Among the Vedic MSS. here, I have found copies of the Bhāradvāja and Hiraṇyakeçi-pitṛimedhasūtras, the first unfortunately in a very bad state. They are almost identical ; the first praçna in both differs very slightly, the second chiefly in the arrangement. There is a Comment to the first. Perhaps the most valuable part of the collection of Vedic MSS. here consists in the "Prayogas," or plain manuals of the ritual for the priests at the different sacrifices. There are Prayogas here for all the sacrifices, and in many cases for the different priests. There is a complete set of the Prayogas for the Chayanas (a part of the ritual of the Yajur Veda), and respecting which it is difficult to get information. As they involve (in some cases) sacrifice of human life, it is not likely that these triumphs of the Vedic sacrificial art will ever be repeated in India.

The last great Vedic sacrifice performed here (some five years ago) was the Paundarīka, a sacrifice described in the Yajur Veda ; though it does not involve any crime as the laws here are at present, it is a disgrace to humanity and worthy of Dahomey.

The weather this year has been very bad, and I have felt it extremely. I hope, in the course of a month, to give you some more details ; the rains will then have begun. A. Burnell.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—I hope you will kindly allow me to add a few words on the derivation of the modern Greek ἀράδα, of which I speak in my review of Sophocles' *Lexicon* (No. 31, p. 426*b*). In comparing it with the Latin *ordo*, I find that I unconsciously adopted Dehèque's suggestion ; but much worse is that I forgot to mention Miklosich's derivation from the Albanese "rádʒ," a word of the same meaning as ἀράδα. Ducange quotes also the form ῥάδα, and α is in modern Greek frequently prefixed to words without changing their meaning. See Miklosich, *Die slavischen Elemente im Neugriechischen*, "Sitzungsber. der Akad. zu Wien," vol. lxiii. p. 538. W. Wagner.

Intelligence.

Dr. Wright, late of the British Museum, now Professor of Arabic at Cambridge, has printed for private circulation more fragments of the lost Syriac grammar of Jacob of Edessa. He states in the introductory remarks that he had observed two leaves in a volume of Syriac fragments (Mus. Brit. Add. 17,217, foll. 37 and 38), which apparently belonged to some ancient grammatical work, but as they had been washed, in order to be used as palimpsest, but little of their contents was legible, and that little not very intelligible. A passage of Bar-Hebræus, however, quoted by M. Martin in his article on Jacob of Edessa and the Syriac vowels, *Journal asiatique* for 1869, pp. 457–9, made everything clear ; a chemical reagent was applied, and Professor Wright was soon in possession of the text of two portions of Jacob's

lost work. A palimpsest fragment of the same MS. was also found in Add. 14,665, fol. 28, which was covered in part with rude Arabic writing, and a fortunate discovery in the Bodleian due to M. Neubauer has enabled Professor Wright to print portions of the introduction, from a fragment or a MS. also of the ninth and tenth century. The two leaves of which the latter consists are bound, with other miscellaneous fragments, in the volume numbered Bodl. 159, and are not mentioned in Dr. Payne Smith's Catalogue of the Syriac MSS. in the Bodleian Library.

From a letter by Dr. Mordtmann, in the *Zeitsch. der deutschen morgenländ. Gesellschaft*, we learn that no less than eight volumes of Tabari's *Universal History* have been discovered in the library of the Hagia Sophia at Constantinople. Fragments are also said to exist in the other libraries of that city.

The *Zeitschrift für ägyptische Sprache* for May-June and July-August contains the following papers bearing on Assyrian researches—Storia Assira e Storia Biblica, by Felice Finzi; Comparative Chronology of Assyria, Egypt, and Israel, by D. H. Haigh; and a translation of the inscription on the Cyprus monolith, now at Berlin, "a most important stele, as it proves the truth of some of the Assyrian records, and marks the western limits of the great Assyrian empire."

The first part of the Report of the Progress of Oriental Studies, issued by the German Oriental Society, has appeared. It is from the pen of Professor Gosche, and is a highly "readable" and suggestive volume, although it only includes the literature of the years 1862–1867. Beginning with bibliographical works, and contributions to the history of Oriental learning, it concludes with a survey of publications on the history, geography, religion, &c. of China. The necrologies of deceased Orientalists, including Bopp, Rückert, and our own Cureton, are especially interesting.

With reference to the Greek dialogues recently edited by Professor M. Haupt of Berlin (see p. 408), we are informed by M. A. Boucherie, of Montpellier, that he has a complete edition of the inedited pieces contained in the Montpellier MS. in the press, which may be expected within three or four months.

We learn from the *Pall Mall Gazette* that three of the papyri presented to the Stuttgart Collection of Coins and Antiquities, partly by Drovetti, the French consul in Alexandria in 1824, and partly by Dr. Heuglin, have at last been unrolled by Dr. Eisenlohr, the Heidelberg Egyptologist, without having suffered any damage. They belong to the third and fifth centuries B.C., and are inscribed partly with beautiful hieroglyphics, partly with hieratic characters. Two of them form parts of the Book of the Dead. The third contains portions of the so-called Book of the Restoration, and exhibits in brilliant colours a large drawing of the Judgment of the Dead. After this comes a representation of a grave. Over the mummy inside it the departing soul rises with outspread wings. On the cover reclines Hathor the goddess in the guise of a cow; over her is seen the winged sun-disk.

M. J. Halevi is carrying through the press the Himyaritic inscription found by him in Yemen in the year 1870.

Contents of the Journals.

Journal of the German Oriental Society, vol. xxv. Nos. 1 and 2. —Contributions to the explanation of the Avesta, I. II. III.—Jeimini Bhârata, ch. ii., transl. &c. from the Canarese by H. F. Mögling.—The Question about Istakhri and Balkhi, by M. J. de Goeje.—The legend of Adam in the Talmud and Midrashim in its relation to the Persian legend of Yima and Meshia, by A. Kohut.—Extracts from Dschami's love poems, by F. Rückert, cont.—The names of the Aramaic nation and language, by Th. Nöldeke.—Hebrew Phrases for a modest expression of opinion, by Dr. Zunz.—Moses-Osarsyph, by Dr. Lauth. [Explains Osarsyph as a Semitic compound, the Egyptian translation of ul: may be πετεσήφ; see Josephus cont. Apion. i. 32, where the Egyptian names of Moses and Joseph are transposed.]—Semitic Epigraphy, by K. Schlottmann, II. III. IV. [On ·- and ם- as Phœnician suffixes of the 3rd person sing., and on Nos. 3 and 4 in the Maltese inscriptions.]—On the dialect of Mahra, called Méhri, in S. Arabia, by H. v. Maltzan. [A sketch of the grammar of this interesting dialect.]—Explanation of Vedic words, by Th. Aufrecht, cont. —Selection of unpublished strophes of various poets, by Th. Aufrecht, cont.—Nâsîf aljazigî, by A. v. Kremer. [A necrologe of an eminent Arabic scholar and poet, of Beiru.]—Two Arabic inscriptions on ivory boxes, by J. Gildemeister.—Notes on Epigraphy, by F. Hitzig.—Miscellanies, by Th. Nöldeke. [On Aramaic names of the signs of the Zodiac; on Arpad; on the Arabic name for Petra.]—Anti-Prætoriana, by O. Blau.—Reviews: Wright's Syriac Catalogue, by Nöldeke, with appendix by Geiger; Bickell's Conspectus, by Geiger; Sachau's Inedita Syriaca, by Nöldeke; Vámbéry's Uigurische Sprachmomente, by Schott; Baron de Schlechta-Wssehrd's Manuel terminologique français-ottoman, by Fleischer.

Journal Asiatique, No. 62, Jan.-Feb.—L'Arabie vue en 1837–1838, par F. Fresnel. [Intended to form the sequel of an article which appeared in the *Revue des Deux Mondes* in 1839, but now first printed.]—Lettre sur le récit de Fathh-Allâh Ssâyégh, inséré dans le tome quatrième des Souvenirs d'Orient de M. de Lamartine. [The letter is by the late M. Fresnel, and is edited by M. Mohl; it proves by the best Arabian evidence that the interview described in Lamartine between a Bedouin chief and the king of the Wahhabites is fictitious.]—The Divans of the six ancient Arabic poets, edited by W. Ahlwardt, by Barbier de Meynard.

Il Propugnatore (Bologna, 1871), vol. iv. parts i. and ii.—Ai suoi associati la direzione.—Reggimenti delle donne di M. Francesco da Barberino, by Giovanni Galvani. [F. da Barberino was a contemporaneous writer of Dante. His didactical poem is imitated from similar Provençal and Old-French poems, chiefly from the *Roman de la Rose*, and was edited by Manzi (Roma, 1815), from the only MS. at the Vatican Library, which dates from the seventeenth century, and offers a very bad and incomplete text. Galvani wishes that a new and emended edition should be published, and shows by a long series of examples how the true text of the author should be reconstituted. The second edition of the *Reggimenti* in the *Biblioteca scelta Milano*, 1842, is a mere reprint of Manzi's edition.]—La Rotta di Roncisvalle nella letteratura Romanzesca italiana, by Pio Rajna. [Continuation. Very important paper, throwing new light on the history of the Charlemagne saga-cycle in its later developments. The author has found a new MS. of the prose composition *La Shagna*, the only known MS. of which had been lately lost (cf. *Jahrb. f. Rom. u. Engl. Lit.* xi. 189, ff.]—Le pretese amate di Dante, by S. G. Bergmann-Pitrè. [Continuation.]—Il serventese di Ciullo d'Alcamo, scherzo comico del 1247, by Giusto Grion. [New and critical edition of this important poem, with an accurate commentary and an interesting introductory study, maintaining the results of his former dissertation—*Il Sirventese di Ciullo d'Alcamo, esercitazione critica* (Padova, 1858)—against several criticisms, chiefly by Lionardo Vigo, in the preceding part of the *Propugnatore*. There are also four other poems of the same time and in the same dialect first printed from the Vatican MS. 3793; G. believes them to belong to Ciullo d'Alcamo. Grion gave a detailed account of the Vatican MS. in Boehmer's *Romanische Studien*, p. i.]—A proposito di Ciullo d'Alcamo, by Vittorio Imbriani. [Contesting, like the preceding article, the assertions of L. Vigo, and coming to nearly the same conclusions as Grion.]—De' Vocabolari in generale e specialmente di quello del Cav. ab. Manuzzi, by Ferdinando Ranali. [Letter full of true and interesting observations, but intermixed with some strange and paradoxical opinions.]—Spiegazione di un luogo di Dante nel canto xv del Paradiso, by Galvani. [It is the expression *ciò che 'n camera si puote* which he justly explains: *ciò che si può fare in cubicolo in cui potevano compiersi le segrete cose o custodirsi le altre che non si volevano appariscenti.*]—Di una poesia in Volgare Siciliano del sec. xiv e di una Laude in volgare illustre del sec. xv, by V. di Giovanni. [The first poem is incomplete, and written on two vellum leaves of the Palermo MS. Qq. G. 36; the second is written on a fly-leaf of the Palermo MS. 2 Qq. C. 38, which contains the Prediche toscane di S. Bernardino da Siena.]—Lingue e dialetti di Calabria prima del Mille, by Vincenzo Pagano. [A study which can be used only with great precaution, on account of the author's strange views.]—Scrittura volgare lucchese del anno MCCLXVIII, by L. Del Prete. [This is the oldest prose document in the dialect of Lucca, and is preserved to us in its original shape. Another short document of 1065 is a falsification of the thirteenth century.]—Compendio storico della letteratura tedesca, by C. S. Henrisch. [Continuation.]—La Novellaja milanese, esempi e pauzane lombarde, by V. Imbriano. [An interesting collection of tales in the Milanese dialect, with valuable notes; to be continued.]—Bibliografia and Bulletino bibliografico.

New Publications.

Bissinger, G. Ueb. die Dichtungsgattung u. den Grundgedanken der Alcestis d. Euripides. 1. u. 2. Heft. Erlangen: Deichert.

Cohn, M. J. Zur Analyse der hebräischen Wörter auf Grund der primitiven Lautverbindungen und Bedeutung, insbesondere des y-Lautes. Frankfurt: Kauffmann.

Eckstein, F. A. Nomenclator philologorum. Leipzig: Teubner.

Herzog, E. Untersuchungen üb. die Bildungsgeschichte der griechischen u. lateinischen Sprache. Leipzig: Teubner.

Kohut, A. Kritische Beleuchtung der Persischen Pentateuch-Uebersetzung des Jacob ben Joseph Tavus. Leipzig and Heidelberg: Winter.

Sermo de Thamar. [Syriacè.] E cod. Vatic. 117 ed. a Jos. Zingerle. Innsbruck: Wagner.

Teuffel, W. S. Studien u. Charakteristiken zur griechischen u. römischen sowie zur deutschen Literaturgeschichte.

ERRATUM IN No. 28.

In page 364, col. i., line 6, for "Jugebold" read "Juynboll."

ERRATUM IN No. 31.

In page 428 (*New Publications*), for "Lobschird" read "Lobscheid."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, October 14, and advertisements should be sent in by October 11.

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General Literature.

AN EASTERN LOVE STORY.

Kusa-Jâtakaya, a Buddhistic Legend; rendered for the first time into English verse, from the Sinhalese poem of Alagiyavanna Mohoṭṭāla, by Thomas Steele, Ceylon Civil Service. London: Trübner and Co.

An Indian prince, son of the greatest sovereign of Dambadiva (India), gifted with every intellectual and moral quality, but ill-favoured in his personal appearance, asks in marriage a princess of great beauty, and has her brought in pomp to the court of the king, his father. As soon as the lovely Prabavati has seen her bridegroom, prince Kusa, in broad day-light (for the first interviews had been cleverly managed by night), she takes to flight and returns to her father's house. Kusa, much disappointed, follows her, and after practising various trades in the town where Prabavati's father reigns, ends by obtaining access to the palace, where, as a cook, he distinguishes himself by his uncommon talent. But neither his culinary skill nor his lamentations move the heart of Prabavati; and, being insultingly rejected, he is induced to return to his native town. Immediately after his departure, seven kings arrive, each at the head of an army, to demand the hand of Prabavati. The father of the princess is much embarrassed; if he bestows his daughter upon one of the seven, the other six will unite against him in a war which may ruin his country. In this dilemma, the excellent king, touched with compassion for his people, decides that his daughter shall be cut into seven pieces, and the portions carefully equalised so that the seven suitors may be satisfied, and no one made jealous. The prospect of this sevenfold marriage causes Prabavati to reflect: she begins to consider that prince Kusa, whom she so arrogantly rejected, is certainly not handsome (that she never could admit), but full of intelligence, of constancy and love; that he is the son of the most powerful king, and at the head of the most brilliant court to be found: she declares herself therefore ready to accept him as her spouse. Kusa has in the meantime returned; by his superior talents, without shedding of blood, he defeats and takes prisoners the seven kingly suitors; and as his clemency equals his bravery, and Prabavati fortunately has seven sisters, he gives one in marriage to each of the conquered kings. As for himself, his ugliness is suddenly transformed into beauty, he is married to Prabavati, "and they both lived happy ever afterwards."

"At last unto the Town of Gods, through fair desert, they went."

Such is the frame-work of the poem translated by Mr. Steele. The reader may already partly imagine the development to which it lends itself; the description of the town and the palace of prince Kusa, of the charms of Prabavati, the talents of Kusa, the sorrows of the prince rejected by his lady-love, the lamentations of Prabavati condemned to a frightful death, &c. &c. We will not dwell upon this subject, but will content ourselves with giving as a specimen a single stanza, taken at random from the description of Prabavati.

"Her lovely eyebrows and her nose did likeness meetly hold,
To banners thick and darkly blue, bound to a staff of gold!
To fresh, young gold-banana trees, with long leaves darkly blue,
Those lovely features ever bore a marked resemblance true!"

But whatever idea he may have of the extent and brilliancy of these poetic amplifications, the European reader, unless initiated into the moral and religious beliefs of the poet and his fellow-countrymen, would not be likely to conceive the real nature of the story. We have to deal with one of the legends of a religion which explains all the events of this life by moral causes proceeding from an anterior existence. This theory is expressed in the stanza 357, which is, as Mr. Steele truly remarks, the moral of the poem; it is also given under a different form in one of the epigrams added in the appendix at the end of the volume (page 242), and which we quote in preference to the words of the poem:

"Not from the king that rules the realm proceed our ills and woes,
Nor from the ministers of state, our kinsmen, or our foes!
Nor from the shining host of orbs that glitter in the sky,
Descend the ills that compass us, and shall do till we die,
And after! But the real source of all our woes on earth,
Is merit or demerit earned within a previous birth!"

The following is an account of the train of events relating to the hero and heroine of the poem. Long before the birth of Kusa, there lived in the environs of Benares two brothers, the elder of whom alone was married. One day when the younger brother had gone to work in the forest, and was late in returning, the wife of the elder, after their meal, put aside a portion for the absent one; but a Pasemuni,* or pious mendicant, happening to pass, she gave it to him. At the very moment, the younger brother returned, and, finding his dinner gone, he flew into a passion with his sister-in-law, ran after the mendicant, and snatched away the food she had just given him. Nothing daunted by this violence, she then offered the mendicant a jar of ghee (clarified butter); and her brother-in-law, converted by her noble example, restored the food he had taken away. As a reward for these two good works, this woman of low rank was born again in an ulterior existence as the princess Prabavati, and the younger wood-cutter became prince Kusa: the two, after having been brother and sister-in-law in a previous life, became husband and wife in their new life; but as in their former relation they had been wanting in consideration for one another, in the latter they were divided before being united by the closest of ties. Even now the explanation is incomplete. For the *ci-devant* wood-cutter, afterwards prince Kusa, became in later times Buddha Çâkyamuni, and it is he himself who relates this story, which he must well know, firstly, because he is all-knowing, and, secondly, because it is his own personal history. As for the peasant-woman of the environs of Benares, who returned to the world as the princess Prabavati, she appeared later under the name of Yaçodharâ, and became the wife of Çâkyamuni, as she had been of Kusa, after having been his sister-in-law in earlier ages.

This theme is that of all the Jâtakas, or accounts of the anterior births of Buddha; they are all constructed on the same plan. The hero is therefore always in reality Buddha himself. This explains the presence, in the poem now

* A Pasemuni or Pasebuddha, in Sanskrit Pratyeka-Buddha, "Buddha for himself," whose high virtues profit himself only, and not other beings.

before us, of several marvellous facts intended to bring out in relief the great superiority and wonderful power of Kusa, who is a Bōdhisattva or future Buddha. Thus the seven kings who demand the hand of Prabavati are sent by the king of the gods Çakra (another name for Indra), to bring about a result conformable to the wishes of Kusa; and Kusa triumphs over his adversaries by the mere force of his "lion's roar," a distinguishing mark of Buddha. We cannot describe or discuss all the marvellous facts related by the poet; but there is one on which we must say a few words: the birth of Kusa.

Okâvas, king of Malala, who reigned at Kusavatî, had sixteen thousand women at his court, and yet not one heir, male or female (stanza 109). The people murmured; until after various efforts to cure the sterility of the harem, Çîlavatî, the queen and real wife of Okâvas, was driven forth into the country. There Çakra, the king of the gods, came down and carried her up into heaven, where he promised her that she should be the mother of two divine sons, the one ugly, but full of wisdom, the other senseless, but of perfect beauty; and allowed the queen to decide which should be the elder of the two. Çîlavatî, like Solomon, considered wisdom the highest of all blessings, and preferred that the heir to the throne should be wise, although ugly: and this is why prince Kusa, on account of the ugliness which concealed his wisdom, had so much difficulty in gaining the heart of the lovely Prabavati.

We have already said that it is Çâkyamuni himself who recounts the adventures which befell him in former times when he bore the name of Kusa; indeed the other Jâtakas, of which there are 550, are instructions given by Buddha, he being the narrator after having been the hero of these stories.* Our Sinhalese poet Alagiyavanna Mohoṭṭāla has faithfully followed the tradition; he gives us the Kusa-Jâtaka, told by Buddha in the town of Sewet or Çrâvastî, on the occasion of a transgression of the religious law committed by one of his monks. Fifty-eight stanzas are employed in describing the city of Sewet, and the appearance of Buddha. But this introduction, furnished or imposed by tradition, does not suffice; one more specially belonging to the author and his contemporaries is needed, and in the first 21 stanzas the poet tells us how he has undertaken this composition at the request of Menikhâmi, "the Lady Jewel fair," wife of Attanakaya, chieftain at the court of the king of Ceylon, Rajasinha, and grand-daughter of Sepala, who had been one of the principal state personages in the reign of Bhuwaneka. These kings belong to the second half of the sixteenth century, which is consequently the period when Alagiyavanna Mohoṭṭāla lived. The poet naturally couples the mention of these various names with emphatic eulogies; and dilates particularly on the praises of his patroness Menikhâmi:

> "This high-born lady sought from me, the writer of this song,
> To sing of legendary lore our Faith has cherished long:
> With heart devout and prayerful the sweet request was made;
> And thus it was that I with joy this Lay of old essayed."
> (Stanza 19.)

The characteristic point in the work of Mr. Steele is that it presents us with a strictly literary Buddhistic production. We have had hitherto published only the canonical works, which are writings or commentaries attributed to Buddha or his successors, to teachers celebrated for their learning or unknown on account of their antiquity. Here we have, for the first time perhaps, the work of a layman, of a court poet, of a minstrel, who has chosen to treat a subject, furnished, it is true, by the religious books, but developed in accordance with his own genius, in accordance with the spirit of the people among whom he lived, of the language which he spoke, and with more liberty than would be becoming to sacred and official literature. To appreciate the merit of the Sinhalese poet, and what share of credit is due to him for his imagination, we ought to be able to compare his work with the canonical account, and we have not, at the present moment, the means of instituting this comparison. It would probably show that the writer, while ornamenting his story, profusely, at his own discretion, has left its outline and even its incidents unchanged. In his note on the 5th stanza (p. 198) Mr. Steele, speaking of a historical fact which the poet himself may have witnessed, the sending of a golden statue of a Sinhalese prince to Lisbon, says that this circumstance may have suggested one of the main incidents of the poem. He may be right; but statues and portraits play so great a part in the history of Buddhism and in its sacred legends that there is no need to search in events contemporary with the poet for the source of such an invention as he develops in the third part of his poem (stanzas 170–223), and I should not be surprised to find in the original story the episode of the golden statue related by Alagiyavanna Mohoṭṭāla.

The notes which Mr. Steele has added at the end of his translation form a tolerably compact mass. They contain explanations always useful, and often necessary to the ordinary reader. They are borrowed from the principal works which have appeared upon Buddhism, and which the author mentions in his preface: they appear to be generally exact; but why does Mr. Steele say (p. 330) that Ananda was born the same day as Çâkyamuni? The tradition is on the contrary that he was born on the day when his cousin attained the Bodhi (supreme Wisdom); which would make a difference of thirty-five years in their ages. Of course Mr. Steele's notes, except in the few cases relating to details of manners, contain nothing very new; they only repeat what has been said elsewhere. But the last note, which does not refer to any stanza in particular, and which is entitled "Buddhistic and other remains in the Hambantota district," occupies a place by itself, and deserves a special notice. Its title sufficiently indicates its nature; it contains the personal observations and researches of the author, described at some length, and is most interesting.

At the end of these notes we find a small collection of Sinhalese epigrams and stories. We have already given a specimen of the former; we may mention among the latter "The Pandit and the She-fiend" (p. 248) which Mr. Steele gives in his notes (p. 218), and which greatly resembles the judgment of Solomon. Several of these stories bear a likeness to Western traditions. The connection of the folk-lore of Asia with that of Europe always gives a lively interest to collections of this kind.

The poem of Alagiyavanna Mohoṭṭāla is written in Elu, a language which Mr. Steele defines as "ancient Sinhalese, less Sanskritised than the modern." It is hard to pronounce upon the translation in the absence of the original. Mr. Steele has intended to be literal, but the few stanzas given in the notes show that Elu is a language of few and long words, and Mr. Steele writes in a language of many and short words; and when a translation on this principle does not quite fill the stanza, he ekes out his metre with insertions, honestly indicated by brackets. His versification is monstrous but not unreadable, and probably quite good enough for his original, which he hopes to print in a second edition.

Leon Feer.

* The Kusa-Jâtaka is the first of the section entitled Sattati-Nipâta, in the official collection of the Jâtakas; it must be the 534th of the whole collection.

English Lessons for English People. By the Rev. E. A. Abbott, M.A., and J. R. Seeley, M.A. Seeley and Co.

The title of this work is somewhat vague; it can hardly be said to treat of the structure or history of the English language, but is rather—as far as it deals with language at all—a treatise on rhetoric: all the strictly philological information it contains is introduced incidentally. This will be seen from an analysis of its contents.

After some remarks on definition and the methods of accurately discriminating shades of meaning, comes a chapter on the relation of the meaning of words to their derivation, and the danger of relying too implicitly on the primitive sense of a word. These general remarks are supplemented by some specifically philological information: lists of prefixes and affixes and of Greek roots are given, with exercises; then comes our old friend, Grimm's law, followed by remarks on various other sound-changes, and the chapter ends with an account of the various laws which govern the changes of meaning. Then follow chapters on the diction of poetry and prose, and on faults of diction, with practical hints on selection and arrangement in the various styles of composition. The rest of the work is taken up by a chapter on metre and an appendix on errors in reasoning.

This strikes us as rather a heterogeneous array of subjects, and the question suggests itself, What is their connection, why are they brought together, what is the object of the book? We turn to the preface, and are told that "the book is not intended to supply the place of an English grammar," but is addressed to "those who, having already a familiar knowledge of English, need help to write it with taste and exactness." In other words, it is a manual of rhetoric. A little farther on, however, it appears that the object of the third part (on metre) is "to enable the pupil to read English poetry with intelligence, interest, and appreciation," which is a special branch of elocution. As to the logical appendix, the writers themselves confess that it "may interfere with the symmetry of the book." In this we fully agree. Not only has logic nothing to do with English, it has no connection with language at all: the circumstance that we employ language to formulate trains of reasoning is an accident, which does not justify the introduction of logic into any work on language, much less into one which treats—or professes to treat—of a special language.

If, as the writers suggest, the utility of this last addition is enough to compensate its want of connection with the other subjects, why not simply refer the student to one of the numerous treatises on formal logic that have already been published? When the plea of utility is once allowed, it is difficult to see what limits are to be set to the introduction of irrelevant matter. It is a mistake to suppose that science and what is called "practical utility," "sound common sense," are opposed to one another, or that the fundamental principles of scientific arrangement can be violated without, in the end, reacting most injuriously on practical interests.

Whatever merits the book possesses must, therefore, lie in the treatment of those special sections of which it is composed, of which those that treat of metre and diction are the best. The chapter on metre is of high value: it is, in remarkable contrast to the plan of the whole work, systematic and based throughout on definite principles. The following extract from the remarks on the varying use of prose and poetry in Shakespeare will show how interesting the usually so dry subject of metre may become when skilfully handled:—

"One remarkable instance where prose is used instead of verse is in the speech of Brutus to the populace after the murder of Cæsar. Elsewhere Brutus always speaks verse; but, in addressing the people, he refuses to appeal to their feelings, and affects a studiously cold and unimpassioned style. This speech serves in this respect as a useful foil to Antony's highly impassioned harangue. But even in this studiously frigid speech it is noticeable how, as soon as the speaker begins to *appeal to the feelings* of the audience, he approaches and finally falls into metre:

"'As Cæsar loved me, I weep for him,' &c.

"So far we have merely rhythm, though rhythm on the brink of metre: now comes the appeal to the feelings, and after one line that is all but metre, the rhythm becomes absolute metre:

"'Who is hére so báse that wóuld bé a bóndman?
If ány, spéak; for hím have I' offénded.'"

The remarks on the various uses of the pause in different styles, and on the alliteration of the Elizabethan poets and of Milton, are of special interest, but the whole section is excellent, and will no doubt give a great impetus to the study of English metre in our schools.

The chapters on style are, for the most part, very good. We especially sympathize with the authors in their condemnation of the "unmanly dread of simplicity, and of what is called 'tautology.'"

The philological parts of the work are not so satisfactory: they are too fragmentary and disconnected, and contain several errors of detail. The *-icle* of *icicle* is not a Latin affix, but the O. E. substantive *gicel*, Icelandic *jökull*. *En-* is not a Teutonic prefix, nor is it true that *with-* in *withstand* is not our modern *with* (the preposition), but the German *wider*.

If Grimm's law—which has no special connection with English—and the rest of the philological information, together with the logical appendix, were cut out, and the whole work carefully revised, its real value would not, as is now the case, be obscured by the objectionable features pointed out above. Henry Sweet.

THE DESTRUCTION OF STRASBURG LIBRARY.

The destruction of the Strasburg Library, an event which sent a thrill of horror throughout cultivated Europe just a year ago, has found an eloquent and authoritative historian in Monsieur R. Reuss of that city, who contributes an article on the subject to the current number of the *Revue critique*. The loss, indeed, seems an irreparable one. To say nothing of the classical and theological treasures involved in it, a rich collection of unedited documents illustrating the history of Alsace has perished, together with the laws and statutes of the Republic of Strasburg, so precious to the student of municipal institutions. The Library itself dated from the time of the Reformation. It was rapidly augmented during the seventeenth century by gifts and purchase, until the French Revolution finally swept within its walls the treasures of the suppressed monasteries of Alsace. The value of these additions may be judged from the fact that a single religious house, the Commanderie de St. Jean, thus contributed 2000 incunabula and 1200 MSS., and, thanks to the care of a succession of enlightened directors, Koch, Oberlin, Schweighäuser, the Strasburg Library became worthy of a town which was a sort of meeting-point of French and German culture, and of a university which numbered among its many distinguished members Herder and Goethe, as well as Bignon and Destutt de Tracy. The catastrophe of the 24th of August appears to have been wholly unforeseen. The authorities had provided against such danger as might result from a casual shell, but had failed to realise the fact that the Library would become with the Cathedral the object of a close and sustained bombardment. Notwithstanding M. Reuss' high encomium on the Prussian artillery, we can hardly credit his statement that the catastrophe was intentional. "I declare on my conscience that all denial of premeditated destruction of the Library is impossible. When once the church caught fire, and lit up the country far and wide, the Prussians must have observed by the light of the conflagration that the greatest but one of all the religious edifices in Strasburg had become a prey to the flames. During the whole of this terrible night, however, incendiary projectiles rained into the burning mass, followed up by canister-shot, which effectually prevented any efforts on the part of the inhabitants to extinguish the conflagration." The reason for this severity

M. Reuss finds partly in General von Werder's belief in the existence of a strong German party within the city, partly in his desire to paralyse the military defences of the fortress by a "pression psychologique et morale"—in other words, to divide Strasburg against itself by bringing its intellectual into collision with its patriotic interests. But it is well to remember that, after the surrender, Germany came forward with liberal offers of books to repair the loss. If we again quote M. Reuss, it is not without regret at the tone of irritation which his language betrays:—"Booksellers, publishers, scholars offered copies of their works or of those they had in store; some libraries promised their duplicates, individuals announced an intention of endowing the German university of Strasburg with their private collections: all this, be it well understood, might have weight with the simple souls who are at least as numerous in Berlin as in Paris. A real library is not the creation of a day—the veriest scribbler knows this; and what German *savant* imagines for a moment that such a congeries of modern works, even though amounting to 100,000 volumes, has any right to the name of library, or could be useful to a scholar desirous of seeking knowledge at its source, and content with nothing but what is first-hand? Who will restore us our manuscripts, our priceless collections of sixteenth and seventeenth century literature, our unedited chronicles, the faithful memorials of the greatness of our republican ancestors? Let no one mock our loss by telling us that he will give us back this, and more also." Whether we approve of these reflections or not, we cannot withhold from M. Reuss our sympathy when he concludes with the words of the Florentine poet—

> ". . . Nessun maggior dolore
> Che ricordarsi del tempo felice
> Nella miseria."

LITERARY NOTES.

Mr. Allen Park Paton has published some interesting notes on a copy of the 1612 edition of North's *Plutarch*, now in the Greenock Library. The first owner was W. S., who wrote his initials on the title-page and stamped them on the binding. He also wrote his motto, and marked 104 passages in 13 of the lives. They are such as Shakspeare might have marked for his plays. The motto belongs to three families, all of whom had the same crest as Shakspeare. On the other hand the motto *Vive ut vivas* might have been inserted by any owner as suitable to the contents of the volume. There are materials for constructing a plausible list of the intermediate owners of the volume, and the Rev. Thomas Taylor, who possessed it in 1668, can be connected without too much violence with Shakspeare. Mr. Paton suggests a new reason for respecting the folio of 1623 in the apparently capricious distribution of capitals, which he supposes to represent Shakspeare's MS., where, *ex hypothesi*, the emphatic words were all so marked. The matter requires further investigation.

Dr. Karl Simrock of Bonn is about to add a version of Sebastian Brand's famous *Ship of Fools* to the list of his modernisations of old German literature, handling the obsolete language and metre of the humanistic satirist in the same manner as those of the epic-writers. The book is to be produced with the utmost care by the Berlin house of Lipperheide, and illustrated with *facsimiles* of the original woodcuts of the edition of 1494.

The Russian Imperial Geographical Society has begun to publish the first volume (of three) which are to contain the riddles, songs, proverbs, and legends current among the natives of North-West Russia. H. Hildebrandt is editor of the collection, and the first part will be accompanied by an exact account of the linguistic possessions of the district.

In the *Revue des deux Mondes* for Sept. 15, M. Guizot carries a very full notice of the public life and character of the Duc de Broglie down to the formation of the Polignac ministry. M. Guizot undertakes to prove, mostly from the *Notes biographiques* left by his friend, that the duke observed through life the dying injunction of his father, the Maréchal de Broglie, to remain faithful to the revolution in spite of its injustices. Incidentally we have the apology of the *doctrinaires*, whom M. Guizot now holds to have been guilty of the dangerous error in politics of looking too far forward, and attempting to encounter future difficulties before they had arisen.

Czech literature has just sustained a considerable loss in the death of M. Jean Erasime Vocel. Born in 1803 at Kutna-Hora (Kuttenberg) in Bohemia, M. Vocel first appeared as an original poet in a piece called *Harfa* ("The Harp"), and later, in 1834, issued a series of historical poems called the *Premyslides*, in praise of the princes of the first Bohemian dynasty. This book became very popular, and has run through no less than three editions. These were followed by the *Sword and the Chalice*, in allusion to the favourite symbol of the Hussites, and the *Labyrinthe Slava*, celebrating the glory (slava) of the Slavonic nation. In 1845 he published his first work on archæology, *Grundzüge der böhmischen Alterthumskunde*, and five years later became professor extraordinarius of art and archæology at the university of Prague. After this he published a number of studies, many of them relating to Skandinavian antiquities, resumed in a large work in two volumes, *Pravek Zeme Ceske* ("Prehistoric Bohemia"). This work also contains many points of interest for Celtic scholars. M. Vocel was corresponding member of the Academy of Vienna.

The Bohemian Society of National Literature called "Matice" has just finished the translation of Shakespeare into the Czech language: one of the best translations of the poet in Europe. A translation of the Greek tragedians and Latin comic poets is undertaken. M. Durdik, whose studies on Byron we have already mentioned, has also just brought out a Czech translation of *Cain*.

M. Zoubek has just published a complete biography of the great educationalist Komensky (Comenius), bringing out the Slavonic side of his hero, whom, like Hus and Copernicus, previous writers have been accustomed to claim for Germany.

The first volume of the unpublished memoirs of the celebrated Polish poet Jean Ursin Niemcewicz has just been published at Posen (Zupanski). Niemcewicz was the friend and fellow-labourer of Kosciuszko, and took part in the revolution of 1831. After this he lived successively in Italy, France, Germany, and America. He was member of the diet of Poland, and one of the most brilliant writers of the period preceding Mickiewicz. The memoirs are full of interest, both in a literary and political point of view.

Bulgarian literature, the youngest and least developed of all the Slavonic literatures, is beginning to thrive. In 1869 a literary society was founded at Braïla in Roumania, which has in two years amassed a capital of 200,000 francs, and publishes a special organ of its own. A "librairie" has also been created at Rustchouk for the publication of Bulgarian books.

Art and Archæology.

THE CONVENT OF SAN MARCO.—FRA GIO. ANNI DE ANGELICO AT FLORENCE.

Among the religious orders whose suppression by the Italian government may excite grateful remembrance of merits and usefulness in the past are the Dominicans, who (however yielding to the inevitable law of mutability) have shown intelligent interest in the works of art and monumental churches consigned to their care. Though few painters or sculptors have proceeded from their ranks in modern times, they have proved their desire to preserve the ancient types of ecclesiastical architecture, and carried out restorations without regard to cost—witness the recent works in some of their most conspicuous Italian churches: *S. Maria sopra Minerva* at Rome, *S. Maria Novella* at Florence, *S. Dominico Maggiore* at Naples.

In one instance the new appropriation of a celebrated convent, though involving essential change, is in harmony with its memories and sanctities; and *S. Marco* at Florence could not have been better utilised, in its new character, than as a Museum

of Sacred Art—especially the art fostered or produced by the Dominican order, under which destination it has been open to the public about two years, though the collection within its walls has not yet reached the intended completeness.

An oratory on this site, dedicated to St. Mark, was conceded by the Republic in 1290 to Sylvestrine monks, a branch of the Benedictines, and by them enlarged, or rather rebuilt as a new church, consecrated 1299. Their community was almost annihilated by the great plague in 1348, and never recovered either its ancient discipline or moral standing. By the beginning of the next century they had so lost esteem that the Republic desired, in 1419, to remove them and substitute in their place the Dominicans of "strict observance." The unpopular Sylvestrines were not, however, removed from S. Marco till 1436, when Pope Gregorius IV. yielded to the urgent wish of the magistracy, and assigned this cloister to the reformed Dominicans, who had been settled at another church in Florence, *S. Giorgio oltr' Arno*, in the previous year. They found the S. Marco cloisters wofully dilapidated; the church in part roofless, the cells so ruinous that they had to throw up wooden cabins for their lodgings, and cold and damp caused some of the brethren to fall ill. The head of the now powerful Medici family came forward and declared his intention of befriending the Dominican friars at this emergency. He employed the architect Michelozzi to investigate and report on the state of the S. Marco convent; and as it was found that the entire building, the refectory alone excepted, should be taken down before any efficient restoration could begin, Cosimo pledged himself to the amount of 10,000 gold florins for the works now ordered by him. The buildings were commenced from Michelozzi's designs in 1437, and finished in 1443, during which interval Cosimo provided for the friars at the cost of 366 gold florins per annum. The entire expense defrayed by him for the S. Marco buildings was 36,000 gold florins, besides which he spent 1500 florins on the choir-books, all illuminated by Fra Benedetto, brother to Giovanni Angelico; and he also presented the nucleus of a library to fill the shelves of the stately hall divided by Doric colonnades into three aisles, the finest apartment in Michelozzi's buildings. This library was overthrown by an earthquake in 1453, but soon restored by the same architect, through the generosity of the same benefactor. In 1496 the private Medicean library was bought by the Dominicans of S. Marco after the expulsion of Piero de' Medici. After the death of Savonarola, 1498, the entire collection was seized by the State, but restored, under certain conditions, to the Dominicans in 1500; and eventually, in the time of Clement VII., this became the famous "Mediceo-Laurentian" library, after being sold by the friars to the Cardinal Giovanni de' Medici (Leo X.), and sent back to Florence by his cousin, the Clement who succeeded Adrian VI. on the papal throne. On the other hand, only a partial restoration of the church of S. Marco had been deemed necessary. The tribune was rebuilt and enlarged. The paintings on its walls by Lorenzo di Ricci and Pietro Cavallini were not apparently disturbed, but Vasari laments the vandalism which had allowed them to be hidden under whitewash before his time.

Long before this the Florentine Dominicans had won high repute by intellectual as well as moral qualities. One of their community had succeeded to Francesco Filelfo in the post of public lecturer on Dante; and the second printing-press ever seen in Tuscany had been set up by a Dominican. These friars had distinguished themselves in different walks of art before the close of the thirteenth century, and their finest church at Florence, S. Maria Novella, was founded, built, and completed, between 1278 and 1357, exclusively by architects of the religious order for which it was destined. In painting, the first Dominicans who become known to us at the Tuscan capital are illuminators and miniature-artists. The quiet studiousnes and concentrated pursuits of the cloister favoured the growth of excellence in a walk requiring so much patient industry, delicacy of hand, and loving devotedness to the task undertaken. Those exquisitely finished groups of sacred subject, Scriptural scenes or saints and angels in adoration, those brilliant arabesques and flowery borders, vivid as if but yesterday tinted, speak to our minds of the silent seclusion and unwearied labours of the pious artists.

Among the four painters named in the *Divina Commedia*, two, Oderigi of Gubbio and Franco of Bologna, were miniature-artists. Tradition preserves the names of many celebrated in this walk, whose works have not been spared by time; and Simone di Martino (1285-1344) is known to have illuminated the codes of Virgil, Silius Italicus, Marcianus Coppella. A school of miniature-painting originated in the S. Maria Novella cloisters before the middle of the fourteenth century; and though little is known of its earlier productions, the names of three of its masters are found in the necrology of that convent, who attained a certain excellence, and died in the years 1301, 1316, 1336. In those cloistral registers the title "pulcher scriptor" is given indiscriminately to the calligraphists who wrote and the artists who illuminated the precious code for the uses of choir or altar. Fra Guido, who died of the plague, 1348, is the first distinguished by the term "pictor," and also by the qualification "totus mechanicus." Two other friars of the same order, at the convent of S. Caterina, Pisa, are mentioned about the same time by the same title, "pulcher scriptor;" one of these being Alessandro della Spina who is accredited with the invention of spectacles; but of the many choir-books once at that convent, only six are extant, much spoilt and mutilated, at the archiepiscopal seminary of Pisa. The first Dominican miniature-artist known in the fifteenth century is Michele Sertini della Casa (ob. 1416), who painted two large psalters, till recently in use at the novitiate of his convent, S. Maria Novella. Another, Giovanni di Rossi (ob. 1495), dedicated himself through long years of illness to the adorning of choir-books, and executed, about 1455, some beautiful illuminations of codes preserved in the ducal library at Modena. It may be inferred that all competitors in this walk were surpassed by Fra Benedetto del Mugello, who was the brother of Angelico, and took the cloistral vows together with him in 1408—his life extending from 1389 to 1448. While engaged on the choir-books ordered by Cosimo de' Medici for S. Marco, he was appointed prior of S. Domenico at Fiesole, and consequently had to leave incomplete (1445) that task, finished by another Dominican in 1453, the series consisting of twenty volumes, graduals, antiphonarii, missals, and psalters. All, except two psalters unfortunately lost, continued to be in use at that convent-church till the recent suppression. Of the missals painted by this able artist, five are extant, in one of which it is supposed that his brother assisted him, at least in the beautiful picture of the Descent of the Fiery Tongues (for Pentecost), and in a more elaborate composition where is represented the Deity blessing, several saints adoring, and Christ bound to the column. Vasari ascribes to Angelico the paintings in "two very large books at *S. Maria del Fiore*, kept with great veneration and richly adorned;" but Padre Marchese, the able historian of Dominican artists, searched for them in vain at the Florence cathedral. That writer concludes that all Benedetto's miniatures were retouched, and the letters and musical notes in the same codes renewed, about the middle of the sixteenth century, probably by another Dominican master, Fra Pietro of the Casentine province, who died at Bibbiena, 1596, and to whom perhaps is due a certain hardness of style that contrasts with the delicacy characterizing his predecessor's best works. Besides the many codes adorned by Benedetto at S. Marco, and still to be seen there, it is probable that some of those now at the Laurentian library are by the same skilful hand.

The last miniature-artist known in the Dominican annals of this century was Fra Eustachio of Florence, received into the order by Savonarola, 1490, and deceased 1555. A psalter at S. Marco contains some of his best paintings. Particularly noticeable is a frontispiece in which a half-figure of Isaiah is associated with the four doctors of the Latin Church; also a David at prayer, with his crown on the ground before him, and the Deity in far-distant glory above, a cheerful landscape forming the *fondo*, so firmly conceived that the design has been attributed to Fra Bartolommeo. To him P. Richa (*Chiese Fiorentine*) attributes certain choir-books in the Duomo; and Marchese supposes that he may have had a hand in the painting of some, though the greater number of those codes at the Florence cathedral are earlier, of the fifteenth century, or by less able artists of the sixteenth.

Fra Angelico spent nine years in the S. Marco cloister, which he left, 1445, when summoned to Rome by Eugenius IV. His first works at the Florentine convent were two panel pictures for the church, one of which, a Virgin and Child with saints, is extant, though much damaged and badly retouched. He seems to have commenced his fresco paintings in the cells whilst the buildings were still in progress, and as soon as the upper dormitory had

been finished. In those forty-four cells he executed 25 *storie* of the life of Christ, assisted probably by his brother; and during the period of his stay here, several other pictures, now in the Uffizi and Accademia galleries, were undertaken by him for other churches in Florence.

What the Vatican *stanze* are to Raffaelle, the Sistine and Medicean chapels to Michelangelo, such is this now secularised convent to Fra Giovanni. No Italian art-gallery is so completely a monument to individual genius. The modernised exterior of church and convent are insignificant. But when we enter the older section of the buildings, we are reminded by the narrow dim-lit cells and long sombre corridors under no roof but the huge bare rafters, now blackened by time, of what the cloistral life and vocation were whilst an Antoninus and Savonarola were presiding spirits within these walls. In the outer cloisters the eye is first arrested by one of those Crucifixions in which we see that subject restored to its consoling pathos and dignity by the genius of Angelico. But most admirable among the frescoes here is a mystic paraphrase of the journey to Emmaus, treated as a type of Christian and monastic hospitality, as well as in the light of its historic and divine importance. Two gentle Dominicans are urging the majestic stranger to abide with them, their countenances declaring the dim but reverential sense of something more than human in that Being who stands in pilgrim garb before them. From these cloisters we enter the spacious chapter-house, one side of which is occupied by the largest and most complicated among all Fra Giovanni's works—the famous fresco which must be considered the most grandly idealised treatment of the Crucifixion hitherto (up to the middle of the fifteenth century) seen in any form of art—a purely "doctrinal Crucifixion," as designated by Lady Eastlake (*History of Our Lord in Art*). When French troops were quartered here long ago, they amused themselves by picking out the eye-balls of all the heads in this great composition. The restoration may have somewhat altered their character. Another injury inflicted—at what date is unknown—was the substituting of a dusky red for the original *fondo* of deep blue in the principal picture.

I need not undertake the guide-book task of describing all the frescoes by the same hand in the windows and cells of this convent. In the evangelic series, which begins with the Annunciation and ends with the Resurrection, will be recognised those peculiar doctrinal conceptions of subject which are characteristic of Angelico's idiosyncracy. In almost every picture is introduced some Dominican saint, most frequently the founder, St. Thomas Aquinas, and St. Peter Martyr, in devout contemplation of the scene.

To two cells built for Cosimo de' Medici, and in which he used occasionally to spend a few days given to serious discourse or communings with conscience—where Eugenius IV. also lodged on occasion of the consecrating of the church by him—Angelico painted a Crucifixion with S. Cosmus in worship, the dead Christ in the tomb, and the Adoration of the Magi with numerous figures—chosen for this place probably because it was on the feast of the Epiphany, 1442, that the restored S. Marco was consecrated by Pope Eugenius.

Among late additions to the art-works in this convent are three reliquaries from S. Maria Novella adorned by Angelico with small paintings of graceful design and exquisite finish: a Madonna, called "della Stella," from the star above her head, sweetly serious in character, with the Deity amidst seraphim above, and graceful angels, playing on musical instruments, at each side; also an Annunciation, the Magi worshipping the Child, and a Coronation of Mary; another rich reliquary, as well as ornaments for a paschal candelabrum, having been painted for the same convent, but the two latter objects lost; and Marchese tells us that all were executed for Fra Giovanni Masi, the artist's friend, of the S. Maria Novella community.

The library of S. Marco, a majestic pillared hall which does credit to the architect's genius, is now appropriated to the collection of illuminated codes, here laid in glazed cabinets, while the books (a mere residue of what this Dominican library contained up to the time of French occupation) still remain on their shelves. Among the codes are 23 adorned by Fra Benedetto, and comprising some of his masterpieces in miniature-art. The Holy Trinity, the Annunciation, the Resurrection, remind us strongly of his brother's manner. A choir-book from the chapel of the Pitti palace has a finely conceived miniature of St. Dominic amidst angels (fifteenth century?), but deprived of its illuminated border, which was cut off, for its more convenient use at the altar, by some grand-duchess. The codes from Vallombrosa and S. Bartolommeo, a suppressed Olivetan monastery, are valuable; and in one from the first-named establishment (now entirely secularised) is a painting by a Vallombrosan monk, with name and date, "Justus, MCCCCLXXXIII." Those from S. Maria Novella, all, no doubt, adorned by Dominican artists, are among the most noticeable. Two miniatures of some merit, the Presentation, and Mary with Joseph worshipping the Infant, are by Plautilla Nelli, a Dominican nun, who died, aged 65, in the convent of S. Caterina, Florence, 1388—of whom Lanzi says that "she generally proves herself a good imitator of Il Frate" (*i.e.* Rusticci, called *Cecchin del Frate*), "but sometimes followed another style, as appears in the church of her convent." The S. Marco library is to be made public; and a catalogue of the contents of this and all other apartments in the convent was in course of preparation when I last visited it (November, 1870).

In other chambers of this interior we are reminded of illustrious men of later art-schools. The two comparatively large cells where Savonarola dwelt as prior (one a chapel) cannot be entered without emotion when we remember the thrilling scenes of his life as they are described by his able biographer, Professor Villari. Here we see a most characteristic, but not pleasing, terracotta bust of him by Bastianini, a Florentine sculptor, lately deceased (1868); another portrait of him in profile, by Fra Bartolommeo; and by the same artist two wall-pictures of the Virgin and Child, one much damaged by the attempt to remove it from its original place in a chapel of the church, and both distinguished by the grandeur of style and elevated expression peculiar to that artist. The damaged picture is, I believe, the one mentioned by Marchese as among the last works of Fra Bartolommeo, 1517. There are also several relics, no doubt genuine, of Savonarola in the chambers inhabited by him: MSS. sermons, Latin, written in 1489, his Bible, with copious marginal notes in his hand, &c., and other art-works—a lovely Madonna worshipping the Child, in teracotta, by Della Robbia, and a bust of Benivieni, by the above-named Bastianini. In the cell of St. Antoninus are personal relics of that amiable saint, autographs, &c., and a very expressive chalk drawing of his head by Fra Bartolommeo. Another picture by that great artist, the journey to Emmaus (treated historically), in a lunette over the door of the smaller refectory, strikes me as one of the most impressive and noble among his works; it displays his assiduous study of, and power of imitating, Leonardo da Vinci. Vasari notices it but slightly; Lanzi, Rosini, and Rio not at all; but Marchese does justice to its high merit, expressing his "regret that it has hitherto been so ignored by most writers as well as artists," and classing it among the works executed by Della Porta soon after he had resumed the practice of the art, renounced for about four years, in consequence of the shock and deep melancholy resulting from his having witnessed the last tragic scenes in the life of Savonarola, who had so powerfully influenced him. According to Marchese's theory, the date of this picture would be 1506, and that biographer supposes that both the apostles, seen in profile, conversing with the Saviour on the arrival at Emmaus, are portraits—one that of Padre Pagnini, the prior of this convent, who induced, almost, indeed, commanded, Bartolommeo to resume his artistic labours; the other, of fair and florid aspect, a German friar, Nicholas Scomberg, who succeeded Pagnini as superior of S. Marco, 1506, afterwards became Father General of the Dominican Order, Archbishop of Capua, and finally Cardinal.

In the old refectory we see, by far from good light, the well-known "Cenacolo" by Domenico Ghirlandaio, while the last picture of high merit, and the last in chronologic order which I need notice at S. Marco, is in the more modern refectory: St. Dominic and his community at supper, supplied with bread, when their poverty was at the extreme, by angels—a wall-painting that may be called the masterpiece of Giovanni Antonio Sogliani, who was for twenty-four years the pupil and assistant of Lorenzo di Credi; who formed his manner on that of Della Porta, and competed at Pisa with Pierino della Vaga and Andrea del Sarto. This picture was executed in 1534, and it is supposed that Della Porta himself designed, or had a hand in the modelling of, parts of it.

Other churches and convents in Florence possessed many paintings by Angelico, executed during his stay at S. Marco, but transferred to the Uffizi or Accademia galleries long before

the recent suppression. One only remains in its original place, in the Benedictine cloisters of the "Badia"—a figure of St Benedict enjoining silence, in attitude like the St. Peter Martyr of the Dominican cloisters, but far superior to the picture above noticed, and strikingly distinguished by a dignity suitable to the great patriarch of monachism in the West.

One remarkable picture by Angelico, and the only one in the convent of St. Dominic at Fiesole still in its place, is a Crucifixion on a wall of the refectory, now used as the conservatory of a garden rich in orange and lemon. It is not seen in a good light. The Sufferer, without any trait of physical horror or pain, breathes Divine benignity from the Cross, beside which stand Mary and St. John; the Mother aged in aspect, calm in her intense sorrow; the apostle a less happy example of the artist's conception—often inferior in treatment of the male as compared with the female figure. But all his fervour and power of expression appear in the St. Dominic, who kneels below, clasping the Cross, and gazing upwards with countenance marked by the utmost intensity of devotion blent with heart-wringing repentance. It reminds one of the Miserere Psalm as interpreted by the music of Allegri or Palestrina.

C. I. Hemans.

NOTE.

Mr. J. A. Crowe contributes to the last number of *Im Neuen Reich* an article of great value on the Holbein exhibition now open at Dresden. Its chief point lies in an elaborate and convincing technical comparison between the great rival "Madonnas" of Darmstadt and Dresden, which seems finally to establish the certainty that the former is the genuine original and the latter a copy—an opinion entertained by Mr. Wornum, and after vigorous opposition accepted by Dr. Woltmann and some other critics in Germany. Mr. Crowe does not think that the copy can be with confidence ascribed to any individual hand, but sees in it the manner generally characteristic of the Netherland students of Italian art at the end of the sixteenth century. In the course of his remarks Mr. Crowe appears to accept as undoubtedly genuine the male portrait lately acquired by Mr. Millais. The question of Holbein's birth-year, and the question of authorship as regards the Augsburg "St. Anna," are both reopened since the experiment by which HH. His, Sesar, and Hüber (see *Academy*, vol. ii. p. 372) have finally proved the spuriousness of the inscription setting forth that picture as the work of the younger Hans Holbein in his seventeenth year. Mr. Crowe contends for the elder Hans Holbein as its painter, arguing from the great variety of style shown at various periods of that artist's activity. On the other hand, the new number of the *Jahrbücher für Kunstwissenschaft* contains an argument by Dr. His on behalf of Sigismund Holbein in this connection, accompanied with an account of the experiment to which we have alluded, and with some elaborate genealogical researches into the family of Holbein, for which facilities have been given by the accession of a new keeper of the archives, Herr Christian Meyer, at Augsburg.

New Books.

Auerbach, B. Lebensgeschichte B. de Spinozas. (Published with a German translation of S.'s works.) Stuttgart: Cotta.

Jackson, J. The Ammergau Passion Play: descriptive guide, &c., with the songs of the chorus in the German originals, with English translations. Frankfurt a. M.

Mall, E. The Harrowing of Hell. Das altenglische Spiel von Christi Höllenfahrt neu herausgegeben. Berlin.

Schrott, J. Die Minnelieder Arn. Hildebolds von Schwangau, zum erstenmal übersetzt u. mit begleit. Texte herausgeg. Augsburg: Kollmann.

Shakespere's Hamlet. Englisch u. Deutsch. Text v. 1603 u. 1604. Quellen, Varianten, Noten etc. Hrs. v. Max Moltke. 4. Hft. Leipzig: Volksbuchh.

Taltarigo, C. M. Giovanni Pontano e i suoi tempi. Monographi. Libro primo—la vita. Sanseverino-Marche.

Varnhagen von Ense, K. A. Ausgewählte Schriften. 4. Bd. (Denkwürdigkeiten d. eignen Lebens.) Leipzig: Brockhaus.

Science.

*RECENT WORKS ON CHEMISTRY.**

[Third Article.]

VIII. **Text-book of Practical Chemistry**, or Introduction to Qualitative Analysis. By W. Valentin, F.C.S. London: Churchill and Sons, 1871.

IX. **Select Methods in Chemical Analysis (chiefly Inorganic).** By William Crookes, F.R.S. London: Longmans, 1871.

X. **A Cyclopædia of Quantitative Chemical Analysis**, By Frank H. Storer. Part I. Boston: Sever, Francis, and Co., 1870.

VIII. It is difficult to realise the fact that, at the present moment, there is no generally recognised standard work in English on Chemical Analysis. Other nations can quote Fresenius either in the original or in a translation; even English chemists could once do so likewise, but now they have but a Barmecide feast of it, in the author's name without his book. It would be useless to estimate the trouble and inconvenience which the gratuitous re-editing of Fresenius' manuals has entailed upon analysts and teachers, and the harm which it has done to the study of scientific analysis in this country. The first visible effect will be that a crop of imperfect little books, of no interest to any but their authors, will spring up, claiming notice because of some isolated merit, just as lower vegetable life suddenly starts into prominence round the place where a large tree has stood.

The advantage of Fresenius' Qualitative Analysis lay in its completeness and method. It was thoroughly scientific, and could be always consulted with confidence. Again, though elaborate, it was not too much so for the learner who was beginning the science with good supervision, because, when studying it, he acquired not the facts only, but their methodical combination and the way to reason about them. No other book embodied these characters, none therefore enjoyed a wider circulation, and it becomes a question whether it would not be advisable to retranslate the thirteenth edition of the original.

In the meantime Mr. Valentin's work goes part of the way to supplying the want. It does not cover the same ground, but it is a book on which much care and labour have been expended.

It is divided into two parts, the first containing 100 experimental exercises on general chemistry, the second treating of qualitative analysis.

Part ii. opens with a chapter of generalities, replete with good sense, which the student should carefully ponder, and which the teacher should never lose an opportunity of impressing on him. The reactions of the metals then follow. In the arrangement and grouping, Fresenius' method is adopted. This arrangement, it is true, is not quite free from objection, but it is a question of convenience rather than of principle. The description of the reactions is very full; there is given not only the deportment of the metal with the reagent so far as that serves for its recognition, but much that is useful in connection with general chemistry is added, and the changes are abundantly illustrated by equations. The non-metallic elements and inorganic acids are next treated in the same way, and then some of the commoner organic acids, citric, tartaric, benzoic, &c. The systematic course of analysis is given partly in full detail at the end of each group, and, partly in a series of tables at the end of the book, not consecutively as in Fresenius'. The tables are short, clear, and must be easily remembered by the student with a little practice.

After examination of this part, we think that hardly any-

* *Academy*, vol. ii. pp. 374–377 and 438–441.

thing more is required for teaching qualitative analysis. Whether or not the exact form be taken, the substance of the teaching cannot differ to any extent from what the author has selected. There are but few things to amend. The properties of the elements, especially the non-metallic, might have been given, and the general characters, colour, solubility, &c. of the salts. The reactions of hydric potassic tartrate with acids and alkalies might have been mentioned, as they are somewhat instructive; the quick and characteristic reaction of a chlorate acidified with sulphuric acid and tinged blue with indigo, when a little sodic sulphite is mixed with it, might have been included, and some other details. These, however, are minor points.

As in most modern text-books, questions and exercises occupy a large space at the end of the different sections. They relate mainly to analytical methods, and they are skilfully contrived to practise the student in constructing processes for different mixtures. A considerable number, however, are upon the mere notation of the book, the construction of graphic formulæ. These, which are concerned merely with the arrangement of certain groups of lines, according to rule, and do not require the same familiarity with the nature and properties of the bodies, can hardly be considered as coming legitimately within the scope of qualitative analysis. Such exercises, again, as the following, "Explain the use of the bracket" (p. 68), "Describe the use of thick type" (p. 61), and remarks elsewhere, are apparently notes intended for the printer, which have slipped into the text by an oversight, and might have appeared in the errata with the few misprints observable.

Part i. as a whole seems to us inferior to the other. From its construction it is apparently meant for students working separately in a laboratory. But considering how easy it is for a number of students to learn at once all that the combustion of a mixture of two volumes of hydrogen and one of oxygen and such like experiments can teach them, how necessary it is to have seeming contradictory experiments like No. 7 and No. 8 explained, it would be preferable to let the number so learn. Students in a laboratory can employ their time to better purpose than in the preparation and examination of the ordinary gases. This introduction therefore is for teachers rather than for taught, and is applicable only to lectures or demonstrations.

In the arrangement of the matter, the inductive form has been chosen, but with unsatisfactory results. There is some assumption, which, though quite allowable in dogmatic teaching, vitiates the experimental method. Particular care should be taken not to expose an inductive science to criticism from this side. All the defects in this part have arisen, not from the impossibility of treating the subject inductively, nor from any want of ability on the author's part so to treat it, but simply from his not taking space in which to develop it. Arendt's *Lehrbuch*, which Mr. Valentin has in some parts followed, and to which he acknowledges his obligation, is a moderately successful attempt to teach inorganic chemistry on a purely experimental basis. But though it is considerably larger than Mr. Valentin's whole book, even in it the method is not strictly adhered to, and supposing it was, it may be questioned if the gain counterbalances the time spent upon learning by it.

But while this part is too short as an inductive introduction to the science, and too long as an exposition of the scientific basis of analysis, a large amount of it is very valuable, as explaining the conditions under which chemical change is effected. These explanations are generally wanting in text-books, and have either to be supplied personally by the teacher or omitted altogether.

In any large collection of facts it is always possible to find repetitions, omissions, and incongruities. From these the present book is almost, but not quite, free. For example, the following (p. 18) is rather puzzling to the beginner: "The names of binary compounds are constructed by using the names of the metallic element adjectively with a terminal *ic*, and giving to the non-metallic element the terminal *ide*. Carbonic anhydride is a binary compound, for Experiment 22 has shown that it is the result or *product* of the combination of the element carbon with the element oxygen. All combinations of oxygen, either with metals or non-metals, are called *oxides*." The student naturally asks, Why then is CO_2 (p. 14) called carbonic *anhydride*, and why is SO_2 (p. 14) called sulphur*ous* anhydride? There is oxygen and the same amount of oxygen in both, and the general rule just given says not a word about the terminal *ous*. It is not until much later in the book, and after the confusion above engendered has had time to root itself, that some light is thrown on the subject. Even then (p. 63, *note*) the explanation as it stands is not strictly correct, or at least is not explicit, and this is further supplemented (p. 77) by another, long after the student has acquired the information empirically. The following also may be noticed: the distinction between the oxides and chlorides (p. 48) is not clear and decisive; the solubility of arsenious sulphide is stated differently on p. 206 and p. 239; some of the explanations seem to be out of keeping with the general theory of the book: caustic soda is said to contain water or the elements of water (p. 64), which cannot be expelled by heat on account of the attraction of sodic oxide for it; hydriodic acid "occurs in nature in the form of soluble iodides;" graphic formulæ are tacitly surrendered by the attempt (pp. 63, 64) to make them represent formation as well as structure, which carries us back by the very instance chosen to Gerhardt's paragraph upon it. The cause assigned for the acid and alkaline reaction of the salts of the weak bases and weak acids is not satisfactory. It leaves the facts exactly where they were, and besides obscures the possibility of there being a true physical explanation of the phenomenon; an explanation analogous possibly to that by which Graham showed the oxides of the heavy metals discharging functions restricted generally to water. It is inaccurate to ascribe the reaction to one constituent or to the other when it is by the union of the two that it is elicited. Explanation based upon the strength of sulphuric acid or of soda belongs to a bygone period of chemical theory, and does not accord with that now in vogue.

Among all the facts, however, there are but two which seem to need modification. One is that chlorine and ammonia are antidotes to prussic acid. Recent examination has made it almost certain that they are not of the slightest use. The other is the formation of nitric acid, which, the author says, is effected by the decay of animal matter in the tropics in presence of lime or potash soils. Without discussing nitrification, we would suggest that the same animal substances, under the conditions mentioned, also result in the formation of guano.

The question suggests itself whether this book will receive the general adoption to which many of its excellences entitle it. One or two features seem to us likely to limit its usefulness. Its character is most accurately expressed by its title; it is not a mere guide to qualitative analysis, but to the practical course in the College of Chemistry. It is written from the point of view of the teacher, rather than of the mere chemist, and is addressed to teachers. The author's experience has enabled him to anticipate and resolve the doubts which ingenious beginners are continually raising, and the use of equations clears up the reactions which take place, and helps to remove the vagueness which the constant spectacle of ever new phenomena leaves upon

the mind. It is, however, too special to be adopted by those who have elaborated courses of their own, and who wish merely a text-book. It was the merit of Fresenius' book that, while it expounded no system, it gave a view of the subject which lent itself to any system. The notation also, which is closely interwoven with the facts, presents another obstacle to many, who would readily accept the matters of fact. Again, so far as it is purely a teaching manual, it is unsuited for the practised analyst. To him the introduction, the equations, the general chemistry, the problems, are dead weight, while he requires the rarer elements which have not been introduced. Thus the student who has learned originally from this manual gets ultimately beyond it, and requires something less cumbrous. It was another merit of Fresenius' treatise, as has been already remarked, that the student never outgrew it, but could at any time afterwards refer to it. It did not enter into his plan, probably it did not occur to him that it was required, but it would undoubtedly have facilitated the adoption of the book, could Mr. Valentin have made it take the place of Fresenius' and supply both wants.

Still, though not so universally useful as the classical work of Fresenius, it is the completest English manual for teaching that we have seen.

IX. Mr. Crookes is almost the only one at present who, by translation and original writing, tries to keep English chemical literature from falling completely behind the times. The present publication, now that the standard work on Quantitative Analysis has been suppressed, will prove acceptable, we should suppose, to professional chemists. Though intentionally incomplete, it is a very full collection of the new and of the improvements on the old processes, scattered through the *Chemical News* and other journals, arranged under the usual groups and accompanied sometimes by critical remarks: it is not intended, therefore, for tyros. The processes, of course, are not all of equal merit: the range, indeed, is of the widest, from Stas' preparation of lead and silver down to the estimation of so-called reduced phosphates. The bulk of the volume, however, consists of valuable matter.

It is not necessary to enter into a detailed criticism of it. From the original papers being quoted, instead of their contents being rewritten, the descriptions are not always proportionate to the importance of the matter.* Thus, some familiar reactions are described as if they were novelties, while comparatively rare or new methods are alluded to without sufficient amplification. The precipitation of magnesia by lime-water (p. 15), the use of the different parts of a combustion-apparatus (p. 74), the reduction of ferric salts by sulphuretted hydrogen (p. 71), the separation of zinc and iron by baric carbonate (p. 126), the detection of fluorine in apatite, by the etching process (p. 76), these one should hardly expect to find in a work like the present, at least not in detail.

We do not complain of the non-adoption of a uniform system of weights or of nomenclature, but positive confusion should have been avoided if possible. In one place (p. 247) it is said that stannous oxide reacting in an alkaline solution on binoxide of copper precipitates protoxide (Cu_2O). In another (p. 183), protochloride of tin is said to reduce salts of the oxide of copper in hydrochloric acid to salts of the suboxide. It is satisfactory, however, to find that the prefix *di-* (dioxide, dichloride) is correctly used as synonymous with *sub*.

* Professor J. L. Smith's introduction to his method of analysing silicates should not have been reproduced in its present advertisement-like form (pp. 403, 404).

An important character of the book is its including the methods for the rarer metals. Of these, however, molybdenum, niobium, erbium and tantalum have been omitted, though they have all been examined more or less within the last few years. The author is justified in his remarks respecting the neglect of the rarer metals, and the unexpected light which their detection sometimes brings with it.

We do not agree with him that there is no need for giving references to the original papers. When, generally, one has to follow the actual description, and not a mere abstract, it would be a convenience to be able to refer at once from this *résumé* to the journal containing the memoir.

It is impossible to pass by the woodcuts which disfigure this very neatly printed and compact volume. They are of the same kind as those referred to in our first article. The folding plate is rather better, but it too conveys an erroneous impression. It is interesting to compare the drawing of Scheibler's calcimeter in Fresenius' *Quantitative Analysis* (Vieweg, fifth edition, 1862, p. 897), with the drawing of the same instrument in this book and in Mr. Crookes' treatise on Beetroot Sugar (Longmans, 1870, p. 273).

We notice that there is no table of combining proportions in the appendix.

X. According to derivation and according to universal custom, a cyclopædia is a book which treats of all things and of some others. Not content with calling this dictionary arrangement of quantitative analysis a cyclopædia, the author has impressed upon his reader that it is a comprehensive dictionary, so that there can be no mistake about the extent of the work; while others are attempting to abbreviate works on the subject, his aim "is to show that perspicuity can be best gained by amplification, if need be, and *methodical arrangement*." One concludes, therefore, that he has done all in his power to make it one of the kind of analysis books which "look to completeness in all directions." Now, when the author acknowledges that the book has manifold shortcomings, and that he has no apology to offer for them, because of the manifest difficulty of perfecting the first edition of a book of this kind, and when soon after he says that the names of the rare elements have been omitted from this edition simply from lack of time to deal with them, one feels at a loss how to encounter such a bundle of contradictions. The subject is not new, nor is its literature scanty and difficult of access. The material for the construction of a comprehensive cyclopædia was all ready, and the author admits that he has made free use of all the great works on chemistry, as he was justified in doing. Why then does he publish a work which he knows to be full of shortcomings, and why does he call it a cyclopædia? His duty was plainly to have made his work such, that he could say that it was as perfect as a work of the kind can be made. There was not such a want of books on analysis that chemists would be glad to have anything, however imperfect. Want of time, therefore, cannot be accepted as an excuse, when almost the only novelty which the book could be expected to offer, is the result of care and labour, that is, of the time spent upon it.

So far from this book being comprehensive, it is necessary to have besides a number of books for reference. This should have been avoided, for it is the aim of other works to dispense with extraneous aid. For example, under Alkalimetry and Acidimetry one looks for the tables of specific gravity and strength. Instead of these a reference to the author's *Dictionary of Solubilities*, or any of the larger treatises on chemistry, is given.

It is not quite obvious, whether it is intended to include under one alphabet the methods for analysing various substances, natural and technical, as well as the methods for

determining the elements simply. If not, and there is another division for compounds, the gain of the alphabetic arrangement is lost, and all the trouble entailed by a supplement is imposed upon the reader. If, however, everything is supposed to be included in one alphabet, a number of names are not forthcoming, and there is not even a cross reference to say that they have been thought of: alloy, ash, apatite, alkali, bile, blood, bone, beer, bleaching-powder, are some about which not a word is to be found anywhere. In this part, only methods of estimating bodies seem to be given, and even to employ this to advantage, it would be requisite to know beforehand much that one expects to learn from a cyclopædia.

To the general idea of the book there is no prominent objection, except that it separates what had better be together, and therefore involves repetitions and numerous cross references. Thus acetate of aluminium and acetate of iron are disjoined from the other methods of determining those metals. If one wishes to know how to estimate calcium, half a dozen and more separate references must be made.

It is proverbially unfair and unsafe to judge of unfinished work. It is not impossible, however, to judge of work already done. Taking this part on its own merits, we have not been able to see anything in the plan which would be an inducement to adopt it in place of the ordinary one. Further, as regards the detailed execution, examination shows that it has not substantiated its right to the title of cyclopædia. Not only are old processes and books referred to, and newer results omitted, but important methods, given in detail by other writers, are passed over with mere mention.

John Ferguson.

THE ARCTIC REGIONS.

North-polar voyaging assumes a new aspect this summer, for not only are there more than a dozen expeditions, greater and smaller, besieging the icy fastnesses of the arctic region at almost every point in the circle of its unknown area, but the whole of these, with two exceptions, are independent of any public aid, and have been undertaken at individual risk, in the hope of direct mercantile as well as scientific gain.

Two very important expeditions are under German leadership (*Petermann's Mittheilungen*, ix.). The Rosenthal expedition of this year sailed on the 25th of June from Bremerhafen, and is directed by the veteran traveller von Heuglin. One of the two vessels belonging to it is the *Germania*, the steamer in which the second German voyage, to East Greenland, was made. The ships are prepared for a 15 months' cruise of discovery in the Siberian seas, and the route which it is intended to follow passes through the strait of Novaia Zemlla, and across the Kara Sea; thence an attempt will be made to double the North Cape of Asia and to reach the islands of New Siberia. A few determinations of longitude, alone, in this region, would be of the greatest service to geography. Payer and Weyprecht's expedition, which left Tromsö also in June, is directed to the region east of Spitzbergen, where the land named after King Karl of Würtemberg has been dimly seen, and is now to be the special object of exploration.

A Swedish expedition in two war vessels provided by government, led by Professor Nordenskjöld, left Carlscrona on the 11th of May, for the more complete examination of the sea between Greenland and Spitzbergen. Several Norwegian vessels, under well-tried arctic commanders, and thoroughly equipped with scientific instruments lent by the government, have sailed for the seas between Spitzbergen and Novaia Zemlia.

From Scotland Mr. Lamont has gone with his steam yacht to revisit the scene of last year's German expedition on the East Greenland coast in high latitudes; and an enterprising Englishman, Mr. Leigh Smith, has bought and manned a vessel at Tromsö to sail for the Spitzbergen seas.

The well considered American expedition of Captain Hall in the *Polaris* steamer left New York in the end of June. Supplies of coal await the vessel at Disco, in West Greenland, and it is intended to purchase a supply of sledge-dogs at Upernavik, the northernmost settlement on that coast; thence the *Polaris* will cross Melville Bay, and Captain Hall has chosen to follow Jones Sound as the most promising entrance to the circumpolar region.

France is also represented this year in the person of a gentleman named Octave Pavy, formerly a resident in North America, who has prepared an expedition at his own cost, to carry out, in its main features, the plan proposed by his own countryman, Lambert, a few years ago. He proposes to cross the Pacific from San Francisco to Japan, and there to charter a ship for Kamtchatka. In Petropaulovsk he will purchase 200 rein-deer and 50 dogs, and will travel thence in deer-sledges by Anadyrsk to Cape Jakan. There, one-half of the number of rein-deer will provide a supply of fresh provision for the further part of the journey, and the remainder will be left in charge of the native Chukchees. Should solid ice be found extending northward from the cape to the unvisited Wrangell Land, the dog-sledges will be put in action; if there is open water a "modified monitor raft," constructed specially for this use, will be fitted up and launched on the polar waters.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In connection with the account of M. Bernard's experiments on the influence of heat on animals, described in the *Academy* for Sept. 15th, it may be well to mention that the sudden change in the colour of blood when heated to 140°–158° F. is accompanied by an alteration of the original hamoglobin into hæmatin. This clearly explains why it does not again recover its bright colour when agitated with air.

9, *West View, Ilkley, Sept.* 25. H. C. Sorby.

Scientific Notes.

Geology.

Sequence of the Glacial Beds.—The question of the sequence and parallelism of the later drifts and alluviums, especially that set of beds occurring so profusely in our eastern counties, and which have for many years been studied by Mr. Searles V. Wood Jr., Mr. Harmer, and others, still occupies the attention of the geological world. Every writer has discovered the orderly succession of "boulder-clay" and "till" in *his own* district, and is able to produce the most clear and accurate plan of their arrangement, *on paper*. Not content with so doing, other and bolder spirits, such as Prof. Hull, venture to give us a programme for the general relations of the drift deposits, and the state of our islands during their deposition, showing how we have successively been ice-clad, submerged, re-elevated, glaciated, and thawed. As the contest is still going on, we must be content to await the issue of the warfare between the ice-giants. Whether we shall ever be able to obtain a clear notion of the orderly succession of the chaotic mass of clays, gravels, sands, and drifts, which cover so many parts of our island, it is hard to say. Meantime there is no lack of earnest workers in all directions. The metropolitan area, with its superficial deposits coloured by the geological surveyors, will shortly be published. Messrs. Wood and Harmer intend, we believe, to issue a map of the eastern counties, drifts, &c. very soon; and it is highly probable the Royal Agricultural Society (who have already published several maps of the superficial deposits) will pursue the same good work.

The Crag-Formation of Iceland.—Dr. O. A. L. Mörch of Copenhagen gives an account (in the *Geological Magazine*) of the crag-formation of Iceland, from which it appears that tertiary beds of shells as well as leaf-beds occur in that island. The plants are probably of miocene age, according to Dr. Oswald Heer, but the shell-beds belong to pliocene or post-pliocene times. The tendency of modern geological and zoological investigations seems to prove that, within the arctic zone, life on the land and in the sea has, in late tertiary times, been more abundant than at present, and that such animal- and plant-life owed its greater vitality partly to the more direct action of the warm currents of sea and air travelling northwards from the equator, and partly to the eccentricity of the earth's orbit, which would have greatly favoured the arctic regions at the cost of the antarctic.

A New Arachnide in the Coal-Measures.—Spiders and scorpions appear to be among the very earliest representatives of air-breathing Articulated animals. Myriapods, Orthoptera, and Neuroptera also make their appearance in palæozoic times. Mr. Woodward has just described (in the *Geological Magazine* for September, p. 385) a new and very perfect false-scorpion (nearly related to the recent African genus *Phrynus*) from the ironstone of Dudley. The body of the animal is richly orna-

mented with five rows of tubercles and numberless smaller prominences. Four short tail-spines are preserved; four pairs of limbs and a pair of pedipalps are also to be distinctly seen. What is not a little remarkable is the fact that the nodule in splitting open exposes, *not a duplicate* impression on its two halves, but on one is a nearly perfect *upper view* of the body of the animal, and on the other an equally perfect one of its *ventral* surface. A less perfect example of the same fossil was found many years ago in the penny-stone ironstone of Coalbrook Dale by Mr. Anstice, and is figured and described by Dr. Buckland in his *Bridgewater Treatise* as a Curculio, or "diamond-beetle," and named *Curculioides Prestoicii*. Mr. Woodward, in pointing out its true affinities with the Arachnida, has named it *Eophrynus Prestoicii*. Hitherto there have been found 44 scorpions, myriapods, and insects in the coal-measures, 7 in the Devonian, and one in the permian. They are more abundant again in the lias and Solenhofen limestone and other beds of secondary age; whilst the tertiary beds possess a large insect-fauna of their own.

The Geological Collection of N. T. Wetherell, Esq., F.G.S.—This collection possesses special interest for Londoners. It was almost wholly made by its persevering accumulator during the leisure moments of his professional work as a surgeon in Highgate. The localities represented are Hampstead, Highgate, Holloway, Primrose Hill, Whetstone, Finchley, and numerous other localities around London. The fossils are from the London clay, and were obtained during the making of the Highgate Archway, the Great Northern Railway, the London and North Western, the Finchley and Edgware line, the Hampstead Tunnel and Well, and indeed every excavation around the north of London. There are a large number of figured fossils, including *Nautili; Aturia zic-zac; Pleurotomas; Cypræa*, and other shells; many London clay Crustacea, figured by Bell; the *Loricula pulchella*, a chalk Cirripede, figured by Darwin; and numerous other palæontological treasures. These have been secured for the British Museum, and will prove a great addition to our National Museum.

Chemistry.

The Breitenbach Meteorite.—In the *Philosophical Transactions of the Royal Society*, 1871, is a memoir on this aërolite by Prof. Story-Maskelyne, of the British Museum. It was acquired for the national collection in 1863, having been found two years previously at Breitenbach in Bohemia, not far distant from Rittersgrün in Saxony, where a large meteoric mass of a similar kind was almost contemporaneously found. Nearly halfway between these two localities, in the environs of Johanngeorgenstadt, is a village named Steinbach, where in 1751 a mixed meteoric mass resembling the above-mentioned was met with. It is supposed by Prof. Breithaupt, of Freiberg, that the occasion when these masses fell was the "Eisenregen" that occurred at Whitsuntide, 1164, in Saxony, when a mass of iron fell near the town of Meissen. A polished surface of either of these masses reveals iron in patches, having the characteristic structure, and enclosing troilite, and a greenish and greyish-brown magma; the latter, when liberated by treatment with corrosive sublimate, was found to be made up of three ingredients: a highly crystalline bright green or yellowish green silicate, rusty brown or black and sometimes nearly colourless grains of a mineral with crystalline characters, and crystalline grains of chromite. The first mineral is rhombic, has the formula of an enstatite, a hardness equal to 6, a specific gravity equal to 3·238, and the composition of a bronzite very nearly corresponding to the formula $(Mg_{\frac{2}{3}}Fe_{\frac{1}{3}})SiO_3$. The second mineral is no other than silica crystallized in the orthorhombic system, and constitutes about one-third of the mass of the mixed silicious minerals. The grains of this mineral rarely present any faces that offer any chance of a result at the goniometer. Its parametral ratios were—

$$a : b : c = 1·7437 : 1·0000 : 3·3120.$$

Two specimens, on analysis, were found to contain 97·43 and 99·21 per cent. of silica respectively. Its hardness is 5·5, and specific gravity 2·245, or that of quartz after fusion; which differs in but a slight degree from that of the crystallised form of the rare variety of silica that Prof. Vom Rath has termed tridymite. Although this is the first meteorite in which the presence of pure silica has been determined, it is interesting to find that already in 1843 Partsch identified as a specimen of the Steinbach siderolite a fragment with a label, "Gediegenes, zahnicht und zackicht gewachsenes Eisen mit kornichtem Quarz u. s. w." The iron of this siderolite contains 90·5 per cent. of iron and 9·5 per cent. of nickel, inclusive of a little cobalt; the ratio of the former to the two latter metals being as 10 to 1. The Breitenbach iron, moreover, contains a trace of copper.

The Nitration of Chloroform.—The substitution of the hydrogen of chloroform had been previously attempted without success. Dr. Mills (*Jour. Chem. Soc.* Aug. 1871, p. 641) successfully accomplished it by heating 16 vols. of hydric nitrate, containing much nitric peroxide, with 7 vols. of chloroform, to 90°—100°, for 120 hours in sealed tubes. After the digestion is ended, the apparent volume of the chloroform has greatly increased, on account of the liquefied gases, especially nitric peroxide, held in solution. The tubes having been opened, their contents are dried with calcium chloride and distilled. At first much chloroform comes over, and is followed by a very small quantity of liquid, with the extremely pungent and highly characteristic smell of chloropicrin. It boiled at 110°·5, and contained rather more than 65 per cent of chlorine; the theoretical percentage for this compound being 64·74. The gaseous products of the reaction are chlorine and carbon dioxide.

The Gases occluded by Coal.—The questions whether any gases are enclosed in coal, and, if so, of what kinds they are, have been solved by E. von Meyer (*Journal für prakt. Chemie*, Nos. 11 and 12, 42). He used a hard compact coal from Zwickau, that had been for some months in contact with the air; and he expelled the gases with boiling water, and analyzed them by Bunsen's method with, in two cases, the following results:—

	I.	II.
Carbonic acid	16·9	22·4
Marsh gas	20·4	22·3
Nitrogen	53·3	48·0
Oxygen	1·7	4·1
Heavy hydrocarbons	7·7	3·2
	100·0	100·0

The large amount of nitrogen and small amount of oxygen are remarkable; that absorbed by the air being apparently used in the oxidation of the coal and the formation of carbonic acid. The presence of heavy hydrocarbons absorbable by fuming sulphuric acid is also interesting; the author convinced himself that they were not a product of the action of the heated water, used in his method, on the coal by extracting similar gases at ordinary temperatures by the aid of an air-pump.

Nouveau feu lorrain.—According to P. Guyot (*Compt. rend.* 72, 685) a new liquid fire may be produced by shaking bromine with an excess of flowers of sulphur, and after filtration through asbestos, dissolving the clear bromide in bisulphide of carbon to which phosphorus has been added. This agreeable mixture, in contact with ammonia, immediately takes fire. The solution of bromide of sulphur and phosphorus in bisulphide of carbon can be safely preserved in closed vessels. Except in the presence of ammonia it does not ignite unless it be actually poured in a thin layer on paper or some other combustible material.

The Amalgams of Potassium and Sodium.—It has been noticed by K. Kraut and O. Popp (*Ann. der Chemie*, August, 1871, 188) when an aqueous solution of carbonate of potash or caustic potash is poured on an amalgam of sodium containing 3 per cent. of this metal, that after the lapse of some days there form in the mercury hard and brilliant cubes with rhombic dodecahedral and simple octahedral faces of potassium amalgam; some are 5 mm. long. Pressed and dried they can easily be preserved in closed vessels; in air, however, they soon decompose, and the same is true if they remain a longer time in the liquid where they are formed. Some on analysis were found to contain 1·56 per cent. of potassium, and 0·036 of sodium. In fact the latter metal was probably no constituent of the crystal, but present in the sodium amalgam adhering to them. In sodium amalgam, treated with pure water, long needles were developed which, though produced under somewhat varying conditions, contained in each case about 1·8 per cent. of sodium, indicating for the compound the formula Na_2Hg_{12}.

The Searsmont Meteorite.—This stone, which fell near Searsmont, in Maine, on the 21st May, 1871, has been examined by Dr. Lawrence Smith (*Silliman's American Journ. of Science*, September, 1871, 200). He finds it resemble very closely the Mauerkirchen stone that fell in 1768, the crusts corresponding quite closely both in thickness and appearance; the Mauerkirchen stone, however, has not well-marked globules like that of Searsmont, and in this respect it corresponds more nearly to the Aussun aërolite. Its specific gravity was 3·701, and its composition is—

Nickeliferous iron	14·63
Magnetic pyrites	3·06
Olivine	43·04
Bronzite, a hornblende with a little albite or orthoclase, and chrome iron	39·27
	100·00

With the bronzite there may also be some enstatite which would be confounded with the former if existing in the stone.

Miscellaneous.

Darwinism.—In a reprint of an article in the last number of the *North American Review* by Mr. Chauncey Wright, the author ably defends Mr. Darwin from some of Mr. St. George Mivart's attacks; and clearly points out the nature and extent of the variations suitable for the efficient action of natural selection—a point on which Mr. Mivart, like so many other critics, has misunderstood, and to some extent misrepresented, the theory. Several of Mr. Mivart's special difficulties are very ingeniously overcome, but others of equal or greater weight are left unnoticed. The discussion of the theological bearings of the subject is

somewhat obscure; and though the article must be considered to be a criticism of, rather than an answer to, Mr. Mivart's book, it exhibits much originality of thought and a very accurate conception of the essential features of the theory of natural selection, and is therefore a real contribution to the literature of the subject.

We regret to have to announce the death of Prof. Schweigger-Seidel, assistant professor in histology to Prof. Ludwig at Leipzig. Prof. Schweigger is well known for his histological writings on nerve-endings in the salivary glands, on the lymphatic system, and, more recently, for his elaborate paper in Prof. Ludwig's "Arbeiten" on the cornea. All his writings are characterized by extreme caution in the interpretation of microscopic appearances. In him Prof. Ludwig has lost an assistant whom he highly valued, and will find it very difficult to replace.

A memorial notice of Friedrich Ueberweg († June 9), by W. Dilthey, in *Preussische Jahrbücher* (Sept.), describes his philosophical standpoint as having most in common with Schleiermacher on the one hand and Beneke on the other. The most original part of his system, the doctrine of the reality of space, is not fully developed in his published writings; and his antagonism to Kant led him into paradoxes the obvious objections to which he did not live to answer.

New Books.

Ball, R. S. Experimental Mechanics. London: Macmillan and Co.

Gümbel, C. W. Die sogenannten Nulliporen. 1. Theil: Die Nulliporen d. Pflanzenreichs. 2 Taf. München: Franz in Comm.

Heer, Prof. Oswald. Flora fossilis arctica. 2 Bd. 59 Taf. Winterthur: Wurster and Co.

Leighton, Rev. W. A. The Lichen-flora of Great Britain. Shrewsbury: printed for the author.

Leuckart, Prof. Bericht über die wissenschaftlichen Leistungen in der Naturgeschichte der niederen Thiere während der Jahre 1868-1869. Berlin: Nicolai.

Maier, R. Lehrbuch der allgemeinen pathologischen Anatomie für Studirende und Aerzte. Leipzig: Wigand.

Meyer, H. A. Untersuchungen üb. physikalische Verhältnisse des westlichen Theiles der Ostsee. Schwerin: Keil.

Newton, Isaac. Mathematische Principien der Naturlehre. Aus dem Lateinischen übersetzt von Prof. J. Ph. Wolfers. Berlin: Oppenheim.

Preyer, W. Die Blutkrystalle. Jena: Mauke.

Virchow, R. Die Cellularpathologie in ihrer Begründung auf phys. und path. Gewebelehre. 4te neu bearb. u. stark vermehrte Auflage. Berlin: Hirschwald.

History.

EARLY EASTERN GEOGRAPHY.

[First Article.]

Bibliotheca Geographorum Arabicorum. Edidit M. J. de Goeje. Pars prima. Viae regnorum. Descriptio ditionis Moslemicae auctore Abu Ishák al-Fárisí al-Istakhrí. Lugduni Batavorum: apud E. J. Brill, 1870.

A specially prominent place among Arabian sciences belongs to geography. Besides the Greeks, and a few Roman authors, the only students of this branch of knowledge till quite modern times have been Arabic writers; the Chinese are too remote from our field of vision to be taken into account. At a time when, late in the middle ages, the geographical works of European nations were still based ultimately on the statements of Pliny, the subject had already been handled in the East by a series of accurate and original writers. Between their researches and those of the Greek geographers there is hardly any connection. The only point on which the former are dependent on the latter is mathematical geography, but this is a subject in which very few of the Arabic writers took any interest. Indeed geography was never taught in their schools, like theology, jurisprudence, and philology, and hence the greatest geographers are not men of learning in the strict sense of the word. But this is precisely one of the chief advantages of the study. As the *Periplus maris Erythraei*, the work of a merchant of no particular education, but a close observer, is far superior to the compends of learned schoolmasters like Dionysius Periegetes, so these productions of merchants and officials stand preeminent for sound observation and correct relation of facts. They are composed in part of mere descriptions of routes, with precise estimates of distances, but are generally accompanied with various notices about countries and people. The most flourishing period of Arabic geography begins when the other native sciences had already reached their height, viz. in the tenth century A.D. A series of works then appeared, the peculiar relation of which has for the first time been cleared up by the editor of the above-named *Bibliotheca*. Professor de Goeje's opinion is at present the only competent one on the subject. The publication of two more works of the series in the succeeding volumes of the *Bibliotheca* will alone enable others to form an independent judgment. From an essay by Professor de Goeje on "the question about Istakhrî and Balkhî" (see *Zeitschr. der deutschen morgenländ. Gesellsch.* xxv. 42, &c.) we gather that the book now edited is based on a lost work of Abû Zaid al-Balkhî (died A.D. 934), which contained maps accompanied by short descriptions. This book received extensive additions in 950 from the great traveller Abû Isḥâk al-Istakhrî, whose work is reproduced in all essential points in de Goeje's edition. Istakhrî's geography was similarly enlarged by his junior contemporary Ibn Haukal, and not long afterwards in 985-6 was much used by al-Mokaddasî, who in the opinion of the only two scholars who have studied him, Sprenger and de Goeje, is the most distinguished of the Arabic geographers. The verbal agreement of these books in so many places has caused much confusion among the Arabs themselves. Istakhrî's work was sometimes ascribed to Balkhî, sometimes to Ibn Haukal; a Persian translation of Balkhî was edited by Ouseley, who ascribed the authorship to Ibn Haukal. But, to make confusion worse confounded, many MSS. contain abridged—and at the same time in some places enlarged—texts; and so too the Persian translations do not altogether correspond to the originals. For instance, the facsimile of the Gotha MS. of Istakhrî edited by Möller contains an extract. Even this was enough to show the great value of Istakhrî, and we therefore congratulate ourselves that Professor de Goeje, who has performed so many services already to Arabic geography and history, has edited his work in a carefully restored text with abundant critical material.

Istakhrî, like the other geographers, attaches his descriptions of countries to maps. But we quite approve de Goeje's omission of the latter. A reconstruction of them in their original form could only be made with considerable freedom, as the sketches in the several MSS. do not always agree; besides it would scarcely prove of much use, as we are accustomed to better maps, and it would greatly increase the price of the book. Any one may get an idea of this kind of map from the Gotha edition. Istakhrî confines himself intentionally to the Mohammedan world, which he seldom leaves, and then only for a brief space. But even these regions are not treated alike. The entire west (Maghrib), *i.e.* North Africa from Cyrene onwards, and Spain, is treated very cursorily. Egypt, too, and the Semitic countries are not described very minutely; this is much to be regretted for Syria and the countries on the Euphrates and Tigris, as we want more detailed accounts of these parts. About three-fourths of the work relate to the countries in which Persian was chiefly spoken, or which at any rate stood under the immediate influence of the Persians. Particular care is bestowed on the description of his native country, Persis proper (*Pârs*, in Arabic *Fâris*), and of Transoxania, which had been already described at length by Balkhî. Istakhrî gives us not only a great number of names and descriptions

of places, but also excellent notices of the peculiarities of countries and their inhabitants. He brings out in particular the natural and artificial productions, and expresses an opinion on their value as a merchant with the confidence of an expert. He also offers many observations on climate. As is well known, the Iranian highlands rise abruptly from the sea and from the neighbouring low country on several sides, though there are several considerable depressions in the interior. This often gives rise to important variations of climate in places which lie close together. Thus the geographer observes that falls of snow are not uncommon in Holwân, a town on the frontier between the low country of Babylonia (Sawâd, 'Irâk) and the mountainous region (*Jibâl*) of Media, while the summit of the neighbouring range is covered with perpetual snow. He notes further in all the more important localities whether they lie in the sultry lowlands (*jorûm*, the Arabic plural of the Persian *garm*, "warm"), or the cold highlands (*ṣorûd*, from the Persian *sard*, "cold"), or on the border between both climates. I make this remark because Oscar Peschel, the author of an excellent *History of Geography*, doubts whether the Arabic geographers knew the dependence of the temperature on the elevation. In Persia proper such observations could not but force themselves even on the uneducated, while the fact that they did so is proved by those thoroughly popular appellations. Istakhrî also characterizes briefly the great desert, which occupies the interior of Irân, as one of the most unfrequented, and as worse than the Sahara and the desert of Gedrosia, quite in harmony with the impressions of modern travellers. He gives an exact description of the character and mode of life of the inhabitants of several provinces. While he finds much to blame in his own special countrymen, his eulogy of the people of Transoxania is almost enthusiastic. His very minute description of this country is particularly interesting. One is surprised to read of the flourishing condition of a region which has long been so unutterably wretched. But no doubt there has scarcely ever been such a happy time as that for Transoxania. In the times of Balkhî and Istakhrî, the Sâmânides, one of the best, if not the best, Persian dynasties, were still in unbroken vigour. Not long afterwards the Turkish element obtained the upper hand, and from that time the land became the scene of the struggles between Turkish and Mongol hordes, which have almost entirely extirpated the old Iranian civilisation. Istakhrî informs us moreover of the sects and religious parties prevalent in the different regions, and in particular of the old Persian religion, which still had a wide extension, especially in Pârs. Ethnography, too, is not neglected. He tells us about all sorts of Persian dialects, about a peculiar language of Susiana, &c., and enables us to make out with tolerable distinctness the relation then existing between the Turkish and Iranian population of the north and east, on the opposition of which the history of those races depends. While the civilised countries, even in the north, including the fruitful district of oases Khwârizm (Khiva), appear to have been purely Iranian, the desert east of the Caspian Sea was haunted by predatory Turkish tribes called the Ghuz (a shortened form of the native Oghuz). After the foundation of the Seljukian empire, the Ghuz themselves moved further to the west, but they were succeeded by other Turkish tribes, from whom the modern Turkmâns are descended. Irân proper, however, was still fortunately free from Turks, except quite in the east, between Sijistân and India, where Istakhrî mentions the Khalaj as a people of Turkish language and customs, who had migrated thither in ancient times. It would be natural to take these Khalaj for the Sacæ, from whom the whole country received the name of Sakastân (Arabic *Sijistân*, neo-Persian *Sîstân*). Far away to the east our geographer mentions Kurds, as yet undisturbed in their predatory preeminence by the Turkish nomades. He also gives us minute and very interesting information about the numerous Kurdish tribes, not mentioned by other writers, in Pârs itself. But in fact the distinction between Kurds and Persians in western Irân has much more to do with their mode of life than with their nationality. Another uncivilised Iranian people, the Balûcians, are mentioned for the first time by Istakhrî, in whose time they still lived quite in the west of the region which now bears their name. The inhabitants of the Ghôr, the region from which the modern Afghans are derived, were still heathens in Istakhrî's time.

These few points may be enough to show that the section on the geography of Iran in Spiegel's valuable work *Erânische Alterthumskunde* might have been greatly improved had the author consulted Istakhrî's book. It is true that the names of places could hardly be fixed with precision from the Gotha edition and Ouseley's Persian translation; but even in this imperfect form Istakhrî would have supplied him with much useful information on points such as the conformation of the ground, the climate, and ethnography, to which Spiegel rightly attaches a primary importance.

Professor de Goeje himself thus describes his work in the essay referred to above, p. 57: "It is well that at the beginning of an undertaking one cannot always command a view of its full extent. Had I known, when some years ago I resolved to edit Ibn Haukal, how extremely laborious it would prove, I should certainly have been deterred from the attempt. The section on Persia in Istakhri alone required weeks of hard work. Often have I been on the point of breaking off in discouragement, so defective were the MSS. at my command. There can be no doubt that many corrections will still have to be made in my edition. No one can expect it to be otherwise." A glance at single chapters, *e.g.* those on Pârs and on Transoxania, will be enough to convince any one of the unusual difficulties of the task. There may be seen whole pages full of names of unknown places in Persian or in perfectly strange languages. The diacritical points are often entirely or in part wanting in all the MSS., or else they are placed incorrectly besides other corruptions to which the names are liable, and which could only have been prevented, considering the peculiarities of Arabic writing, by extraordinary attention on the part of all the copyists. Many of the names can never be restored with complete certainty.

In course of time we may hope with de Goeje that one and another of these names may be corrected, but the first solid foundation has been laid in this edition. It is not too much to say that no geographical or historical work of Arabic literature has yet been edited with such a combination of critical aids. Professor de Goeje has worked with as much industry as circumspection, and hence, from his numerous but altogether defective authorities, he has produced a good text. We wish that other editors, as for instance those of Masûdî, had used their much better apparatus in a similar way.

Istakhrî, as we have said already, is not a scholar. As might be expected, he employs many Persian and other foreign words for objects of ordinary life, articles of trade, &c., which are wanting in the dictionaries of the classical language, but which even a purist could hardly have dispensed with in describing such objects. But he also betrays by several of his expressions that Arabic was not his mother-tongue. We go so far as to question whether he could even write Arabic with perfect grammatical accuracy. All the MSS. coincide in a number of grammatical irregularities, *e.g.* in the use of the numerals, and we scarcely think that these

ought to be corrected; indeed we are more and more disposed to apprehend that too much may be done in correction of the Arabic of authors with but moderate pretensions to education. It is true that in such cases, especially where the MSS. differ, we may often be at a loss which course to pursue. In some places Professor de Goeje brings the text into conformity with the grammar, while in others he leaves the errors alone; but one can hardly avoid a certain amount of arbitrariness.

The second volume of the *Bibliotheca geographorum* is to contain Ibn Haukal, the text of which could not conveniently be inserted in that of Istakhrî, as Professor de Goeje had at first intended. Nor until we have this second volume before us can we form a precise notion of the relation between these two works. Their affinity is, of course, apparent from the critical apparatus in the present edition of Istakhrî, in the formation of which, besides the two MSS. of the work itself, the Gotha extract, and the Persian translations, this very text of Ibn Haukal was an indispensable aid. The third volume will contain the work of Mokaddasî, and the fourth will conclude the work with a German translation, a glossary, and the necessary indices. We hope the editor will soon be in a position to complete his great undertaking; from his vigorous energy we may hope the best.

Th. Nöldeke.

The Insurrection of Hóra. [*Hóra-Világ Erdélyben.*] By M. F. Szilágyi. Pest: Athenaeum.

This is the second book that has appeared in Hungarian during the last few years relating to the *jacquerie* of the Transylvanian peasants in the year 1784–5, as Count Dominick Teleki's book, *Hóra-Támadás Története*, "History of the Insurrection of Hóra," was published in 1865. Thus deprived by anticipation of his natural title, M. Szilágyi has fallen back upon a well-known Magyar idiom, and entitled his work *Hóra-Világ*, or "Hóra-World." This second work in a certain sense indeed owes its publication to the first, having grown out of a series of articles contributed to the *Buda-Pesti Szemle*, 1866 to 1868, criticizing the incorrect statements made by Count Teleki. In his preface the Count had stated that, after keeping his work for a long time in a drawer, he had at length come to the conclusion that the passions of either side had by that time, in 1865, sufficiently cooled down to allow of its publication, and that the leading minds amongst the Rumans themselves saw clearly that the names which would reflect credit upon the nation were not those of Kloska, Hóra, and Krisan, the leaders of the peasant insurrection. On the other hand, M. Szilágyi tells us that only the previous appearance of Count Teleki's book persuaded him to write on a subject so calculated to increase the irritation at present existing between the Magyar and Ruman nationalities in Transylvania.

To some extent the forms of the two books witness to the diversity of their origin. The *Hóra-Támadás* is written straight on like a story, encumbered with a few insignificant notes, and winds up with a register of the documents and authorities he had been able to consult in the libraries of Transylvania. Consequently to trace the authority for any particular statement made in the narrative is possible only to one who like M. Szilágyi has spent years in the examination of documents and authorities, both printed and in manuscript. On the other hand, *Hóra-Világ* opens with a *catalogue raisonné* of his authorities, showing the amount of dependence to be placed upon each, and the errors which we may expect to find in some of them. The work is elaborately divided into parts and chapters; the authorities for each several statement are referred to in foot-notes which occasionally contain additional information that might have found place in the text. Occasionally, too, the author departs from the chronological order without apparent reason, and the reader suspects that the unity of place is preferred to that of time, because the author is engaged in exhausting one set of authorities before he refers to another. Wherever he comes to conclusions differing from those of Count Teleki, he is careful to point out the difference. These relate chiefly to what is perhaps the most interesting portion of the history, namely, the part played by what we may call the mythopœic faculty in the Transylvanian public. Some, however, of the Count's historical errors seem referable to the class prejudices of a Hungarian nobleman, especially in the year 1865. As an instance in point, we may refer to his attributing a culpable neglect and indulgence towards the insurgents to the governor, Baron Bruckenthal, who had the misfortune to be a *novus homo*, and withal to belong to the Saxon nation.

In reading the story of the insurrection of the Ruman peasants of Transylvania in 1784–5, one cannot help comparing it to the insurrection of 1848–9—a historical parallel, however, which our author from obvious reasons does not notice. In each case one is struck with the inextricable combination, or rather confusion, of social, national, and religious animosities. Although each insurrection was one of the peasants against the exactions of their superiors—landlords and county officials—scarcely any peasants of Magyar nationality joined in the movement except upon compulsion. Nor did the insurgents content themselves with killing or plundering landlords or officials. In many cases they gave the peasants belonging to the Magyar nationality and of the Roman Catholic or Protestant religions the choice of death or admission into the orthodox Eastern church by re-baptism. As in the more recent instance, the Rumans took advantage of a civil war between the Viennese government on the one hand and their Hungarian masters on the other, so, too, the earlier insurrection might never have broken out if it had not been for the notorious dislike felt by Joseph II. for the Hungarian constitution, and the consequent suspicion and jealousy with which he was regarded by the nobles. But while the earlier insurrection was only favoured by the half-hearted and dilatory conduct of the military authorities—in itself, perhaps, in part attributable to the anti-aristocratic leanings of their sovereign—in the more recent one imperial soldiers fought on the same side with the insurgent peasants. Consequently no feat of arms was achieved by the hordes of Kloska and Hóra that can be compared to the sack of Nagy Enyed in January, 1849, by the followers of Axenti Severu. Nor did the first insurrection spread over so large an extent of country. On the other hand, it is to be observed that both had their origin in the woody and thinly peopled hill country north and west of the valley of the Maros, in the midst of which are situated the gold mines of Abrud-bánya and Veres-patak. In each case the officers of the crown estate at Zalatna were among the first victims of the insurrection, while on both occasions the undisciplined and half-armed hordes of poor ignorant people signalised themselves equally by their cowardice and their cruelty.

It is worth remarking that the myths which collected around the insurrection arose during the time while it was actually in progress, and crept from the common speech of the people into the official documents. At the same time there generally appears some motive which prompted the adoption, when not the origination, of these myths. Thus the story that the Emperor Joseph II. regarded the insurrection with favour was of course promulgated by Hóra for the purpose of encouraging his followers, and naturally

found credence among the nobility already dissatisfied with Joseph's unconstitutional government. So, too, the connection between the insurrection and a mysterious impostor calling himself Count Salins seems to have crept into the official documents through the desire of the magistrates of the county of Hunyad to justify their summary execution of the insurgents that fell into their hands at the beginning of the disturbance. The importance attributed to some poor Russian pedlars may in like manner be explained by a natural desire on the part of the Hungarians to see something more in this terrible story than a mere servile war, to look upon it as the result, not of a want of sympathy between themselves and their peasantry, but of the unprincipled and unneighbourly intrigues of the government of St. Petersburg.

M. Szilágyi has certainly done a good work to his countrymen in clearing Joseph's reputation of one of the darkest accusations ever brought against him even by Hungarian patriotism or party spirit. We are also glad to see that in the preface to the book before us he repeats the promise made to the Hungarian Academy, in January, 1868, of writing the history of Transylvania during the century that elapsed between the peace of Szatmár and the death of Joseph II. (1690 to 1790). It is not given to everyone to labour on the history of a period so barren in striking events, and on the whole so little glorious to his country.

ARTHUR J. PATTERSON.

FURTHER NOTES ON THE SECOND REPORT OF THE HISTORICAL MSS. COMMISSION.

THIS report, which was described in the *Academy*, vol. ii. pp. 204–206, has lately been issued with its copious and most valuable appendix and indices both to this and the preceding volume. The publication lays open to students an enormous treasure of literary, biographical, and historical documents of all kinds. Among the most valuable materials for English history the ancient charters and rolls of the Arundel family may be named, the historical, ecclesiastical, and legal records belonging to Mr. Wynne; the documents of the reigns of Henry VIII., Edward VI., Jane Grey, Mary, and Elizabeth, among the Petyt MSS.; Lord Calthorpe's collection—especially rich in State papers of the sixteenth and seventeenth centuries, and including documents respecting the Hanse towns and English intervention in the affairs of the Low Countries, with others relating to Mary, Queen of Scots; and Mr. Fortescue's archives of the same period, which contain numerous letters, political and domestic, of James I. and his family. The correspondence possessed by the Earl of Dartmouth illustrating the events of the Civil War, and those of the revolution of 1688, Chevalier's *Journal of Affairs in Jersey*, 1643–51, while that island was held for the king (Dr. Hoskyns), the curious narrative, Sir Edward Southcote's *Memoir* (Dominican Monastery, Woodchester), with the letters and documents in Mr. Ormsby-Gore's collection, offer a body of important data for the history of the times from the accession of Charles I. to the downfall of the Stuarts. Among the most valuable documents bearing upon Scottish history are those in the Earl of Stair's collection, and in that of Trinity College, Glenalmond; the latter includes a remarkable letter from Alexander Rose to Bishop Campbell, giving a full account of his mission to the Prince of Orange in December, 1688. Irish history is specially illustrated by the archives of the Ormond family, and the correspondence and papers of Archbishop King. Mr. Gilbert's appendices to the latter collection will well repay perusal.

Colonel Carew's splendid tenth-century copy of the Gospels, according to St. Jerome, which is fully described, stands conspicuous among the numerous illuminated MSS. of the various collections. A Wyclif MS. (fourteenth century) at Dytchley, containing translations of SS. Matthew and Mark, claims special interest from its commentaries. That on Matthew is distinguished from other copies by the insertion of polemical passages from Bishop Grostête's sermons, while the commentary on Mark appears to have been hitherto unknown. Valuable Early English treatises and poems by Lydgate, Richard Rolle, Walter Hilton, Hugh Campeden, Bishop Alcock, and others, are noticed, but three only of these are Chaucer MSS., all fifteenth century: (1) A MS. of the *Canterbury Tales*, used in the Six-Text edition of the Chaucer Society. (2) A considerable portion of the translation of Boethius (Hengwrt Collection, Nos. 154, 328). (3) Large excerpts from the *Tale of Melibeus*, offering interesting variations from the printed texts (Stonyhurst, No. 26). The closing article in the volume last-named, described in the appendix as much later in date than the others, will be found to be part of a transcript on paper of Sir David Lyndesay's *Dreme* (the London edition, 1566), which appears to have been bound up with this fine vellum MS. Copious extracts of great interest are given from the registers, computi, &c. of different colleges in Oxford and Cambridge. The memoranda illustrating collegiate discipline and manners, and the full inventories of books, plate, and furniture, are especially noteworthy. Among them may be mentioned the registers and letters of Clare College, and the matriculation book of Gonville and Caius, containing entries of the admission of Francis Quarles, 1605, and Titus Oates, 1667. Corpus Christi, Oxford, has the Book of Charges, *temp.* Henry VIII., for building the college. Entries from the rolls of Queen's College respecting Wyclif, an almonry boy in 1371–2, cast some doubt on Professor Shirley's conclusions with regard to the reformer's lengthened residence in that college. At Exeter, a computus, dated 1362, mentions John Trevisa, and gives expenses for repairs of college property "after the great wind," *i.e.* the furious storm in January, 1362, mentioned in Langland's *Vision*. Entries touching requisitions of the college plate for the royal cause in 1642 significantly explain the non-existence of magnificent pieces of ancient plate described in the older inventories of Oxford colleges. The Commission has brought to light many diaries, and a very large amount of correspondence, which will furnish new material for the biographies of celebrated personages. Among the royal letters are several, hitherto unpublished, from Mary, Queen of Scots, and a singularly characteristic letter of condolence from Queen Elizabeth to Lady Paget, which is given at length.

G. WARING.

Intelligence.

A work by Mr. George Smith, of the British Museum, is announced in our list of publications, containing the history of Assurbanipal, king of Assyria, B.C. 668 to 626. The cuneiform texts are given of all the historical inscriptions of the reign of Assurbanipal, the most important in Assyrian history. Each text is accompanied by an interlinear translation (in English), and the whole book is divided into sections, according to the various campaigns of the king. The long inscription on the decagon cylinder of Assurbanipal, now in the British Museum, is taken as the standard text. This document alone contains 1200 lines of cuneiform writing. The annals of Assurbanipal mention the conquest of Egypt by the Assyrians under Esarhaddon and Assurbanipal; in this part we have the Assyrian account of Tirhakah, Necho I., and Psammitichus I. In the affairs of Asia Minor, Gyges and Ardys, kings of Lydia, come in; and there are numerous wars and other events, including the conquests of Babylonia, Susiana, and Arabia.

The well-known historian Palacky has just re-published a collection of articles in the Czech language which he had contributed to a variety of journals.

M. Romek of Prague has just brought out the second volume of his history of that city, which is brought down to the fifteenth century. The first volume appeared as far back as 1856. Both are in Czech.

A large collection of *Fontes Rerum Bohemicarum*, on the scale of Pertz's great work, has recently been taken in hand under the direction of M. Palatzky. The first fasciculus has already appeared, containing the biographies of the Slavonic apostles St. Cyril and St. Methodius, with notes and commentary in the Bohemian language.

New Publications.

ANNALES MONASTERII S. ALBANI, a Johanne Amundesham, monacho ut videtur, conscripti. A.D. 1421–40. Ed. by H. T. Riley. Vol. II. Longmans.

BAUMANN, Wilh. Geschichte d. deutschen Volkes in seiner Entwickelung zum National-Staat. Aus d. Verf. literar. Nachlass hrsg u.

bis auf die neueste Zeit fortgesetzt v. Max Moltke. 3. u. 4. Hft. Leipzig: Deutsche Volksbuchh.

Desmaisons, Le Baron. Histoire des Mogols et des Tatares, par Aboul-ghâzi Bêhâdour Khan. Traduite etc. Tom. I. Texte. St.-Pétersbourg: Eggers. Leipzig: Voss.

Die Memoiren Sullys u. der grosse Plan Heinrichs IV. München: Verlag der Akademie.

Egger, Dr. Jos. Geschichte Tirols von den ältesten Zeiten bis in die Neuzeit. 1. Bd. 4. Lfg. Innsbruck: Wagner.

Foscolo, Ugo. Letzte Briefe d. Jocopo Ortis. Aus dem Italien. übers. v. Frz. Zschech. Leipzig: Dyk.

Henne-Am Rhyn, Archivar Otto. Geschichte d. Schweizervolkes u. seiner Kultur von den ältesten Zeiten bis zur Gegenwart. 2. wohlfeile (Titel-)Ausg. 3 Bde. Leipzig: O. Wigand, 1865–66.

Historia das Lutas com os Hollandezes no Brazil desde 1624 a 1654. Pelo autor da historia geral do Brazil. (Com una estampa.) Wien: Braumüller.

Peter, Carl. Geschichte Roms in 3 Bdn. 3. (Schluss-)Bd. Das 11. bis 13. Buch, die Geschichte der Kaiser bis zum Tode Marc Aurels. 3. verb. Aufl. Halle: Buchh. d. Waisenh.

Ranke, Ferd. August Meineke. Ein Lebensbild. Leipzig: Teubner.

Salinas, Prof. Ant. Le Monete delle antiche città di Sicilia descritte e illustrate. Fasc. II. Berlin: Calvary and Co.

Smith, George. History of Assurbanipal, translated from Cuneiform Inscriptions. London: Williams and Norgate.

Teuffel, W. S. Studien u. Charakteristiken zur griechischen u. römischen sowie zur deutschen Literaturgeschichte. Leipzig: Teubner.

The Fortescue Papers. Letters relating to State Affairs, collected by John Packer, Secretary to George Villiers, Duke of Buckingham. Ed. from the orig. MSS. by S. R. Gardiner. (Camden Society.)

Zingerle, Ign. v. Sitten, Bräuche u. Meinungen d. Tiroler Volkes. 2. verm. Aufl. Innsbruck: Wagner.

Philology.

The Public School Latin Grammar for the Use of Schools, Colleges, and Private Students. London: Longmans, Green, and Co.

"The *Public School Latin Grammar* is simply a development of the *Primer*, in conformity with the design of those who, after accepting the latter book, entrusted to the same editor the preparation of the former." These are the first words of the preface, and they are fully justified by the book before us. The reason for its existence is to be found in the acceptance of the *Primer*. No doubt it is of less consequence that the grammar employed by advanced students should be everywhere the same than that the elementary grammar should be uniform. Every parent has an interest in the employment of one and the same grammar for teaching the elements of Greek and Latin in all English schools. When the elements have been well learned, the student may be fairly expected to profit by any grammatical treatise which is offered to him, however different its plan may be. Indeed there is a positive advantage at this stage in making acquaintance with a variety of grammars, as in doing so the student learns to distinguish between facts and theories, ascertained truths and conjectures which have more or less of probability. The appearance of a Public School Latin grammar would be a subject of regret if there were any reason to apprehend that boys and masters would not look beyond it. But there is no reason for such an apprehension. Philology is not inactive amongst us at the present day, and the results of individual speculation and research will be admitted from time to time in correction of any grammar which may be generally employed. Meanwhile time and labour will be saved by the use of an advanced grammar, in which the terminology of the elementary grammar is maintained. Some of the terms introduced in the *Primer* were unpopular at their first appearance: perhaps they are not all popular now: but at all events they are in possession of the field. And if there is any department of grammar in which uniformity is desirable, it is its terminology. Of course, the more complete a terminology the more danger there is that a student will rest upon it as if its acquisition were the sum of science. But in all sciences a terminology is necessary; in all sciences it is most desirable that there should be but one. An English student of the Latin language must perhaps always have to deal with two; for the imperfect terminology of the old Latin grammarians has at least an antiquarian interest: but from more than two he may hope to be delivered. And if the *Public School Primer* and *Grammar* achieve this deliverance for him, he will have cause to be thankful to their projectors. We observe with pleasure in the present grammar a partial attempt to give us terms of native origin. "Soundlore" and "Wordlore" are more agreeable to the English ear, and certainly not less intelligible, than "Phonology" and "Morphology," and we are sorry to see that the editor only suggests them as alternatives. Of course there is an apparent difficulty in dividing the Greek genus "Etymology" into two British species; but if the Greeks had no names in their language for these species, there seems to be no good reason why we should not form such names as we require from words which our own language supplies.

The uses of a primer and an advanced grammar are wholly different. One is to be learned by heart, the other to be studied in connection with the literature of the tongue with which it deals. Hence in a primer brevity is essential, in a larger grammar we demand completeness. It ought to be a book of reference which the student may take without fear of disappointment for the illustration of all the forms and all the constructions with which he meets in his reading. The grammar before us seems well calculated to satisfy this demand. Both in accidence and in syntax it presents a fulness of detail which was hardly to be expected in so small a volume. Few phenomena can meet the eye of a student within the range of classical Latin which he will not find noticed in these pages. We would notice as examples the laborious enumeration of the forms assumed by Greek substantives in Latin and the lists of deponent verbs with the asterisk which denotes the occasional employment of their active voice. "A grammar of this size," says the preface, "does not profess to be an exhaustive treatise on its subject." This is of course true, and yet it is rather by condensation than by omission that this grammar has been kept from exceeding its actual size. Even now the matter contained in its 519 duodecimo pages would fill two comely octavo volumes if the type were adapted to the ease of a reader's eyes. If a grammar like this were intended to be read through continuously, the smallness of the type in many parts and the abundance of matter would be a positive blemish on the volume. There is something in its look which is calculated to deter a reader, who needs wide spaces, large type, short sentences, frequent headings, to lure him on.

Great pains have been taken by the editor to embody in his work the latest results of philological study at home and abroad. This is shown not only by his references to the best modern works, but by the text of his book. Amongst other things it has been his aim to bring the subject of comparative philology before his readers, without trespassing unduly on the domain of comparative grammar. Whilst we sympathize with him cordially in this attempt, there is one point in his method against which we feel inclined to raise a protest. Greek forms and Greek roots naturally appear from time to time in his pages for the illustration of Latin forms and Latin roots, and sometimes Sanskrit forms are introduced under their own name. So far we are on firm ground. But we are presented not unfrequently with "primitive" forms and "primitive" roots. For example, on p. 32

we read—"Genitive Singular. Primitive Ending generally *as* (also *s-ya*);" and in p. 139, on the Latin verbs, 3. *linquere*, 4. *vincere*, 5. *agere*, 6. *frangere*, 7. *legere*, 8. *capere*, 9. *rumpere*, we have the following notes :—

"3. Prim. rik, Gr. λιπ-.
4. Prim. vik, *arrive*.
5. Prim. ag, Gr. ἀγ-.
6. Prim. bhrag, Gr. ῥαγ-.
7. Gr. λεγ-.
8. Gr. κώπη, *oarhandle*.
9. Prim. lup, *tear*, *break*."

In explanation of the word "primitive" we are told in p. 4 that "By a primitive sound or root is meant one which careful induction assigns to that ancient, though no longer extant, Aryan language from which the Sanskrit is derived. Such induction is obtained by comparison of the Sanskrit with all other kindred languages, especially with Zend, Greek, Latin, Gothic, and Lithuanian." Some philologers have, no doubt, employed themselves on the attempt to rediscover by such an induction the parent language from which the known languages of the Aryan group are descended. Within certain limits their results are plausible enough: but it must be always doubtful whether such a language as they can reconstruct ever existed, and even if we confine ourselves to special forms and roots which seem to contain in themselves the starting point of all the known Aryan varieties in each case, we cannot certainly affirm that they were the historical parents of these varieties. This being so, the word "primitive" represents a hypothesis, and not a fact, and we should be glad to see it banished from the *Public School Grammar*. The exhibition of real forms which resemble each other in different languages is always instructive. The well-known Sanskrit genitive endings *as* and *s-ya* should be given as Sanskrit phenomena. We do not object to the suggestion that these forms lie at the bottom of Greek and Latin terminations, but we doubt whether that suggestion is likely to be so fruitful of instruction as the exhibition of the fact: at all events we would have such a suggestion put before the student as a theory and nothing more. And so of the roots in p. 139. If we may neglect the substitution of gutturals for palatals in the first three, all the roots there alleged as "primitive" are Sanskrit roots—with the exception of *bhrag*, which has been manufactured by the comparative philologers, and is thought by Curtius an article of dubious value. Surely it would be a gain to the student if *bhrag* disappeared, and the other five were mentioned as phenomena of the Sanskrit language, just as ἀγ-, ῥαγ-, λεγ-, in the same page are brought forward as phenomena of the Greek. We have not gone through the "primitives" alleged in this volume with a view to this point, but it is our impression that very few of them would disappear from it if the editor consented to strike out all to which he could not truly give the name of Sanskrit instead of the name to which we have been venturing to object. In a work of this sort there must always be many small points on which there is room for difference of opinion. We will not linger upon such details as the derivation of *exul* from *solum* (p. 14), which seems strange in the face of *consul* and *praesul*; or the suggestion that the strange form *alituum* which occurs repeatedly in Lucretius and once in Virgil "is due to purely metrical reasons" (p. 51); or the reference of the long penultima in *rēcidi*, *rēperi*, *rēpuli*, *rētuli* (pp. 138, 457), to a lost reduplication when the editor himself has indicated in p. 547 sufficient reason for it without any thought of such compensation. A grammar like this covers so much ground that it would be a marvel if it did not raise many questions of this sort. To pursue them would detain us too long, and their importance bears no proportion to the general merit of the work. We must not part from it without noticing its successful treatment of several subjects which are not always embraced in a Latin grammar. We would instance particularly style (p. 434 *seqq.*) and prosody (p. 448 *seqq.*). For the sections on prosody, which are admirable in their kind, the editor acknowledges himself obliged to Prof. Munro. Latin pronunciation comes in for a brief treatment both in the first chapter and in the appendix. The recent controversy in our own columns tempts us to exhibit some of the suggestions of the *Public School Grammar* on this subject in juxtaposition with those of Prof. Munro, Mr. Roby, and the Oxford Circular. We confine ourselves to the long vowels and the diphthongs most in use. On the semivowels and the consonants *c* and *g* the *Public School Grammar* agrees with Prof. Munro and Mr. Roby.

ā as in *aha*, P. S. G.; as in Italian *pádre*, Munro; as in *father*, Roby and O. C.
ē as in *there*, P. S. G.; as *ai* in English *pain*, Munro; as *ê* in French *être*, Roby; as *a* in *cake*, O. C.
ī as in *fatigue*, P. S. G.; as first *i* in Italian *timidi*, Munro; as in *machine*, Roby; as *e* in *he*, O. C.
ō as in *propose*, P. S. G.; as first *o* in *Benázzo*, Munro; as in *nor*, Roby; as now, O. C.
ū as in *rude*, P. S. G.; as first *u* in *túmulo*, Munro; as *ou* in French *poule*, Roby; as *o* in *who*, O. C.
ae as *ai* in French *mai*, P. S. G.; as first *e* in Italian *Cèsare*, Munro; as *a* in *Bath* (Somerset pronunc.), Roby; as *a* in *cake*, O. C.
oe as *oy* in *boy*, P. S. G.; as German *ö*, Munro; "no convenient example," Roby; as *a* in *cake*, O. C.
ei as German *ei*, P. S. G.; "sound both vowels," Munro; as in *feint*, Roby; as *i* in *idle* (German *ei*), O. C.
ui as *wee*, P. S. G.; . . . . . as French *oui*, Roby; as English *we*, O. C.
au as *ow* in *cow*, P. S. G.; as Italian *au*, Munro; as *ow* in *cow*, Roby; as *ow* in *owl*, O. C.
eu as *you*, P. S. G.; as Italian *eu*, Munro; as *ow* in Yankee *town*, Roby; as now (*i.e.* as *you*), O. C.

It will be seen that the proposals of the *Public School Grammar* are not entirely in accord with any one of the other three schemes. But there is comfort for advocates of reform in Prof. Munro's reflection, that "exact uniformity does not exist among us now, and need not be looked upon as indispensable in a reformed system." EDWIN PALMER.

Transactions of the American Philological Association, 1869-70. Hartford.

If American education has hitherto been better known for the wide diffusion of primary instruction than for the production of works of a high class, this has perhaps been chiefly owing to the want of common action on the part of its scholars. The absence of an "academic" influence is felt there, as in England, not so much in the fewness of learned men as in the difficulty of distinguishing good from bad books or dissertations. The Association whose first volume of *Transactions* has reached us promises to be of the greatest service in establishing a high standard of philological attainment in America, and in providing good scholars with a means of making known their researches. We learn from the volume in question that there have been three meetings, a preliminary meeting in November 1868, and two "annual sessions" in 1869 and 1870, each extending over several days. Nine papers which are printed are for the most part a selection from those read at the meeting of 1870; omitting as a rule those which were upon subjects of merely practical or local interest, such as the pronunciation of Latin and Greek in schools, phonetic spelling, means of encouraging higher education, &c. The term philology is wisely taken to include literature as well as language; and, as was to be hoped and expected, the American aboriginal languages hold a prominent place in the *Transactions*. Probably as the Association goes on it will be led to give greater attention to the "realistic" side of their subject: for if linguistic

science, as Professor Henry appears to have well maintained, is closely connected with ethnology, the literature of a nation is no less decidedly a part of its artistic, social, and political history. We proceed to notice briefly the papers which are given in full.

I. "On the Nature and Theory of the Greek Accent," by Professor Hadley, of Yale College, is an eminently learned and judicious discussion, showing not merely acquaintance with the best modern writers, but (what is much rarer) independent study of the original materials. Prof. Hadley shows that the general laws by which Greek accents depart from the primitive type may be summed up in a single rhythmical canon, and that the Æolic "barytonising" and the Latin system may be regarded as further modifications of a purely rational or grammatical system of accent by certain rhythmical tendencies. The assumption which he makes for this purpose is that in Greek (as probably in Sanskrit) there was a middle tone between the acute and the grave, and that the Greeks "changed the older accent of words so as to secure the cadence 'high tone, middle tone, short low tone,' wherever it could be secured without throwing back the accent." The Æolians of Asia Minor took the further step of throwing the accent back as well as forward; the Latins took a different further step by throwing the accent forward on every long antepenult. The evidence for the "middle tone," as Professor Hadley himself points out, is slight; the passage which he quotes from Aristotle (*Rhet.* iii. 1, 4) seems to refer to the "key" on which a speech or part of a speech is delivered, not to grammatical accent. Whether true or not, however, the hypothesis of a middle tone fulfils the condition of "colligating" the facts in a striking and suggestive way. Professor Hadley's treatment of the general question is very satisfactory. His arguments on the relation of stress to tonic accent are especially ingenious and just.

II. "On the Nature and Designation of the Accent in Sanskrit," by Professor Whitney, is partly intended to supplement the former paper. Its chief object is to show that the rules found in Sanskrit grammarians for the accent called *prachaya* are derived from an accident in the mode of writing the accents, namely, that the rise and fall of the voice was shown by marks on the syllables before and after the high or acute syllable, instead of on the acute syllable itself as in Greek. The curious result seems to be that modern recitation has almost exactly inverted the original Vedic accentuation. The original acute accent (*udâtta*) not having been marked is not sounded, while the sliding or "circumflex" (*svarita*) by which the voice descended to the grave tone has become the main accent. We may add that Greek offers a problem resembling that of the *prachaya*-accent in the combinations of enclitics such as *καί τέ μέ φησι, οὐδέ τί πώ μοι.*

III. "On the Aorist Subjunctive and Future Indicative with *ὅπως* and *οὐ μή*," by Professor Goodwin, shows that the rule known as Dawes' canon represents a mere tendency of Greek (namely, to avoid such forms as *ὅπως ποιήσῃς* on account of the close resemblance to the more usual *ὅπως ποιήσεις*), and that it ought not to be carried out by emendation against good MSS. Collations are given of some crucial passages proving that both subjunctive and future occur after *οὐ μή* in prohibitions.

IV. "On the Best Method of Studying the North American Languages," by J. Hammond Trumbull, insists upon the small value of mere lists of words based upon "standard vocabularies," and the necessity of careful analysis of structure, in order to determine the *roots*. It is satisfactory to find, from this and another paper by the same author (VIII.), "On some Mistaken Notions of Algonkin Grammar, &c.," that many of the strange statements which ornament popular books on language—*e. g.* that Indian languages form compounds by taking parts of the radical words to be joined, that it is impossible to translate "*I am*" into Algonkin, that the Algonkins cannot say *I love*, *I hate*, without expressing the object of the love or hatred, that there is no word for *love*—are mere errors.

V. "On the German Vernacular of Pennsylvania," by Professor S. S. Haldeman, traces its peculiarities to South German dialects. Specimens are given.

VI. "On the Present Condition of the Question as to the Origin of Language," by Professor Whitney, is an admirable statement of the relation between comparative philology and the very different subject of linguistic philosophy. The problem of the origin of language, Professor Whitney points out, belongs exclusively to the latter. "Historical investigation takes us from the present condition of language a long way back towards the beginning, but it does not and never can take us the whole way." We may add that it never can tell us whether it has taken us over a large or a small proportion of the way. It has taken us so far however that by showing the origin of conjugation and case-endings it has narrowed down the enquiry to the question of the origin of roots. The main divergence is on the relation of language to reason—whether the idea and the word can exist independently, and, if so, which is prior; and the most important step towards the answer will be made by determining, if possible, how far language is the growth of social relations, or of the desire of expression existing "within" each individual.

VII. "On Certain Forms of the English Verb which were used in the 16th and 17th centuries," by Thomas R. Lounsbury, shows that the use of the endings *s* and *eth* for the third person plural is frequent in Shakespeare, and some of his contemporaries; and that in that period *s* instead of *st* in the second person singular was still regarded as allowable. In nearly all the examples of *s* and *th* in the first person which are given by Mr. Lounsbury the subject is a relative: *e. g.* "to make me proud that jests;" "I that truth hath always meant" (Wyatt).

IX. "Contributions to Creole Grammar," by Addison Van Name. Creole dialects bear somewhat the same relation to French or Spanish (as the case may be) which these languages bear to Latin, and have been produced by similar causes. The paper is of the highest interest: indeed there is hardly any linguistic process which does not receive illustration from it.

D. B. Monro.

WELSH AND ANGLO-SAXON PRONUNCIATION.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In the second part of his *Early English Pronunciation*, pp. 519-522, Mr. Ellis gives portions of the Greek version of the Old Testament written in what he considers a kind of Anglo-Saxon orthography. On reading the second article in the *Saturday Review* on that work, I was surprised to find that it is maintained by some that the transcriber and his orthography were Welsh, and on looking into the matter I find no reason for our not claiming them, if our English friends feel disposed to disown them: till that happens we cannot, I fear, for the simple reason that Welsh orthographies, being imitations of contemporary English ones, leave us without sufficient data to prove our claim.

To give one an idea of the nature of the document in question, I quote from Ellis' work Gen. i. 26:—*ποιήσωμεν ἄνθρωπον κατ' εἰκόνα ἡμετέραν καὶ καθ' ὁμοίωσιν· καὶ ἀρχέτωσαν τῶν ἰχθύων τῆς θαλάσσης, καὶ τῶν πετεινῶν τοῦ οὐρανοῦ, καὶ τῶν κτηνῶν, καὶ πάσης τῆς γῆς, καὶ πάντων τῶν ἑρπετῶν τῶν ἑρπόντων ἐπὶ τῆς γῆς.* This is transcribed as follows:—"Phyisomen anthropon cat icona ce cath omyosin imeteran ce archeto ton icthyon tis talasas ce ton petinon tu uranu ce ton ctinon ce passes tis gis ce panton ton herpeton ton herponton epi tis gis ce egeneto utos." The occasional use in this transcript of *ph* for *π* is striking, and, as *f* is used for *φ*, it can only mean aspirated *p*. As an initial this is unknown to me in Welsh: the nearest approach to it occurs in the case

of such words as Kidwelly and Cyfeiliog, which now and then occur in the *Liber Landavensis* as Chedueli and Chevelliauc, matching or imitating the English orthography of Chenth, &c. It is needless to mention that all three tenues are met with aspirated in combination, *e.g.* in the Oxford glosses, pimphet, fifth, and hanther, half; and in the Cott. Vesp. A. xiv. (Brit. Museum), Lan eschin and schitrauc, erroneously read echitrauc by Stokes. This *h* still remains in the so-called mutation of *p*, *t*, *c*, to *mh*, *nh*, *ngh*—a change which has always been a puzzle for Welsh philology. But, to leave the discussion of these points for a more fitting occasion, let us return to the transcript:—by far its most interesting feature is the use made of *y* to represent *υ* and *οι*, which cannot but be after Professor Curtius' own heart, who, as a few Englishmen even at our great Universities are perhaps aware, has shown in his *Erläuterungen*, p. 24, that at one time *υ* and *οι* had the same sound. Hence *υ* was called *υ ψιλόν* in contradistinction to the digraph *οι*, just as in the case of *ε ψιλόν*, as distinguished from *αι*, which in modern Greek is identical with it in sound. What the steps were, through which *οι* passed to *υ*, is not at all clear: the writer of the article in the *Saturday* alluded to above thinks *οι* was first *ö*, then *ü*. This seems to me very doubtful: if I may be permitted to offer an opinion of my own, I should say that it first became *ui* by a change common in many languages, and then became *υι* by merely following the track of the simple *υ*; lastly, by assimilation, *υι* might become *ῦ*. As to *υ* itself, there can hardly be a doubt but that it, before it began to be pronounced *ι*, approached German *ü* very nearly in sound. In fact, that sound still survives in certain localities. I remember an Athenian, in a skirmish respecting the claims of modern Greek pronunciation, naïvely observing, that such words as *κϋνος* are Spartan vulgarisms. This undoubtedly was the sound the British transcriber intended to represent by means of *y*, which in Anglo-Saxon and Early English must have approached it very nearly. Now the same volume, which contains the curious document we are discussing, also contains a considerable number of Welsh glosses, dating, according to the *Gram. Celtica*, from the end of the eighth or the early part of the ninth century. In these *y* never occurs. The same remark applies also to the somewhat later ones, contained in a volume marked Bodl. 572. From these we pass to the *Liber Landavensis*, of which we read in the *Gram. Celtica*:—"Scriptor enim, qui composuit librum saeculo duodecimo ineunte usque ad a. 1132, hausit e codice vetustiore, atque ex eodem vel etiam e tabulario ecclesiae Landavensis plurimas finium descriptiones cambrice scriptas itemque privilegia episcopatus cambrice composita offert." The compiler, it is worthy of notice, says, p. 93: "ELIOS autem Graecè, Latinè SOL interpretatur." The Anglo-Saxon who transcribed the Greek in question would have said ILIOS if not HILIOS. In the Welsh portion of the book there occur at least two orthographies: of these one is too young for our purpose, as it uses *f* for *v*. The other is older, and uses *y* and *i* to a great extent promiscuously; but, as far as any system is discernible in it, *y* seems to have had one of its present sounds, namely, that of the modern Welsh *u*: that is to say, it was to all intents and purposes identical with Anglo-Saxon *y*. The Saturday Reviewer is mistaken when he says that modern Welsh *u* has the sound of *i*. That is the case only in certain parts of South Wales. But it is to be observed that *u* is so similar in sound to *i* that the Southwalian, who has it not, does not, in nine cases out of ten, notice its presence in Northwalian dialects, when he hears them spoken; whereas its absence in his own dialect immediately tickles the ears of his Northwalian neighbours, and affords them considerable amusement. On the other hand, one of the most common mistakes which a Northwalian makes in speaking English is to substitute his Welsh *u* for the English *i*: thus, to quote from a conversation I had last week with a Carnarvonshire friend, "This is positivism, is it not?" becomes "Thus us posutuvusm, us ut not?" This vowel sound I believe escapes the ordinary English ear if the consonants are correctly pronounced. This seems to me to account to some extent for the continual confusion of *y* and *i* in early Welsh and English. The other sound of Welsh *y*, namely, ə,* is in Welsh, just as in English, the most modern of vowel sounds. The history of *u* and *y* in Welsh is by no means easy to unravel, but, as far as can be made out, it amounts briefly to this:—

Old Welsh *u* { remains *u*, but is written *w*.
{ becomes *y*, but is written *u*.

" " *y* { remains *y* / becomes ə } both continue to be written *y*.

* This is Mr. Ellis' exponent of the sound of *u* in the English word "*but*."

The reason is evident, why some consider the acquired sound of *y* its proper sound, without any further explanation. I am inclined to think that in the *Liber Landavensis u* and *y* had their original value, and that ə was unknown.

As my letter is already a medley, I need not apologize for calling attention to the Saturday Reviewer's remarks on the Anglo-Saxon pronunciation of *ea* and *eo*—in some of the instances he seems at any rate to have the best of Ellis. The forms *Yerl* and *Yedward* are corroborated by the forms they have taken in Welsh, namely, *Iarll* and *Iorwerth* (pronounced *Yarll* and *Yorwerth*). Curiously enough the Anglo-Saxon *geard* occurs in Welsh in two forms: in the Oxford glosses it is *gerthi = virgae*, whereas in modern Welsh it is a plural tantum and always of the form *ierthi* (pron. *yerthi*), "a rod used in driving oxen." I cannot conclude without a few words again on the interesting name *Cyfeiliog*, which in early Welsh occurs in the form *Cimeiliauc*. This postulates an older form, *Camil-iac-*. Another supposed modern form of the same word is *Cyfelach*, surviving in *Llangyfelach* in South Wales. This in its turn postulates a slightly different form, *Camil-ac-* or *Camil-acc-*. Here it is necessary to observe that *i* semi-vowel, as in *Camil-iāc-*, is a letter which in Welsh very often plays "hide and seek" between the stem and termination of words, and is now meaningless excepting as an index of dialect, its absence being, on the whole, Southwalian, and its presence Northwalian. What I was, however, going to say, is, that, according to the editor's note in the *Liber Landavensis*, p. 490, *Camilac* was written by Matthew of Westminster *Camilec*, and that Florentius of Worcester rendered the form *Camiliac* by *Cimilgeacum*, while in the *Saxon Chronicle* it seems to be written *Cameleac*. Without vouching for the correctness of these statements, I venture to call the attention of English orthoepists to them. JOHN RHŶS.

Postscript.—If I may be permitted to quote from memory, I would mention the name *Sulgen*, which seems to be the Welsh of *Julien*, as an instance similar to *gerthi*; nor am I certain that *Urbgen* is not posterior to and a mere orthographic variation of *Urbien*, more commonly met with as *Urien*, and derived from *Urbigenus*, although Mr. Skene makes use of it, if I remember rightly, as evidence of the existence of a Pictish *ur* = Latin *vir*. At any rate *gerthi* and *Sulgen* show a distinct touch of Anglo-Saxon orthography; and I am inclined to apply a similar explanation to some instances of GU (= GW) in *inlaut* in Old Welsh, as for instance in *petguar*, four. It is worthy of notice that the writer of the Luxemburg fragment (of the ninth century) hesitates, sometimes writing the G and sometimes not; e.g. *torguisi*, but *toruisiolion*, and *doguorennam*, but *douolouse*, &c. J. R.

A SYRIAC VERSION OF HOMER.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—Abulfaraj in his Arabic chronicle tells us that one Theophilus of Edessa, who died in 785, translated Homer into Syriac. I am happy to state that Severus of Takrit († 1230) quotes a Syriac version of Homer as *testo di lingua*. Dr. G. Hoffmann, who read the *Cyclopedia* of Severus before I did, noticed the fact before I was aware of it.

Speaking of the Hebrew and Greek words employed in Syriac to produce brilliancy of style, Severus mentions חמא, which, he says, is in common use with the מערביא (and, indeed, we find it in some Targums of undoubted Western extraction): but, continues Severus, the interpreters of poetical works also say חמא for חזא, for instance, חמא בה אקטור ביש ביש ואמר. This is clearly *Iliad*, vi. 325, *τὸν δ' Ἕκτωρ νείκεσσεν ἰδὼν αἰσχροῖς ἐπέεσσιν.*

In another place, though here the passage might be taken from the original, as the point in question is not any Syriac word, but the definition of פוחמא or טופסא, Severus quotes *Iliad*, i. 225, 226, from "אומירוס, who on behalf of Achilles' wrath against Agamemnon, נבל מלא in this way." And, when speaking of comedy, he recurs to what אומירוס has on Patroclus and the driver of Hector's chariot, *Iliad*, xvi. 745; there too giving the very words of his author.

It may be well also to mention a passage taken from the *Odyssey*. Under the heading טכינוס (*ταπεινὸς* seems to be meant, Lagarde, *Abhandlungen*, 34, 7), Severus speaks of מנדיא: "It is to be found in the poet: Fie, how sharply this beggar talks" = כתיב בפואיטא וי מא חריפאית ממלל מנדיא ה נ א. I think this is *Odyssey*, xviii. 26, *ὦ πόποι, ὡς ὁ μολοβρὸς ἐπιτροχάδην ἀγορεύει.*

I could produce more instances, but forbear, as I trust the whole of

Severus will be one day published. It fully deserves this honour. Let me add that I learnt more Syriac from Bar Hebraeus and Severus, whose manuscripts fell but lately into my hands, than from all the versions of Greek patristic writings I have published. The copies I made use of belong to Dr. A. Socin, of Basle, who kindly lent them to Dr. G. Hoffmann. PAUL DE LAGARDE.

Göttingen, Sept. 10.

DISCOVERY OF ADDITIONAL FRAGMENTS OF THE CURETONIAN GOSPELS.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—It is much to be regretted that the Trustees of the British Museum should have failed to secure the whole of the Nitrian collection of Syriac MSS. This comes of trusting to the honesty of Arabs and Greeks. M. Pacho kept back four fine MSS. (among them the *Ecclesiastical History* of Eusebius, dated A.D. 462), which now adorn the shelves of the Imperial Public Library at St. Petersburg. But there seem to be still more MSS. from the same collection at Cairo or Alexandria. No less than thirty or forty volumes were offered by letter to the librarians of the Bibliothèque Nationale, shortly before the commencement of the siege of Paris by the Germans; and last year the famous Egyptologist, Dr. Brugsch, now residing in Egypt, purchased one, which has found a resting-place in the Royal Library at Berlin. This is a copy of the Gospels, made up of portions of several MSS., among which are *three leaves of the Curetonian Gospels* (Brit. Mus. Add. 14,451; see my Catalogue, part i. p. 73, no. cxix.). Professor Roediger of Berlin has made a careful copy of these leaves, and intends to have them printed this autumn for the use of Biblical students. W. WRIGHT.

Intelligence.

Professor W. S. Teuffel, of Tübingen, has just published a collected re-issue of his numerous essays on subjects of Latin and Greek literature. The English translation of the same writer's *History of Roman Literature*, by Dr. Wilhelm Wagner, will be published next year in two volumes, the first volume being nearly ready in type.

The *Lexicon Sophocleum* of Professor W. Dindorf has just been completed. Our readers will find in one of our next numbers an account of this important publication.

The first part of Prof. Weber's edition of the *Taittirîya Samhitâ* will appear very shortly. It will contain numerous critical notes on the text.

Dr. E. Stengel writes to take exception to the views expressed in our last number as to the scope and comparative value of M. Cihac's *Dictionnaire daco-romane* and the *Etymological Dictionary of the Romance Languages* by the venerable Professor Diez.

Another interesting notice of Mr. E. W. West's edition of the Book of the Mainyo-i-Khard, or "Spirit of Wisdom," appears in the *Augsburg Gazette* for Sept. 19. The writer, Dr. Mordtmann, of Constantinople, points out the singular parallelism between many passages in this book and in the apocryphal Book of Wisdom and the New Testament. One of the most important instances of this occurs in chap. 57, which bears a close resemblance to the prologue of the Fourth Gospel. Dr. M. also propounds a "heretical" view as to the origin of Pehlevi, the language from which the Parsi translation is made. He compares it to the official Turkish language, which is a production of the effendis of Stamboul, and is unintelligible to the mass of the population. On this hypothesis, Pehlevi was never a spoken language, but is a tasteless mixture of the Aramaic official language bequeathed to the Persian Sassanidæ by their Parthian predecessors, with elements of Iranian origin.

An unfortunate misprint (see below) in our notice of Dr. Wright's fragments of Jacob of Edessa may have led some readers to suppose that other fragments had been already printed. This is of course not the case; it is an entirely fresh discovery which Dr. Wright has been fortunate enough to make.

Contents of the Journals.

Hermes, vol. vi. pt. 2.—W. Dittenberger: Roman names in Greek inscriptions and literature. [Forms like Τεβέριος, Λέπεδος, Λεγεών, seem to arise from the current mode of pronouncing the words, while others, *e. g.* Νατάλιος, Κυρήνιος, are due to an attempt to make Latin look like Greek names. In discussing the transcription of the consonants, the principal facts noticed by the writer are the doubling of the consonant in Λικίννιος, Λουκίλλιος, &c., and the converse process, the substitution of a single λ, μ, s, for the Latin *ll, mm, ss*, in Μάλιος, Κόμοδος, Κάσιος, &c. We are glad to find that this highly interesting article is to be continued.]—E. Hedicke: On a transposition of leaves in Frontinus.—H. Kettner: On the Glossae Placidi. [On the state of the text, with some notes from a Magdeburg MS. of the Lexicon Salomonis.]—N. Wecklein: On the topography of Rome. [The bridges, the direction of the Sacra Via, the position of the Curia Hostilia and Rostra, the Scalae Caci.]—H. Jordan: The Introduction to Cicero's Brutus.—H. Genthe: On Lucan. [The various readings preserved in the Commenta Bernensia edited by Usener.]—Th. Mommsen: On the Apparatus Criticus to Ammianus. [The article, which is a model of lucid exposition, is a series of strictures on Eyssenhardt's edition: the main result is that the text of the Basel edition of 1533 may be taken to represent the lost Hersfeld MS.—(1) when it deviates from the previous printed text but coincides with the Vatican MS.; (2) when it deviates from both in such a way that the readings cannot be attributed to the ingenuity of the Basel editor Gelenius.]—V. Gardthausen: How and when did the Fuldensis of Ammianus get into the Vatican? [Another article against Eyssenhardt. The writer shows that at the opening of the fifteenth century the MS. must have been still at Fulda, and that it was probably transferred to Italy before the middle of the century, as it seems to have passed through the hands of Bessarion. Aeneas Sylvius, afterwards Pope Pius II., is known from the testimony of Ulrich von Hutten to have deprived Fulda of some of its manuscript treasures.]—R. Schöne: On Frontinus. [Suggestions on the text.]—J.: Ἀμβακούμ. [On the form of the word: the allusion in the Scholiast on Porphyry's *Vit. Pyth.* is to the story in the apocryphal "Bel and the Dragon."]—A. Kirchhoff: On the Electra of Euripides. [Gives a new and minute collation of the Florence MS. by Th. Heyse.]

Journal Asiatique, March–April.—The Pali grammar of Kaccâyana, sutras and commentary, published with a translation and notes by M. Émile Senart. [M. Senart's work was executed and accepted by the Academy before the appearance of Dr. Mason's edition, which, however, as M. S. remarks, has not rendered his own superfluous. It is based on the collation of two of the Grimblot MSS. now in the National Library at Paris, written in Singhalese characters, and seven Siamese MSS. in Pali characters. Deviations from the editions of the 6th and the 3rd chapter by Mr. d'Alwis and Dr. E. Kuhn, as well as the chief variants of the MSS., are noted at the foot of the page. The editor's principles of orthography agree in the main with those of Fausböll.]—Perny's French-Latin-Chinese dictionary of the spoken Mandarin language; rev. by M. Pauthier. [Dwells at length on the difficulties overcome by the author, and attributes his peculiarities of transcription and of rendering to the remoteness of his provincial abode from the capital.]

Götting. gel. Anzeigen.—Stade on verbs in the Ethiopic composed of more sounds than three, and Orelli on Hebrew synonyms for time and eternity, both reviewed by H. E.

New Publications.

BINHACK, F. X. Grundbegriffe d. antiken Münzwesens nach Böckh, Mommsen, Hultsch, Grässe und andern Hilfsquellen. Amberg.

EARLE, J. The Philology of the English Tongue. Oxford: Clarendon Press.

CATALOGUS codicum Mstorum qui in Museo Britannico asservantur. Pars secunda, codices Arabicos complectens.

MIKLOSICH, F. Die slawischen Elemente im Magyarischen. (Academy Reprint.) Wien: Gerold's Sohn.

FERRARI, D. A. Notes with Emendations on the Lexicon of Hesychius. Selected and edited by W. Brown, M.A. Part I. London: Longmans.

GEPPERT, C. E. Plautinische Studien. 2. Heft. Jena: Mauke.

HIRZEL. Ueber die Tendenz d. Agricola v. Tacitus. Tübingen: Fues.

POTT, A. F. Etymologische Forschungen auf dem Gebiete der indogermanischen Sprachen. Part 3; ed. 2. Detmold: Meyer.

RENAN, E. Mission de Phénicie. 5me Fascicule. [The fourth appeared shortly before the war.] Paris.

SCHANZ, M. Novae Commentationes Platonicae. Würzburg: Stahel.

SCHWARZMANN. Studien zu einer lateinischen u. griechischen Parallelgrammatik. Tübingen: Fues.

SOPHOCLIS Oedipus Tyrannus. In usum scholarum ed. Mauric. Schmidt. Jena: Mauke.

ERRATA IN No. 32.

Page 434, col. ii., line 23, for "*Chronographers*" read "*Chronographer.*"
" " col. ii., line 39, for "collections" read "collations."
" 435, col. i., line 38, for "of" read "or."
" " col. ii., line 14, for "Buchevian" read "Bucherian."
" 436, col. i., line 29, after "bishops" insert "(so at least the printed text)."
" " col. ii., line 22, for "the two operations" read "this later operation."
" 447, *Intelligence*, line 2, for "more" read "some."
" 448, col. i., line 5, for "and" read "or."
" " col. i., line 48, for "inscription" read "inscriptions."
" " col. i., line 61, for "ul:" read "which."
" " col. i., line 70, for "Beiru" read "Beirut."
" " *New Publications*, line 5, for "y-Lautes" read "ÿ-Lautes."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, November 1, *and advertisements should be sent in by October* 28.

Subscribers to THE ACADEMY who find it difficult to receive the numbers regularly through the newsagents may secure their regular delivery on the day of publication, post-free, by order to the publishers, at 12s. per annum, or 6s. for 6 months, payable in advance.

General Literature.

RECENT ALPINE LITERATURE.

1. **The Playground of Europe.** By Leslie Stephen. London: Longmans.
2. **Hours of Exercise in the Alps.** By John Tyndall, LL.D., F.R.S. London: Longmans.
3. **Scrambles amongst the Alps in the Years 1860–69.** By Edward Whymper. London: Murray.

The appearance, within six months, of these three books is a striking proof of the general interest which the subject of Alpine travel excites at the present time. Fifty years ago it would have been impossible, twenty years ago it would have been difficult, to rouse the interest of ordinary readers in a story of Alpine adventure. At the beginning of the century the higher Alps were almost as little within the range of ordinary travel as the Himalayas are at present, whereas there are now few travellers who have ever crossed the Channel to whom the Matterhorn is not more familiar than the Malverns and the Haslithal than Dove dale. It may be doubted however whether the genuine appreciation of Alpine beauty has extended itself in proportion to the increase in the number of Alpine travellers; in fact we may confidently assert that it has not. Mr. Stephen's denunciation of "the common tourist" (*Playground of Europe*, p. 150) is not less emphatic than that of Mr. Ruskin himself. Of the Alps as of philosophy the true votaries are few, though the worshippers are many: these true votaries are not to be found amongst climbers alone, for many a man truly loves the Alps who never set foot on a glacier; but notwithstanding Mr. Ruskin's bold assertion that the true beauties of the Alps are to be found and found only where the child, the cripple, and the man of grey hairs may enjoy them, we imagine that among climbers will be found more real appreciation of the Alps and less false worship than in any other class of travellers.

At any rate there can be no question that the authors of the three works before us are genuine Alpine enthusiasts. The conquerors respectively of the Schreckhorn, the Weisshorn, and the Matterhorn, they are climbers of first-rate capacity; but though the mere impulse of scrambling for scrambling's sake is strong in each of them, and has led each of them in his turn quite up to, if not beyond, the limits of justifiable risk, yet the "soaped pole" * theory of mountaineering is as little applicable to them as it can be to men who avow openly that one of the chief motives for going up a mountain is the pleasure derived from climbing it. Mr. Stephen's chapters "On the Love of Mountain Scenery" and his "Regrets of a Mountaineer," as well as the delightful verbal etchings of scenery scattered throughout his pages, show that he seeks in the Alps a source of ennobling emotion no less than a field of healthful activity: Dr. Tyndall avows that "much as he enjoys the work, he does not think that he could have filled his days and hours in the Alps with clambering alone"—and we all know how Dr. Tyndall has made the glaciers his laboratory, and has contributed more than any living man to our knowledge of their phenomena; while the admirable drawings with which Mr. Whymper's book is enriched prove that in him at least the mountaineer has never extinguished the artist, and encourage the hope that other artists may some day learn that a snow mountain is something more than a large piece of rock irregularly sprinkled with patches of whitewash.

We place Mr. Stephen's book first, not only because it was first issued from the press, but because for the most part it owes its origin to a love of the Alps pure and unalloyed, and to a delight in climbing in which the mere pleasure of healthful bodily activity is not the least prominent element. So much, and that to so little purpose, has been already written on motives which induce men to climb mountains that we do not think it profitable to carry the discussion further. We must refer our readers who care about the subject to Mr. Stephen's "Regrets of a Mountaineer," where they will find a graceful exposition of the emotions which mountains and mountain-climbing arouse in a cultivated and sensitive mind. Those on the other hand who, taking the pleasure and its sources for granted, find, to use Dr. Tyndall's words, "exhilaration in descriptions of mountain life," will find in Mr. Stephen's descriptions much that will amuse and not a little that will instruct. We do not care to dwell, after the genial apology in the preface, on the perhaps too jaunty style of some of the papers, for a man in describing an exhilarating pursuit may well be infected by its own joyous nature, and we have our selves laughed too often over Mr. Stephen's jokes when they were made, to use his own metaphor, "in the rusty old shooting-coat" to be severe upon them now that they are presented in a more imposing garb. That Mr. Stephen can write well without the aid of jokes is abundantly evident from the more serious papers in the present volume; that he is a genuine humourist few will deny: we wish we had space to quote as a proof the description of the "Myth of Tuckett" in the opening of the paper on "The Peaks of Primiero."

Mr. Stephen, then, approaches the Alps as a climber, a man of culture, and a humourist; for humourist substitute man of science, and invert the order, and you will have the attitude in which Dr. Tyndall approaches them. It is in his scientific relation to the Alps that Dr. Tyndall's name will be remembered long after even his ascent of the Weisshorn and his other climbing exploits have been forgotten; and as his scientific reputation in this respect is thoroughly established and recognised, one could wish perhaps that the relation between the two things were in his writings placed a little more in the background. Still Dr. Tyndall writes with a genuine honest love of Alpine climbing and a real enthusiasm for the scientific pursuits he associates therewith. His emotional relation, so to speak, to the mountains is not so outward and objective as Mr. Stephen's, and has for that reason perhaps the appearance of being less genuine and spontaneous: as an illustration we may refer to those "Musings on the Matterhorn" which are not only to be found in the volume before us (p. 291), but have also been transferred by the author to the companion volume of *Fragments of Science* (p. 124); the passage is too long to quote at length, but it shows characteristically how Dr. Tyndall's mind, saturated as it is with scientific ideas, refuses to accept others, so that even the expression of emotion naturally takes a

* Ruskin's *Sesame and Lilies*, p. 85.

scientific form. And just as in some passages science seems to do duty for emotion, so in others it seems to take the place of humour; at least we cannot otherwise explain the frequent recurrence of such phrases as "a solid shot from the Matterhorn describing its proper parabola" (p. 158), or "a mountain stream making soft music by the explosion of its bubbles" (p. 4), or (we quote from memory from an earlier work on the Alps), "seizing a bowl of milk by the extremities of one of its longer diameters"; here, as before, the current of Dr. Tyndall's thoughts runs so exclusively in scientific channels that, when he seeks a quaint or incongruous image, it is the language of science that spontaneously suggests it. These peculiarities apart, Dr. Tyndall's book is an interesting record of mountain adventure; its feats of skill and daring are truthfully and modestly told, and few will read it without interest, or lay it down without instruction, for it contains chapters directly devoted to some of the most interesting scientific questions to which the Alps give rise.

Mr. Whymper went to the Alps to sketch the Pelvoux, and remained to conquer the Matterhorn. So fascinated was he by the latter mountain that he returned again and again to its assault; he defied its incessant cannonade, and camped repeatedly at various heights among its crags, trying it at all assailable points; he clambered over it alone, and barely escaped death in a fall from its ridge; he scorned the remonstrances of the best and boldest guides, and at last achieved success, though at what a terrible cost all will remember. In the intervals of his repeated assaults on the Matterhorn and his visits to Dauphiné, Mr. Whymper occupied himself in exploring the less known recesses of the Pennine chain from Mont Blanc to Monte Rosa, and of several of his excursions in this district accounts are given in the present volume. He thus became one of the most skilful and daring of the present generation of mountaineers. While yielding all homage to Mr. Whymper's rare skill and rarer courage, and to his apparently faultless nerve (few men would have returned to the assault on the Matterhorn within five days of such a fall as is described on p. 120), we cannot help remarking that the quality of prudence seems to have no place in his nature. Not to mention the various attempts on the Matterhorn, and the repeated warnings of men of such undisputed courage as Bennen and Almer, we would point to the ascent of the final peak of the Ecrins, and to the passage under the *séracs* of the Moming Pass, as occasions on which almost every maxim of prudence seems to have been set aside: these are, perhaps, the most flagrant cases, but it appears to us that both in his solitary wanderings, and in his organized assaults on the Matterhorn and other mountains, Mr. Whymper frequently transgressed the limits of legitimate risk, and placed himself in positions whence he only escaped by the most extraordinary good fortune.

Though Mr. Whymper's book cannot fail to interest from its almost epic unity of purpose, heightened as well as saddened by its terrible catastrophe, yet it lacks the genial humour of Mr. Stephen and the scientific fervour of Dr. Tyndall. But its great merit and great attraction are the drawings with which it is embellished. No book on the Alps has hitherto been illustrated as Mr. Whymper has illustrated his, mainly, we imagine, for the reason that few artists are mountaineers, and few who have not wandered among the higher Alps have the patience, even if they have the skill, to draw them with any semblance of accuracy. We do not enter here on the very difficult question of the comparative beauty of Alpine and other mountain forms; but we contend that if Alpine forms are worth drawing at all, they are worth drawing accurately, and this is what very few artists have ever attempted and fewer still have ever succeeded in doing. Now Mr. Whymper, if he has not in all cases attained success, has at least in many come very near it. The Matterhorn, on p. 285, the Grandes Jorasses, on p. 344, the Col Dolent, on p. 347, among the larger pictures, are such as only an artist who is also a mountaineer could have drawn, while some of the smaller drawings as faithful transcripts of mountain and glacier detail could scarcely be surpassed. At the same time it must be admitted that Mr. Whymper sometimes unworthily lends himself to the sensational and the exaggerated. Doré himself could scarcely have given a more *bizarre* aspect to "The Crags of the Matterhorn" (p. 175), which, faithful though it may be to the general outline of the ridge, is full of the most sensational effects. The frontispiece, too, "The Fogbow on the Matterhorn," we cannot help suspecting of some exaggeration; and as Mr. Whymper admits (p. 400) that he paid very little attention to the phenomenon at the time, it would perhaps have been as well had he given it less prominence now. We cannot tell whether Mr. Whymper has ever traversed or even visited the Lauwinenthor, but we strongly suspect that his drawing of it on p. 11 of Dr. Tyndall's book is purely imaginative: surely either the drawing is defective or the rocks up which the Professor is represented as arduously toiling are hopelessly impracticable. The picture of the Weisshorn in the same volume, though it admirably represents the noble cone of the mountain itself, is spoilt, as are too many of Mr. Whymper's drawings, by the introduction of the wholly disproportionate figures on the summit of the nearer mountain in front; this mountain, the Mettelhorn, as measured on Mr. Whymper's reduction of the Federal Map, is nearly five miles from the supposed point of view, and figures at that distance are of course quite indistinguishable by the naked eye. It is one of the most difficult things in the study of Alpine scenery to train the eye to interpret aright minute indications of size and distance. Many visitors to Chamouni take the Grands Mulets for a party of travellers ascending Mont Blanc, and they scarcely make a more egregious blunder than Mr. Whymper has made in this drawing of the Weisshorn. If Mr. Whymper will look at the photograph facing p. 143 of Mr. George's *Oberland and its Glaciers*, he will see near the left-hand corner a series of dots, representing, as we happen to know, four men and a dog at a distance of barely half a mile from the focus of the camera, and he will gain a lesson as to the relative proportions of figures and mountains, which will be of no little service to him. Putting aside these blemishes, we do not hesitate to pronounce Mr. Whymper's drawings admirable: his keen eye and subtle hand have almost regenerated the popular illustration of Alpine scenery; it is not merely that he has studied more closely than other artists the objects he has to portray, but he has managed to set down more accurately the results of his study. The effect is consequently within its limits most satisfactory. More imaginative drawings of Alpine scenery may doubtless be found, but more truthful ones, we think, cannot. For the combination of minute fidelity with high imaginative and poetic feeling we must still go to the drawings of mountain scenery in the fourth volume of Mr. Ruskin's *Modern Painters*.

We have preferred in a notice like the present to dwell rather on the general literary and artistic character of the works before us than on the particular narratives of mountain expeditions of which they are mainly composed. We confess to being a little puzzled by the popular taste for such narratives; to the mountaineer who has followed or intends to follow in the steps of the first explorers, or to the tourist who, without being a climber, has made himself

familiar with the districts described, they have no doubt considerable interest; but to the general reader, without any special experience of the facts described, we should have thought they were singularly dull and monotonous. It would seem, however, that such is not the case, and certainly those who care for such reading will find each of the present volumes in its own special way lively and entertaining. Moreover, on what may be called the ethics of mountaineering, each writer has not a little to say which is worth attention, though to our mind Mr. Stephen, whom Dr. Tyndall quotes, and to whom on this point he defers, has more nearly hit the mark than Mr. Whymper. That mountaineering is an unjustifiably dangerous pursuit, few competent judges will be be found to maintain, but they will agrée with Mr. Stephen that it is a pursuit which may easily be rendered dangerous by rashness, ignorance, or carelessness. We may add that its joyous and exhilarating nature is peculiarly apt to throw even the wary off their guard, and to tempt the imprudent to their destruction. Because it is now easier for a man of ordinary strength and activity to reach the top of Mont Blanc than it was fifty years ago for him to climb Pilatus, it is often rashly and thoughtlessly concluded that the terrors of the Alps have disappeared. The result is seen in such accidents as the terrible death last year of eleven persons on Mont Blanc—an accident which in the midst of war passed almost unnoticed in England. "Bene ausi vana contemnere" was, not perhaps unjustly, the spirit of the earlier mountaineers; there is too much reason to fear that the spirit of some of their descendants is rather that of the words "Quid Alpes esse credentes quam montium altitudines?"

James R. Thursfield.

Life and Letters of William Bewick (Artist). Edited by Thomas Landseer, A.R.A. London: Hurst and Blackett.

The *Life and Letters of William Bewick*, as edited by Mr. Thomas Landseer, make a very readable book. Mr. Bewick himself appears to have been a very ordinary person, but he had the good fortune to come in contact with men of mark both in the generation which is now passing away and in that which immediately preceded it.

An autobiography honestly written always lays claim to human sympathy, and therefore even the rather commonplace early struggles, and later issue into affluent respectability, chronicled in these pages, are not wholly devoid of interest. It is indeed impossible not to feel sure that Mr. Bewick is honest, impossible not to feel sure that we have each letter exactly as he wrote it. We trace him from page to page, at first full of the buoyancy of hope, full of that faith in the possible personal possession of limitless power which characterizes the teens. Then comes London, where the illiterate country boy becomes the pupil of Haydon, and is excited by the sight of Wordsworth, Keats, Hazlitt, and others. Now and again, too, start up the names of men whose claims to notice are now almost forgotten—Edward Havell, for instance, a charming artist whose memory is still cherished by the few who knew him, and who yet remain amongst us. Eventually young Bewick, having become involved in Haydon's difficulties, had to leave town. He found a refuge in Scotland, where he saw and painted every one worth seeing, Hogg and Sir Walter Scott included. Then a commission from Sir Thomas Lawrence sends him to Rome, and in his letters thence, written with perfect simplicity and *naïveté*, we learn how the vanity of the tradesman's son (his father was an upholsterer) was excited and gratified by being permitted, under the wing of Lady Westmorland, to share in the fashionable gaieties of the winter. Still Bewick works on in spite of all distractions, painting and copying in the Sistine, but gradually the conviction steals in that the limits are but narrow within which it has been permitted to him to succeed. Yet his allegiance to his profession, like his devotion to his family, is never shaken; he returns to England, he goes home to the North, he settles there where he was bred, painting and collecting paintings around him, till, in 1866, he dies.

The Boswellising which Mr. Bewick has done for himself is after all by no means so attractive as that which he has done for others. Being a man of but moderate ability and but half education, he is certainly not competent to give us anything like an adequate picture of such men as Scott, Wordsworth, or Hazlitt. Yet having seen and talked with them, he can make some original contributions to the knowledge of them which we have already derived from other sources. His account of a meeting between Ugo Foscolo and Wordsworth, in vol. i. p. 75, is told with simplicity and liveliness, and the chapters on Hazlitt in the same volume, beginning p. 102, succeed in conveying a very interesting impression of the man—valuable to us who can only know Hazlitt from his writings, and who have sometimes a difficulty in apprehending the extraordinary influence and attraction which he exercised over so many of his contemporaries. A correction should however be made at p. 146. *Apropos* of one of Hazlitt's successful lectures delivered at the Surrey Institution, Mr. Bewick quotes Hazlitt thus:—"What do you think of that handsome Mrs. Montague throwing herself into my way as I came out, and telling me in plain unmistakable terms that she did not like my lecture that evening *at all!* But as I had just before received such unequivocal testimony of approbation from the audience, I made her no reply, and, as if I had not heard her cutting remark, said in the same tone of jeering depreciation, 'Mrs. Montague, madam, allow me to compliment you upon the excellent *tea* you make in Bedford Square!' Then leaving her in the crowd that she might have no further opportunity of saying anything ungracious, I stepped away." But those who had known Mrs. Basil Montague knew that she could never have said anything calculated to annoy an enemy, far less have deliberately purposed to wound an intimate friend, and I learn from the best authority that Mr. Bewick must have been entirely mistaken. Mrs. Montague's daughter, in a letter now lying before me, writes—"The story is false. My mother admired and reverenced Hazlitt, and was as incapable of thinking his lecture bad as Sir Thomas Lawrence was of thinking Raphael could not draw. The real culprit was Mrs. Godwin, who disliked Hazlitt. The story is told I believe in Talfourd's *Recollections*, and when she said, 'Mr. Hazlitt, I don't like your lecture,' he merely said, 'What a number of tall and well-dressed women are here to-night,' Mrs. Godwin being short and ill-dressed."

In conclusion, it may be remarked that Mr. Bewick has been singularly fortunate in his editor. Anything like pretension would have made this simple life and these slight memoranda ridiculous, but the modesty and good feeling of Mr. Landseer must do much to recommend the book he edits, and the friend he has lost, to the indulgent consideration of people of taste.

E. F. S. Pattison.

Saint-Simon and Saint-Simonism; a chapter in the History of Socialism in France. By Arthur John Booth, M.A. London: Longmans.

About two-thirds of Mr. Booth's readable sketch is devoted to the fortunes of the Saint-Simonian Church after the death of its founder; and this portion of the work may be recommended to those who have not elsewhere made the

acquaintance of Enfantin's strait-waistcoat of fraternity (which buttoned behind is an outward and visible sign of mutual dependance), or who have forgotten the important share taken by that apostle in promoting the Suez Canal. The first section, which treats of Saint-Simon himself and his writings, does so chiefly from the point of view of his relations with Positivism and Comte, an interesting subject which might with advantage have received fuller development than the author has ventured to give it, under the belief, expressed in his preface, that "so purely technical an enquiry cannot be expected to prove very attractive." Saint-Simon's first work, *Lettres d'un Habitant de Genève à ses Contemporains*, was published in 1803, his *Système industriel* in 1821, his *Catéchisme* in 1824, and a first instalment of his *Nouveau Christianisme* in 1825, immediately before his death. In 1818 Comte, who was then a youth of twenty, became acquainted with Saint-Simon, in whose journal, the *Organisateur*, he published his first essay in 1820; in 1822, out of regard for the feelings of his family, he published a heterodox essay under his master's name instead of his own, and the final quarrel between the two men in 1824 arose from a dispute whether this paper should be reprinted with the new title, *Système de Politique positive*, or as a part of the *Catéchisme des Industriels*. These dates are evidently favourable to Mr. Booth's views that Comte's obligations were more considerable than he would admit or than is generally believed. Many of the opinions notoriously common to both writers were expressly maintained by Saint-Simon before 1817, and in 1820 we find him using some of the most characteristic phraseology of Positivism. It is scarcely conceivable that so vain a man should have consciously borrowed even phrases from a young pupil who, as late as 1824, professed no higher ambition than to develop and systematise the "idées mères" of his master. It is in 1808 that we first meet with the words "philosophie positive," and in 1811 (when Comte was thirteen) they are used in a context which proves conclusively that Saint-Simon understood their full significance. It does not detract from Comte's services to science and philosophy, whatever they may be, that he was not the first to think that "nous en sommes au point que le premier bon résumé des sciences particulières constituera la philosophie positive"; but either his originality or his consistency as a thinker is compromised when we find him inheriting ideas which follow necessarily from those of Saint-Simon, and yet professing to have arrived at them by an independent track. Such Mr. Booth maintains to have been the case with Comte's well-known "metaphysical" state or period, which is fully described by Saint-Simon in 1820, both under that name and as the epoch of parliamentary government, of Protestantism, and of critical philosophy, an age of half-knowledge intermediate between religious ignorance and positive belief. (*Œuvres de Saint-Simon et d'Enfantin*, vol. xxi. pp. 9, 62, 81, 210, &c.)

The question of formal priority, whether, that is, Saint-Simon is to be called a Comtist, or Comte a Saint-Simonist, is not of very great importance, and Mr. Booth only suggests, without discussing, the wider issue, how the conflicting claims of Positivism and Socialism to be the religion of the future are affected by the relative position of their supposed founders. Saint-Simon began, where Comte ended, with the conception of a new religion, but Positivism, *minus* the religious element, remains a method which consecrates all the actual tendencies of modern science; Saint-Simonism, with the same deduction, is only a mass of incoherent conjectures and unattractive suggestions. The positive philosophy, on the other hand, is singularly chary of arguments for embracing the positive religion, whilst the faith of Saint-Simon spread faster than his doctrines could be appreciated. Like many other religious innovators, the reason why his mission is to be accepted is the weak part of the system, and yet this is what Comte, led by the love of influence and uniformity, appears to have adopted from him, without making it his own, in the sense in which he may fairly be said to have done so to the other ideas which he borrowed. In his *Science de l'Homme*, Saint-Simon hopes to see the new religion, based upon science, professed as unanimously as the old theology, in which religion and science were the same, as they will be again when all the beliefs of society are consistent. But he perceives that the belief in Deism is only half dissolved, so that the universal triumph of the scientific religion is remote; meanwhile Physicism is to be the religion of the educated, the priests of the future, who will correct what is antiquated in the received code of morals. There is only one flaw in this vision; by the help of science men may remodel morality and dispense with religion, but science and morals do not, for all that, constitute a religion. In theory this distinction was ignored equally by Comte and by Saint-Simon, but while the former kept within the limits of ordinary reason, the prophetic instinct of the latter led him to the discovery of the missing sanction, and he drifted into Socialism. The dignity of labour is as "vague and metaphysical" an idea as that of liberty, but in a certain sense, and with certain corollaries, it appears likely to become an article of religious belief with the masses. After passing first for a visionary and then for a philosopher, Saint-Simon may end by being ranked amongst practical men and leaders of opinion. The gulf between the enthusiastic and disinterested apostles of the new creed and the ignorant mass of converts was not wider than that which has always separated the few and the many, and though Enfantin and his disciples all returned at last to ordinary society, they retained their opinions in a latent state, and are not without followers who will be ready to justify the revolution of opinion as soon as it is consummated.

Mr. Booth's account of the peculiar tenets of Saint-Simonism is given in an impartial expository style, which is the more meritorious as his sympathies appear to be warmly engaged: at least, in his preface, he looks forward with obvious satisfaction to the time when the Scientific Church of the Future will meet in its own "sacred edifice," "its walls adorned with pictures and its aisles decorated with statues of the great Heroes of Humanity." The solemn service "consists alone of sacred music, and as the heart is touched by its melody each worshipper pursues his own meditations in silence." To compensate the unmusical, who might find this kind of Quakers' meeting rather dull, there is a sermon "neither upon dogmatic theology nor a dissertation of doubtful ethical value," by a lecturer "selected from the most distinguished men in the various departments of science." With the exception of this little bit of eloquence the book is sensibly and intelligently written.

H. Lawrenny.

Poesias de Estanislao del Campo, precedidas de una Introducion por el poeta argentino Don José Mármol. Buenos Ayres: 1870.

There are in this book two sets of poems, written in almost two different tongues: the first in pure Spanish, the second in the *criollo* Spanish, employed years ago by Hidalgo and Ascasubi, the initiators and the heroes of *gaucho* poetry.

The pure Spanish poems form the more important part of the work, and deserve rightly the praises so largely bestowed upon their author by the Argentine press. M. del Campo handles his mother tongue with considerable ability; his inspiration is genuine, his emotion sincere. Of course

his manner is not always exempt from the bombast and affectation which so often spoil the beauties of Spanish poetry. But, free allowance being made for this more national than individual fault, I think that the hymn to *Jesus*, and the half dramatic half lyric piece about *La hermana del Pescador* will justly find not a few admirers.

Though, from their own intrinsic merits, these poems are amongst the finest that have ever proceeded from the pen of a South American author, yet the beautiful poem called *América* is by far superior to them, and an extract of it will give the reader as good a specimen of del Campo's style of writing as is possible in a prose translation.

"Kneel down, mortals, kneel!
The splendid vision raised its brow,
Crown'd with marvels unknown,
Rising from the westward seas!
Drop, drop your dazzled eyes,
Hailing AMERICA on your knees!

"Of high Chimborazo on the snowy
Lucent top, her head is lying
With crisp, gorgeous feathers adorned,
With which the capricious breeze plays,
As it plays with the packs
Of white, candid skies.

"A hymn to her, with loving delight,
Tossing their swelling billows,
Waft the most splendid seas of the globe;
All through her woodlands and prairies delicious
The daisies grow and the jessamines
That give to her a garden-like breath.

"From her gallant mountains breaks loose,
In a torrent of pearls and feathers,
The rich, sonorous waterfall,
Pledging the sun with its white foams,
For the king-o'-space-star
To enamel them with roses and topazes.

"Like liquid curls from her brow,
And along her shoulders down to her ankles,
Fall large rivers that run tamely
Through immense savannahs of emerald,
Carrying in their clear, sonorous stream
Precious stones amongst golden sands.

"In her rich bowels she keeps burning
The blaze of volcanoes recondite,
That burst to her commanding accent;
She chains down to her feet the hurricanes,
To whose rude, irresistible onset
The subdued sea, with affright, roars."

About the satiric part of these poems there is not much to say. As a rule, there is nothing more difficult than for one people to laugh at jokes which amuse another. It would be about as easy to get into an English mind the capital fun of "*El y ella*," "*Por la plata baila el mono*," "*Que se lo cuente a su madre*," as to force Tom Hood's wit into the head of a *Porteño*.

The second set of poems to which we alluded at the beginning can hardly be understood by one who has not lived in the Argentine Republic, and learned the peculiarities of its manners and language. The Spanish, transported from its native home into the River Plate regions, has experienced a great many alterations, both of vocabulary and grammar. Amidst the new scenes of life which opened to their activity, the Spaniards happened often to find their tongue remarkably deficient for subjects that are better expressed by indigenous terms. Hence the necessity of borrowing many words from the Quichua, Aymara, Guarani, and Araucanian dialects. For instance, the Guichua *tampu*, a roadside inn, *chakra*, a cultivated farm, *huaska*, a chain, a rope, modified into *tambo*, *chacra*, *guasca*, signify respectively a place where milk is sold, a farm, a rope; and, treated like pure Spanish roots, have produced *tambera*, a milk-maid or a milch-cow, *chacarero*, a farmer, *guasquear*, to bind, *guascaso*, *guasquita*, *guasqueador*, &c. Spanish words proper, distorted in the mouth of half-bred Gauchos, have been submitted to strange phonetic transformations. Each of the letters *b*, *v*, *p*, *f*, is converted into its correspondent gutteral: instead of *bueno*, *buey*, *vuelta*, *puerta*, *fuerza*, *fuzil*, they say *güeno*, *güey*, *güelta*, *cuerta*, *juerza*, *juzil*. The Latin *f* reappears in the Spanish words beginning with *h*; ex. *fierro*, steel, in place of the Castilian *hierro*. The dental *d* becomes *l* before *m* or *b*—*alvierto* for *advierto*, *almirar* for *admirar*, &c.

Such a language is too redolent of the soil to be easily translated. Therefore I will not venture to give anything from the Gaucho poetry of M. del Campo. Suffice it to say that his *Fausto* is considered by the Argentines as a capital piece of wit and description. It tells of a Gaucho—Don Anastasio *el Pollo* (the Chicken) his name—who, happening to be in Buenos Ayres, goes to Colon's theatre, sees Gounod's *Faust*, and afterwards relates to his *compadre*, Don Laguna, the stupendous adventures of Dr. Faustus, Mephistophiles, and fair Margaret. The colloquy between the two Gauchos, the description of Colon's theatre, above all the beautiful episodes sparingly inserted into the narrative, are well-known to all South American natives, and would be admired by European readers, did not the strange aspect of the language prevent them from approaching it, and getting to understand clearly what is its value. G. MASPERO.

LITERARY NOTES.

The Pest publisher, M. Rath, announces as nearly ready for publication an interesting book by M. Thaly, entitled *Contributions to the History of the Literature of the Times of Thököly and Rákóczy*, 1670-1735. As a specimen of the book there appears in a feuilleton of the *Reform* an extract from one of the documents it contains, entitled *Actio Curiosa, Hungarico Idiomate*, together with a short description of the same. "My collection contains," writes M. Thaly, "an original MS., written with great care on sixty-three quarto pages, containing a Hungarian drama hitherto unknown." It appears, however, that the word drama is not exactly applicable to the document, which consists of eight dialogues on the political history of the day, connected together only by the unity of subject and of place and the identity of two or three of the principal characters. The scene is laid in the house of a powerful nobleman in one of the south-western counties, and the principal speaker is a Protestant country gentleman, who comments on the news communicated to him by the other characters of the piece, many of whom have arrived from distant parts of Hungary. The whole machinery is evidently devised to afford the Protestant squire an opportunity of commenting on contemporary events, with a humour for the most part very successful, though not seldom somewhat coarse. Action, properly so-called, there is none. The document has not merely a historical value, as showing what was the public feeling in Hungary about 1678, but also as a specimen of the conversational Magyar of that period. It not only abounds with exceedingly original and at the same time genuine Hungarian expressions, but also contains proverbs which have by this time become obsolete.

The second part of "Literature and Dogma," in the *Cornhill*, continues the writer's theory of the Messianic ideal, corresponding to the visible decline of the Theocracy. This ideal is regarded as an *Aberglaube*, an extra-belief with a dangerous tendency to become the principal foundation of faith. When the Messianic ideal was remodelled to apply to the Founder of Christianity, this extra-belief centred in Him. The essence of the Christianity of the New Testament, according to the writer, is the renewal of righteousness and religion by self-examination, mildness, and self-denial, which is a fresh and elegant way of stating one essential side of the traditional theory. This renewal made its way by its air of truth and likelihood. The writer omits all mention of the Beatitudes.

The article in *Fraser* on "Evidence: Historical, Religious, and Scientific," contains the following sentence *àpropos* of the "Port Royal Miracle":—"We simply and absolutely disbelieve a thing which is certainly better attested and certified than almost any fact in history." The writer, by polemical iteration, has reduced a very fine intellect to what he imagines to have been the condition of Pascal, who, he forgets, had to confute the Jesuits. He no longer feels free on certain subjects "to apply the ordinary rules of what constitutes evidence."

A curious instance of the obsolete vituperative style in criticism appears in the October number of the *Contemporary Review*, a periodical happily less known for such eccentricities than for very respectable services in the field of latitudinarian Christianity. The paper in question, called "The Fleshly School of Poetry: Mr. D. G. Rossetti," by a Mr. Thomas Maitland, shows more acrimonious personal discourtesy, founded on more grotesque literary misapprehension than it would have been easy to suppose possible. Until the writer has learned to correct his manners he cannot expect a hearing for his opinions.

In the *Revue des deux Mondes* for Oct. 1, M. Albert Dumont gives an account of an interesting MS. collection made by M. Vercovitch among the Bulgarians, so called, of Rhodope. M. Vercovitch believes he has discovered traces of Orpheus under the name Orfen —— and of Vischnou. In the same number, M. Guizot carries his reminiscences of the Duc de Broglie to the close of his honourable but unutterably sterile career. A novelette of the Sahara, entitled *L'Arabe Taïeb*, has much verisimilitude in the scenery, less in the incidents.

In the October number of *Die Deutsche Warte*, Dr. Fr. Hüffer criticizes the poetry of Mr. Morris for German readers in an article of discriminative appreciation; which would have read more pleasantly but for the misprints with which it is disfigured.

The *Cornhill Magazine* for October contains a favourable example of Mr. P. B. Marston's style in a sonnet called "My Life;" and *Fraser's Magazine* prints a poem called "For Better? For Worse?" which would seem to suggest the hand of Mr. Joaquin Miller under the influence of studies in Browning.

Music.

The Works of G. F. Handel. Parts XXXII., XXXIII. and XXXIV. Printed for the German Handel Society. Leipzig.

The first of these three magnificent folio volumes, modestly styled "parts," which have just come to the hands of the subscribing members of the German Handel Society contains the thirteen *Italian Chamber Duets* and two Trios, heretofore usually printed together; the second, the oratorio *Alexander Balus;* and the third, an instalment of the *Chandos Anthems*—examples, all three, of as many different stages of their great composer's progress towards that broad and individual style by which he won and still maintains his place in the hearts of the English. The *Chamber Duets*—eight more of which "not yet printed" are promised "as a supplement" to the set before us—are of all Handel's not forgotten works those in which the influence of his Italian travels and studies may be discerned most clearly. Not that the result of that influence is imperceptible even in his latest utterances; especially is it manifested in a knowledge of the capabilities of the human voice and a delight in turning them to the best account of which his great contemporary and only rival, J. S. Bach, shows no sign; but that the duets have absolutely nothing in common with earlier productions of the same hand which have been handed down to us—*e.g.* the first "Passion"—and that they are, moreover, obviously if not avowedly built on Italian models, some of which, those of Clari for example, they can hardly be said to surpass. Irrespective of the interest which these duets derive from their intrinsic merit, the beauty of their subjects and the skill with which they are developed, the taste and fertility of resource exhibited in their details, they have another interest altogether special; as being one of those storehouses, early filled, from which their provident keeper in later days drew material to which a very slight exercise of an improved judgment and increased skill could give all the semblance of novelty. The most remarkable instances of this procedure—more common among great artists of whatever kind than is commonly supposed—are presented by the second movement of Duet XII., beginning with the words "Dagl' amori flagellata," and the first of Trio II., "Quel fior che all' alba ride." Of the former, two of the subjects have been employed in the chorus, "Wretched Lovers," which opens the second part of *Acis and Galatea*, the first or principal subject of which however is an afterthought no germ of which is to be found in the duet. The idea of driving through these two florid themes a third solid and sustaining one which, as it were, might weld them together into an enduring whole, is one that could only have occurred to a man of genius, and the power to carry it out as Handel has done to the few who have added to their genius contrapuntal skill and musical scholarship. In Trio II. we have something more than the germ or germs of a subsequent work of equal interest with "Wretched Lovers"—the final chorus of *Alexander's Feast*, "Let old Timotheus." Here we find all four of the subjects of that large and effective *finale* treated at great length—even the pedal-point being more than indicated—and a movement which subsequent experience proved was worthy and capable of all the "effect" which performance under more favourable circumstances by larger and more varied agencies could give to it. These duets and trios, like all works of the same epoch, were originally published as written—with a "figured bass" only beneath the voice parts: the addition of "piano-forte accompaniments" has in modern times become a necessity. One of these in the edition before us has been contributed by Herr Joachim, and the majority—to six of the duets and the two trios—by Herr Brahms, in whom no one will be surprised to find a close student of Handel.

Alexander Balus is one of those many "large" works of Handel public performances of which in their entirety have not been heard by living amateur, and from which even single extracts are rarely made. A reversal of this judgment of "posterity" is not to be expected, hardly even desired. The subject of the poem is one which, even better treated than it has been by Dr. Thomas Morell, could hardly be made to awaken the interest of an auditory. It has certainly not awakened that of Handel. A work of such length from such a composer could not of course but contain some movements in which his invention and learning would be made manifest. The choruses, "Ye happy nations round," and "Triumph, Hymen, in the pair," are charming examples of his lighter or brighter utterances, as is "O calumny" of his more austere; and the airs, "Hark, he strikes the golden lyre," "O take me from this hateful light," and "Convey me to some peaceful shore," are unsurpassed examples of their several very different styles. Here and there too a situation rather than a sentiment or the "poetical" expression of it has roused up the master to an exceptional effort. The accompanied recitatives for instance, "Ungrateful child," and "Calm thou, my soul," are manifestly from the same hand as "Deeper and deeper still;" and the episode, "Or cold death"—in the air, "Fury, with red sparkling eyes"—is an oasis in a succession of passages alike unmeaning and commonplace. But in no work, regarded as a whole, has the composer shown himself less moved by his subject; in none

has he propounded so many dull "subjects," and resorted to such hackneyed artifices in dealing with them. Against no composer of like eminence has the charge that he was "a mere musician" been more often brought than against Handel. One thing is certain—that no composer ever rose or fell with the subjects he treated or the particular words he set more constantly than he. With Gay and Congreve he is elegant; with Milton and Dryden noble; with Holy Scripture sublime; and with Morell none of these.

The *Chandos Anthems* are remarkable for many things, but more than for any as examples of great musical effects produced with small means and appliances. The "Cannons Chapel" does not seem to have included among its resources even a viola; and the chorus, whatever the quality of its individual voices, it is certain numbered but very few. Neither Handel's invention or science were in the least degree damped or checked in exercise by these considerations; and it may be safely asserted that never hes a Berlioz or a Wagner, with half a dozen orchestras at his back, stirred audiences more thoroughly than has Handel through the instrumentality of two or three sopranos, tenors, and basses, supported by as many stringed instruments, reinforced occasionally by an oboe and bassoon, and an organ of one manual and no pedals! How worthy the *thoughts* thus, as it might seem, wasted were of nobler expression may be seen in the volume before us, wherein side by side with these small scores are the larger ones, in which the self-same music, in all its essentials, is made fit for execution by more numerous and more skilful performers, in a larger area and more august presence. It is well that these noble compositions should from time to time be brought before the world, whether through new editions, public performances, or occasional criticism, not merely for their own sakes but that the name of the munificent nobleman to whom they owe their existence should be had in remembrance. The Handels of the future—if the future should have any—will get on very well without patrons; but in an age when patronage was a necessity the "magnificent" Duke of Chandos exercised it judiciously as well as handsomely, not merely recognising genius—though that is much—but fostering it, by giving it positive and congenial occupation.

The "part" before us—a folio of some three hundred pages—contains only the first volume of the *Chandos Anthems*. It opens with the "Jubilate," originally written for the celebration of the peace of Utrecht and subsequently arranged by Handel for the duke's chapel, and closes with the anthem, "As pants the hart," one of the most original and variedly beautiful of the composer's works.

The number of English names in the list of subscribers to this superb and anything but costly publication is surprisingly small. The ill success which attended a former attempt of the same kind may have had something to do with this; but perhaps the little publicity that has been given to the one before us has had more. All doubt, if there ever was any, about the completion of the work may be said to have been removed by the splendid "Jahres-Subvention" of the late king of Hanover and the large and undiminished number of its individual supporters during the twelve years it has existed.

John Hullah.

MR. CIPRIANI POTTER.

The death of Mr. Cipriani Potter in his eightieth year, on the 26th of September, closes an epoch in musical history. He was the last of a generation of whom even Mendelssohn—prematurely taken from us now nearly a quarter of a century since—was too young to have had any personal knowledge. The artistic life of Mr. Potter synchronized with the lives of Spohr and Meyerbeer—taking in, as it were, those of Mendelssohn and Schumann—with those of Rossini, of Auber, of Bishop, and their contemporaries, not to speak of a body of executive artists (instrumentalists especially) most of whom had no predecessors, and some of whom have found no successors. Not only so; he was one of the few who had received the counsels and even won the confidence—so far as that might be possible—of a greater than any of these, Beethoven; as he was among the earliest to estimate at its full value the genius of that great master. Nor through any other single influence has Beethoven been made to penetrate so deeply or to spread so widely in England as through that of Mr. Potter. Had his labours in the cause of music been restricted to the direction and performance of Beethoven's works, in days when our orchestral performers could not or would not grapple with the difficulties their interpretation presented, and when English audiences were even less willing than now to give heed to the utterances of untried prophets, his memory should be held in honour by his countrymen. But he did more than this: he was the most influential English musical teacher of this century; and of that which he more especially taught he was the only teacher when he began to teach it. Harmony, counterpoint, even instrumentation as now understood, had been taught and mastered in the English school—the two first especially—long before the return to and final settlement in England of Mr. Potter; but the principles of "form" in musical composition, the order in which the several "subjects" of a movement should be introduced, the differences with which they should be repeated, the nature of the "episodes" by which they might be relieved—everything, in fact, connected with their "treatment"—were, before that epoch, rather felt than understood among English musicians; in either case, neither made clear in precept nor demonstrated in practice. To his last days Mr. Potter's interest in his art remained undiminished, and his judgment unenfeebled by that insensibility to new impressions to which we are all liable as years grow upon us. He was the most catholic of musical critics. As Bach was not too occult, so was Auber not too obvious for him. Mr. Potter was a constant attendant at the concerts of the Philharmonic Society, of which he was one of the founders, at the Monday Popular and Crystal Palace Saturday concerts—indeed, wherever good music well performed was likely to be heard. His absence from our musical places of resort will be not unfelt even by those to whom he was known only by sight. To those whose relations with him were closer, his departure is as yet hard to realise—so full of life, so sympathetic, so clear in judgment, and so happy in the expression of it, seemed he and was he only a few weeks ago.

John Hullah.

NOTES ON MUSIC AND ART.

For the more just appreciation of one of its favourites, it might be useful to the English public to know with how little success Mr. Charles Hallé has met on his recent appearance as pianiste in the Beethoven Concerts at Bonn. Almost all the German musical papers, with due praise of Mr. Hallé's technical abilities, are unanimous in reflecting upon his cold and academical playing. From the *Neue Zeitschrift für Musik* we translate the following passage about his rendering of Beethoven's Concerto in E flat:—"Mr. Hallé's playing of this wonderful piece surrounded us again with icy coolness. It is certainly highly meritorious of this *virtuoso* to have made it his task to popularise Beethoven's masterpieces in his new fatherland, England. However, his being acknowledged as a remarkable interpreter of this master would be possible nowhere but in England."

After an enforced suspension of twelve months, the Paris *Gazette des Beaux Arts* has made a welcome reappearance on the first of October last, under the management of its old editor, M. Émile Galichon. In a short address to his readers M. Galichon announces that, in accordance with the altered circumstances of his country, the *Gazette* will now direct its treatment of Art matters more than heretofore towards their educational and industrial bearings, and less towards their character as the ornament and luxury of national greatness and prosperity. The most interesting papers in the number are two, both of which are immediately concerned with recent events. M. Alfred

Darcel gives the first half of a long and detailed account, illustrated with some curious documents, of the personal and other vicissitudes to which the national art-collections have been subject since the first Prussian victories last year. Much space is taken up with the changes of *personnel* following under the September revolution, the steps taken to recover objects of art illegitimately dispersed during the previous *régime* beyond the walls of the national museums, and finally the despatch of the chief pictorial treasures of the Louvre to safe custody at Brest. The further accidents ensuing under the Commune are reserved for a future paper. On the other hand, one of the chief artistic calamities involved in the storming of Communal Paris is described by M. Georges Duplessis,—that is, the destruction of M. Gatteaux' house and collection in the Rue de Lille. M. Gatteaux, it appears, was the owner of an unsurpassed collection of medals, bronzes, enamels, drawings by old masters, &c., all of which have perished by fire.—In addition to the above, M. Ch. Garnier contributes an essay on "deformities in organic and inorganic nature," and M. René Ménard the first part of a very complimentary account of the International Exhibition just closed in London.

The *Preussische Jahrbücher* for August contained a good account of the life and family of the once glorious and now forgotten painter and artistic authority Raphael Mengs, who died in 1779, and whose career furnishes a lively picture of the ways of an artist family in Rome at that date.

New Publications.

Björnson, Björnstjerne. Die Neuvermählten. Deutsch von Frz. Busch. Bremen: Kühtmann und Co.

Fröhner, W. La Colonne Trajane. 220 Planches phototypogr. Rothschild: Paris.

Führich, Lukas R. v. Moritz v. Schwind. Eine Lebensskizze nach Mittheilgn. v. Angehörigen u. Freunden d. verstorbenen Meisters zusammengetragen. Leipzig: A. Dürr.

Hildebold von Schwangau. Minnelieder zum erstenmal übers. u. m. begleit. Text herg. v. J. Schrott. Augsburg: Kollmann.

Jansen, Alb. Die Aechtheit der Holbein'schen Madonna in Dresden bewiesen. Dresden: Schönfeld.

Lindner, E. O. Geschichte des deutschen Liedes im 18. Jahrh. Nachgelassenes Werk, hersg. v. L. Erk. Leipzig: Breitkopf u. Härtel.

Mickiewicz, Adam. Konrad Wallenrod. Aus dem Polnischen metrisch übertragen von Dr. Alb. Weiss. Bremen: Kühtmann und Co.

Taine, H. History of English Literature. Transl. by H. van Laun. Vol. I.

Turgéniew, Iwan. Visionen, Helene. Zwei Novellen. (Selected works.) Mitau: Behre.

Theology.

Grätz on Ecclesiastes. [*Kohélet oder der Salomonische Prediger übersetzt und kritisch erläutert*, von Dr. H. Grätz.] Leipzig and Heidelberg: Winter.

This new commentary is, we suppose, a forerunner of the two first volumes of Dr. Grätz's *History of the Jews*, which still remain to be written. To ascertain the import of the books in the Old Testament canon was a necessary preliminary to the elaboration of the Biblical portion of the history. And as this edition of Koheleth is evidently a specimen of the manner in which the other Old Testament books will be treated, we shall endeavour to give a succinct analysis of it.

According to Dr. Grätz, Koheleth was written circa B.C. 8. The author seeks to depict the corruptions of Herod's reign, and the various melancholy excesses, both in religion and politics, which the tyranny of this monarch engendered among the community at large. He therefore satirizes on the one hand, not only Herod, whose tyranny and infatuation he holds up to execration, but also the depravity of his princes and creatures; and on the other hand he exposes to ridicule the manifold evil effects on the tempers of the people, especially the vain philosophical speculations and excessive piety, including the belief in the immortality of the soul, to which Herod's misrule gave rise. Accordingly, Koheleth is a kind of politico-religious satire levelled against the king, the court, and the people.

The design of Koheleth is to reclaim the Jewish community from the excesses to which they had abandoned themselves, viz. despair, paroxysms of passion, personal neglect, weariness of life, celibacy, asceticism, Essenism, mourning, unwillingness to propagate their race, belief in the immortality of the soul, &c. To effect this, he puts before the people two considerations: (1) The present state of things, however grievous, is nothing new, it has existed before, only men do not remember it, just as that which is now taking place will not be remembered by posterity; the world therefore does not perish when things appear intolerable. And (2) philosophizing is of no avail, men cannot alter it, God has arranged everything well and suitably for its time. Moreover, an essential element in the means here adopted to reclaim the people is the denial on the part of Koheleth of the doctrine of immortality. The weariness of life, manifested more especially by the young, was encouraged by this doctrine, since it yields the consolation that every discrepancy here will be rectified hereafter. Koheleth therefore boldly maintains that there is no continuance after death.

In so doing, Koheleth by no means propounds a heresy, but, on the contrary, strictly adheres to the faith of the pre-exile Biblical writings, as well as to the post-exile Sopheric Judaisms. Judaism, as organized by the Sopherim after the return from the Babylonish captivity, only knows the resurrection of the body (תחיית המתים = ἀνάστασις τῶν νεκρῶν). This does not at all necessitate the continuance of the soul, but is regarded as a new act of divine creation, whereby the body is raised and a soul is breathed into it. The Evangelists, too, only lay stress on the resurrection, but not on immortality. When Josephus declares that the Pharisees believed in the immortality of the soul, he simply does it for his Greek readers. The doctrine has been imported by the Alexandrians into Judaism from the Platonic philosophy, and for a long time was not recognised among the acknowledged dogmas. When, therefore, Koheleth denounces this notion, he is not to be regarded as a materialist or sceptic, but simply takes his stand upon the basis of the Judaism of his time. With its demolition, he demolishes the asceticism, the aversion to life encouraged and fostered thereby, as well as reconciles young men to life *quand même*. He uses the arguments of his old Jewish faith against modern innovations.

The plan of the book cannot always be consecutively traced owing to its import and design. As the author chastises the king, he has frequently to break off suddenly and pass on to some harmless remark, for fear lest Hyrcanus should cast him into prison. Hence such interruptions as iv. 17, &c.; xi. 1, &c. The first three and the last two chapters only have, therefore, a regular connection, whilst chap. iv.–x. contain single groups of thoughts. If a division of the book is to be adopted, it must be trichotomical. Part i., embracing cap. i. 1–ii. 26, is introductory; part ii., cap. iii. 1–ix. 18, is dialectical disquisition; and part iii., cap. x. 1–xii. 8, contains the application. There are, however, dislocations of verses and lacunae in the book. Thus, in cap. v. verse 7 is dislocated, and must follow vii. 10, *i.e.* vii. 9, 10; v. 7, 13, 14. Verses 8–11 of the same chapter are also dislocated, and belong to cap. vii., which ought to be as follows: vii. 11, 12, v. 8, 9, 10, 11. In cap. vii. verse 19 is dislocated, and belongs to cap. ix., the order of which is as follows: ix. 16, vii. 19, ix. 17. In cap. x. ver. 4 is dislocated, and belongs to cap. viii., the position of which

is viii. 4, x. 4, viii. 5. The lacunae are in the middle of viii. 6, and between verses 12, 13, in cap. ix. There are, moreover, interpolations, viz.: the words בן דוד, *son of David*, in the middle of the superscription, which, if allowed to stand, would be fatal to the Herodian theory. The last six verses, too, are an interpolation, since they propound the doctrine of a future judgment.

The arguments which Grätz urges for the Herodian theory may be epitomised as follows. A tyrannical king, not of royal descent, who ruled over Judea, and lived in the neighbourhood of the author, is frequently mentioned (viii. 3, &c.). This precludes all foreign monarchs who resided in Persepolis, Antioch, or Alexandria, as well as the satraps. As Koheleth, according to the fixed results of criticism, was written after the Babylonish captivity, no pre-exile king can be meant. The choice from the post-exile sovereigns is limited. The Ashmoneans from Jonathan to Hyrcanus cannot be intended, for they were not of foreign origin, but belonged to the hereditary dynasty, whilst the tyrant of Koheleth is a native and yet of foreign extraction, one who rules in and over Jerusalem, and yet does not belong to the Jewish nation. Hence he is no national king. His princes are described as created. They are properly slaves, but ride on horses like princes, whilst the real nobility of the land go on foot like slaves (x. 6, 7). Nay, the king himself is a *parvenu*, and is actually called a *slave* (נער, x. 16). He can therefore be no other than Herod, the Idumean *parvenu*, who was forced upon the Jews by the Romans, and who tyrannised over the Jews with refined cruelty. Herod too is the old and foolish king, who becomes poor and miserable in his last days (iv. 13, 14). The youth in prison, who is to be his successor, and around whom all the people rally (iv. 15, 16), is Alexander, whom Herod incarcerated (Joseph. *Antiq.* xvi. 1, 2). The king who must be obeyed because he imposed an oath of allegiance upon his people (vii. 2) is no other than Herod (Joseph. *Antiq.* xv. 10, 4). The spies who report everything to the king (x. 20) are those employed by Herod (Joseph. *ibid.*). No other post-exile king can be found whom all the circumstances suit so naturally as the Idumean despot. Moreover, the Aramaic and modern Hebrew diction, the formation of sentences, the Græcisms and Latinisms which already appear naturalised in the language, the allusions to the excesses of the Essenes, &c., compel us to assign to Koheleth the latest possible date.

Lest any arguments should be used against this extremely late date of the composition of Koheleth, from ancient sources, Dr. Grätz discusses in two appendices the close of the Old Testament canon and the date of the Septuagint. With regard to the first, he endeavours to show from the Talmudic and Midrashic literature that the three portions of the Old Testament, respectively denominated the Law, the Prophets, and the Hagiographa, were inserted into the canon by three different synods in three widely separated periods. The first fixing of the canon took place under Nehemiah at the time of the Great Synagogue, *circa* B.C. 400, when the Pentateuch alone was declared sacred. The second was effected in the school of Shammai and Hillel at the time of the revolt against the Romans, *circa* A.D. 65, when the Prophetic portion was added, and the third and final settlement was at the deposition of Gamaliel II. from the patriarchate, *circa* A.D. 90, when the Tanaim or Propounders of the Law fixed and added the Hagiographa.

As to the Septuagint, its version of Koheleth is the *secunda editio*, *κατ' ἀκριβείαν*, of Aquila, made in the time of Akiba. This is concluded from the fact that the particle את is translated *σὺν* almost throughout Koheleth. Akiba was the first who propounded the hermeneutical canon that the accusative particle את denotes לרבות=σὺν throughout the Old Testament, and moreover as, according to the testimony of Origen and Jerome, Aquila alone consistently followed this peculiarity, which he adopted from Akiba (*Jerusalem Kiddushin*, i. p. 59; Jerome on Isaiah iii. 14), there can be no doubt that the Greek interpreter of Koheleth is Aquila. This assumption presents no greater difficulty than the fact that the Septuagintal canon adopted Theodotion's version of Daniel, which was made *circa* A.D. 160.

We trust that the above will be found a fair analysis of this remarkable commentary on Ecclesiastes. If any salient point has been omitted, we must plead as an excuse the absence of system in the introduction, where, in upwards of fifty pages, the author discusses pell-mell the import, design, plan, date, &c. of the book. The mixing up of all these questions has entailed upon the author a double disadvantage. Thus while some of the points, such as the design and form of the book, are discussed several times, the argument and analysis are nowhere given.

Now with all due deference to Dr. Grätz, we have no hesitation in saying that he has failed to see the *design* of Koheleth, and that this has led him to resort to arbitrary alterations and fanciful interpretations of the text. Having mistaken the import of the prologue (i. 2–11) which gives the theme or problem of the disquisition, Grätz is obliged to interpret והארץ (verse 4), which is antithetical, contrasting the *transitory state* (הלך) of man with the *abiding nature* (עמדת) of the earth, elliptically for ישבי הארץ, *the inhabitants of the earth.* He has moreover been compelled to translate ראשנים and אחרנים (ver. 11) by *former* and *later things*, contrary to the uniform usage of these words, which, being masculine forms, invariably denote *men* (comp. Deut. xix. 14; Job xviii. 20; Koheleth iv. 16), and contrary to the analogous sentiments in Koheleth ii. 16, 17; ix. 5, which is the burden of the writer. As a necessary consequence, this ingenious scholar has mistaken the meaning of the concluding portion of Koheleth. Thus he takes בוראיך (xii. 1) to denote *cistern*, maintains that it is a metaphorical expression for *woman* (comp. Prov. v. 15 with 18), and that Koheleth admonishes both young and old to enjoy connubial life. But as Grätz knows too well that *thy cistern* in Hebrew is בְּאֵרְךָ or בּוֹרְךָ, and not בּוֹרְאֶיךָ, he of course has to resort to the assumption that the word has been tampered with and so altered as to impart to it a religious sense. But what about זכר, *remember?* The phrase זכר בוראיך is too solemn and stereotyped to bear the sense which Grätz imposes upon it. Judg. xv. 1, which he adduces, can no more modify it than Gen. xxi. 1. Dr. Grätz is moreover constrained to deny that the words הרוח תשוב אל האלהים, *the spirit goeth back to God* (xii. 7), means the *continuance of the individual soul*, though the similar phrase, רוח עלה למעלה, *the spirit going upward*, i.e. to God (iii. 21), which to our mind unquestionably means immortality, puts it beyond the shadow of a doubt. Though espousing the allegorical interpretation of xii. 2–6, Grätz assigns a new sense to some of the words; thus adding to the utter confusion of opinions which already exists as to what the different parts of this supposed allegory mean, and supplying an additional argument in favour of adhering to the literal explanation of the text.

In spite, however, of these serious defects, we may safely affirm that no scholar will rise from the perusal of this masterly commentary without having increased his Biblical and antiquarian knowledge in numerous departments. The faults of Grätz in this treatise, like those in his other productions, are almost as instructive as the excellencies.

Christian D. Ginsburg.

Intelligence.

Bishop Martensen, of Zealand, whose work on dogma has obtained an almost world-wide celebrity, has brought out the first part of his long-expected *Christliche Ethik.* We hope Messrs. Clark, of Edinburgh, will favour us with a translation with the least possible delay.

Dr. Liebner, a deceased theologian, of similar intellectual tendencies to those of Martensen, receives an affectionate and profound appreciation from his friend Dorner, in the *Jahrbücher für deutsche Theologie* (No. 3 for 1871). He was the author of an unfinished speculative work on Christian doctrine, to which Dr. Dorner attaches great importance for the reformation of the traditional orthodox theology.

A German translation is announced of Scholten's recent work, *The Pauline Gospel* (see *Academy*, vol. ii. p. 335).

Father Pius Zingerle, a veteran in Syriac studies, is bringing out a translation of select works of S. Ephrem in Reithmayr's *Library of the Fathers.* He has also published independently a version of three discourses *ascribed* to S. Ephrem (see below), and will at no distant date produce a second volume of *Monumenta Syriaca.*

Dr. G. Janichs has published a pamphlet at Breslau, entitled *Animadversiones criticae in vers. Syriacam Peschitthon. librorum Kohelcth et Ruth.* His design is, by comparing these two portions of the Peshito with the original Hebrew and with the LXX. and other versions, to assist in solving the difficult questions as to the origin and authorship of the Peshito. Is that version the work of a single translator or of several? Was the authorship Jewish or Judæo-Christian? Did the author, or authors, while translating from the Hebrew, avail themselves of the assistance of earlier versions, and, if so, to what extent? The pamphlet is short, and not likely to produce much effect on critical opinion. Dr. J. claims to have found distinct evidence that Ruth was translated by a Jew; but the passages on which he relies (i. 15, 19, 21, 22; ii. 21; iii. 4, 11; iv. 3), are by no means decisive, and we regret to add that neither his Hebrew nor his Latinity are immaculate.

Selected Articles.

The Speaker's Commentary, vol. i., rev. by H. E[wald]. in the Götting. gel. Anzeigen, Sept. 13. [A singular article, intended, it would seem, for English rather than for German readers. The first six pages are devoted to an eulogy of the design and its authors, slightly modified by the assertion that the idea was evidently taken from Bunsen's *Bibelwerk!* A severe castigation follows. The writers have no appreciation of the method and results of "*our* science." They often, however, supply much useful information, chiefly derived from German sources, as a specimen of which, strangely enough, the reviewer mentions Mr. Cook's excursus on Egyptian history and words. When they are right, it is generally on a point which the English church has already determined, *e.g.* on the right division and form of the Decalogue. The article concludes with a fervent wish that English clergymen would study *sound* German criticism.]

Keim's History of Jesus, vol. ii., rev. by Weizsäcker in Jahrbücher für deutsche Theologie, No. 3. [Excels, not in the discovery of new solutions, but in the accurate combination of facts, and in the exhibition of the connection between the history of Jesus and the national life of the Jews. The reviewer has no considerable objection to make; yet he questions the tenableness of Keim's distinction between miracles in which a natural process can be indicated, and others of purely mythical origin. He is also unable to agree with Keim's preference for St. Matthew. What are we to think of the authenticity of a Gospel such prominent portions of which, *e.g.* the feeding of the 5000 and the 4000, are pronounced mythical by our author? It would be wise, in the reviewer's judgment, to abandon the attempt to write a history of Christ, and confine ourselves to the comparative criticism of the Gospels.]

Hurter's Nomenclator of Catholic Theologians, rev. by Reusch, in the (Rom. Cath.) Theolog. Literaturblatt, Sept. 25. [A very unequal performance.]

The Reading μονογενὴς Θεός in John i. 18, by J. Drummond, in the Theological Review, October. [The results are—i. as to the manuscript evidence, Θεός is confined to the form of text known, but not universally used, in Egypt in the fourth and fifth centuries; ii. as to the versions, the evidence preponderates against Θεός; iii. as to the Fathers, there is room for doubt in all the passages where the verse Θεός is quoted with Θεός; iv. as to the internal evidence, Θεός is un-Johannine, it makes the connection harsh, and in the fourth century was the *lectio proclivis.*]

Godet on the Synoptical Gospels, by J. Wright, in the same. [The book represents the most conservative view that can be held by anyone acquainted with modern criticism.]

Arnold on St. Paul, rev. by C. K. Paul, in the same. [A thoughtful and admiring criticism from a theological, not a politico-ecclesiastical, point of view.]

The Experience-Philosophy and Religious Belief, by C. B. Upton, in the same. [A criticism of Locke and Mill, from the point of view of Mr. Martineau.]

On the Religion of Buddha, by F. J., in Ausland, Sept. 4, 11. [An attempt to extract from the legends a probable sketch of the founder of this religion, and from the dogmas and rites to disengage the original doctrinal ideas.]

New Publications.

Ephrem. Reden des heil. Ephräm des Syrers üb. Selbstverleugnung u. einsame Lebensweise. Aus dem Syr. übersetzt von P. Pius Zingerle. Innsbruck: Wagner.

Ewald, H. The History of Israel. Translated by Carpenter. Vols. 3 and 4. Longmans.

Hengstenberg, E. W. Geschichte des Reiches Gottes unter dem Alten Bunde. Zweite Periode, zweite Hälfte. Berlin: Schlawitz.

Keim, Th. Geschichte Jesu von Nazara. Band 3. Das jerusalem. Todesostern. 1. Der Messiaszug. Zürich: Orell, Füssli, and Co.

Martensen, H. Die christliche Ethik. Allgemeiner Theil. Gotha: Besser.

Science and Philosophy.

A Memoir on the Indian Surveys. By Clements R. Markham. Allen and Co.

There exists an increasing interest among us in all that relates to our Indian possessions; but it was, perhaps, not until the Mutiny that this interest became marked. As the struggle went on at far distant points of our empire, local names became familiar, and the vast size and resources of the country became known to many who until then had but a faint conception even of the relative distances of the presidency towns. European enterprise in the extension of the railway system, in the coalfields of Bengal, tea and coffee cultivation, &c., has introduced new elements of interest and research. The history of India's resources is intimately connected with its geological structure, its geographical extent, and physical configuration. All information on these subjects is eagerly sought after by the general reader, and is no longer solely confined to a few scientific bodies. In the report and compilation under review, by Mr. Markham, will be found a satisfactory account of what has been done and is doing with respect to the geodesy, the geological structure, topography, archæology, cartography, meteorology, &c., of our Eastern dominions. Reference is also made to a vast store of papers scattered through numerous publications, to many works, and government reports—the whole forming a very comprehensive history of Indian survey, for which great credit is due to Mr. Markham. His long connection with the Geographical Society, his appointment in charge of the Geographical Department at the India House, and his experience as a traveller, render him particularly fitted to compile such a work as that before us.

As might very naturally be supposed, owing to our early connection with the coasts of India, the earliest survey operations were confined to plans of ports and roadsteads. Mr. Markham accordingly begins his *Memoir* with the history of the marine surveys of the Eastern seas, taking us back to the "plotts" of Lancaster and Middleton (1601), to the narratives of Hakluyt and Purchas, compiled out of the voyages of the ships of the early traders to India, embellished by the yarns of the "noted seamen of Wapping." This section of the work, if written in detail, would fill many an interesting page in the history of Indian survey labour. With the old East India Company, the Bombay Marine (afterwards in 1832 the Indian Navy) ceased to exist, but England may be proud of the many officers who served her

in those waters, and whose names are recorded in Mr. Markham's *Memoir* in connection with the many hundred miles of coast line they assisted in laying down. Most interesting are the portions relating to the survey of the Red Sea, by Moresby and Elwon, &c., in 1830–34, and the splendid work done in Mesopotamia by Lynch, and Felix Jones, the accomplished draughtsman and surveyor; as Mr. Markham expresses it, "for this alone the Indian Navy takes rank among the foremost contributors to geographical knowledge." Connected with this work in 1855–61, we must not omit the names of Captain Selby, Lieutenant Collingwood, and Lieutenant Bewsher, up to 1865, when it was abruptly stopped in an unfinished state by the government of India. The destruction of the records of such a noble service is lamentable, for we read that "nearly all were reduced to pulp." In 1862 the Indian Navy ceased to exist, all the marine surveys were abandoned, and left incomplete; and we find, with this hasty and very questionable reform, that for eight years, up to 1870, no less than twenty-three surveys remained untouched—work that would long ere this have been completed, and much more would have now been in progress in other quarters of the Indian Ocean.

The land surveys commence in 1763, and date from our first battles and the acquisition of our first districts. They were conducted under Major Rennell, "the father of Indian geography," who had served under Clive; but it would be unjust to the great French geographer d'Anville not to mention that his map of India had precedence by eight years of any work of Rennell's. Colonels Call and Wood continued the system then adopted, which was a compilation of the route surveys, checked by observations at different points for latitude and longitude. With yearly acquired territory, routes were being constantly executed by officers attached to different forces in the field; thus opening up the then quite unknown interior parts of the peninsula. In this section we again find a record of destruction. Colonel Reynolds was for years collecting and compiling materials for a great map of India, which he completed and sent home in 1798; it was never published, and was eventually lost in the destruction of precious records on the abolition of the East India Company. Connected with the rapid changes taking place in the deltas of the Ganges and Indus, the old maps, such as remain, have an increasing value and interest, year by year; their loss is therefore the more to be deplored.

The Survey Department of India consists of three branches, the trigonometrical, topographical, and revenue; four sections treat of the first, the same number of the two latter. Major Lambton, of H. M. 33rd Regiment, was the originator of a rigorous system of triangulation, commencing with a measured base fixed by astronomical observations, a series of accurately measured triangles carried from it, either upon a line of latitude, or a line of longitude, and the accuracy of the whole tested by closing upon another measured base. Lambton's proposal was sanctioned by the "Great Duke" in 1800. His 3-foot theodolite, by Cary, was captured at sea by the French frigate *Piémontaise*, and taken to the Mauritius; but science was respected and honoured by the chivalrous French governor de Caen, who forwarded it on to Madras with a complimentary letter to the governor. His nation we also find was the first to recognise Lambton's important labours, when in 1817 he was made a member of the French Institute. "For many years he never received one word of encouragement, sympathy, or advice, either from the government or the Royal Society." Across the channel his operations were understood, not so with those he served; for he was called upon, from time to time, to demonstrate the utility of his work; even Rennell came forward to prove the old system of route surveys were equally trustworthy, and the finance committee at Madras crippled his resources. Lambton struggled manfully on, and his name will ever be associated with the highest honour, in connection with the "great arc series," or the measurement of 10° of an arc of the meridian, carried from Cape Comorin, the most southern point of the peninsula, to Beder. Lambton continued his work almost to the very last; the old man's spirit was never broken, and he died at Hingunghat at the age of seventy, then on his way to make arrangements for continuing the great arc series northward. Lambton was succeeded and his grand undertaking carried on and completed by his lieutenant, George Everest, under whose superintendence great improvements were made in the construction of instruments. Compensation bars were introduced in the measurement of base lines, and used for the first time at Barrackpur. Everest had a splendid staff of assistants, who, with their leader, inherited the zeal of the old chief Lambton. Everest was the designer of the "gridiron system;" nine stations were selected at sixty miles apart, on the Calcutta longitudinal series, as origins of as many meridional extensions to the north. Everest finally retired from the service in 1843, after having been twenty-five years connected with the survey.

"He refused the knighthood which was then offered him, but accepted it with a C.B. in 1861. He had completed one of the most stupendous works in the whole history of science. No scientific man ever had a grander monument to his memory than the great meridional arc of India. Everest was a creative genius. The whole conception of the survey, as it now exists, was the creation of his brain. He entirely altered and revolutionised the old system of Lambton, by substituting the gridiron for the network method. He introduced the compensation bars which have measured every base in India down to the present day. He invented the plan of obverving by heliotrope flashes and the system of ray-tracing, and designed the plan for the towers. There have been modifications and improvement since his time; but nearly everything in the surveys was originated by the great geodesist."

Colonel Waugh took charge in 1843, and his first work was to complete Everest's gridiron system, better exemplified to the uninitiated by a glance at the Index Chart facing page 109.

The North-Eastern Himalaya series connected the northern ends of this meridional system; which was commenced in 1845, and completed in 1850; it was the longest series between measured bases in the world, 1690 miles long, from the Deyrah Doon to Sonakoda at the base of the Darjeeling Hills. Writing of this work, Mr. Markham says:—

"The dangers and difficulties in the execution were far greater than have been encountered in the majority of Indian campaigns. Military service, plentifully rewarded by the praise of men and by prizes of all kinds, is neither so perilous nor so honourable as that of the Indian surveyor, who devotes great talent and ability to scientific work in the midst of as deadly peril as is met with on the field of battle, and with little or no prospect of reaping the reward that he deserves. His labours, unlike those of a mere soldier, are of permanent and lasting value; but few know who obtained the valuable results, except the gallant surveyor's immediate chief and colleagues."

From the stations of the North-Eastern Himalayan series were fixed the great snowy peaks of that range, situated north of Nepal and Sikkim. This work was personally conducted by Colonel Waugh, whose name will be for ever coupled with the determination of their position and altitude. The highest peak (No. 15), 29,002 feet above the sea, was well named by him after his old chief, "Mount Everest." After the completion of Everest's system of triangulation in the east, Colonel Waugh originated the plan of a gridiron of triangulation in the west of the great arc series. The *Memoir* contains an interesting *résumé* of the labours of Captain Strange, when carrying the work across the desert from Deesa

to the Indus. Between 1849 and 1853 Lieutenant Walker, of the Bengal Engineers, executed a *reconnaissance* survey, quite alone, of the trans-Indus territory, a work of no little danger on that newly acquired and wild frontier. Then follows the account of that great undertaking, the survey of Kashmir, and the stupendous mass of mountains up to the Tibetan frontier, begun in 1855 by Captain Montgomerie, the originator of a system of *reconnaissance* by trained natives beyond our northern frontier. Marks for the triangulation were erected and plane tabling carried on from peaks 20,500 feet and over, and a height of 21,480 feet above the sea was ascended. The accuracy of this work was remarkable. Colonel Waugh, retiring in 1861, became a major-general, and was knighted. Colonel Walker succeeded as superintendent of the trigonometrical survey, and Colonel Thuillier became surveyor-general, both offices having been previously combined. The history of their tenure of office up to the present time is one of never-ceasing extension of the great system of triangulation, with the revision of some of the earlier work of Lambton, imperative and due to the very great improvement in all instrumental equipment since his day.

Pendulum observations were commenced on the meridian of the great arc, to determine independently the ellipticity of the earth and its physical constitution. Levelling and astronomical parties were organized, and great strides were made with the survey of Kashmir territory; the enormous glaciers of the Mustakh and Karakoram were mapped, and this work was finally completed in 1867. The process of photozincography was introduced for the first time in India, and has since proved of immense value, in the rapid execution of cartography.

Colonel Thuillier has been associated with the topographical and revenue branches since 1836, when he first joined the latter; the perfect system of both dates from 1847, and is due to his talent for organization. In the sections devoted to these branches we again find a history of unflagging zeal and energy, as we read in those on the trigonometrical operations a life of constant exposure to sun and malaria, undermining and cutting off in the prime of life the assistants employed. At the present time we have seven topographical parties taking up all the hill and mountainous parts of the country, and some portions are being mapped by the trigonometrical surveyors; while parties of the revenue branch are employed in the more level parts of the peninsula. These surveys embrace every variety of ground, from the dry deserts of Bikanir to the damp mountains of Khasia, receiving the heaviest rainfall in the world, and the steep or snow-clad slopes of the Himalaya. Service in the survey of India requires men of great tact and knowledge of the people, with whom they are brought into closest relationship, very frequently alone, and at great distances from the civil or military stations. The work is not without considerable danger on the frontier, whether it is with the fanatic Mahomedan tribes of the Peshawur side or the wild tribes of Eastern Bengal on the north-east. They have many difficulties to contend with—want of carriage, dearth of necessary articles of consumption, and occasionally the lukewarm assistance of the civil power, while the work is not unfrequently brought to a standstill by a sudden attack of jungle-fever, prostrating nearly every man in camp. The same struggle is shared by the members of the geological survey, and Mr. Markham says justly:—

"They must be animated by a noble devotion to the cause of science—these Indian geologists, for theirs is neither a safe nor an easy task. Out of the two dozen or so that have entered the survey since it commenced, thirty-four per cent. have been struck down by death or incapacitating disease. The rest work on zealously and bravely, reflecting honour on English administration by the results of their labours, extending the sum of human knowledge, and doing much practically useful work. In spite of all difficulties of climate, inaccessibility of districts, and slowness of means of travel, they have examined an area about four times as large as Great Britain."

The section devoted to the geological survey is prefaced by the work performed by Dr. Voysey and other able explorers, Faulkner and Cautley's discoveries in the Siwalik Hills, &c. Dr. Oldham, the present director, has held the charge for twenty years, since 1851. Lord Canning took an enlightened interest in the work, and the department was placed on a proper footing. The memoirs by Dr. Oldham's able assistants, and the splendid series, the *Palæontologia Indica*, form lasting records of their labours.

The archæological survey receives several pages of honourable mention. In 1866 the then governor-general abolished the appointment of archæological surveyor, and thus these very important investigations were stopped, and left, as much in India ever has been, to private enterprise and the zeal of the Asiatic Society of Bengal, a society which has, with its branches, founded by Sir William Jones in 1784, ever fostered natural history and science in the East. However, in 1870, the government of India having again considered the importance of the work, and that it should be conducted in some systematic manner, again deputed General Cunningham to the charge, and he has lately proceeded to India. During the interval, 1868, Lieutenant Cole was sent out to examine the temples in Kashmir, and again, in 1869, to take mouldings of one of the gateways of the Sanchi Tope. The cast, exhibiting the curious style of the architecture, was this summer to be seen in the International Exhibition.

Meteorological and tidal observations receive attention in sect. xiv., and the history of Indian astronomy in sect. xv., commencing in so early a time as the fifth century, with the sage Aryabhata. With regard to the first subject, we have now arrived at the period when there is a chance of some results being deduced from observations, of systematic care being taken in observing with instruments properly made and accurately compared with standards; and, what is of equal importance, of a system of regular and continuous record being introduced. The past history of meteorology shows that this has never (with some bright exceptions) been attained. The mass of former work is untrustworthy in itself, and no sound theory can be based upon it. Yet it is upon such materials that the Messrs. Schlagintweit have bestowed much useless labour.

Under Dr. Murray Thompson, in the North-West Provinces, and Mr. H. F. Blanford, in Lower Bengal, a perfect organization is growing up, with results of which we are beginning to reap the benefit: yet until the meteorology of the whole peninsula, the seas bounding it on the south, and the great mountain mass on the north, are treated and supervised as a whole under one superintendent, we cannot expect very valuable deductions to be added to science. At present the investigations and reports of individuals are confined to arbitrary political and not physical boundaries.

The *Memoir* concludes with a section on physical geography, and all that has been written up to the present time on that absorbing science. Much remains yet to be done; large areas are still unexplored by scientific travellers, who are capable of bringing back with them rich stores of geographical knowledge. Year by year new fields are opened up, and whenever and wherever these openings present themselves, our Indian service produces men ever ready to risk their health and lives in the noble cause, with its high aspiration and exciting incidents.

H. H. Godwin Austen.

Life Theories and their Influence on Religious Thoughts. By Lionel S. Beale, M.D., F.R.S., &c.

Readers of this little work will regret that Professor Huxley called Dr. Beale "a microscopist ignorant alike of biology and philosophy:" not merely because this manner of expressing fundamental disagreement is always to be deprecated, but because we seem to owe to this remark the peculiar querulous prolixity of the polemic which Dr. Beale has mingled with this exposition of his views. The treatise has thus become so rambling and reiterative that it must be pronounced tedious though short. As far as its contents are properly biological, it seems to be merely a restatement of the doctrines put forward in the same author's treatise on Protoplasm: I conclude, therefore, that it is written solely with the philosophical design of showing the connection of the fundamental truths of biology with theology and religion. I imagine that Dr. Beale's view of this very important question is and will remain quite peculiar to himself: but a brief account seems due to the writer's reputation in his own department.

Dr. Beale divides the matter of the universe into two portions: (1) a certain transparent colourless substance found in all living bodies, artificially coloured red in his preparations; and (2) all other matter, including the greater part of the matter of living bodies. With regard to this latter and larger portion he accepts unreservedly the current theories of the correlation of forces and the indestructibility of matter and energy: he considers, therefore, that the motions and mutual relations of all the particles composing it might be completely accounted for by physical laws, if our knowledge of the facts were sufficiently extended and minute. But he holds that if a similar view is taken of the former kind of matter "the abandonment of the idea of a God, of Divinity of every kind, is only a question of time;" for that Deity could then only be regarded as a "primæval creative impulse," and in so "remote and indirect a Providence" man could take but little interest. Religion, therefore, is bound up with a recognition of the peculiar qualities of Dr. Beale's red matter. These qualities are (1) that it is only produced out of other matter of the same kind; and (2) that its motions cannot be accounted for by physical laws, and therefore the forces acting on it are not to be correlated with other forces, and indeed should not be called "force" at all but "power." "Vital power" is distinguished as a tendency to motions *centrifugal* in themselves and *formative* in their results. "No physical explanations will account for portions of a mass of semi-fluid matter moving away from one another, in many different directions," or "for the phenomena of growth, nutrition, multiplication, formation, conversion."

Granting these biological premisses, we have still to enquire how they support religion. It might seem from Dr. Beale's preface that he considered their whole importance to lie in the establishment of an "absolute difference between the living and the non-living." But the supposition that the events in the universe are connected in two series, one non-vital and the other vital, seems in itself only to lead to the introduction of the primæval creative impulse *twice* instead of *once:* and it does not appear how this mere duality of origin should lead mankind to take more interest in a Providence that would still remain "remote and indirect." Indeed if Dr. Beale regards the creator as "self-extinguished" and "reposing powerless beyond the sun" in so far as non-vital events are concerned, merely because these are reduced to "immutable laws and necessary sequences," it would seem indispensable for his defence of religion to maintain that vital phenomena are not reducible to uniform laws. And some of his language seems really to point to this conclusion. He is almost inclined to call the production of any living thing "preternatural;" and seems especially to dislike the assertion, on the part of physicists, that the present state of the universe would have been calculable in the past by a being possessed of complete knowledge. Still it would be unfair to attribute to our author deliberate adhesion to so portentous a heresy, by which biology in its turn would be "self-extinguished," as vital phenomena could not be made matter of scientific study. He speaks of his "vital powers" as being "inherited," and so seems to consider them as determinate entities, whose existence is dependent on pre-existing conditions; nor does he deny that every movement, even of his red matter, has a cause. But he holds that this cause is immaterial, intrinsically imperceptible by the senses; that a complete knowledge of the condition of the living particles at one moment would not show us the real antecedent of its movement at the next moment. It is this hypothesis of *immaterial causes* which seems to him to establish our belief in Superintending Providence, Personal Deity, and Christianity.

In short, Dr. Beale's argument consists of two tremendous leaps:—(1) Vital movements are essentially different from non-vital, and no cause of this difference has yet been demonstrated in the state of the particles of living matter immediately before movement: *therefore* no such cause exists, and the cause must be thought as immaterial. (2) The cause is immaterial: *therefore* we may introduce the ideas of Superintending Providence and Personal Deity. The first leap is made within or at least out of the region of Physics, and Dr. Beale seems aware that it is rather a stretch; the second is metaphysical and taken quite unconsciously.

The treatise, then, as a contribution to philosophy, hardly deserves serious discussion. It is, however, written with much earnestness and sincerity, and is psychologically interesting, as illustrative of the effects produced in many minds by the collision of theological and scientific conceptions.

H. Sidgwick.

Scientific Notes.

Physiology.

On the Colouring Matter of some Aphides.—Mr. H. C. Sorby has communicated a paper to the October number of the *Quarterly Journal of Microscopical Science* (new series, vol. xi. p. 352), in which he describes a red colouring matter found in some species of Aphis, named by him *Aphidéine.* In some of its characters this resembles cochineal, but in others the red colouring matter of the blood of vertebrate animals, though entirely distinct from either. It can exist in an oxidised and in a deoxidised state, and thus may perhaps serve to convey loosely combined oxygen from the respiratory organs to other parts of the body. One of its most remarkable peculiarities is that it rapidly passes into a series of fluorescent products, giving remarkable spectra, which, unlike the original substance, are not dissolved by water, but are very soluble in bisulphide of carbon, and thus are like the colouring matters of wax and oils, which they also resemble in their general consistence, when left dry on evaporation. This change is so rapid that it occurs in the course of a few minutes, when the living insects are crushed and exposed to the air; and it therefore required special care to prove that none of these fluorescent substances exists during life, and that the fatty matter then found is similar to that met with in other insects.

The Snout of the Mole as a Tactile Organ.—In Schultze's *Archiv für mikroskopische Anatomie,* Band vii. Heft 3, Dr. Th. Eimer gives an account of his investigations into the structure of the muzzle of the mole, which he was induced to study from considering that it must be a highly developed organ of touch. The fore part of the muzzle in this animal can be seen with the naked eye to be beset with numerous papillæ. These, when examined with the microscope, appear as low elevations, varying from 0·09 to 0·2 of a millimetre in diameter, composed of cells, and with an axial cavity traversing them from base to apex, and containing a structureless mass which is probably a modification of connective tissue. The shape of the cavity is that of a dice-box, or of two cones joined by their apices. The terminations of the nerves are in the outer cone, as may be very distinctly brought into

view with chloride of gold. The snout is very richly supplied with nerves, presenting the usual medullated character; but having reached the base of the "tactile cones" of the papillæ, they lose their medulla, and the axis cylinders to the number of about 20 are prolonged in the gelatinous tissue of the interior of the cones, almost as far as to the surface, at least to the fifth layer of epithelial cells. The axis cylinders are arranged in the form of a circle, with one, two, or three in the centre. A few fibres penetrated the epithelium outside the cones, and terminated in or between the cells themselves. The number of papillæ he estimates at about 5000, and the number of nerve-ends in the cones alone must therefore be about 100,000; and as they are thus almost exposed to the air, they must constitute a wonderful sentient organ. Some beautiful illustrations accompany the paper.

The External Ear of the Mouse as a Tactile Organ.—Dr. Jos. Schöbl, in the same number of the same periodical, gives an account of the wonderful structure presented by the external ear of the mouse. He describes the ear as composed of two lamellæ, in each of which are three layers of dark-edged nerve fibres and one layer of pale fibres. The last layer forms knots and rings around the base of the hairs that cover the surface of the ear. To each hair sac a small trunk, composed of from two to four *medullalid* fibres pass, and these, then losing their medulla, form a ring around the vitreous membrane of the shaft of the hair, and, running down beside it, become coiled into a knot at its base. The knots are spheroidal or slightly oval, with a diameter of about 0·015 of a millimetre. In a square millimetre of the ear, near its margin, he counted 90 knots, but in the same area near the base only 20. He estimates the number of such knots distributed over the whole surface of the two ears at about 12,000.

Zoology.

Development of the Radiolaria.—According to Cienkowski (*Archiv für mikroskop. Anatomie*, vol. vii. 1871), the monad-like bodies observed by Müller, Haeckel, and Schneider to swarm within *Acanthometra*, *Thalassicolla*, and other allied forms, and regarded by them as of parasitic origin, represent an important phase in their life history. Experimenting upon *Collosphæra Huxleyi* and *spinosa*, this authority observed capsules develop within their bodies, which again broke up into minute spheroids, and were ultimately liberated as bi-flagellate monads, each of these containing one of the small crystalline rods characteristic of the species from which it originated. Though incapacitated by illness from pursuing their development beyond this stage, Prof. Cienkowski considers himself justified in regarding these monadiform bodies as motile zoospores, representing one of the principal modes by which the propagation of the Radiolaria is effected. The "yellow cells" so conspicuous in the representatives of this group, and usually regarded as an integral portion of their organization, he, on the contrary, considers to be matter merely taken in as food.

New Gigantic Salamander.—In the *Comptes rendus* for July 10, 1871, M. E. Blanchard announces the discovery of a new gigantic salamander in Western China, equalling in size and closely allied to the well-known *Sieboldia maxima* of Japan. It is distinguished from that species by the more strongly marked and regular ornamentation of its integument, and by the greater length of the digits of the fore limbs. *Sieboldia Davidiana* is the title conferred upon it by its describer, to commemorate the name of Abbé Armand David, who discovered it. In addition to its zoological interest, the discovery of this new species has important geological bearings, it occurring midway between the Japanese habitat and the schists of Œningen in Central Europe, where Cuvier's famous fossil form, *Cryptobranchus Œnigensis*, occurs.

Nomenclature of Foraminifera.—The *Annals and Magazine of Natural History* for September and October contains the continuation and conclusion of Messrs. Parker, Jones, and Brady's joint contribution on the "Nomenclature of the Foraminifera, and Synopsis of the Species enumerated by D'Orbigny and Soldani." Five plates, including illustrations of 158 species, accompany their monograph, and the nomenclature is revised to accord with the system of classification most recently adopted. The same journal for October includes a brief outline by Dr. J. D. Macdonald, H.M.S. *Lord Warden*, of "A Scheme of Classification of the Invertebrata, founded upon the Progressive-Development Theory." Professor Huxley's system is in the main adhered to, the author supplementing those forms which, in his opinion, constitute the more immediate connecting links between the lowest and most highly organized classes of the sub-division, as indicated in the ollowing table:—

Protozoa.

Astomata.		Stomatoda.	
Rhizopoda.	*Gregarinidæ.*	*Infusoria.*	*Noctilucidæ.*
Cœlenterata.	Cestoidea.	Aprocta.*	Rotifera.
Molluscoida.	Nematoidea.	Proctucha.*	Annelida.
Mollusca proper.	Trematoda.	Echinodermata.	Articulata.

* Turbellaria.

Hæmatozoa.—Descriptions of two newly discovered infusorial organisms inhabiting the vital fluids of the Ceylon red deer and the edible frog appear respectively in the pages of the last issue of the *Monthly Microscopical Journal* and the *Quarterly Journal of Microscopical Science*. The first of these, described by Dr. Boyd Moss, occurs in some abundance in the blood of the Ceylon deer, or "muntjac" of India. In shape these minute parasites are pyriform, possess no distinct mouth, are clothed with cilia at their smaller anterior extremity, and appear to possess many characters in common with the *Opalinæ*. The second and more remarkable form of the two was discovered by Mr. Ray Lankester during his experiments on the red blood-corpuscles of the frog, in connection with the action of various gases and vapours, at Leipzig, last spring. According to his description, these bodies are a little smaller than the ordinary red corpuscles of the host they inhabit, and at first sight might easily be mistaken for a very active white blood-corpuscle. On the application of the highest powers, however, their structure is found to consist of a minute pyriform sac, with the narrower end bent round on itself somewhat spirally, and the broader one spread out into a thin crest-like membrane, exhibiting four or five folds, and produced on one side into a very long flagellum. No mouth or cilia were present, and a pale nucleus and a few granules were the only differentiations of internal structure observed. In life, the animal progresses by the vigorous undulation of the thin expanding membrane, the flagellum also partly assisting. This undulating membrane, in connection with the absence of cilia, is a peculiarity of structure necessitating the acceptation of this infusorium as the type of a new group, separate from either the Flagellata or Ciliata. *Undulina ranarum* is the name proposed for it by its discoverer. Associated with it, Mr. Lankester observed other minute bodies closely resembling the pseudo-naviculæ of the Gregarinæ, which he regards as probably possessing some genetic connection with the form above described.

New Rotifers.—Under the name of *Pedalion mira*, a most extraordinary rotifer is described in the September number of the *Monthly Microscopical Journal*, by Mr. C. T. Hudson. Its peculiarities consist in the presence of a dorsal, ventral, and four lateral prolongations bearing fan-shaped plumes of branching setæ or fascicles of simple ones: the author regards these as homologous with true limbs, and considers that this type demonstrates the crustacean rather than the annelidan affinities of the Rotifera. In the same journal for October a new *Melicerta* is introduced by Mr. Charles Cubitt. Its tube, instead of being composed of a series of spherical pellets, as in *M. ringens*, is entirely hyaline, and presents throughout closely set and well-marked annulations. *Melicerta annulata* is the name given to this form in reference to this peculiarity.

Botany.

The Structure of Fossil Cryptogams.—At the recent meeting of the British Association, Prof. W. C. Williamson read a paper on this subject; and his views are further enunciated in a paper in *Nature*, No. 99, for Sept. 21. The main point in Prof. Williamson's new theory is that the fossil arborescent cryptogams allied to lycopods—the Lepidodendra, Sigillariæ, Stigmariæ, &c.—so abundant in the coal-measures and some other strata, are true cryptogams with an exogenous woody axis. The growth of these to the size of forest trees resulted from the development, within the stems, of a vascular woody cylinder, which grew thicker year by year, such thickenings being the result of additions to the exterior of the previous growths. In the case of the huge lepidodendroid carboniferous plants closely allied to the modern Lycopodia, he contends that we have no closed fibro-vascular bundles, analogous to what are found in ferns, but that, on the contrary, their growth does not cease after a limited time, but was obviously continued, being sustained by a cambium layer, until the plants assumed the magnificent dimensions which their fossil remains now exhibit. Prof. Williamson proposes to separate the vascular cryptogams into two groups, the one comprehending Equisetaceæ, Lycopodiaceæ, and Isoetaceæ, to be termed the Cryptogamiæ Exogenæ, linking the cryptogams with the true exogens through the cycads; the other, called the Cryptogamiæ Endogenæ, to comprehend the ferns, which will unite the cryptogams with the endogens through the palms. In the two following numbers of *Nature* for Sept. 28 and Oct. 5, these views are strenuously contested by Professors W. R. M'Nab and W. Thiselton-Dyer, who maintain that Professor Williamson's proposed division rests on an entire misconception of the structure of cryptogamic stems. In their view we have in lepidodendron merely a pseudexogenous growth taking place in the primitive tissue, while in gymnosperms and dicotyledons we have true exogenous growth in the fibro-vascular bundles; and there is no radical distinction between the structure of the stem in lycopods and in ferns.

Influence of the Period of Fecundation on the Sex of Plants.—The author of the *Vestiges of Creation* advanced the theory that "all beings are, at one stage of the embryotic progress, female, a certain number of them are afterwards advanced to be of the more powerful sex;" and Thury believed that the moment of fertilisation in relation to

the maturity of the ovule exercises a decisive influence on the sexuality of the product, the ovules fertilised earliest producing females, and those fecundated at a later period producing males. With plants this supposed law can only apply in the case of diœcious species, bearing male and female flowers on different plants; and this Prof. Hoffmann of Giessen has endeavoured to test in a series of experiments recorded in the *Botanische Zeitung*, Nos. 6 and 7 for 1871. The species operated upon were *Mercurialis annua*, *Spinacia oleracea*, *Lychnis vespertina*, and *Rumex acetosella;* in each case the female plants were separated into two portions, one being fertilised artificially as early as the stigmata were developed, the other portion after they had been for a considerable time in a receptive condition. The result of his experiments, though in some cases favourable to Thury's hypothesis, in others, and on the whole, was entirely in opposition to it. A remarkable difference, however, was found between the results of artificial and of natural impregnation, which at present there seems no mode of accounting for.

Physics.

On the Freezing of Water.—M. Boussingault has contributed to the *Compt. rend.* (lxxiii. 77) a note on the freezing of water under pressure. A cylinder of steel, 46 centims. long, was bored to a depth of 24 centims. ; the width of the boring was 1·3 centims. and the thickness of the wall 8 mm. ; a cap, capable of being screwed on perfectly tight, was also fitted to the cylinder. As indicator of the condition of the water, whether frozen or not, a small iron ball was placed in the interior. The cylinder was filled with distilled water at a temperature of $-4°$ C., and the cap screwed on ; it was then exposed to a temperature of $-24°$, when the mobility of the iron ball proved that the water was still unfrozen. On opening the cylinder at $-10°$, immediately on the removal of the pressure the water solidified. In a second experiment the water in the cylinder was cooled down to $-18°$ with a similar result.

On the Spectra of some of the Elements.—MM. Troost and Hautefeuille have published (*Compt. rend.* lxxiii. 620) the results of their examination of the spectra of carbon, boron, silicon, titanium, and zirconium. Their general conclusions are :—That in passing from carbon to zirconium, namely, from the metalloids to the metals, more and more refrangible rays are met with : thus the termination of the carbon spectrum is at 105 in the violet in their instrument ; of the boron spectrum at 115 ; of the silicon spectrum at 120 ; of the titanium spectrum at 130 ; and of the zirconium spectrum at 135. They all commence at about the same point in the red. Each of the spectra exhibits three maxima of intensity, these maxima advancing in passing from carbon to zirconium more and more towards the violet. Thus the least refrangible maximum in the carbon spectrum is midway between D and E ; in that of boron at E ; in that of silicon between E and F; that of titanium between F and G, nearer F ; in that of zirconium between H and L. The most refrangible maximum for carbon is near the ray G ; for zirconium far in the ultra-violet. A study of the spectra of these elements leads, therefore, to their classification in the order corresponding to that of their other properties. M. Ditte (*ibid.* 622) who has studied the spectra of sulphur, selenium, and tellurium, arrives at the same general conclusions. The limit of visible rays is at 120 in the violet in the case of sulphur ; at 125 in the case of selenium ; and at 146 in the case of tellurium. The three spectra present each two maxima of intensity, each of which consists of two rays or bands separated by a dark interval. In passing from sulphur to tellurium these maxima of intensity also advance towards the violet.

On the Influence of the Size of the Electrodes in a Battery.—The *Compt. rend.* (lxxiii. 436) contains a discussion and a number of experiments by M. Moncel on the influence of the dimensions of the polar electrodes on the intensity of the current in a battery. He considers that his experiments prove that there is a great advantage to be gained for telegraphic purposes by increasing the size of the electronegative plates. Thus in a Daniel's battery the copper cylinders employed should be as large as possible, and the surface of zinc reduced in proportion. Whereas, by so doing, the resistance of the elements is not sensibly increased, the battery is more constant and more readily maintained in working order, the expense for zinc much lessened, and the saline efflorescence considerably diminished.

New Books.

Allbut, T. C. On the Use of the Ophthalmoscope in Diseases of the Nervous System. London : Macmillan and Co.

Arnoldt, Dr. Ohne transcendentale Idealität des Raumes keine nothwendige mathematische Erkenntniss vor aller Erfahrung. Königsberg : Rosbach.

Forel, Dr. F. A. Essai de Chronologie archéologique. (Bulletins de la Société Vaudoise. Sept. 1871.)

Lange, F. A. Friedrich Ueberweg. Berlin : Mittler.

Schultze, Max. Archiv für mikroskopische Anatomie. 7. Bd. 6 Taf. Bonn : Cohen.

History.

The History of India as told by its own Historians. The Muhammadan Period. Edited from the posthumous papers of the late Sir H. M. Elliot, K.C.B., by Professor John Dowson, M.R.A.S., Staff College, Sandhurst. Vol. III. London : Trübner and Co.

We are glad to record the vigorous progress made in the publication of Sir Henry Elliot's materials for the history of India at the able hands of the editor, Professor Dowson. The first volume of 1867 contained, by way of introduction, the reports of early Arab geographers on India, and an account of the historians of Sind. It was followed in 1869 by the second volume, which gave a picture of the first centuries of Indian Muhammadan history from the inroads of Maḥmûd till the foundation of the empire of Delhi, and beyond that epoch as far as A.D. 1260, towards the close of the reign of Nâṣir-aldîn. Starting from the father of Indian researches among Muhammadans, Abû-Raiḥân Al-Bîrûnî, the editor put in requisition the works of all chroniclers contemporaneous with the events which were to be detailed. The period of less striking grandeur consequent upon the death of Nâṣir-aldîn (A.D. 1266) till the pernicious incursion of Timur (A.D. 1398) is the subject of this third volume. It comprehends the decadence of the Slave King dynasty under Balban and Kai Kubâd (A.H. 664–687), the rule of the three Khiljî Sultans (A.H. 687–721), and the fate of the Tughlak dynasty (A.H. 721–817) from their accession to the throne till the dissolution of the empire under Maḥmûd Tughlak, in consequence of the sack and devastation of Delhi by the hordes of Timur (A.H. 800), when the Indian armies were annihilated, and all the provinces threw off their allegiance, when Maḥmûd himself was a fugitive, and the authority of Delhi under Ikbâl scarcely extended beyond the walls of that city. There is, however, a hiatus in the chain of contemporaneous chronicles extending from the death of Fêrôzshâh Tughlak till Bahlol Lodî, that is, A.H. 790–854 (comp. Nassau Lees, "Materials for the History of India," *Journal of the Royal Asiatic Society*, September, 1868, p. 38 *seq.*). As regards the present volume, the years A.H. 790–800 will have to be more fully illustrated from other materials.

The sources of information described in the present volume consist of general or special histories and monographs. They were all composed between the year A.H. 699, when Waṣṣâf finished the four first volumes of his work, and 830, when Sharaf-aldîn Yazdî composed his Zafar-nâma. The class of general histories is on the whole of very little importance, when compared with the extent of the volumes which they fill; valuable they are only in two respects : when they contain extracts from chronicles which have since been lost, and, secondly, when they contain information on contemporaneous events, provided the author was in a position to make independent researches. From this point of view we could easily do without the greatest part o Rashîd-aldîn and the compilations of his epitomist, Binâkitî. As a source of original value the Jâmi'-altawârîkh is to be used for the history of the Moghuls till Uljaitu-Khân, and as regards India it contains a copy of Bîrûnî's accounts, which would prove to be of some value for the philologist.

The same more or less may be said of the Ta'rîkh-i-Guzîda, composed by Hamd-allâh Mustaufî, a native of Kazwîn, the secretary of Rashîd-aldîn and of Rashîd's son Ghiyâth-aldîn, A.H. 730. The only portion of his "Selected Chronicle" to which we can attribute any special value is his biographical notes on Eastern celebrities, chiefly contained in book vi. Almost every Persian chronicle contains similar materials, which in most cases refer especially to the native country of the author. It would be a work of no ordinary merit to

collect them from all available chronicles and publish them with a translation: the history of Eastern civilisation and literature would thence derive much useful illustration.

To return to Mustaufî, we may state that almost all the sources which he used are still extant, and that with regard to those affairs of which he might have given an independent report he is too brief to be of much value. Besides, he swells his book by numerous irrelevant poetical quotations.

Fortunately we can put a higher value on the second class, that of the special histories, here represented by several standard works. Waṣṣâf, a *protégé* of Rashîd-aldîn, composed, as a continuation of Juwainî's Jahân-Kushâ, the history of the Moghuls from Kublai-Khân to 'Abû Sa'îd (A.H. 728), in five volumes. The offensiveness of his style, the *ne plus ultra* of Eastern phrase-fabrication, renders it a most disagreeable task to wade through the intricacies of his *sesquipedalia verba*. Still we agree with the editor that the work is full of historical matter, in fact, of independent value for a grand period of Eastern history. Everything relating to India in the third and fourth books is given in a translation.

Whilst the preceding compositions had to be noticed solely as containing occasional notes on India, the following works bear exclusively on that subject. First, we may mention the monograph of the celebrated poet Mîr Khusrû, his Ta'rîkh-i-'Alâî, in which the history of part of 'Alâ-aldîn Khiljî's reign (A.H. 695–710) is recorded. As Mîr Khusrû, who died A.H. 726, relates the events only of his own time, in many of which he took part himself, his composition, though written in a style *à la* Waṣṣâf, is of great interest, particularly for the mode of warfare then employed. In the appendix (on pp. 523 *seq.*) an analysis of his poems is given. The historical matters therein contained are highly interesting; it was a most meritorious act to have directed attention to these sources, as historical reports wrapped up in Persian poetry are very liable to be overlooked.

There can be no doubt that the two works called Ta'rîkh-i-Fêrôzshâhî of Ḍiyâ-aldîn Barnî and Shams-i-Sirâj 'Afîf are the most precious gems in this chain of writings. Barnî was reasonable enough to give up his original design of composing a general history from the creation down to his time, and to confine himself to writing a continuation of Jauzjânî's Ṭabakât-i-Nâṣirî, in which the history of India is carried as far as A.H. 658. Passing over the last six years of Nâsir-aldîn, he commenced with Ghiyâth-aldîn Balban (A.H. 664), and ended with the sixth year of Fêrôzshâh Tughlak (A.H. 758). Although he is not always fair in his narration, being partial to that dynasty under which and probably for which he wrote, and not very reliable in his dates, his materials are extremely valuable, and we must thank the editor, Prof. Dowson, for the rich extracts, which "contain the pith and marrow of the work, all that is likely to prove in any degree valuable for historical purposes." A friend of the poets Mîr Ḥasan and Mîr Khusrû, he intended to complete his history of Fêrôzshâh, but did not execute his design. He died a poor man; the date of his death seems to be unknown.

The second Ta'rîkh-i-Fêrôzshâhî of Shams-i-Sirâj 'Afîf is a monograph on the reign of Fêrôzshâh Tughlak (A.H. 752–790). We learn from several passages in the book that the author's family was for generations connected with the Tughlaks, and that he himself was attached to the court of Fêrôzshâh. So we can understand that he, like Barnî, is not in every respect a fair narrator, but, "making due allowance for the prevalent spirit of eulogium and exaggeration, it not only raises in us a respect for the virtues and munificence of Fêrôz and for the benevolence of his character, as shown by his canals and structures for public accommodation, but gives us altogether a better view of the internal condition of India under a Muhammadan sovereign than is presented to us in any other work, except the Â'în-i-'Akbarî" (pp. 269, 270). Shams-i-Sirâj does not attempt the highly artificial style so much in vogue among Eastern writers, and this is perhaps the reason why in the East itself he does not seem ever to have been much appreciated. His two other monographs on the two first Sultans of the Tughlak dynasty, the Manâḳib-i-Ghiyâth-aldîn Tughlak and Manâḳib-i-Muḥammad Tughlak, have not come down to posterity.

The same prince who is the subject of Shams-i-Sirâj's monograph himself composed a brief summary of his *res gestae*, called Futûḥât-i-Fêrôzshâhî. In plain style he relates his reform of justice and administration, his protection of the faith against Shîas and Hindus, his erections, &c. Copies of the treatise are extremely rare. Prof. Dowson has translated the whole from a manuscript in the possession of Mr. Thomas.

The last two works in the series of chronicles described in this volume refer to Timur. The first of them, Malfûzât-i-Tîmurî, pretends to be an autobiography of Timur. The reader will be astonished to learn how that monster—who knew so well how to sack and burn cities, to slaughter hundreds of thousands of his fellow-creatures, to lay waste almost one-half of the then civilised world in a marvellously short time—in his leisure-hours received inspirations from Clio; that he, in short, was a Tatar Cæsar. Even admitting that he knew how to write, we cannot believe in his authorship of the book in question, and that for the following reasons.

A certain 'Abû Tâlib Ḥusainî presented to the Emperor Shâhjahân a Persian translation of an autobiography of Timur, from his 7th to his 74th year, written originally in Cagatâî. The original, he stated, had been found in the library of a Pasha of Yaman. This story sounds strongly apocryphal. First of all, it is not very likely in itself that Timur should have written his own history. But Bâbar had done so, likewise Jahângîr. Why should not also the father of the family, Timur himself, have had this "family predilection"? Certainly it was a very good business to produce such a work at the court of Shâhjahân. It is not necessary to suppose that this prince himself believed in the authenticity of the book, but probably he deemed it in his interest to adopt the story as it was produced, and to make people believe in it.

Professor Dowson shows (p. 390), from the preface of the Zafar-nâma, composed by Shâraf-aldîn Yazdî, A.H. 828, only thirty years after Timur's death, that certain officers in the suite of Timur were always employed to write down everything that happened to him, in fact to compose court-chronicles both in Turkî and Persian. There is no reason to doubt this statement of Yazdî; it is from these materials that he composed his eulogy, not to say history, of Timur. But were these materials every gathered and formed into one coherent composition, into a book? This we can hardly believe to have been the case if we remember the statement of Yazdî, that his patron Ibrahim, Timur's grandson, tried to procure for him "from all parts of his dominions copies of the *works* relating to the life of Timur" (p. 391). But admitting that such a book existed, how, then, did it happen that it remained unnoticed for centuries under the reigns of all Timur's descendants as far as Shâhjahân? If, after the death of Timur, another dynasty had come into power, it would be only natural that they should have tried to destroy every memorial of their predecessors. But that was not the case; members of his family were sitting on the thrones of

Persia, Transoxania, and India. Further, are those court-chronicles identical with the Malfûzât-i-Tîmurî, as Professor Dowson seems to believe (p. 340)? The editor states quite correctly with regard to Yazdî's Zafar-nâma and the Malfûzât that the one is a mere reproduction of the other. And from this fact we conclude that the Malfûzât are forged upon the basis of Yazdî's work. In the first instance the Malfûzât are composed in the strict form of an autobiography ("I said," "I ordered," &c.), and we can scarcely assume that this was the form of the above-mentioned court-chronicles. Secondly, if Timur had been an author himself, Yazdî would certainly have mentioned it, and would, page after page, have enlarged on his stylistic attainments. But such is not the case.

The book of Ḥusainî was revised under the same Shâh-jahân by Muḥammed 'Afḍal Bukhârî, with the view of making it more conformable to the Zafar-nâma. The latter book of Yazdî, who died A.H. 850 (A.D. 1446), is by translations into French and English well known in Europe, and is distinguished for its partiality towards Timur, and for the high polish of its style.

In the appendix, besides Mîr Khusrû, the Ḳaṣâ'id of Badr Châch are laid under contribution. The extracts from the geographers Shihâb-aldîn Dimishkî, who died A.H. 749, and the famous Ibn Batûta, who lived for some time at the court of Muḥammad Tughlak, are of first-rate interest.

It is scarcely necessary to add that this volume, as the two preceding ones, is highly creditable to the learning and sagacity of Sir Henry Elliot, and of the editor, Professor Dowson. The work will be of long lasting value as an introduction to Indian historiography. Being such, it naturally cannot be considered more than the beginning of an undertaking the proper continuation of which would be the translation of all the works printed in the *Bibliotheca Indica* relating to Indian history; for books in an Eastern tongue will always more or less be an unproductive capital.

ED. SACHAU.

Contents of the Journals.

Theologisches Literaturblatt (moderate Roman Catholic, Bonn), July 31.—Contains notices of Nohlmann's Life of Arnold, Archbishop of Mainz, 1153–1160, and Remling's Life of the late Bishop Nicholas of Speyer (well known for the magnificent restoration of his cathedral). The contrast is curious and instructive. One life shows us the struggle of the burghers for freedom amid the rivalries of the great families, the archbishop being the chief ruler; the other gives a lively picture of the modern struggle between church and state in Bavaria, and the most modern forms of religious controversy. Aug. 14.—Janssen reviews Kriegk's Deutsches Bürgerthum im Mittelalter, a good account of city life in the middle ages on its social side, the schools, hospitals, prisons, baths, &c., the marriage and baptismal festivals, and so on. The materials are largely drawn from the archives of Frankfort-on-the-Main. Aug. 28.—Long and valuable notices of Boethius and the Anician Family by Schündelen (based on Aschbach's treatise and Peiper's edition) are contained in this and the following number. The Anicii were the leading family in the later Western Empire, and through Boethius and Gregory the Great exercised a distinct influence on the middle ages. They were divided into many families, to one of which the poetess Prolea belonged. The change of the ancient Roman system of family names is very curiously illustrated.—Zingerle's book on the manners and customs of the Tyrol, ed. 2, is much commended, as also Meyer's Handbook for Rome and Central Italy (Hilburghausen, 2 vols. 8vo.), in which special attention is paid to the archæology.—Dante's mysticism (into which he passed through the scholastic school of thought) in the Divine Comedy, and his political views in the De Monarchia, are described in this and the next number, the former in a review of Delff's book by B. ten Brink, the latter by A. von Reumont. Sept. 11.—Concludes with a review by Jannsen of Hennes' Life of Count Stolberg, whose interesting letters show the nature of the views which led him inevitably to become a Roman Catholic.

Götting. gel. Anzeigen, Aug. 23.—Contains a full account of the new edition of Bruns' Fontes Juris Romani Antiqui, in which the last results of new MS. researches have been adopted. The full collection of his laws is very useful.—Wilson's The Ever Victorious Army (which suppressed the Taeping rebellion) is praised for its thorough account of the existing state of China, important to us above all nations. Aug. 30.—Liebrecht reviews Hock's Croyances et Remèdes populaires au pays de Liége: the way in which medieval charms and remedies have survived could be easily paralleled in England.—Nitsche's Gothic War under Valens and Theodosius is shown to be based too much on the order of events in Zosimus, whose anecdotes are by no means arranged in chronological order.

Literarisches Centralblatt, Sept. 2.—Droysen's Gustavus Adolphus, vol. 2, is much praised. It shows how the king began the war as a defensive one, to secure the Baltic coast from the overwhelming predominance of Austria. Droysen has made use of the numerous contemporary pamphlets, and of the lately published extracts from the Swedish archives, as well as those of Dresden.

New Books.

CALENDAR OF STATE PAPERS and MSS. relating to English Affairs, existing in the Archives, &c. of Venice and other Libraries of N. Italy. Vol. IV. 1527–33. Ed. Rawdon Brown. Longmans.

FREEMAN, E. A. Historical Essays. Macmillan.

GEIGER, A. Das Judenthum und seine Geschichte. 3te Abth. Vom 13. bis zum Ende des 16. Jahrhdts. Nebst einem Anhang: Das Verhalten der Kirche gegen das Judenthum in der neuern Zeit.

MORRIS, J. (S. J.) Father Gerard's Narrative of the Gunpowder Plot. Longmans.

NUMISMATISCHE ZEITSCHRIFT. Hrsg. v. Christ, Huber, &c. 3. Jahrg. 2. Hft. Wien: Braumüller.

THE CARTE MANUSCRIPTS. Report to Master of the Rolls, by C. W. Russell and J. P. Prendergast. Eyre and Spottiswoode.

VON ARNETH, Alfred Ritter. Johann Christoph Bartenstein u. seine Zeit. (Reprint from the Archives for Austrian History.) Wien: Gerold's Sohn.

VON RAUMER. Gesch. der Hohenstaufen u. ihrer Zeit. 4te Aufl. 2te Liefg. Leipzig: Brockhaus.

VON STÄLIN, C. F. Wirtembergische Geschichte. 4ter Th. 1ste Abth. Stuttgart: Cotta.

Philology.

Introduction to Latin Paleography. [*Anleitung zur Lateinischen Paläographie.* Von W. Wattenbach, Professor in Heidelberg.] Leipzig: 1869.

THIS work, which, for German readers, is a compact and available manual of Latin paleography, labours under a peculiarity of plan which must make it comparatively useless to non-German students. After a printed introduction of twenty-two pages, in which is given a succinct account of the changes introduced into writing from the first century of our era to the fifteenth, M. Wattenbach has been at the pains to have autographed forty-four pages in German handwriting of a minute, often obscure, always trying character, containing first the forms of the letters in historical sequence, then a list of the most common abreviations, lastly a slight account of the separation of words in MSS., punctuation, and arithmetical notation. We venture to think these autographed leaves a mistake; the path of paleography is not so smooth as to make any extra difficulty desirable; even if, as a supporter of the plan might say, any one who has succeeded in reading a crabbed German hand of the nineteenth century, has *ipso facto* attained to the possibility of decyphering any but the more difficult forms of medieval paleography. But to those who have the patience to master this difficulty, the book is interesting, and from its cheapness and compactness, recommendable.

M. Wattenbach makes ten principal forms of manuscript character, which, though partially intersecting, are in the main chronologically consecutive. Of these the first is writing in capitals; the best specimens of which are to be found in

the fragments of a Latin poem on the war with Cleopatra preserved in the Herculanean papyri, facsimiles of which are to be found in the second of the Herculanean volumes published at Naples, and in the careful copies made by order of George IV. and still to be seen in the Bodleian; in the excerpts from Vatican MSS. in Mai's *Auctores Classici*, i.–iii., the *Plauti Fragmenta inedita* of the same author (Mediol. 1815); and the leaves of Sallust and Virgil facsimiled by Pertz. Writing in capitals went on long after other forms had been introduced; the Florentine Virgil is dated under Odoacer; the Turin codex of Sedulius, and the Paris codex of Prudentius, belong perhaps to the sixth centuries. The second form is the uncial, in which A, D, E, M assume a rounded form, and other letters reach above and below the line. Approximations to this are found on the walls of Pompeii; but the earliest document in which it is regularly employed is believed to be a MS. containing the Acts of the Council of Aquileia, A.D. 381, in the margin of which are written remarks in a cursive character by a bishop, Maximinus, about 390; to the fourth century is also ascribed the Veronese palimpsest of Livy lately edited by Mommsen; other specimens are the fragments of Cicero's *de Republica* and other orations published by Mai; the Bobbian codex of Fronto; the celebrated Veronese palimpsest of Gaius, recently facsimiled by Boecking (Leipzig, 1866); and the Florentine Pandects of Justinian. In both these last the writing approaches at times a minuskel; the Gaius is, as is well known, full of abbreviations. Next in order to the uncial character M. Wattenbach places the Tironian *notae;* a set of cyphers conventionally used for particular words, supposed to date from the time of Cicero, and still used by notaries in the ninth century, after which they gradually fell into disuse. The fourth class is the old Roman cursive, samples of which are extant in the wax tablets found about thirty years ago in some gold mines in Transylvania, and proved, by the name of the consul attached, to belong to 169 A.D., and in some inscriptions; similar to which is the character of two imperial rescripts discovered in Egypt, and belonging to the fifth century, as well as some Ravenna documents on papyri, the oldest of the year 444. In these the characters assume a sprawling, lengthy, and awkward shape, at times reminding one of the letters and pothooks of our childhood. From a combination of this Roman cursive with uncial elements arose the fifth class of national hand-writings (Nationalschriften), of which there are three kinds:—(*a*) the Lombard, dating from the ninth century, to which the Bible of La Cava, near Naples, belongs, and reaching its perfection in the eleventh under Desiderius, abbot of Monte Casino; it was sometimes called *litera Beneventana*, a name also given to the peculiar character of the papal bulls, a character closely connected with that of the rescripts above mentioned; these bulls were still written on papyrus in the twelfth century, though from the difficulty of reading them, as well as from the gradually increasing use of parchment, a more ordinary character was early in use; *e.g.* in the two bulls of John VIII. of 876 and 877 given by Silvestre (2281, 2335); (*b*) the West-Gothic or *litera Toletana* peculiar to Spain, of which Westwood gives a fine specimen from a MS. of the Books of Daniel and Revelation; (*c*) the Merovingian, which is very like Early Lombard, and was generally employed in documents, sometimes, especially in combination with a degenerate uncial, for transcribing books. Whilst the cursive was thus developing into its varieties, uncials were undergoing changes of their own. As early as the sixth century manuscripts were written in uncials closely resembling the later Carlovingian minuskel; such are the Hilarius of 509 or 510, the Sulpicius Severus written at Verona in 517, the Codex Canonum Corbeiensis of 573; this variety forms M. Wattenbach's sixth class, and it called semi-uncial (halb-uncial). Meanwhile in Ireland from the sixth century onward a characteristic style was developing: it had three principal forms, an uncial, a large rounded semi-uncial, a small and pointed cursive. This last maintained itself in use till the fifteenth century. In all of them there is a tendency to ornamentation; Giraldus Cambrensis says of them, *tam delicatas et subtiles tam actas et arctas tam nodosas et vinculatim colligatas tamque recentibus adhuc coloribus illustratas notare poteris intricaturas ut vere haec omnia angelica potius quam humana diligentia iam asseveraveris esse composita;* sometimes the human figure is caricatured, as in the Book of Kells, believed to be the oldest specimen of the kind. Traces of Irish calligraphy are found in the monasteries of Würzburg, Switzerland, France, and Italy; Luxeuil and Bobio are among the more celebrated of their foundations. This Irish writing constitutes the seventh class; the eighth is the Anglo-Saxon, perhaps modelled equally on the Irish and the Roman, and also exhibiting an uncial, a semi-uncial, lastly an approximately minuskel character. The connection between England and France naturally caused the hand-writings of the two countries to react on each other. Since the year 789 the revival of a literary spirit in France had shown itself in a more careful study of the text of the Scriptures, and a greater attention to orthography, calligraphy, and punctuation. A return was made on the one hand to uncial; on the other, a new system of writing, the minuskel, was introduced and perfected. It is to the famous school of Alcuin at Tours that we are to ascribe this reformation; his scholars soon carried it into every part of France; in one of its forms it has elements of Merovingian, semi-uncial, and Anglo-Saxon, gradually developed into the fixed straight minuskel; while the Carlovingian type is rounder, with traces of cursive and occasionally of semi-uncial letters. Among the best specimens of it may be ranked the Harleian MS. of the Aratea (No. 647) written in Carlovingian, and containing pictures of the stars seemingly modelled on the antique. It gradually acquired a complete predominance, becoming more and more regular in the defined form of each letter, the sharpness and clearness of the strokes, the perfect separation of each word from the rest, the limited and judicious use of abbreviations, and the carefulness of its punctuation. In fact it is to this perfected minuskel that the Humanists of the fifteenth century returned, and which became the standard of imitation in printing. Owing to its wide-spread use, its history is not always easy to trace; speaking generally, the West is fifty years in advance of the East; but every student of classical texts at the present day knows how often opinion fluctuates as to the age of particular MSS. Towards the end of the twelfth century the letters lose their defined form, and writing becomes more careless, abbreviations increasing in frequency, and the general appearance deteriorating; the fourteenth introduced the angular Gothic or monkish character; in the fifteenth the immense variety of hand-writings caused the return above mentioned to the simpler minuskel.

In the above abstract M. Wattenbach's work is followed implicitly; in an age when MSS. are so much studied as the present, his book, together with its companion volume on Greek paleography, can hardly fail to be acceptable.

R. Ellis.

Select Letters of Pliny the Younger. Latin Text, with English Notes, by A. J. Church, M.A.; and W. J. Brodribb, M.A. London: Longmans.

The first question that arises in regard to this book is why any selection should be made at all. The complete series of Pliny's *Epistles* would have formed but a moderate volume;

and they are themselves a selection, made by the writer himself, of those letters which he had written "with more than ordinary care." And though the choice that has been made by the present editors shows considerable judgment, and includes all the principal letters for which we are accustomed to refer in estimating the character and literary power of the author, yet there are several missing whose absence we cannot but regret. Ep. 20 of b. i., for instance, would have been a valuable addition to the very short section of letters bearing on Pliny's professional career, whilst it is further interesting for its notice of Cicero and other leading orators. Ep. 5 of b. ii., again, is much wanted as a companion to i. 8, which apparently refers to the same panegyric on his native city. Ep. 6 of b. viii. arrests attention by its length, but has besides a special interest from the earnest pointedness of its sarcasm, directed against the servility of the senate's eulogy upon Pallas. And indeed there are few of the letters which do not add something to the conception which we form of Pliny as the finished gentleman, if it be but the pleasant banter with which he reproves a negligent correspondent, or the true delicacy with which he apologizes for conferring a favour. The letters now before us are in bulk very nearly one-half of the whole collection, and are well arranged, according to their subject-matter, in five classes. This arrangement, however, makes it very desirable that we should be furnished with a table of parallel references, as at present it is difficult to find any letter which may be referred to: and this would also have enabled the editors to dispense with the clumsy method of quoting letters in their book by their own, and missing letters by the ordinary, numeration.

Accompanying each letter is a short account of its subject and occasion, and these are generally well done. The notes are at the end, and, though unequal, are for the most part satisfactory. Sometimes they are obscure, as when "litoris spatium," in the beginning of the account of the Laurentine villa, which probably means "the wide frontage to the sea," is explained to be "the wide stretch of the shore between the villa with its grounds and the sea." In the same letter "salvo die" ("without stealing any time from the business of the day") is interpreted as of "a thoroughly well-spent day," which is at least too vague; and our editors, in common with their predecessors, seem to be unconscious, in their interpretation of "quod (litus) longa tranquillitas mollit, . . contrarius fluctus indurat," of the effect of the sea in hardening the soft sand over which it flows. One of the hardest passages in the letter, "si innare in proximo cogites," may be rightly evaded by the modern emendation "mare"; but the old reading should at least have been noticed. In the description of the Tuscan villa, "villa in colle imo sita prospicit quasi ex summo" still awaits a satisfactory explanation, but in so long a note as is given on the passage room might have been found for Gesner's view that "sita" is the accusative plural. "Ambitus," in § 30 of the same letter, is probably not "a winding staircase," but "an indirect approach," avoiding the main lobby of the house for the sake of privacy. In the account of the Clitumnus, "fons adhuc, et iam amplissimum flumen," is not, "up to the point of which I have been speaking, the *gurges* is a mere stream, from that point it becomes a considerable river": but "the stream, though still in its infancy, is already a considerable river." In spite, however, of these and similar blemishes, the notes for the most part show sound scholarship, and especially an appreciation of the peculiarities of the Silver Age.

The text is mainly based on Keil, but it requires more care in the correction of the press. In the shortest of the four sections we notice the following inconsistencies. In c. 1, § 14, the text has *laudicœni*, the notes *laudiceni*, with a curious etymology suggested which absolutely depends on the orthography. In c. 4, § 6, we have in one line "possis, *quum* voles, dicere; dices, *cum* velle debebis:" and in the same section the text has "*mollitia*," the notes "*mollitie*." In c. 5, § 13, the text has ἀκροάματα in Greek characters, the notes explain that the word, written in Roman characters, had become naturalised in the Latin language. There are besides more simple printer's errors, especially in punctuation, than one would wish to see in a book so nicely got up as the volume before us: and we would hope that a speedy demand for a second edition may enable the editors to remove them, and to complete a work which, even incomplete, is a useful aid to the understanding of an author hitherto too much neglected. JOHN R. KING.

Short Grammar of the Old-German Dialects. [*Kurze Grammatik der altgermanischen Dialecte.* Von Moritz Heyne. I. Theil: Laut- und Flexionslehre. Zweite verbesserte Auflage.] Paderborn: F. Schöningh, 1870.

THIS work may be described as a brief synopsis of the more important results of Teutonic philology from Grimm's time to the present day. Such a book was certainly needed, especially by beginners, for whose wants the elaborate discursiveness of Grimm's Grammar is ill adapted, and who would otherwise have to collect from a variety of scattered publications the information which is here brought together in a convenient form. Notwithstanding its elementary character and small compass, the book contains no small amount of original matter. Heyne has carefully worked up Old-Frisian, which is imperfectly represented in Grimm's Grammar, and greatly improved the account of Old-Saxon, chiefly by utilising the less known monuments of the language. The excursuses on the various dialects are of especial value: they treat of the dialect of the Low-German Psalms, on the Northumbrian, West-Frisian, Feroic and Gothlandish dialects. It is to be regretted that the Feroic section is based, not on the original edition of the songs, but on the later one published at Copenhagen, which partially ignores the phonetic peculiarities of the dialect by writing it according to etymological principles: the result being that the said edition is almost useless for scientific purposes, as far as phonology is concerned. The Old Norse sections are too exclusively founded on Grimm's Grammar, and are in many cases calculated to perpetuate errors that might long since have been corrected. In the first place the term "altnordisch" is incorrect. The parent language of Icelandic and Norse has not been preserved—we know nothing about it except by conjecture—all the forms given in the grammars are Icelandic, many of them *exclusively* so, and some of them exist only in the living Icelandic language. Why not, then, call it Icelandic? Many of Heyne's forms are not even Old-Icelandic—much less "Old-Norse." Thus, throughout the verb "to be" he entirely ignores the *s*-forms, *vesa*, *vas*, &c., although in the beginning of the thirteenth century these were the only ones in use. Such inaccuracies are inseparable from the attempt to condense and popularise the results of a science so imperfect as that of Teutonic philology: they ought, however, to put the student on his guard against too readily accepting without examination unsubstantial theories merely because hey have been handed down as established facts from one generation to the other. The theory implied in the term "*Rückumlaut*" is a case in point. Rückumlaut is thus defined by Heyne (p. 19): "Wenn in Folge Wegfalls des umlautenden Vocals der umgelautete zu seiner ursprünglichen Lautgeltung zurückkehrt, so nennt man das "*Rückumlaut*." The simple explanation of such forms as O.-H.-G. *brennan*, *branta* = *brannian*, *brannita* is that in the latter the *i* fell out *before*, in the former *after*, the Umlaut began. The return of

a sound to its original form is simply impossible, except by mere chance or the working of analogy. The term is therefore a misnomer, and ought to be banished from our grammars. HENRY SWEET.

Intelligence.

At the opening of the present session at University College, London, Prof. Robinson Ellis delivered a brief but highly interesting lecture on the study of Latin during the past century. The lecturer commenced by remarking that it was in Greek rather than in Latin criticism that the two great English scholars of the eighteenth century, Bentley and Markland, achieved their most permanent successes; and that the publication of Wolf's *Prolegomena*, in 1795, gave a fresh impetus to the study of Greek, which thus for many years absorbed the energies of the greatest scholars of Europe. With Mai and Niebuhr, however, the tide turned. Besides re-writing Roman history, Niebuhr was a careful and devoted investigator of MSS., and in this respect, like Mai, a man who determined in advance the future course of Latin studies. Mai, again, whose services it has become of late a fashion with many German scholars to disparage, stands easily first among discoverers of manuscript treasures; and it was he who set the example of that scrupulous attention to ancient orthography which is now one of the principal topics of dispute and discussion. After a passing tribute of respect to the names of Orelli, Philip Wagner, and K. O. Müller, the lecturer proceeded to speak at some length of Lachmann, Ritschl, and Mommsen: of Lachmann, as the representative of modern critical method; of Ritschl, as revolutionising opinion in regard to the early literature of Rome by his *Plautus;* of Mommsen, as one who directed enquiry to inscriptions and the ancient languages of Italy, and as embodying the best fruits of recent research in his well-known *Roman History*, in which technical philology connected itself with a subject of universal interest. The lecture concluded with a prophecy that in the department of Latin grammar important results might be expected from our enlarged knowledge of the remains of the earliest Roman literature and the new study of inscriptions.

Among Messrs. Teubner's announcements we find *Historicorum Graecorum relliquiae*, ed. Aemilius Hertz. We are not precisely informed as to its relations to Müller's collection of the fragments in Didot's series, but those familiar with M. Hertz's previous works need not be reminded that his name is the best guarantee that the new book will be well worth having. It seems also that we may expect an entirely new recension of Plutarch's *Moralia*, by Rudolf Hercher; the text being based on MSS. either never before collated or only partially used by Wyttenbach and Duebner. We rejoice to learn, moreover, that this important addition to the *Bibliotheca Teubneriana* is but the forerunner of an elaborate critical edition of the *Moralia* by the same distinguished scholar.

In a recent number of *Im Neuen Reich*, Professor Leskien of Leipzig gives an interesting survey of the Slavonic races which have become merged in the German nationality. Although it contains nothing new to Slavonic scholars, the following abstract of it may be instructive to many readers. At one time nearly all Central Europe, from the Black Sea to the Baltic, and from the Upper Volga to the Elbe, was inhabited by Slavonians. The power of the Bulgarians suffered from the Byzantines, a central power uniting north and south was rendered impossible by the settling of the Hungarians in Pannonia, the Poles and the Russians found their political centres later, and the union of the Slavonic tribes west of the Vistula was prevented by the attacks of the Germans. It is with these last that German history from the ninth till the twelfth century is mainly occupied. From that time forth the Germans got the upper hand, and their language and colonists finished the work commenced by the sword. Among the remnants of German Slavonia one may mention the following: 1. The Sorbians, in Upper and Lower Lausitz, more commonly called the Wends. Their two dialects are still used, but so Germanised that, not to mention the vocabulary, their syntax is hardly to be recognised now as Slavonic. 2. A small tribe, called Caszubians, at the mouth of the Vistula, are the only representatives of the once numerous Polabians (meaning "residents *near the Elbe*"). So early as the middle of the fourteenth century their language was fast falling off. 3. The so-called Wends on the left bank of the Elbe to the east of Lüneburg; their Slavonic name was Drawenians or Drevjanians. It was only with the eighteenth century that their language died out; it is known to have been more Germanised than even the Sorbish of Lausitz. 4. To these may be added the Lithuanians, subdivided into Litavians, Letts, and Prussians. The Letts are in Russia. The Litavians are on German ground, and speak their own language to this day, though its territory is daily encroached on by German. The language of the Old Prussians seems to have died out in the fifteenth century, not, however, without leaving behind it a few documents of some linguistic value. The Old Prussians bravely withstood the German Knights for nearly a whole century: finally they succumbed and rapidly disappeared. So there still remain within the German empire 120,000 Litavians, 150,000 Sorbians, 50,000 Tsechs, and about two million Poles, making in all not more than two and a half millions, whence Professor Leskien infers the absurdity of fearing anything from Panslavism in Germany."

The new edition of the *Historia Apollonii Regis Tyri*, by A. Riese, with an elaborate critical commentary and careful introduction, is a real contribution to Latin philology, and the editor has doubtless succeeded in his aim that in future this curious composition cannot be neglected by writers on Latin literature. The editor gives an exhaustive collection both of the Grecisms and of the low Latin peculiarities of the text, and proves the Latin to be a translation of a Greek original made by a Christian not much later than the beginning of the sixth century A.D. We possess three versions of this celebrated romance, which was widely read in the middle ages, and translated into almost all European languages; and nearly a hundred MSS. of the Latin text are said to be in existence, many of which are in England. Professor Riese has chiefly followed a MS. at Florence, which unfortunately is incomplete, and two or three MSS. of the second class, among which there is an Oxford one of Magdalen College. The text is very carefully edited, though in some instances one might wish the editor to have been more confident in his own emendations, *e.g.* p. 1, 8, his *quaerebant* is no doubt right; cf. the Greek version edited in my *Mediæval Greek Texts* (a publication unknown to Professor Riese). At p. 14, 7, we should certainly emend *en* (the MSS. have *et*), *obscurato sereno lumine coeli*, though even then we do not get rid of the prosodiacal mistake in *sĕreno*, and we are afraid that it would be lost labour to attempt to correct the faulty prosody of the whole composition. There are a number of hexameters, p. 51, which are altogether rhythmical or accentual, like those of Commodianus. V. 14 we propose *adiuverit* or *adiurit* in the place of the corrupt *aderit* of the MSS. W. WAGNER.

Mr. A. H. Sayce is preparing for publication an Assyrian grammar, more complete and exact than Dr. Oppert's. The views of the latter scholar on an emphatic state, and his denial of a perfect (or, as Dr. Hincks called it, a permansive) and of other tenses, in Assyriand, will be combated. The chapters on syntax and the noun will show that Assyrian grammar is, in this respect, in no way inferior to that of other Semitic languages. The cognate dialects will be compared throughout, and the position of the Assyrian relative to them examined. The Assyrian will be printed in Roman type.

Dr. Lieblein, a Norwegian *savant*, has published a Dictionary of Proper Names in the Egyptian hieroglyphic inscriptions, especially of those which occur in genealogical lists. G. E[bers]. in the *Literar. Centralblatt* for Oct. 7 praises the copiousness of the material, and the judgment evinced in its selection, but regrets the absence of a purely alphabetical arrangement. The hieroglyphic texts are to follow shortly.

The Polish grammarian Malinowski is about to publish at Posen a Sanskrit grammar in the Polish language.

A French-Bulgarian and Bulgarian-French dictionary is being published by Sommer in Vienna.

Contents of the Journals.

Phœnix, vol. ii. No. 13.—Principal articles:—Editorial note. [The editor will try to make the *Phœnix* a complete repertory of Oriental lore; he intends also to reprint in it some rare books, such as the history of the Hei-ke family of Japan, the fables of Esop in that language, and the Japanese grammar of Rodriguez, published at Macao about 1601 in Portuguese. Special attention will be given to the geographical works of the Chinese, and the great historical works, which contain many facts of importance for the description of Eastern and Central Asia.]—The Eastern Mongols, by H. H. Howorth. [Notes on the chronicle of Ssanang Setzen, a prince of the Mongols.]—Buddhist Philosophy, by B. H. Hodgson, continued.—Minerals found in Siam, by H. Alabaster. [Gold, magnetic iron, precious stones, crystals.] No. 14.—The Ethnology of Manchuria, by H. H. Howorth. [Manchuria was originally occupied by two races, one belonging to the Tungusic family, the other nearly allied to the Kurile islanders. This ancient population is being rapidly overpowered by a Chinese immigration.]—Annals of Burma and Pegu, continued, by the editor.—Contributions from Chinese for a history of Tartary, by the same.

New Publications.

JENNING, H. De Metamorphosibus L. Apuleji tum de Apuleji Episodiis tum de iis locis qui Lucio Patrensi videntur translati esse. Berlin: Calvary.

PATKANOFF, K. Recherches sur la Formation de la Langue arménienne. Traduit du russe par E. Prud'homme, revu sur le texte original et annoté par E. Dulaurier. Paris: Maisonneuve.

WIMMER, L. F. A. Altnordische Grammatik. Aus dem Dänischen übers. v. E. Sievers. Halle: Waisenhaus.

ERRATA IN No. 33.

Page 452 (b), 17 lines from bottom, omit DE before ANGELICO.
,, 455 (a), 24 ,, ,, ,, for "Sigismund" read "Sigmund."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, November 15, *and advertisements should be sent in by November* 11.

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General Literature.

Miscellanies. By J. A. Symonds, M.D. Macmillan.

It is scarcely more than "*ten years*" since Dr. Symonds delivered his brilliant and impressive lecture upon that short and suggestive text. More than one reader of the interesting but tantalising volume in which the address is reprinted for a wider audience than the members of the Bristol Institution will be inclined to find the distinguishing feature of the ten years that have passed since in the enormous growth of the power of phrases. We are so used to see one another under the tyranny of the "words that beget words" that a character like Dr. Symonds' strikes us already like an apparition from another world than ours, a world where it was still possible for a man to live his own life and to think his own thoughts and to speak his own words, to be in fact thoroughly individual, except so far as he adopted the common language of the simple, manly, old-fashioned piety which of all the lost possessions of our grandfathers deserves to be regretted most. Those who are content to read for pleasure and improvement without always demanding instruction or excitement will find much to attract them in these memorials of one so wholly free from the vices of almost all contemporary literature, from the blatant sequacity which "follows before" where the public "leads on behind," and from the parasitical pugnacity which would expire for lack of nutriment in an atmosphere of "sweetness and light."

The first essay, on the "Principles of Beauty," is taken up for the most part with an exposition of the theories of Mr. Hay and Mr. Field, who refer beauty of line to the harmonic ratios of the determinant angles, and harmony of colour to the intervals of a diatonic scale arranged in octaves. It is to be wished that the writer had carried the subject farther. The analogy of music of itself suggests that the harmonic intervals of sound are only a condition, not a cause, of beauty, for it is possible for music to be correct without being beautiful: and the Venus of Milo loses all her charm when compelled to stand like a tailor's dummy to exhibit the mathematical "harmony" of her proportions: and Mr. Field's theory does not account for the undeniable beauty of individual isolated colours. There is a sort of appendix which touches on most of the topics which ought to have been included in a systematic treatise. The section on ideal beauty is the best, and contains a spirited and intelligent statement of the insufficiency of nature and the necessity of art; that on moral beauty is the weakest: the writer does not distinguish it sufficiently from moral excellence. The lecture on Waste, which comes next, is a charming specimen of dignified exposition and fertile illustration: a fastidious critic judging exclusively on scientific and æsthetic grounds might think the peroration somewhat warped by the optimism which grows naturally and sits gracefully where actual benevolence has found its satisfaction in eminent usefulness and its appropriate recognition in well earned prosperity.

Neither a description nor extracts would give an adequate idea of the excellence of the lecture on Ten Years, which is simply a model of the difficult art "*proprie communia dicere.*" When we read what was meant to be heard, it is possible to take exception to points of detail. The writer was one of those who were slow to recognise Mr. Darwin, and of those who overrated Baron von Bunsen: he hardly seems to have been aware of the relative value of Mr. Grote's *Greece* and of Mr. Gladstone's *Homer.* The introductory address on Knowledge delivered at the Bristol Athenæum in 1846 is a lay sermon, to be judged like a sermon by its usefulness. It may perhaps be doubted whether the life of Dr. Prichard is intended to give the writer's full and definite opinion upon its subject, or simply as a tribute to the memory of a friend. This would account for Dr. Symonds' abstinence from characterizing the perverse pertinacity with which Dr. Pritchard pursued the imaginary ancestors of the Hindoos of Menu and of the Egyptians of Herodotus.

Among the greatest difficulties of editing posthumous works is that they are seldom intended or prepared for publication. For instance, in 1852 Dr. Symonds wrote a paper on Apparitions for the *Bath and Bristol Magazine;* in 1851 he delivered two lectures on Sleep and Dreams at the Bristol Athenæum. It was natural that in the later work he should use the earlier freely, and at the same time each contains so much that is distinctive and interesting that the editor had no alternative but to print both. In the same way there is much in common between the paper on Mind and Muscle, read in 1834, and the lecture on Habit, delivered in 1853. There is a general resemblance in the treatment between three at least of the four. The author begins with a lucid exposition of the part of the subject which he intends to discuss, examines and settles the questions which present themselves from his point of view, and then by a natural and unforced transition passes to the imaginative side of the subject with an evident eye to purposes of edification, which after all are as legitimate as most others to which the human intellect is commonly employed. Of the four we are inclined to like the lectures on Sleep and Dreams decidedly the best. It is written on the highest level of contemporary knowledge, and is charmingly illustrated with interesting details which all but enable the learner to realise the truth as fully as the teacher. We note without regretting the peculiarly English standpoint from which the writer looks at the significant dreams recorded in Holy Scripture. He refuses to explain other significant dreams by them, he declines to explain them by other significant dreams, he prefers to explain other significant dreams away, he prefers to regard these as inexplicable. The essay on Apparitions contains an interesting sketch of the successive opinions which have been held upon such matters, a neat refutation of Mr. Hibbert's opinion that the seat of optical illusions is in the eye, not in the brain, and a copious collection of instances intended to support the theory that all apparitions have an exclusively subjective origin. No attempt is made to select and grapple with the cases on which advocates of the traditional theory would be disposed to rely, and the *à priori* objections to their views are rather exaggerated through the writer's want of familiarity with the theory that the body is constituted by the soul, which he only knows in Hunter's hypothesis of a vital force, in which form he rejected it, with visible distaste. The most interesting point in the paper on Mind and Muscle is the effort made to prove that the muscular movements executed in

obedience to our will are performed not only without the process being present to consciousness, but without its ever having become present. The rest of the paper is much encumbered with slightly pedantic applications of a psychology which some might consider inadequate. For instance the writer seriously insists that while we can *long* for something known to be impossible, or be *anxious* about it, we can never wish for it or desire it. Even here however there are good observations; it was quite worth while to note that exactly the same state may be called a passive desire when viewed as the last term of a series of feelings and an active volition when viewed as the first term of a series of actions.

Judging from the few specimens given, we shall be inclined at the risk of great presumption to prefer Dr. Symonds' medical writings to his philosophical. In the former he is upon his own ground, and moves with a freedom and mastery which perhaps are less perceptible elsewhere, and in addressing his professional brethren he did not wholly suppress the sense of *camaraderie* which gives an agreeable relief to the style of a writer whose deference to a miscellaneous audience was apt to translate itself into a too uniform stateliness. In fact, the strong *esprit de corps* is one of the most amusing features of the book. It is undeniably an ingenious suggestion that medical men when called upon to give evidence upon the sanity and responsibility of a criminal should confine themselves as far as possible to the question whether his state before the crime would have in their judgment justified his friends in placing him under restraint. As Dr. Symonds perceives, if his suggestion were adopted, it would be easier and less invidious to place incipient lunatics under restraint; but this, though certainly for the practical advantage of the profession and possibly for that of the public, does not meet the theoretical difficulty that when a man's mind is going it is generally necessary to wait for a lamentable outbreak of some kind before it can be decided that it is gone, and the precautions which premonitory symptoms might justify would not be always adequate to prevent crime where they gave the most favourable chance for the recovery of health.

The Public estimate of Medicine is a singularly piquant reply to two articles in the *Saturday* and *London Reviews*, whose writers ought to feel themselves singularly honoured at having elicited such an elaborate and authoritative reply. The controversy went no farther: it is, alas! too late to wonder how Dr. Symonds would have met the following rejoinder. Admitting that the science of medicine has a valid base, and that it has made considerable progress, it still remains to be determined whether it has made progress enough to be the foundation of an art which shall be unquestionably superior to the ἄτεχνος τριβή of empirics, who have stumbled upon one of the principles which govern the course of nature, of which there are so many to know and so few known that it is quite conceivable that men who express them grotesquely may manage to use them with effect. It is seldom that statistics are teased into being so suggestive as in the paper on the Health of Clifton, and the opening address on Health, which was its author's last work, is a most refreshing proof that even the meetings of a Social Science Association need not be exclusively devoted to the platitudes which the name generally suggests.

The few poems given are vigorous and elegant, one upon the well-known picture by Poussin, "*Et ego in Arcadia fui*" is positively beautiful, and bears comparison with Keat's "Ode to a Grecian Urn," as well as Gray's "Hymn to Adversity" bears comparison with Wordsworth's "Ode to Duty." We wish that the editor had given us more of Dr. Symonds' translations from Horace; three specimens taken from the second book are on the very highest level yet attained.

Perhaps the best thing in the short life which the editor has prefixed to his father's remains is the delicate and discriminating account of Dr. Symonds' æsthetic preferences; but the whole, in spite of the most shrinking reverence, conveys a singularly distinct impression of a character which presented a rare union of generosity, refinement, and dignity.

G. A. Simcox.

Select Poems by Dryden. Edited by W. D. Christie, M.A. of Trinity College, Cambridge. Oxford: at the Clarendon Press.

This volume contains certain poems selected from the "Globe" edition of Dryden, by the editor of that edition, than whom no one is more competent for the task, owing to the pains which he has expended in endeavouring to secure a correct text of the poet's works. In the "Globe" edition, he has made more than a hundred corrections in the text, as formerly edited by Sir Walter Scott, and, after Sir Walter, by Mr. Robert Bell. In the course of the present volume, there are forty such corrections. The poems selected are—"Stanzas on the Death of Oliver Cromwell," "Astræa Redux," "Annus Mirabilis," "Absalom and Achitophel," "Religio Laici," and "The Hind and the Panther." All these are of importance, and the excellent notes, and the biography of the poet (though the latter is in a great measure repeated from that in the "Globe" edition) leave very little to be desired. Handy books of English classics, really well edited, are much wanted; and this volume will doubtless meet with a deserved measure of success.

There is one note which appears to be either wrong, or else badly expressed. The editor seems to have no clear notion of what "female rhymes" are. Dryden uses this expression, and the note explains it by "such rhymes as of words ending in *e*, as *noble*, *chronicle*, *conventicle*, the *e* being pronounced" (p. 237); and again, "*stickle* rhymes with *conventicle*, which would be either pronounced *conventickle*, or with the final *e* making a distinct syllable, as occurs in Dryden with *chronicles*, *miracles*, *oracles*" (p. 226). What this last sentence means is a puzzle; if it means that Dryden rhymes *stickl-ée* with *convéntícl-ée*, the supposition is simply absurd; the other solution, that *stíckle* rhymes with *cónventíclé*, is the *only* one admissible. As for "female rhymes," there is not the least necessity for the word to end in *e*; it merely means that the rhyme is a *double* one, viz. of *two* syllables. If I rhyme *dare* with *mare*, that is a male rhyme; if I rhyme *dairy* with *Mary*, this is a female rhyme; and when Ingoldsby rhymed *Mephistopheles* with *coffee-lees*, he used what we might perhaps term a child's rhyme. No better illustration of this can be given than Dryden's own words; for he says that the Italians use them "in every line," and certainly we do not find that every line in the *Divina Commedia* ends in *e*. There are some other remarks upon rhyme which suggest that the editor has not always realised how much the pronunciation of Dryden's day varied from that now in use. He will find some useful hints in part iii. of Mr. Ellis' book on *Early English Pronunciation*, which has, however, only very lately been published. For convenience, for excellence of editing, and for clearness of type, Mr. Christie's book is much to be commended.

Walter W. Skeat.

Romhányi, a Satire, by P. Gyulai. [*Gyulai Pál Költeményei.*] 2nd Canto. Pest: Ráth.

The most instructive satire is that written by a friend. He alone is likely to have that intimate knowledge of the object of his satire which enables him to point out what are really its weakest points. Of such a nature is *Romhányi*, by M.

Paul Gyulai, a satirist animated by the tenderest sympathy for the Hungarian character, while he probes its weakest points with unfailing delicacy of touch. It is now nearly wo years ago that the first canto of this poem appeared in a collection of M. Gyulai's poetical works, and the second has been only just now given to the public. The poem opens with a description of the pursuit of a political fugitive by Austrian gendarmes late in the year 1849. He makes his escape through the disaffected conduct of the moon, which refuses its light to the agents of government. The fugitive is Count Romhányi, the son of a "conservative" Hungarian nobleman, who, from a light-hearted spirit of opposition to his father's wishes, sets up for an extreme liberal. Patriotism and dissipation alternately occupy his life until the glorious but dangerous days of 1848. His own vanity, aggravated by the influence of a fascinating young widow, leads him to aspire to a high position in the revolutionary throng. He is by turns orator, administrator, and guerilla captain, but in each capacity uniformly unsuccessful. His lady-love, for whose sake he has broken the heart of a charming young girl, discards him. At last he enters the *honvéd* army as a private soldier, and the wounds, fatigues, discouragements, and anxieties which he endures in this humble capacity, prove him a better patriot than all the fine words and grand designs of his past career. This is the substance of the first canto, which further contains—what at first sight appears an episode—an account of the feelings of the young lady whom Romhányi treated so unhandsomely, and her marriage at her father's request to a conservative ex-official. This first canto contains sixty-one stanzas. The second canto is but a small and tantalising instalment for the reader who has waited for it so long. It contains only thirty-nine stanzas, and advances the story but a very little way, describing the married life of the young girl who had loved Romhányi too well, the discovery of the latter left insensible in the ditch surrounding her husband's park, and her recognition of him on his sickbed. At the same time it is marked as strongly as is the first canto by M. Gyulai's special characteristics; his intense bitterness against the meanness and folly which in Hungary so often wear the mask of patriotism, and a pathos the more effective because self-restrained and only brought forward at the right moment and in due measure. May we be allowed to hope for a continuation of *Romhányi* after a shorter interval.

A. J. Patterson.

ALEKSANDR AFANASIEF.

Within the last few weeks Russian literature has lost one of the most valuable of its cultivators. The premature death of Aleksandr Afanasief leaves a gap in the ranks of Slavonic students which they will not find it easy to fill up. There are many names which are far better known in Russian literary and scientific circles than his ever was, or was likely to be, but in his own particular field of work he stood unsurpassed. As a collector and annotator of Russian popular tales he was unrivalled, and no one has done so much as he to explore, for the benefit of the public, the rich storehouses of legend and of song which the Slavonic nations have so well preserved, but which had, until recently, been turned to so little account. I have not as yet received from Russia anything beyond the bare notice of his death. The sketch which I propose to write of his life and works will, therefore, be meagre in the extreme, but I do not like to delay saying at least a few words about so true and honest a scholar.

Aleksandr Nicolaevich Afanasief was born in 1826, studied at the university of Moscow, and afterwards resided in that city, in which he held the appointment of Secretary to the Council of Magistrates. Some little time ago, I believe, he resigned that post, on assuming, or being about to assume, the functions of one of the new "Justices of Peace." But his real functions were those of critic and compiler, and it is in what he did in those capacities that we are most interested. Of his miscellaneous works it would be but of little use to give a complete list here. A most industrious writer as well as reader, he contributed to the Russian magazines, newspapers, and reviews, a great number of critical articles, most of them bearing on the history, archæology, or literature of the Slavonic nations, and especially of Russia, each of which was of no small value. But his two great works, on which I wish to lay most stress, are his collection of "Russian Popular Tales," and his exhaustive treatise on the "Poetical Views of the Old Slavonians about Nature."

The first, styled *Narodnuiya Russkiya Skazki* ("National Russian Tales") was completed in 1863. It appeared in eight parts, which, when bound, form four substantial volumes. They comprise a series of stories, taken down from the mouths of the Russian peasantry, and conscientiously edited, the names of the persons who told them or wrote them down being given where it was possible, together with those of their localities. To each part the editor appended critical notes of the greatest value, containing the results at which his wide range of reading in many languages and his special acquaintance with Slavonic folklore and mythology enabled him to arrive.

Of his other great work—that on the poetic views about Nature entertained by the Old Slavonians—under the title of *Poeticheskiya Vozzryeniya Slavyan na Prirody*, it is difficult to speak too highly. It is a mine of wealth for all who wish to study the subject, to know the many legends which in the various Slavonic lands are told about the Heavens and the Earth, the Sun, the Moon, and the Stars, the Hills and the Streams, the Thunder and the Wind—to form some idea of the light in which life and death were viewed by the eyes of the old Slavonians—to enter into the feelings of the Slavonic peasantry of the present day with respect to the physical world they see around them, and the spiritual world of which they believe themselves to be conscious. The third volume of this, the most worthy monument to Afanasief's industry and learning, was completed only two years ago.

The copy of it is now before me which he gave me last year in Moscow. I spent some little time with him one day, in his thoroughly Russian house, standing in the middle of so wide a courtyard, one might almost say farmyard, that it was easy to believe it stood in the country and not in a great city. His room and all its belongings were such as one might expect to find in the house of a genuine scholar. Books in all directions, and everywhere traces, suggestions of literary labour. And he himself gave one the idea of a man whose heart was thoroughly in his work, who worked not for material benefit, but from a genuine love of his subject, and from a generous desire to rescue from obscurity, and to set forth well in the light, the literary treasures which so long lay hidden away in little read chronicles and other obscure records, or stored up in the still less consulted memories of the common people. He seemed, when I saw him, full of life and vigour. There was no trace in his appearance of any weakness or disease to which he was likely to succumb, and yet he has died at about forty-six years of age.

W. R. S. Ralston.

LITERARY NOTES.

The *Fortnightly* for October contains an article on Pico della Mirandula, in which Mr. W. H. Pater attempts an analysis of the quality which confers lasting interest on Pico's life and labours. His vast learning was indeed applied to unfruitful tasks, but, like the century in which he lived, he was great in what he aspired and designed to do, rather than in what he did. It remained for a later day to conceive the true method of effecting a scientific reconciliation of Christian sentiment with the imagery, legends, and theories of pagan poetry. Classical story was in the fifteenth century taken as an unquestioned fact to be received as it stood. It sank into men's minds to come forth again with all the tangle of mediaeval sentiments about it. It is because this picturesque union of contrasts characterizing properly the art of the close of the fifteenth century pervades in Pico, an actual person, that his figure is so attractive.

One of the most active Slavonic literary societies is the South Slavonic Academy at Agram, in Croatia. Founded in 1867 by the now famous Bishop Strossmayer, the South Slavonic Academy publishes every year four volumes of transactions on scientific, historical, and philological matters, as well as several important collections, as—(1) *Monumenta spectantia historiam slavorum meridionalium*, a series of unedited documents borrowed from the rich archives of Venice; very curious for the history of Venice, of the international commerce in the middle ages, and of the Slavonic tribes of Dalmatia. Two volumes are already published. (2) *Old Croatian writers:* a collection of Croatian or rather Dalmatian classics, dating from the sixteenth century downwards. Dalmatia at this time, and particularly Ragusa, was the centre of a literary movement which under the influence of Italian literature attained considerable proportions. The third collection, under the title of *Antiquities*, embraces unedited Slavonic, Latin, and Italian texts, relating to Slavonic history or philology. The last publication of the Academy is a *History of the Ragusan Drama*, by Professor Pavich; Ragusa in its palmy days was the South Slavonic Athens, and the monograph of Professor Pavich is highly interesting. We shall return to it again.

Professor Ručenko has edited at Kiew a fresh collection of South Russian popular tales.

In Mr. Ichabod Charles Wright, who has just died, we have lost the last representative of a very interesting type, the scholarly man of business, the type of Roscoe, Sotheby, and Rogers. He was born in 1795, and after achieving in due time a fellowship at Magdalen College, Oxford, he succeeded to the management of a bank at Nottingham. With Bacon he held that every man is a debtor to his profession, and he acquitted the debt by a lucid pamphlet on the vexed question of the currency; but he will be chiefly remembered by his translations of Dante and Homer. For his first attempt he possessed one essential qualification in the manly elegance of his mind—perhaps the qualification of all others which is needed for grappling with the bulk of the *Divina Commedia*, though there are passages which demand a rugged intensity, a spiritual passion, which were not given to Mr. Wright, and there are readers for whom Dante's reputation rests on these. His qualifications for translating Homer were the same, in kind, as Flaxman's for illustrating him. In looking at Flaxman we might forget that, Homer is picturesque; in reading Mr. Wright we might forget that Homer is fiery and impetuous, but both recall something which is too important and characteristic to be left out of sight: they remind us of all that is distinctively classical in one who was the father of classical as well as of universal poetry.

A. Stern reviews Masson's *Life of Milton* in *Gött. gel. Anz.* No. 40; credits the author with even superabundant industry and accuracy; and especially commends the portions devoted to Scotch affairs and the history of the Presbyterians and Independents. The reviewer is not convinced by Masson's arguments that Milton had any practical military experience, nor that the pamphlets in the British Museum with MS. notes and the inscriptions "By Mr. John Milton" and "ex dono authoris" contain examples of the poet's handwriting; the latter he claims to have discovered himself in a copy of the *Doctrine and Discipline of Divorce*, also in the British Museum, and promises proof shortly.

The *Allgemeine Zeitung* for Oct. 14 contains a very laudatory account of Swinburne by Theodor Opitz, who, however, has nothing new to say either in support of the opinion that Swinburne is the greatest poet we have had since Byron and Shelley or in refutation of the view that his genius is somewhat monotonous and its expression marred by the want of artistic measure and moderation.

Unsere Zeit for October has a readable but desultory paper (to be continued) on the Romanticists at Jena, which accompanies the movement down to the time when an "ironisches Herablächeln" upon their own works was rigorously exacted from authors who drew condescending smiles from other people, and when Tieck was as oracular as Goethe.

Mr. Ralston will deliver a course of lectures on the songs and stories of the Russian people, in the Taylor Institute at Oxford, on the 4th, 11th, and 18th of November at 2 P.M. He proposes, at 3½ P.M. on each of these days, to tell to an audience of children a series of stories from the Russian.

The *Athenæum* states that the library of Baron Kirkup is about to be sold by auction by Sotheby and Co. It comprises an extensive collection of works relating to Dante, and no less than six MSS. of that poet; a splendid MS. of Lancelot du Lac, and a fine MS. of Petrarch.

A new edition is announced in the *Athenæum* of the *Five Days' Peregrination of William Hogarth, Sam Scott, W. Tothall, J. Thornhill, and T. Forrest, with Illustrations by Hogarth* from the original MS. in the British Museum.

M. Stojan Novakovich has just brought out a second edition of his *History of Servian Literature*, recast and considerably enlarged. It comprises besides what its title expresses, the history of the Ancient Literature of Bulgaria, and that of Dalmatia during the brilliant period from the fifteenth to the eighteenth century, when Ragusa and Spalatro were literary centres of importance. The account of Croatian literature is carried down to the present time. The book is arranged in five departments: 1. The popular songs and poems: 2. The development of Ecclesiastical Slavonic literature: 3. The Dalmatian development under the stimulus of the Italian Renaissance: 4. Modern literature to which the political emancipation of Servia has given rise: 5. The new Croatian or Illyrian literature, which tends to mingle more and more with that of Servia. M. Novakovich's book has been adopted by the government for all the schools of the principality.

Art and Archæology.

THE HOLBEIN CONTROVERSY.

THE question as to the genuineness and priority of the rival Madonnas of Darmstadt and Dresden was but a few years back a question of interest only to a handful of connoisseurs. It is now disturbing the whole world of art, and has been surrounded by such a cloud of hypotheses that the first task of the critic must be to clear them away and endeavour to ascertain what are the definite facts on which we may rely in forming a judgment.

There are two sorts of evidence convincing in matters of art: historical evidence and internal, *i.e.* the indisputable proof of the master's hand. In this instance historical evidence breaks down: since it is impossible in our present state of knowledge to construct a pedigree for either picture. What we learn from documents is as follows. The Basle *Rechtsgelehrte* Remigius Fesch (*b.* 1595, *d.* 1667) writes that a picture, measuring in height and width about 3 *ulnas basilienses*, representing the Meier family before an *altar* (?), was in the possession of his grandfather, *Bürgermeister* R. Fesch (*b.* 1541, *d.* 1610), who sold it to the Basle *Rathsherr* Iselin for 100 gulden, from whose heirs it was bought by the Amsterdam artist Leblon about 163- (the fourth figure omitted in MS.) for 1000 *Imperialen*, who resold it later to Maria de' Medici. This last statement seems highly improbable. The queen resided indeed from 1631–8 in Brussels, but she was then in the most straitened circumstances. Yet so it stands in Fesch's handwriting.

The next authentic mention of such a picture is by Sandrart, who lived in Amsterdam between 1639–45. He was a friend of the Leblon who purchased it from Iselin's heirs, and says that "long before" 1645 Leblon had sold the Meier Holbein to the *Buchhalter* Lössert for 3000 gulden. At this point the question occurs, was there but one picture, and is Fesch mistaken in mentioning the name of the queen of France as the purchaser? Did Leblon manufacture a second picture? Or—for there is a third hypothesis (see A. Jansen, *Die Aechtheit*, &c.)—were there

originally two? Here is a gap, a flaw, which at present can neither be explained nor ignored.

Algarotti now appears as our authority; he inherited, in Venice, a Holbein Madonna from Giovanni Delfino in 1743, who had acquired it from his father, and the father Delfino, in his turn, had received it from the famous Venetian banker Avogadro. Algarotti learnt from an old servant of Avogadro, Lorenzo Griffoni, that a business correspondent of his master's at Amsterdam had failed in 1690, and that Avogadro had received the Holbein in lieu of a debt of 2000 sequins. This is the picture acquired for Augustus III. in 1743, and which has remained till now one of the gems of the Dresden Gallery.

In 1690, then, the Dresden Madonna left Amsterdam for Venice; in 1709, her Darmstadt rival appears at Amsterdam. Two coats of arms occur together on the old frame of the Darmstadt Madonna; one of these has been identified as that of the Cromhout family, and M. Suermondt has discovered at Aachen, in "Hoet, Catalogus van Schildereyen, Haag, 1752," the "Catalogus van Schildereyen, van Jacob Cromhout, und van Jasper Loskart, verkogt den 7. und 8. May 1709, in Amsterdam." In this catalogue occurs, "Een kapital stuck met tween deuren, verbeeldende Maria met Jesus ap haar arm, met verscheyde knielende Bulden n'at Leeven van Hans Holbein . . . . fl.2000." Here it may justly be inferred that the Darmstadt Madonna which bears the arms of Cromhout allied with another coat is the picture in question. But the hypothesis that Loskart should be read Lössert, and that Cromhout's associate Loskart is a descendant of the Lössert to whom Leblon (according to Sandrart) sold the Madonna which he brought from Basle, is, until the two names can be proved to be the same, wholly gratuitous. The Darmstadt picture now again disappears until in 1822 Prince William of Prussia bought it of Delahante, the Paris dealer.

It must be acknowledged that the historical evidence which has now been briefly but completely stated is quite insufficient to turn the scale in favour of either picture, and unless we attach unwarranted importance to the squareness of shape indicated by Fesch's proximate measurement, which suits the proportions of the Darmstadt picture, rather than those of her rival, we are thrown back on the help of internal evidence. It would be impossible in the present limits to cite the vast number of minute particulars which must here be taken into consideration, but one is now selected which from the artistic point of view is weighty if not convincing. At Basle are extant the drawings from life made by Holbein for this picture; amongst others the head of the girl kneeling to the left of the Virgin. In the drawing her hair hangs down over her neck and shoulders. In the Darmstadt picture, as in its Dresden rival, the hair is tightly plaited up and covered with a pearl-decorated headdress. But in the Darmstadt example, as Professor Felsing pointed out to the present writer in 1868, the lines of falling hair, as originally drawn by Holbein, can be traced through the dress which has been painted over them. Such an alteration as this would only be likely to occur in the work of a man who was dealing directly with his model. There are also passages in which the more elaborate and minute rendering of the Darmstadt Madonna affords an explanation, or completion, of doubtful touches in the Dresden picture. (See A. Zahn, *Das Darmstädter Exemplar*, &c.) Lastly, those best acquainted with the early work of Holbein and his time see in the very style of the somewhat cramped composition, and forcible, if constrained, handling of the Darmstadt picture, additional probability, if not proof. So that on the whole, as regards the weight of artistic and æsthetic evidence, the world is justified in concluding for the priority and genuineness of the Darmstadt Holbein.

Let it be so. What has the Dresden Madonna lost? It is absurd to maintain the solidarity of the two distinct questions of beauty and of genuineness. Still, in point of elegance both of composition and of pose, the Dresden picture must carry off the palm. Only the heat of controversy can have induced Woltmann and others to condemn the changes which have taken place in this example as "*Verschlechterungen*." The Dresden picture is, it is true, save in exceptional portions, less virile; but what is lost in force is gained in the more popular quality of softened beauty. Hermann Grimm, in an article in the *Preussische Jahrbücher* for October, has minutely noted the points on which this effect depends. The force of what he has to say is indeed marred by the way in which he has mixed up his old associations with, and impressions of, the "*geistige Wirkung*" on him of the Dresden Madonna with the matter now in judgment: but the theory which he puts forward, that the Dresden example is a later replica of the Darmstadt picture, done under Holbein's directions, perhaps in part by his hand, is supported, to say the least of it, by the important fact that the actors in this supposed later painting have all aged a few years in appearance; and here we have no play of the imagination, but a demonstrable fact, which seems to imply that the artist, whoever he was, had before him the same models as those from whom Holbein originally worked.

E. F. S. PATTISON.

DUDLEY GALLERY WINTER EXHIBITION OF CABINET PICTURES IN OIL.

THIS small exhibition, the first of the season, opened on the 22nd October, with a collection of pictures perhaps scarcely up to the usual standard, and yet there are a few very remarkable works, works that are of themselves enough to reward a visit. Apart from these, it seems to us, the value of the exhibition depends on the small landscapes. These, indeed, always form a leading feature in the gatherings on these walls, and it is a remarkable evidence of the executive ability of many of the exhibitors that they contribute to both oil painting and water-colour displays with equal success. Among these are Arthur Ditchfield, especially in (26) "Pond near Goudhurst, Kent"; Henry Moore, represented by several small works; the Goodwins, who seem to paint at the present moment all three of them nearly equally well; the Macbeths—R. W. and James—the latter of whom has a very able bit of work he calls "A Scotch Courtyard" (52); Madame Bodichon (301), "Botanising," and several others. Besides these there are landscape exhibitors new to the gallery: Mason showing four lovely sketches, all, however, exactly the same in manner and in degree of finish, making one wonder that the man who can do so well cannot complete his work, or show some little difference between Tivoli and Warwickshire in colour and atmosphere; McWhirter (288), "Moorland Road, Sunset," an excellent rendering of nature; and a really perfect miniature landscape by the veteran R. Redgrave, called "Sweet Summer Time." Among pictures of this *genre* of larger size there are two of distinguished completeness, although not very interesting in subject. These are (246) "Between the Fisher Boats, Scheveningen," by H. W. Mesdag, in which the ropes holding the vessels to their anchors come boldly out of the picture; and (189) "Porlock Weir," by C. N. Hemy: in both of these the surface painting and imitation of texture, sand, shingle, or boat, deserve particular mention. But apart from all these and from everything else in the room, or in the world, for that matter, are two by J. A. Whistler, of the tenderest beauty in colour, the most absolute and excellent sense of sweetness and delicacy of tone. There is no end to one's admiration of certain qualities in these pictures, and we look with all the more amazement on the childishness and fatuous affectation of the artist's mind, prompting him to put in plaques, whether on sea or foreground does not matter, in imitation of the shop-mark or name on cheap Japanese prints. He may have some intention of his own not apparent to anyone else, in raising his horizon to within half an inch of the top of an absurdly narrow and tall canvas, thereby destroying the natural aspect, but it is next to impossible that the imitation of Japanese plaques can proceed from any motive but mental vacuity. The names of his subjects, too, are slightly irritating; Mr. Whistler being desirous to point out the analogy to music to be found in his pictures, he calls one of them which is exclusively painted in one colour (frame and all), "A Harmony in Blue-green." Now melody is the musical relation of successive notes, but harmony is the musical relation of co-instantaneous notes, like many colours present in a picture, and Mr. Whistler's work being in one colour may be much more properly called a melody; but perhaps the artist repudiates the correct use of words as he repudiates meaning, his productions being purely decorative.

Among the important figure pictures, let us first call attention to (105) "Ophelia," by Arthur Hughes, perhaps the most accomplished work in the room: the tenderness of expression of the whole figure and the pathos of the large blue-grey eyes of the poor "Christian soul" are very sure to touch the heart of every one. Not far from this in the place of honour where hung last year the greatest picture to be seen on any exhibition wall in England—Watts' "Love and Death"—appears this year

the same master's "Angel of Death" (132), an analogous subject, but expressed by monumental composition wholly unlyrical and unsympathetic. Of course there is very able execution, Venetian colour, and so forth, but the parts utterly want unity, and a Cupid-child with a sleeping lion in the foreground have a suspicious look of a genius with the lion of S. Mark from some renaissance source. "Carrying the Law in the Synagogue at Geneva" (79), by Simeon Solomon, is in his highest manner, and indeed one of the richest pieces of colour he has done—a "concerto in gold and darkness," Mr. Whistler might have called it had it been named by him. Above this is an example of Miss Rebecca Solomon's art full of very sweet painting: in this case the name "Constant, though Free," is puzzling, the subject being a young woman attending to a little bird in a cage. In "Ferdinand and Miranda" (98) we are glad to meet again Miss Lucy Madox Brown. The scene is the famous game at chess, when the innocent damsel says, "Sweet lord, you play me false," and he replies, "No, dearest love, I would not for the world," whereon Miranda says gaily, "Yes, for a score of kingdoms you would wrangle, and I would call it fair play." The subject is admirably imagined and the action of Ferdinand designed with great ability—an able and charming work—yet the colour of Miranda seems to require something to make it the central attraction of the picture. "The Vow" (102), by A. B. Donaldson, a girl supported by her aged mother giving a candle to an illuminated crucifix in church, possesses high qualities as painting, and (174) "Martyrdom of S. Sebastian," by the same, is an entirely new reading of this long-forgotten subject. Among the works showing emotion and thought of an exceptional kind—rare here as elsewhere—there is one called "Hushed Music" (226), by Edward R. Hughes, a young artist, we understand, but certainly one from whom we may expect healthy and noble motives in his designs as well as good execution in the carrying of them out. "Medea" (324), by R. Spencer Stanhope, we can only allude to with great commendation, and also (269) "La Regina," a Venetian dancing girl in gorgeous leggings and other costume leaning against a tapestried wall, by Elihu Vedder. "Playing at Half-a-Love with Half-a-Lover" (215) is a clever work by A. W. Bayes, a name we do not remember noticing before. The titles of some of the noticeable works may be given here: "A Spanish Artist" (14), by T. R. Macquoid; "Sunday Morning" (21), charity girls going to church, a very honestly painted study; "Sir Harry Wildair" (67), by Princep, a head that might be as appropriately called Mildair; "The Fair Florist" (89); and the examples of the art of Messrs. Marks and Leslie, which are not up to their present standard. W. B. SCOTT.

ART NOTES.

At the meeting of the French Academies on the 25th, the Minister of Public Instruction, who presided, stated that owing to the exertions of the two committees appointed at the beginning of the siege of Paris to take measures for the preservation of the works of art and literature in and near the city, none of the collections or monuments were at all injured during the siege. The civil conflict however which followed, was more disastrous:

"It destroyed to the last leaf several of our great collections of books—the library of the Louvre, those of the Hôtel de Ville, the Prefecture of Police, and of the Council of State. We have lost at the Gobelins magnificent tapestries executed after Raphael, Boucher, Lancret, and several modern masters. Two hundred and twenty-two ancient tapestries, monuments of that art in which we have so few rivals, have disappeared in the flames. Lastly, the directors of the Observatory inform us of the destruction of two instruments of geodesy and an astronomical clock. The great equatorial has been considerably damaged, but not in the most essential portions. . . . . A broken window and the disappearance of a few articles do not forbid us from saying that we have saved entire the Museum of Medals. The manufactory of the Gobelins, which at first was believed to have been destroyed, and which has suffered cruel losses, has been able to resume its operations, and is to-day in full activity."

Respecting projects of restoration he added:

"It is said that the Municipal Council of the Seine has resolved to reconstruct the Hôtel de Ville according to the conceptions of Domenico di Cortona. One of our greatest artists will restore to us the Tuileries in the elegant form devised by Philibert Delorme. Open arcades, supplying the place of the solid buildings raised by Jean Bullant and Père Ducerceau, will connect the new palace with the two great wings of the Louvre, and will bring the Place du Carrousel in direct communication with the gardens."

It is stated on the authority of the *Levant Herald* that a valuable relic of antiquity has lately been discovered in the grounds of the Russian pilgrims' monastery outside the walls of Jerusalem. It is a shaft cut out of a single block and only half complete. From a description in the history of Flavius Josephus it is believed to be a column intended for the decoration of the ancient Temple of Solomon; but that, as the column split while it was being worked, it was left unfinished, the lower part of it remaining in a rough unhewn state. The monolith is about thirty-nine feet in length by six in diameter.

The Florentines are anxious that their city should lose nothing by the transfer of the capital, and have effected several important improvements during the last year. Outside the gate of San Miniato a new square has been laid out with trees and fountains to serve as a memorial of Michael Angelo, and *cadre* for bronze copies of David and the recumbent figures from the Medici chapel. The principal entrance to the church of the Badia has been opened up and restored in the style of the Early Renaissance, and a fine door by Niccolo di Pietro on the north of the cathedral has been so efficiently cleansed as to be scarcely recognisable. It is unfortunate that intrigues and dissensions delay the still more important works for completing the façade of the cathedral.

It is pretty well known to students of German art that Lucas Cranach, the most prolific of Saxon painters, lived and died at Wittenberg, where he was in such esteem as to be twice elected to the office of burgomaster. Less known is the fact that Lucas Cranach kept an apothecary's shop. This shop, called the "Adler," was at the south-west corner of the market-place of Wittenberg, and was first opened by Cranach in 1520. The house above the shop, restored to something of its original state in 1723, was that in which Lucas Cranach lived; it was also that in which his son, Lucas Cranach the younger, burgomaster of Wittenberg, died in 1586. On the 26th of September a fire broke out in the "Cranach" house and reduced it to ashes, and so one more of the classic edifices of the time of the Reformation is lost to us.

Professors E. Curtius, Strack, and Adler, have arrived in Smyrna on an archæological mission, having for its main object the investigation of the ruins of Sardis and its neighbourhood.

The *Revue archéologique* for October continues the description of Livia's house on the Palatine, and describes two paintings which represent ladies engaged in divination with vessels of water, the well-known ὑδρομαντεία. It also supplies a detailed account of some of the statues and windows of the cathedral of Strasburg, the latter representing a series of German emperors.

In the *Bullettino dell' Instituto* (August and September) the new excavations at Pompeii are described. The chief set of frescoes is devoted to the story of Bellerophon—one portrays the parting of the hero from Sthenobaea, a scene which Mr. Morris has purposely avoided in *The Earthly Paradise*.

The rarity of old Flemish wall-painting gives a special interest to the discovery recently made in the Johanniskirche of Herzogenbusch, of a wall-painting dating from 1447. It has been brought to light from beneath the whitewash, and, except that the colour is somewhat faded, is tolerably well preserved. It depicts Christ on the cross, with the Virgin and St. John; at the foot of the cross is a burgher family of the town, the donors of the picture.

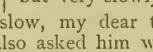
In the *Beilage* of the *Allgemeine Zeitung* for Thursday, Oct. 11, Dr. Lübke draws the attention of students to the importance of the services rendered to the history of art by Dr. Grueber's recent researches in Bohemia. Several detached articles containing portions of the results of Dr. Grueber's labours in this special field have appeared in the publications of the *Verein für Geschichte der Deutschen in Böhmen*, and

in the *Mittheilungen der Wiener Central-Commission*, which has also during the past year printed in a series of profusely illustrated papers the first section of what promises to be a complete work on mediaeval art in Bohemia.

Music.

Robert Schumann. Eine Biographie. Von J. W. v. Wasielewski. Zweite verbesserte Auflage. Dresden: Kuntze.

When at the beginning of the present century music delivered itself from the bonds of royal and noble patronage to which it had hitherto been limited and became a prominent interest of German society in general, there arose almost immediately a large demand for information about the theoretical and historical side of this new favourite art. Of the rapidly increasing literature destined to supply this demand biographical researches form a considerable part. Still the beginning of musical biography as a science cannot be dated before the appearance of Mozart's life by Otto Jahn. With the critical method that had made him one of the first German scholars in philology and archæology Jahn combined a thorough knowledge of musical history, and has given us a description of the *maestro* and the general aspect of music in his time which has never been equalled in accuracy of detail and historical criticism, although it may occasionally be not quite free from a slight affinity to the celebrated Dryasdust. Jahn's example has since been followed by many other writers, and Bitter's *Bach* or Kreissle's *Schubert* display a laudable amount of careful research. Quite a different line Professor Nohl has taken, who in his innumerable musico-historical rhapsodies tries to cover his sometimes very imperfect knowledge of facts with a philosophic *raisonnement* of an equally doubtful character. Herr Wasielewski in his present work has adopted neither of these methods. He restricts himself entirely to his actual task of recording the memorable events in the life of one man without caring much about the position which that man takes in the general development of his art; on the other hand he is entirely innocent of any attempt to enter into the labyrinth of æsthetical speculation. He states expressly that accuracy of facts has been his chief aim, and modestly refrains from intruding his own opinion on the reader. His discretion was evidently a very wise way of proceeding on the part of the author, for wherever he swerves from this principle of impartial narrative he cannot be said to display a remarkable amount of critical power. So, for instance, all the works Schumann composed from 1830–39, among which, it must be remembered, is the *Carneval* (!), are summarily declared to yield, with two exceptions, only "a comparatively small amount of pure noble metal" (p. 160). This want of a due appreciation of work has here given rise to a fault which is only very rarely met with in books of this kind. Biographers are in general prone to overrate the merits of the object of their investigations, a tendency which can easily be explained from a psychological point of view in a relation so nearly akin to that of a counsel for the defence to his client. Wasielewski, on the contrary, not in this respect quite unlike Mr. Elwin, has evidently a much too low opinion of his hero's gifts and importance. The reserved way in which the author bestows his praise upon Schumann's loftiest creations, like *Faust* or *Paradise and the Peri*, is sometimes quite astonishing, and can only be explained by the fact that at the time when the book was written Schumann's fame had not yet silenced the outcry of narrow prejudice which is the inevitable lot of creative genius. Herr Wasielewski conceived the plan of his work during Schumann's lifetime, and on his communicating it to the composer he received from him a book in MS. which contained besides valuable autobiographical notes a register of Schumann's compositions. This and the author's own sketches of the habits and appearance of Schumann, with whom he was personally acquainted during the latter years of his life, form the most attractive part of the work. With an application made to Madame Schumann for further materials after her husband's death she declined to comply, probably because she did not think that the time for writing a biography had arrived. Indeed the fact that many of the persons connected with Schumann's private and public career were and are still alive compelled the author to an involuntary silence on many important topics, and although we fully approve of the discretion with which he has touched upon many delicate subjects, we cannot help noticing the omissions due to this cause. In fact we can scarcely call a *musical* biography of Schumann a book in which the most striking feature of his aspirations, viz. the entirely poetic basis of his musical creations and his affinity in this respect with the latest phase of the "music of the future," is scarcely mentioned at all. Still we gladly acknowledge the meritorious care with which Herr Wasielewski has collected his interesting materials. The book as it is forms a most welcome work of preparation for a future biography of Schumann which still remains to be written. Most valuable in this respect is a collection of Schumann's letters from the years 1833–1854. When contributing our mite to the study of Schumann's life (see "Unpublished Letters of Robert Schumann," *Academy*, vol. ii. pp. 93, 134, 238, 311) we mentioned that his letters as a rule do not display those lively touches and that amusing versatility which for instance characterize the correspondence of Mendelssohn. Still the noble elevation of feeling and the kind-hearted sympathy which appear throughout, but chiefly in the letters addressed to those dearest to him, prevent us from noticing Schumann's deficiencies in the more shining accomplishments of a letter-writer *par excellence*. We select the following passage from a letter to Hiller, dated April 23, 1853, which forebodes already the tragic fate which was soon to extinguish the noble flame of Schumann's genius. It shows how even in the wildest flights of his troubled imagination the absorbing interest of his mind, remained his art.

"Yesterday we have been rapping tables for the first time. It is a wonderful power. Fancy, I asked him (the table) about the rhythm of the two first bars of the Symphony in C minor. At first he would not answer, but at last he began:  but very slowly. When I told him, 'But the time is much too slow, my dear table,' he began at once beating the right time. I also asked him whether he could tell me the number I was thinking of, and he answered correctly, 'Three.' We were all of us in utter amazement and felt surrounded with miracles. Enough, I was to-day too full of what I had seen not to speak of it."

According to an old tradition Beethoven, when asked about the poetic meaning of the quoted motive of his Fifth Symphony, used to say:

"So klopft das Schicksal an die Pforte."
"So Destiny knocks at the gate."

For Schumann these words proved to contain a sad prophetic warning.

Not quite a year after the date of this letter he tried to drown the horrors of his approaching madness in the Rhine, and on the 29th of July, 1856, he died in the asylum at Endenich, near Bonn, in the churchyard of which town he lies buried.

Fr. Hüffer.

CRYSTAL PALACE CONCERTS.

The Saturday Concerts at the Crystal Palace were resumed on the 30th of September. It is intended to devote a considerable number of the present series chiefly to the works of Mendelssohn,

presented in approximate chronological order. The fist concert was opened by a selection from *The Wedding of Camacho*, a very faithful but no less characteristic specimen of its composer's powers, and one which it is to be hoped the world may be afforded opportunity for studying more closely, if not through the ear, at least through the eye. The detached pieces from it, printed many years ago, have been long out of print. Perhaps some ingenious librettist may even be found to do for the whole work what has been done so successfully in France of late with sundry operas the dramatic forms of which have proved unworthy of their musical clothing, *i.e.* save the latter, by the *re*-creation of the former. At the second concert we had, by the same composer, the more familiar overture to *A Midsummer Night's Dream*—taken, greatly to the advantage of its effect, at a somewhat slower *tempo* than that to which we have been used—and "The Reformation Symphony," now nearly as familiar and as much esteemed as his two later works in the same class. The third concert was closed by the presentation of the overture *Fingalshöhle*, or "The Hebrides," as finally revised by Mendelssohn in 1832, immediately preceded by that of his first treatment of the same subject two years earlier. Comparison between two musical works submitted to the ear only—of necessity in succession—is hardly to be made fairly. The two are seldom equally well performed, and that which is heard last almost inevitably makes the stronger impression, unless incomparably inferior to what has been heard before it. Moreover we are predisposed, in these cases at least—with Gibbon—to regard "the author himself" as "the best judge of his own performance; no one has so deeply meditated on the subject; no one is so sincerely interested in the event." Mendelssohn's oft-proven "*conscience du métier*" can never have been more severely tried than in the re-casting of this overture; for it has not been effected without the sacrifice of passages enough—and fine ones—almost to make a third. There can be little doubt that in the act he exercised a sound discretion, and that the "revise" has the advantage over the "first proof" in clearness and coherence—qualities for the absence of which no beauty of detail can afford compensation. Would that the like merciless self-criticism could have been exercised on the works of possibly even a greater genius, Schubert! At the fourth concert, Mendelssohn was chiefly represented by his overture "The Calm Sea and the Prosperous Voyage"—the most difficult but one ("Melusine") of his overtures—and "The First Walpurgis Night," a work the subject of which will always be a hindrance to its popularity out of the country to which it owes its origin. Besides these purely orchestral works various others from the same hand for pianoforte, alone or with accompaniment, have been given, by Miss Kate Roberts, Miss Zimmermann, and Herr Pauer; these again being interspersed with others, not always of less interest, by other composers. Thus the second concert was ended by one of the most varied yet coherent of recent orchestral works—Bennett's so-called "Fantasia-Overture," *Paradise and the Peri;* while the third was begun by the *Cymbeline* of the late Mr. Cipriani Potter, whose rank among creative musicians will perhaps be as freely acknowledged a few years hence by the many as it is now by the competent few who have had opportunities of forming an estimate of it. At the fourth concert two pieces were given which, for a different reason, require notice: a grand scena, "Medea," set to music by a resident foreign musician, Signor Randegger, and sung by Madame Rudersdorff; and an excerpt from one of Schubert's quartets, played orchestrally. No monologue of the same length as "Medea" has been conceived—unless, perhaps, the *Ugolino* of Donizetti—for many years past; nor uttered, for the simple reason that the sustaining power needed for its utterance belongs to a race of singers, in no age numerous, in ours all but without representatives. To appropriate their fair shares in the result of the performance of "Medea" to the composer and the singer would be a hard task, even after a second hearing. Perhaps another occasion may present itself for consideration of the composition; its execution was beyond all praise. The practice by large bodies of executants of musical movements, each part of which is written for an individual performer, is valuable as a means of enhancing the refinement of aggregate effort. Their presentation in public is quite another matter, countenancing as it does that which, alas! needs no countenance, the present taste—not exclusively British—for the big; and doing this by a direct and obvious violation of the intention of their authors. Success—like which nothing succeeds—may in a degree justify any undertaking: and the perfect execution of Schubert's variations from the Quartet in D minor at the fourth concert "by all the strings of the orchestra" might have justified its introduction into the programme. The execution proved, however—it need hardly be regretted—not at all perfect; and the success was of a kind which it is to be hoped will not be sought or attained at the Crystal Palace again.

JOHN HULLAH.

New Publications.

BRONZE ROOM, The, in the Department of Greek and Roman Antiquities, British Museum. Printed by order of the Trustees.

GEIBEL, E. Heroldsrufe. Aeltere u. neuere Zeitgedichte. Stuttgart: Cotta.

GRUEBER, B. Die Kunst des Mittelalters in Böhmen. Nach den besteh. Denkmalen geschildert. 1. Thl.: Der Roman. Styl. 1070–1230. Wien: Gerold.

GÜTZKOW, K. Fritz Elbrodt. Roman. 3 Bde. Jena: Costenoble.

GÜTZKOW, K. Lebensbilder. 3. Bd.: Prüfe wer sich ewig bindet. Novelle. Stuttgart: Halberger.

KONEWKA, P. Illustrations to Goethe's Faust. Sampson Low.

OLLANTA, an ancient Ynca Drama. Transl. from the original Quichua by Clements Markham. Trübner.

PALESTRINA, J. P. A. Missa "hodie Christus natus est," 8 vocibus concinenda. Ed. Franc. Witt. Regensburg: Pustet.

PFLEIDERER, K. Dante's Göttliche Komödie nach Inhalt u. Gedankengang übersichtlich dargestellt. Mit biographischer Einleitung. Stuttgart: Kern.

ROSSETTI, Maria F. A Shadow of Dante; being an essay towards the study of himself, his world, and his pilgrimage. Rivingtons.

VAN SINTE BRANDANE, uitgegeven door W. G. Brill. Groningen: Wolters.

Science and Philosophy.

Embryology of Vermes and Arthropoda. [*Embryologische Studien an Würmern und Arthropoden.* Mit 12 Tafeln. Von A. Kowalewski.] St. Petersburg.

ANY ONE who takes a general survey of the zoological literature of the last ten years will be impressed by the extraordinary amount of embryological investigation which has been carried on, especially in Germany and Russia. So striking a fact must have an evident reason and cause; and there cannot be the least hesitation in saying that this great amount of embryological work is in great part due to the Darwinian theory of evolution. Though in the *Origin of Species* itself too little stress is perhaps laid on the chapter on Embryology, yet Darwin himself points out how the previous attempts of v. Baer and others, to construct their Types and classifications by the aid of embryological characters, might lead to the construction of genealogical trees. But soon after the appearance of the *Origin of Species* there came Fritz Müller's little book *Für Darwin*, which at once threw great light on the subject, by establishing the law that the embryological development was nothing more or less than a short though not always exact recapitulation of the history of all the ancestors of the organism in question. Fritz Müller himself made the first decided application of this law, in tracing the different orders of the Crustacea back to their common ancestor, the famous Nauplius, that little Crustacean larva that quits the egg and is afterwards gradually developed into the well-known diversified and more highly organized forms. After Fritz Müller's decisive step Haeckel put the whole thing in a systematical form in his *Generelle Morphologie*, invented two very good new technical terms, Ontogenesis and Phylogenesis, which signified the development of the individual and of the tribe, and expressed the Müllerian law in the following form:—the ontogenetical development is the short and compressed recapitulation of the phylogenetical development.

Once in possession of such a law there is no wonder that embryological study went ahead of the other departments of morphology. There was an immense field of problems laid open to the students of biology, a field which promised extraordinary rewards for strenuous and judiciously made investigation. It was therefore only natural that in Germany, which at once took hold of the theory of evolution, and in Russia, which follows the German scientific lines, embryology became the favourite study. It is well known that it was Kowalewski who caused the first great excitement in this new field of embryology by proving that the Ascidians and Amphioxus were developed almost identically. He showed that the tail of the Ascidian larva was furnished with a chord the formation and composition of which were completely identical with the notochord of Amphioxus. In the application of the above-mentioned law of the recapitulation of the phylogenesis by the ontogenesis it was thus clearly shown that the Ascidians and Amphioxus ought to form a close genealogical union, both connecting the Vertebrates with a lower type, the definition of which was still unsafe, though it was at any rate a type of Invertebrates. That great gulf, which separated the highest class of animals, including at its very top Man himself, from all the others, was fairly bridged over, though of course the traces of the genealogical lines on the other side of the bridge were still very doubtful.

It could not be otherwise than that Kowalewski's results and the conclusions drawn out of them by Haeckel and Gegenbaur should be much questioned by other zoologists. It was like an earthquake, shaking all the well-established truths of former times, and menacing their complete overthrow and ruin. No wonder therefore that those who considered themselves the chief guardians of safety in the zoological state got into great excitement and ran helplessly up and down till the moment when Professor Kupffer in Kiel simply confirmed and enlarged the discoveries of the Russian zoologist, giving full justification to the conclusions of the two eminent Jena morphologists.

One more disappointment came over them. The second edition of Gegenbaur's *Outlines of Comparative Anatomy* appeared and did away with a good deal of the old doctrines. This book may justly be called the text-book and base of modern Morphology. It showed clearly how the progress of this science could be carried on by the combined action of Comparative Anatomy and Embryology.

General results were expressed on many pages, and with regard to the last and highest genealogical questions, it was stated that all the higher groups of animals were to be traced downward to the Vermes, but that there was the most decisive indication of very deep lines of demarcation within the class Vermes, so that homologies could scarcely be traced between those Vermes that gave rise to the Ascidians, Amphioxus, and Vertebrates, and those which led to the Annelids, Molluscs, and Arthropods.

The old gulf had disappeared—Vertebrates and Invertebrates were no longer opposed to each other—but, as it seems, only to give room to a new gulf of equal depth. If, as Gegenbaur distinctly states, the nervous system of Vertebrates, the spinal cord, has nothing to do with the nervous system of Arthropods and Annelids then of course we have scarcely won much for the unification of the Animal Kingdom. The division is so deep as to create anew two great classes, which may be fitly called Notoneuridæ and Gasteroneuridæ, the last having an œsophageal ring, the others being destitute of it.

Nevertheless there was still another side of the question —embryology. The embryology of Worms was a rather unknown field. Except a work of Rathke's on the development of Nephelis and Clepsine and a monograph of Leuckart's on Hirudo, we were without any knowledge of the development of this important group. The embryology of Arthropods seemed to be better worked out, for the publication of Rathke's great work on the development of Astacus in 1829 and a great number of monographs on the Embryology of Insects and Crustaceans had made their appearance, among which were books like that of Weismann on the Diptera, which seemed classical and calculated to settle a good many important questions.

It is only fair to say that almost all these works seemed very much to justify the conclusions arrived at by Gegenbaur in the second edition of his *Grundzüge*. Weismann especially endeavoured to prove the greatest diversity in the whole embryological and histological constitution of Insects and Vertebrates. There was almost nothing—according to his observations—equal to the apparently so well known embryology of the chicken; he went even so far as to abolish the last identical expressions, and called the layer of the skin hypodermis, to show its distinctness from the Vertebrate epidermis. There was no trace of the "Keimblätter," no indication of amnion or "seröse Hülle," no connective tissue to be compared to the so well-known connective tissue of the Vertebrates; in short, it was all but entirely different. But already some of Weismann's followers controverted his statements. First it was shown by Mecznikow that there existed embryonic skins such as the "seröse Hülle" and amnion of Vertebrates; but Mecznikow himself did not succeed in getting a clear idea about them, which is fully illustrated by the unhappy thought of calling the outer instead of the inner of these two skins "the Amnion Insectorum." He also did not succeed with regard to the organogenesis and the question of the "Keimblätter," showing even by the term "Extremitätenblatt," which he contended to have found in some insects, that he did not understand the real nature and meaning of the "Keimblätter." After his a number of other investigations were undertaken every year from the laboratory of Professor Leuckart, but scarcely one quite in agreement with the other, so that, of course, it was difficult to decide who was right and who was wrong.

Now it seems to be again Kowalewski who is to settle these questions by the investigations the greater part of which are contained in the above-named new work.

It would occupy too much space to review all the specialities this book contains. Though they are of the greatest interest, we must confine ourselves to those points that touch the great question we are treating of at present.

In the very first pages in the introduction Kowalewski gives a short abstract of what he has arrived at. He has studied the embryology of Sagitta, Euaxes, Lumbricus, Hydrophilus, Apis mellifica, and some Lepidoptera. He states with complete exactness the existence of the "Keimblätter," proves that the nervous system originates from the external layer as well in Vermes as in Insects. He shows that the so-called "Keimstreif" in Worms has no other meaning than to give origin to the muscles, thus reminding one essentially of the "Urwirbel" in the Vertebrate embryology. He proves that both in Vermes and Insects there is a fissure in the "middle layer" tending to produce a "Hautmuskelplatte" and a "Darmmuskelplatte," just as it is in Vertebrates. Further on he describes a "Darmdrüsenblatt" as the innermost layer, which produces the intestines.

For the embryology of Insects we owe to him specially the accurate description of the formation of the "middle layer" which gives birth, according to Kowalewski, to the muscles, the "Fettkörper," and the Malphighian vessels. This middle layer does not originate by a fissure of the Keimstreif, as was the generally adopted view, but by a fold of the external layer. The formation of the amnion and

the "seröse Hülle" in the eggs of Insects has been especially investigated by the Russian professor, and he proclaims most decidedly that he considers them homological to the similar structures of Vertebrates.

After this has all been distinctly described, Kowalewski begins to comment upon it. He finds in his way a view proposed by Ganin, who maintains that whatever may be the similarity in the constitution or formation of organs, they cannot be homologous if the animals themselves belong to different types of the Animal Kingdom. The refutation of this opinion is Kowalewski's chief object, and it is easy enough. His reasoning is as follows. He says :—

"Against this—Ganin's—view I should allege that, deriving the Vertebrates as a highly organised type from any ancestor belonging to the lower types, as perhaps the Molluscs (Tunicates) or Worms (Sagitta), we should always compare the 'Keimblätter' of the first existing Vertebrates with those of the other types, and if we compare the 'Keimblätter' of Amphioxus with those of the Worms and Molluscs, we must necessarily do the same with the other Vertebrates. Besides, we meet with a series of animals which, in spite of our complete knowledge of their development, we cannot bring into distinct connection with other animals; for example, *Phoronis*. It can scarcely be said whether this animal was better placed among the Bryozoa or the Worms. Or *Sagitta*, which, as Leydig says, belongs according to its nervous system to the Mollusca, but which, as nobody can deny, might equally as well be placed among the Worms. What, then, are we to do with the 'Keimblätter' of these animals? Are we to compare those of *Phoronis* with those of Molluscs and Worms? Those of *Sagitta* with those of Molluscs, Worms, or even of Echinoderms? And if not, are we not driven to consider in every doubtful case all the organs of such a being as *sui generis?* And then it would take away from us every scientific basis; it would finally render impossible any such science as comparative anatomy or comparative embryology. Therefore I strongly hold that all these structures are, in spite of their belonging to different types, truly homological."

If we understand this rightly, it means that not only Ascidians, Sagitta, Amphioxus, and Vertebrates are homologous in every respect, but also Annelids and Arthropods, so that Kowalewski places himself by this statement in the most decided opposition not only to Ganin's but also to Gegenbaur's view, as stated above. And looking over some parts of the investigations on Euaxes and Hydrophilus, we meet with statements which go so far as to regard those well-known gigantic fibres, described by Claparède and Leydig, in the nervous system of the Annelids as homologous to the Chorda dorsalis of Vertebrates, and to hint as to the homology of the segmental organs of the Annelids and the "Urnieren" of Vertebrates. Besides we find that Kowalewski says expressly that he does *not* consider the "Mitteldarm" of the embryo of Insects as homologous to the intestine of Vertebrates, but that he is inclined to judge the so-called "Rückenrohr," which he has discovered in Hydrophilus and some other embryos of Insects, as the true homologue of the Vertebrate intestine, thus confirming his opinion about the general homology of both the types. This may be true or not, but we should say, in spite of our own conviction that the nervous systems of Arthropods and Vertebrates are homologous, that the mode of demonstration which Kowalewski has taken cannot lead to a successful end. There is first of all a great defect in it, as Kowalewski nowhere tries to bring the principal questions to a fair explanation. The dispute whether Insects and Vermes had "Keimblätter" or not was rather absurd so long as it was not determined what was to be understood by the expression "Keimblatt." We all know how great are still the difficulties with regard to the final statement what organs derive their origin from the middle layer, and what do not. Do the sexual glands and urinary vessels truly belong to that middle layer or not? And are the blood-vessels, the blood-corpuscles, and the "Bindegewebe," produced by a "Keimblatt" or not? Of course, these questions can be definitely solved only by direct observation, but a great deal of error would be spared if the notion of the real meaning of "Keimblätter," as of histological units, had been better and more generally understood beforehand. As it was, the "Keimblätter" were a rather mysterious thing, the meaning of which nobody knows, and the dispute seemed all the more endless.

The second objection we should make to Kowalewski's manner of reasoning is that even the complete identity of the structure of "Keimblätter" in Vertebrates and Arthropods and Vermes would not be sufficient to demonstrate in an irreproachable way that these three orders were in a close genealogical union; in such a union as we ourselves, contrary to the opinion of Gegenbaur and the greater part of the other zoologists, still continue to believe. It is not difficult to understand that the nervous system ought always to derive its origin from the external layer of the embryo, that the intestine, on the contrary, comes off from the innermost layer, and that muscles are originated between these two layers. The nature of these organic systems might force upon them this mode of origin, and therefore the identity of their structure will not suffice to prove that they are necessarily homologous, though, of course, it will be an enormous help for the definite statement that it is so. But this definite statement can only be reached by demonstrating how all the diversities of structure and formation between Vertebrates, Arthropods, and Annelids, are to be accounted for, and that they can be reduced to a single individual from which the three different structures took their origin. To Kowalewski's statements and opinions Gegenbaur, Haeckel, and others, will still object that the relative position of the different organic systems in these two great groups excludes every possibility of homologism, and that whoever undertakes to object to their opinions has to show how this different position may be accounted for, together with a complete homologism of the systems. It is well known that long ago Geoffroy St.-Hilaire the elder said that Insects were nothing but Vertebrates running on their back; but this was not only to be said but to be proved and maintained against different views. This Kowalewski has not done, and he has not shown how it came to pass that the one had the œsophageal ring, whilst the other is destitute of it, thus omitting the very chief argument against his view. The great question of the unity of the organic composition—"l'unité de composition organique" of Geoffroy St.-Hilaire—as opposed to the discrimination of types in the Cuvierian sense, remains therefore still open, though we are inclined to consider Kowalewski's work, in spite of many points in which we are at issue with the result of his investigations, as a decided step towards a final solution of this great problem.

ANTON DOHRN.

Plutarch's Morals. Translated from the Greek by several Hands. Corrected and revised by W. W. Goodwin, Ph.D., Professor of Greek Literature in Harvard University. With an Introduction by Ralph Waldo Emerson. Boston: Little, Brown, and Co. (London: Sampson Low and Son.) 5 vols.

How it is that Plutarch has achieved so abiding a popularity in modern times is a question more easily asked than answered. In France, indeed, the phenonemon is explained in part at least by the literary excellence of Amyot's version, which has made Plutarch for the last three centuries a sort of French classic. Montaigne, a diligent student of this version, has told us at some length the secret of the charm which drew him to Plutarch and another favourite author of his, Seneca. "Ils ont touts deux," he says, "cette notable commodité pour mon humeur que la science que i' y cherche y est traictée à pièces descousues, qui ne demandent pas l'obligation d'un long travail, de quoi ie suis incapable: ainsi sont les

opuscules de Plutarque et les épistres de Sénèque, qui sont la plus belle partie de leurs escripts et la plus profitable." Plutarch's essays were profitable reading, because Montaigne found there "la cresme de la philosophie," "opinions platoniques, doulces et accomodables à la société civile"—in short, a conception of life at once ethnic, consoling, and practical: no writings seemed to reveal so much of that wisdom of the ancients which had hitherto been a sealed book to all but the erudite few. And it must be confessed that there is in all that Plutarch says an air of sanity and even commonplace which makes him a better exponent of the average mind of antiquity than a writer of the first order would have been. He has a profound horror of paradox; hence his aversion to Stoicism. Epicureanism appears to him a mass of immoral contradictions, which render happiness an impossibility, and for which the saintly life of Epicurus himself is no excuse in the eyes of his severe censor. Superstition he pronounces to be worse than atheism, on the ground that the superstitious man is "an atheist at heart, but too much of a coward to think as he is inclined." His treatise "Concerning such whom God is slow to punish" is a sort of *Théodicée*, explaining on principles of reason why the divine vengeance may be suspended so as to fall on the remote posterity of the offender. He does not agree with Chrysippus in thinking evil to have a natural place in the economy of the world: he cannot conceive that death is the end of all things, and that the gods, "like women that bestow their pains in making little gardens in earthen pots and pans, created us souls to blossom and flourish only for a day, in a soft and tender body of flesh, without any solid root of life, and then to be blasted and extinguished in a moment upon every slight occasion." Plutarch, in a word, is a religious man and a moralist; intent on edifying us, yet always willing to relieve the didactic austerity of his theories by a wealth of anecdote and learned allusion, which makes him one of the most entertaining and instructive of ancient writers. Those who desire to know what attraction Mr. Emerson has found in Plutarch will do well to consult the highly interesting introduction prefixed to these volumes.

The basis of the work before us is a translation which appeared in London in 1684–1694. This old translation, now that it has been throughout corrected and revised by the scholarly hand of Prof. Goodwin, of Harvard, forms an appropriate pendant to the edition of the *Lives* published some years ago under the superintendence of the late Mr. Clough. The plan of amending an old version, in preference to producing an entirely new work, is one sanctioned by the great name of Courier, who followed it with eminent success in his *Longus*. Although we think that Mr. Emerson goes too far in claiming for the present translation of the *Morals* the credit of being "a monument of the English language at a period of singular vigour and freedom of style," it is probably better than anything that could be done in these days; its quaintness, at any rate, is an acceptable relief from the laboured realism of many modern attempts at translation. Here is a specimen, taken from the Essay on Banishment:—

"These are the boundaries of our country, and no man is an exile or a stranger or foreigner in these, where there is the same fire, water, air, the same rulers, administrators, and presidents, the same sun, moon, and day-star; where there are the same laws to all, and where, under one orderly disposition and government, are the summer and winter solstices, the equinoxes, Pleiades, Arcturus, times of sowing and planting, where there is one king and supreme ruler, which is God, who comprehends the beginning, the middle, and end of the universe; who passes through all things in a straight course, compassing all things according to nature."

If the versions of poetical passages are not equally satisfactory, it is but charitable to remember that they appeared at a time when Tate and Brady were the poets of the hour. But even the traducers of the Psalms might have envied the following stanza intended to represent some lines of Empedocles:—

"A river in the bottom seems
By shade of colour black;
The like is seen in caves and holes,
By depth, where light they lack."

The original translation is "by several Hands"—none of them "eminent," unless we make an exception in favour of that careful scholar, William Baxter, and Creech, the editor of Lucretius, who was Fellow of All Souls': the rest were for the most part Oxford men, whose strong point was manifestly not their knowledge of Greek. Prof. Goodwin cites some amusing instances of their ignorance, and we can well imagine that his patience has been sorely tried in the work of clearing away the portentous blunders of his predecessors. His patience, we fear, must have occasionally failed him, for inaccuracies, not a few, remain to perplex the reader who cannot correct them for himself by reference to the Greek. Errors like "precepts," instead of "catalogues of dramas" (vol. ii. p. 178); "we say nothing that we take from them," instead of "we give no opinion of our own" (vol. v. p. 240), and others which we forbear to enumerate, are serious blemishes in a book so laudable in design, and, taken as a whole, so excellent in execution. Let us add that on the score of typographical beauty these volumes have every claim to a place in an English library.

I. Bywater.

Scientific Notes.

Geography.

The Open Polar Sea.—It may be remembered by those who interest themselves in the progress of geographical discovery that the more recent explorations of the Arctic region were called into life by a scheme conceived by Captain Sherard Osborn, six years ago, for penetrating to the North Pole. The route selected was that by Baffin Bay and Smith Sound. Immediately afterwards, Dr. Petermann of Gotha laid before the English Geographical Society a project which recommended a northward course in the direction which continues the warm Gulf Stream drift between Greenland and Novaia Zemlia. Whilst these plans were still under discussion here, a German National Expedition under Captain Koldewey, followed by several private ventures, sought a way to the Pole in the course recommended by Dr. Petermann. The commanders of some of these expeditions, however, judging from their experiences, did not think that the most practicable route had been chosen for their object, and notably Captain Koldewey, who was unable to pass the icy barriers of this region, became a convert to Captain Osborn's plan. The news received from Payer and Weyprecht (see *Academy*, vol. ii. p. 458) on the return of their vessel to Tromsö is a triumph for Dr. Petermann, since it tells that in following precisely the course indicated they were able to pass through the outer belt of pack ice, and to reach an open sea between the north of Spitzbergen and Novaia Zemlia, above the 78th parallel, and extending from 42° E. longitude probably to join the Polynia of the Siberian seas. It does not follow from this that a properly organized expedition taking the English geographer's route would not be equally successful in an "open" year: the American attempt by Captain Hall will doubtless do much to settle this point.

Interior of Greenland.—An important memoir on the nature of the ice-covered interior of this vast island, by Dr. Robert Brown, appears in the latest number of *Petermanns Mittheilungen*, and combines, with the author's personal experience and knowledge, the results of the observations of all former explorers in this region.

China.—The same part of the *Mittheilungen* contains a *résumé* of the scientific journeys of Freiherr von Richthofen in Central China. This gentleman, who, as geologist, accompanied the Prussian expedition to Eastern Asia, afterwards independently spent several years in travelling in Further India and California. His explorations in China began in 1868, and terminated in the middle of 1870; and in making known the extraordinary richness of the country in coal and iron, the mainstays of commerce and industry, mark an important epoch in our knowledge of the land. Herr von Richthofen's latest route lay in a

direct line across the country from Canton to Pekin. His reports on the provinces of Hunan, Hupeh, Honan, and Shansi, have been published, in English, at Shanghai.

Ocean Currents.—In a third part of his memoir on ocean currents, which appears in the *Philosophical Magazine* for October, Mr. James Croll examines critically the theory of a general oceanic circulation, put forth by Dr. Carpenter in a paper read before the Royal Geographical Society. After showing that no additional power is obtained from a vertical descent of the polar waters through the action of cold (the "primum mobile" of Dr. Carpenter) above that which is derived from the full slope, of less than 18 feet, due to difference of temperature between the sea in equatorial and in polar regions, Mr. Croll endeavours to prove that the "primum mobile" has in reality no existence; and that since the energy derived from the whole slope comprehends all that can possibly be obtained from gravity, there is not in this sufficient power to produce the circulation which Dr. Carpenter assumes. Further, he maintains that if difference of specific gravity fails in accounting for the circulation of the ocean in general, it fails in a more decided manner to explain the Gibraltar current, because it is only the stratum of water which rests above the level of the shallowest part of the strait on each side that can exercise any influence in disturbing equilibrium, and since the observed difference of density between the Mediterranean and Atlantic within these limits does not give a difference of level sufficient to cause movement.*

Physiology.

Termination of the Nerves in the Cornea.—Dr. E. Klein gives, in the *Quarterly Journal of Microscopical Science* for October, a description of an excellent method of preparing the cornea in various animals in such a manner as to render the very finest branches of the nerves perceptible. It consists essentially in staining the fresh tissue with a very weak solution of chloride of gold, then immersing it in a concentrated solution of tartaric acid, and finally carefully washing it. By this means the nerves appear dark upon a lighter ground; but considerable illuminating power is required. He shows the mode of branching of the larger trunks, and how, when they reach the deep surface of the epithelium, extremely fine filaments enter the epithelial layer, the communications between which form in the first place a *deep* intra-epithelial plexus, whilst from this still finer branches ascend between the cells and form a *superficial* intra-epithelial network, which is separated from the surface at most by only one or two flattened cells. The terminal knobs or bulbs of Cohnheim he considers to be intercalated swellings in the course of the nerves, and by no means to represent their terminations.

Velocity of Vision.—The last number of Pflüger's *Archiv für Physiologie* (Band iv. Heft viii.) contains a paper by M. Baxt, of St. Petersburg, "On the time requisite for a visual impression to arrive at the consciousness, and upon the duration of the period of consciousness, caused by a visual impression of definite duration." From the experiments of Helmholtz and Exner it has been shown that, if a number of ordinary letterpress letters be exhibited to the eye on a white ground, sometimes one, sometimes two or more of them are distinguished from the row according to the duration of the impression, and that of the positive after-image. M. Baxt proceeded on the same principle, and his apparatus was similar to those employed by Helmholtz, and consisted of two discs, which could be caused to revolve at known speed, but the posterior of which rotated twelve times quicker than the anterior. From the numerous experiments given (too complicated to be here inserted) it appears—1. That the consciousness of a given excitation is only realised or perfected by degrees; and, 2. That under the particular circumstances of his experiments, a period of 1-20th of a second must elapse between the occurrence of a relatively simple excitation of 6 or 7 letters suddenly placed before and withdrawn from the eyes and its reception or formation in the consciousness. In other experiments he found that the time required for the comprehension of a complex figure was much greater than that for a simple figure, the proportion between an ellipse and a pentagon for instance being as 1 : 5. Researches on the time requisite for the production of consciousness with various strengths of illumination gave the result that this time was proportionate within rather wide limits to the degree of illumination; but if the illumination was excessively strong or weak, it increases.

The Physiological Action of Extract of Meat (Flesh-broth, Fleischbrühe) and of the Alkaline Salts.—A paper appears on this subject in one of the last parts of Pflüger's *Archiv für die gesammte Physiologie* (Band iv. Heft vi. and vii.), and is of considerable interest, since it deals not only with an obscure department of physiology but with large commercial interests, since the establishment of Liebig's and other factories for the production of the extract of meat have caused this material to be largely employed in the treatment of the sick. It is written by Gustav Bunge, whose experiments were undertaken in the laboratory of Professor Schmiedeberg, of Dorpat. The composition of the American extract of meat is—water, 17·9; ashes, containing a large proportion of potash salts, 21·9; organic constituents, 60·2 per cent. In experiments with dogs he found that they would not willingly consume it, but that, when made to take it, it exerted but little influence upon either the frequency of the pulse or upon the temperature of the body; nor, when he made himself the subject of experiment, were any such effects produced. The addition of a still larger quantity of the salts of potash to the extract of meat caused an increase in the frequency of the pulse in rabbits, but not in other animals or in man. When injected in fatal doses directly into the blood, the alkaline salts were found to lower the number and strength of the contractions of the heart, seven to ten grains of chloride of potassium injected directly into a vein of a large dog proving fatal, by paralysing the heart. Upon the whole, he ascribes an exceedingly low value to the extract of meat as a nutritious substance, actually placing it below the level of coffee, tea, and alcohol.

Effects of Swinging in Depressing the Temperature of the Body.—Dr. Wjatscheslaw Manassein gives the results, in one of the last parts (Band iv. Heft vi.) of Pflüger's *Archiv*, of a considerable number of experiments on rabbits, which he subjected to the action of swinging, the swing making from 30 to 40 double vibrations in the minute. In all instances the temperature of the interior of the body fell, the maximum depression being 1°·2 Centigrade, the minimum 0°·3 C., and the average 0°·66 C. The effects were fully marked in about 15 minutes, and lasted for about two hours. The tendency to sleep was always distinctly expressed. The depression in the temperature of the body was not occasioned by the mere renewal of the air in contact with the surface, as this was carefully guarded against by enveloping the animal in wool. The experiments have a practical side, as showing that swinging has the same effect in depressing the animal temperature in rabbits made ill (feverish) by the injection of fœtid pus into their vessels. Their temperature may in such case even be lowered to the normal degree.

On the Origin and Distribution of Mycrozymes (Bacteria) in Water.—The October number of the *Quarterly Journal of Microscopical Science* contains a paper on this subject by Dr. Burdon Sanderson, reprinted by permission from the author's "Second Report of Researches concerning the Intimate Pathology of Contagion," in the appendix to the Thirteenth Report of the Medical Officer of the Privy Council. Dr. Sanderson, assisted by Dr. Ferrier, by whom many of the experiments recorded in this memoir were both planned and carried out, has been making a series of investigations into the conditions under which Microzymes (Bacteria) and Fungi develop themselves in various solutions. The results at which he arrives are of very great importance. Microzymes are not capable of being transmitted from one solution to another by means of air; on the other hand, Fungi, as is well known, are capable of being so transmitted. If proper precautions in its preparation be taken, a solution (Pasteur's, *e.g.*) may be exposed to the air for months in an open vessel without the development in it of a single Bacterium, whilst Fungi, *i.e.* Mycelium torula, will be developed in it in proportion to its amount of exposure to the air. In order to ensure this result, all that is necessary is to boil the solution, and thoroughly rinse the vessel which is to contain it with boiling water. The addition of a drop of ordinary distilled water is sufficient to cause the rapid development in such a solution of Bacteria in abundance. If the distilled water be previously boiled no such development ensues. These results show clearly that there is no developmental connection between Microzymes and Torula cells, and that their apparent association is one of mere juxtaposition. There is further contained in this paper an account of a series of experiments with sealed tubes containing organic and other solutions which were, as in Dr. Bastian's well-known experiments, submitted to a high temperature, special experiments being also made with tubes in which more or less perfect vacuum was produced, Dr. Bastian having, as it will be remembered, supposed that he had found that low organisms developed themselves more rapidly in fluids existing in an atmosphere of low tension. Dr. Sanderson's conclusions are entirely at variance with those of Dr. Bastian. In no one case where proper precautions were taken to exclude and destroy germs, did any development of life whatever take place.

Geology.

Contemporaneity of Man with Extinct Mammalia.—The exploration of King Arthur's Cave during the past summer by the Rev. W. S. Symonds, F.G.S., has been attended by the most gratifying results. Itself a deep fissure in the carboniferous limestone rocks of the hill of the Great Doward, on the right bank of the Wye, Whitchurch, near Ross, it appears to have attracted but little notice among geologists until last year, when some miners, while making surface excavations in search of iron ore, exhumed numerous fossil bones, which were identified

* It should be noted that Dr. Carpenter, in a letter from Malta, dated Sept. 29th, and printed in *Nature* for Oct. 12th, states that a series of observations which he had just carried out in conjunction with Captain Nares, of H.M.S. *Shearwater*, places beyond all doubt the outflow of dense Mediterranean water into the Atlantic over the "ridge" or "marine watershed" between Capes Trafalgar and Spartel, and beneath the surface-inflow of Atlantic water.

by Professor Owen to be relics of the mammoth, rhinoceros, and horse. This past summer Mr. Symonds has prosecuted further excavations in a scientific manner, and has added the remains of the cave lion, hyæna, bear, bison, reindeer, and gigantic Irish elk to those already mentioned. Most importance, however, is to be attached to the occurrence of flint flakes and chips, and various human instruments of stone, mingled with the remains of the animals just enumerated: these must have been brought from a great distance, and afford some of the strongest evidence yet elicited of the antiquity of the human race. The floor of the cave, which has been excavated to a depth of about 24 feet, yielded the most interesting results from the very commencement: the superficial layer, consisting of fallen *débris* from the roof and loose stalactitic matter, was found to contain remains of ancient pottery, probably Roman, and human bones in a recent and unfossilised condition, separated from this by a thin stalactitic floor; an accumulation of cave earth succeeded, about three feet in thickness, containing the flint and other instruments mingled with the remains of the extinct mammalia; between this and the lower and greater deposit of cave earth yielding similar remains, relics of the cave bear alone being absent, a band of stratified red sand, silt, and rolled pebbles, intervened, which Mr. Symonds interprets as indicating the river bed of an ancient Wye 300 feet above its present channel, the drift sand and pebbles being derived from the lower Silurian rocks of Rhayader and Builth through which the present river flows. These results of Mr. Symonds' explorations are recorded in the October number of the *Geological Magazine*, and were laid before the late meeting of the British Association.

The *Annals and Magazine of Natural History* for September contains the description of a new Plesiosaurian reptile from the Portland limestone, by Mr. Harry G. Seeley, of Cambridge. The remains—cervical and pectoral vertebræ—demonstrate the species to be most closely allied to *Plesiosaurus megadeirus*, from which it appears to differ in the centrum being longer and flatter on the articular surface, with a larger lateral margin to the articulation and a relatively shorter articulation for the cervical rib, which is placed farther from the anterior margin of the centrum. Winspit Quarry, in the Isle of Purbeck, being the locality from whence the materials for the creation of this new species were derived, *Plesiosaurus winspitensis* is the name conferred upon it by its describer. The same number of this journal includes also the record of a new fossil *Balanus* (*B. sauritonensis*) from the raised beaches of Saunton and Baggy Point, North Devon, by Mr. Edward Parfitt.

New Fossil Fish.—Vol. iii. fasc. 2, of the *Archives du Musée Tegler* includes the description of a new representative of the interesting genus *Cœlacanthus*, by Dr. T. C. Winkler, conservator of the Tegler Museum. The remarkable character of this extinct piscine form, first pointed out by Agassiz and von Munster, is exhibited in the structure of the caudal fin, which is entirely traversed by the vertebral column, and terminates in a smaller accessory one. *Cœlacanthus Harlemensis*, the new species introduced by Dr. Winkler, presents close affinities with both *C. striolaris* and *C. penicillatus*, Munst., but differs from them either in the smaller number of the rays of the dorsal and pectoral fins, and more particularly from the former in the much greater size of the ventral one. The specimen affording the material for Dr. Winkler's description is derived from the lithographic limestone in the neighbourhood of Eichstätt, Bavaria.

Affinities of Sivatherium.—Dr. Murie (British Association and *Geological Magazine*) contributes some original data on the affinities of this interesting artiodactyle, first made known to us by the indefatigable labours of Dr. Hugh Falconer and Captain Sir Proby Cautley. He opposes Dr. Falconer's theory of its having borne a prehensile proboscis, after the manner of the elephants and tapirs, considering the evidence offered by the structure of the facial bones rather indicates its having merely possessed a voluminous salient muzzle, like that of the existing *Saiga* and elk. Dr. Murie is of the opinion that, taking the character of its horns, its affinities with the North American prongbuck (*Antilocapra*) are most patent, while in dentition and the form of the lower jaw it is allied to the Cervidæ, and again in the massiveness of its limbs, sternum, and vertebræ to the Bovidæ, or Ox tribe. A spirited drawing representing Dr. Murie's ideal restoration of *Sivatherium giganteum* accompanies his contribution.

New Tertiary Crustacea.—Dr. F. Stoliczka publishes in the late issue of the *Memoirs of the Geological Survey of India* a description of five new species of Bractyurous Podopthalmia from the argillaceous beds and tertiary nummulitic limestones of Sind and Kutch. The species described belong to the respective families of the Portunidæ, Canceridæ, and Leucosidæ, the form referred to the last one being the type of a new genus for which Dr. Stoliczka proposes the name of *Typilobus*.

Effect of Alcohol on Dogs.—M. Magnan has communicated to the Société de Biologie of Paris (*Revue scientifique*, Oct. 7, 1871) the results of his experiments in administering alcohol to dogs in doses of from about one to three ounces per diem. The effects produced strongly resemble those developed in man himself by the abuse of alcohol. The nervous susceptibility is greatly increased, and even complete hallucinations resembling those of delirium tremens occur, the temperature of their body falls, and they die from ulceration of the stomach, fatty degeneration of the liver and kidneys, and other states commonly seen in drunkards.

Chemistry.

Meteoric Graphite.—The meteorite found some years since at Cranbourne, near Melbourne, contains, in association with pyrites, the form of carbon, which has been usually termed graphite. Professor Berthelot, who has recently subjected a portion of the carbon of this large mass to the action of nitric acid, or a mixture of that acid with chlorate of potash, identifies it (*Compt. rend.* lxxiii. 493) with the carbon contained in cast iron, and not with native graphite. The products of the oxidation of the meteoric carbon exhibit all the properties of that formed by subjecting the carbon of pig-iron to the same operation, and differ from that given by graphite under like conditions. He assumes, therefore, that the carbon of the meteorite has been dissolved in the nickeliferous iron, and subsequently separated from it during a rapid cooling of the metal. The fact of pyrites being intimately associated with the carbon of this aërolite has led the author to suppose that this element is a result of the action of the incandescent iron on carbon bisulphide and not on carbonic oxide. Carbon of this kind prepared by Gruner's method, when subjected to the action of a mixture of nitric acid and chlorate of potash, became perfectly soluble, as the combined carbon of pig-iron does under similar circumstances. Native graphite, then, cannot have been crystallized from molten iron, for it differs both from that which separates from iron and from the chemically combined variety. Native graphite, moreover, cannot have been formed from anthracite or from organic substances that have been carbonised at ordinary or moderately elevated temperatures, for the coke derived from either of these sources gives no graphitic acid. To convert them into graphite the intense heat of the electric arc must be employed. Graphite, however, is plentifully produced by the decomposition of carbon disulphide at higher temperatures.

On the Occurrence of Amygdaline and a New Body resembling Asparagine in Vicia Sativa.—It is stated by Ritthausen and Kreusler (*Zeitschrift für Chemie*, 1871, 283) that on pouring water over some bruised seeds of this plant the odour of hydrocyanic acid is to be perceived. They also succeeded in detecting the presence of this acid in the distillate from such a mixture. As yet amygdaline is the only substance known which produces the acid under such circumstances, and the authors are of opinion that it is actually present in the seeds, though they have not yet succeeded in isolating it. The material first experimented on came from Greece: seeds from other localities have since been found to comport themselves in like manner with water. By digestion with boiling alcohol and subsequent treatment with ether a yellow liquid was obtained which slowly deposited crystals of a compound with the formula $C_8H_{16}N_4O_6$ that greatly resembles that of asparagine. It is tasteless, has a feeble alkaline reaction, dissolves but to a slight degree in cold though more readily in warm water, and can be obtained in fine crystals from its solution in warm dilute alcohol. This new body has only been met with in the vetch from Attica: none of the material of localities which has till now been tested contains it.

The Sea-water of the Coast of Sweden.—Professor Blomstrand writes from Lund (*Ber. Deut. Chem. Gesell.* 1871, No. 13, 749) a description of the results of the elaborate experiments instituted by Prof. Ekman, of Stockholm, on this subject. The proportion of salt in the sea-water along the west coast of Sweden varies to a far greater degree than that of any other water. Dividing the sea along the western shore into two parts by an imaginary line connecting Skagen and Marstrand, into Skager Rack, leading to the North Sea, and Kattegat, where the current from the Baltic sets in, he found in the former area somewhat under 2 per cent. of salt in the surface water, 2·5 per cent. at a depth of 60 feet, and 3 per cent. at 90 feet below the surface. In the latter area a percentage of 2·5 is met with at the surface. At its northern and southern limits, where large rivers are poured in, water containing 2·5 per cent. occurs at a depth of 12 feet; at 60 feet usually, and not unfrequently already at from 25 to 30 feet, 3 per cent. of salt is met with, whilst at 91 feet it remains constant at 3·35 per cent., and at greater depths very slowly increases, reaching 3·5 per cent. 600 feet down. In the narrow fiords the same relation between percentage and depth was remarked.

Masses of Meteoric Iron from Virginia.—The *American Journal of Science* for July, 1871, contains a paper, illustrated with drawings and sections, by Professor Mallet, of the University of Virginia, on three masses of iron from Augusta County, in that State. The first lump was turned up by the plough some two years ago, and proved to be an undoubted meteorite, weighing 56 lbs. The second was shown at the annual fair of the State Agricultural Society in Richmond, and weighed 36 lbs.; and the third is a hand specimen, some 3 lbs. in weight. All

three have an irregular pear-like shape, and a specific gravity of 7·85 to 7·83. They exhibit the Widmannstättian figures with great distinctness, and resemble in this particular the iron of Lenarto, in Hungary. They consist of between 89 and 90 per cent. of iron, about 10 per cent. of nickel, a little cobalt, and traces of copper, tin, and manganese. It is in the highest degree probable that these three masses represent a single fall, as they agree very closely in chemical and physical characters. It is a remarkable fact that two meteoric irons and one meteoric stone had previously been found in the State of Virginia.

Test for Nitrous Acid.—Among recent contributions to chemical science from the laboratory of the Lawrence Scientific School is a paper in *The American Chemist* for July, 1871, 38, describing an examination by T. M. Chatard of the various methods employed for the recognition of this acid. In his enquiry he used a very dilute solution of Fischer's salt, $Co_2 6NO_2 + 6(KNO_2) + 2$ aq. containing $\frac{1}{200000}$ part by weight of nitrous acid. Most of the tests failed to give accurate results with such a solution, and gave a reaction only when a comparatively strong solution of the nitrite was employed. The methods devised by Schönbein, Braun, and Hadow were investigated. If to a suspected solution potassium ferrocyanide and acetic acid be added, and the mixture be boiled, and ammonium sulphide be subsequently added in the cold, the characteristic blue colour is not seen when less than 10 c. c. of the above-mentioned test solution is taken. A satisfactory result was finally arrived at by the production of phenol from aniline by means of nitrous acid. The liquid under examination is to be evaporated nearly to dryness, and intimately mixed with a little concentrated solution of sulphate of aniline. If nitrous acid be present, the odour of phenol will be immediately perceived, 1 c. c. of the test liquid giving a perfectly distinct reaction. Nitric acid produces no phenol, but merely a yellow colour.

Hydrated Carbonate of Lime.—Prof. Rammelsberg, of Berlin, has analysed some small crystals occurring on some confervæ, and found them to be a hydrate of carbonate of lime containing five molécules of water (*Ber. Berlin. Chem. Gesell.* 1871, No. 11, 569). Pelouze obtained the same compound from a solution of lime in sugar; and Prince Salm-Horstmar more recently noticed their occurrence in the tube of a well. This hydrate has the property of parting with its water at 15°, even when under water.

Conversion of Acetone into Lactic Acid.—According to E. Linnemann and V. v. Zotta (*Ann. der Chemie*, August, 1871, 247) dichloracetone, when heated with 20 volumes of water for six hours to 200° C., is completely decomposed into hydrochloric and lactic acid. By evaporating in the water-bath the former acid readily passes off, leaving a brown-coloured syrup that gave with lime or zinc salts which crystallize well. 24 grammes of dichloracetone produced 5 grammes of colourless lustrous crystals of the salt in question, the variety of lactic acid being that formed in lactic fermentation, though the degree of solubility of some of the products seem to indicate the occasional presence of a portion of the other form of the acid. The change is brought about by the substitution in dichloracetone of two atoms of chlorine for two of hydroxyl in the following way:—

$$C_3H_4Cl_2O + 2H_2O = 2HCl + C_3H_4(HO)O.$$

We have to record the death of two eminent English scientific men, Sir Roderick Murchison, Bart., and Mr. Charles Babbage.

New Books.

De Silvestri, A. Compendio di patologia e terapia speciale degli animali domestici basato sui recenti progressi della fisiologia ed anatomia patologica. Vol. 1. Torino: Candeletti.

Favre, E. Études sur la géologie des Alpes. Bâle: Georg.

Fehling, Dr. v. Neues Handwörterbuch der Chemie. 1ter Band, 1te und 2te Liefg. Braunschweig: Vieweg.

Helmholtz, H. Populäre wissenschaftliche Vorträge. 2tes Heft. Braunschweig: Vieweg.

Huxley, T. H. A Manual of the Anatomy of Vertebrated Animals. London: Churchill.

Jevons, W. Stanley. The Theory of Political Economy. Macmillan.

Kirby, W. F. A Synonymic Catalogue of Diurnal Lepidoptera. London: Van Voorst.

Moggridge, J. Traherne. Contributions to the Flora of Mentone. 100 coloured plates. London: L. Reeve & Co.

Quetelet, A. Anthropométrie: ou mesure des différentes facultés de l'homme. Bruxelles: Muquardt.

Quetelet, A. Physique sociale; ou essai sur le développement des facultés de l'homme. 2 vols. Bruxelles: Muquardt.

Rieth, Dr. Die Volumetrie oder chemische Massanalyse zum Gebrauch im Laboratorium. Bonn: Cohen.

Sutton, F. A Systematic Handbook of Volumetric Analysis. 2nd ed. Churchill.

History.

Les Dernier Stuarts à Saint-Germain-en-Laye. Par la Marquise Campana de Cavelli. 2 vols. Paris: Didier; London: Williams and Norgate.

A visit to St. Germain in 1864 inspired our authoress (an Englishwoman by birth) with the idea of collecting the documents connected with the Italian wife of the last Stuart king, Marie Beatrice of Modena, a descendant of the great house of Este. By taking her as the central figure it was possible to avoid laying too much stress on James II.'s public character and history, which only serves as it were for a background, while the queen's sterling character and worth come forth into the light. The fate of the Stuarts, too, can be represented more as a series of fatalities which weighed on a doomed line—not destitute of ability or good qualities, but which came into conflict with the progress of English society, and, not knowing how to change with the changing time, perished. Not that there is any attempt to conceal James' errors of policy or personal morality. On the contrary, these are expressly stated once for all, that the persons of the drama may be thenceforth allowed to speak for themselves, and reveal to us their projects, their fears, and their hopes. A very full preface describes the nature of the documents and enumerates the chief members of the Jacobite cause who shared James' exile at St. Germain.

The first pieces date from 1673—the date of the Duke of York's marriage. Peterborough's despatches, describing the bride, and the difficulties that arose about the marriage at Modena and at Rome, and the similar despatches of the French ambassador to Louis XIV., are followed by a curious itinerary of the bride's journey to England, drawn from the archives of Modena. The description is amusing. The Italians noticed two cavalry soldiers "always kept in front of Whitehall, though often changed," and "the palace of the queen, called Somerset, a good mile from the king's palace of Whitehall, opposite the park." Troubles soon began, and the Duchess of York had to retire with James to Brussels and to Scotland during the fierce state of excitement between the time of the Popish Plot and the Exclusion Bill. A secret agent from Modena at London supplies full details about her. Coleman, her secretary, was the first person arrested for the plot, whose letters seemed to give some warrant to Oates' narrative, and confirm the belief in that secret agreement with France of which we have now full proof. The letters of the French ambassadors are here largely used for illustration. At one time an attempt was made to throw doubt on Barillon's statements as to the bribery of the great persons both on the court side and that of the opposition (including Algernon Sydney), which were made public by Dalrymple, but it has been long given up. The two men whose honour is untouched by the charge are Shaftesbury and Russell. Mignet's great work on *The Spanish Succession in Louis XIV.'s Time* fully confirms all that was hitherto suspected of the intrigues between the English and French courts. Marie Beatrice's own letters to the nuns of "The Visitation" at Modena (she had intended from a child to enter the nunnery), to her mother, brother, and uncle, give us a good idea of her own character: she knew several languages, and her frequent Latin quotations show the nature of a good education in Italy at that time. In the correspondence the Orientalist Renaudot frequently appears: he carried on a considerable part of the secret intrigues set on foot with the Jacobites of England and Scotland, and was enthusiastic in the "good cause." But never was there a more signal illustration of the nature of "the hopes of exiles." The slightest signs

of discontent in England, the slightest hope of succour from abroad, become certainties of success. As to the real state of things in England and the course events were taking, they were incapable of forming a sound judgment. The "signs of the times" were as utterly lost on them as on their master. Of course the flight of the queen to France receives full illustration; it is one of those romantic adventures which abound in the Stuart annals, and enlist a sympathy for them which in most respects is so wholly undeserved. Our authoress is obliged to point out James' grossly immoral conduct long after his marriage, and in the midst of his religious fervour—conduct which forced his wife to demand passionately to be allowed to return to Italy. Later he seems to sink altogether into a devotee, and in the exile at St. Germain the queen is really the ruling spirit of the lost cause; she arranges what is to be done, and stirs up the Catholic feeling of Europe to restore her son. Her exile brought out the best parts of her character. As queen she is scarcely visible, and what we know of her is not altogether agreeable: her asking that a hundred of the Taunton rebels sentenced to transportation might be given her for her profit makes an unpleasant impression. Her religious zeal, too, would have urged on James even had he needed urging on. The leading Roman Catholics dreaded a reaction, and would have much preferred a more constitutional course. But the fanatics about the court, such as Father Petre (for whom a cardinal's hat was warmly demanded from the pope, who was much too wise to give it), whom James admitted to the privy council, decided otherwise. But the queen's zeal, which made her influence as queen of a Protestant country so injurious, assumed a brighter character in adversity—and to her adversity she owes her fame.

In the second volume the German despatches become important. Hoffmann, the imperial ambassador in England, was an excellent observer, and the archives of Vienna—now happily thrown open to historical enquirers—supply us with many of his letters; they are particularly interesting for the years 1688–9. The great crisis of course arrived when "the Pretender" was born; and here the documents are very full and satisfactory. There are a considerable number of papal letters in the work, and much of the Stuart correspondence with the court of Rome is interesting. The "Vatican Transcripts," made at the request of George IV., when, after the great war, the papacy was specially willing to oblige the English government, are here of much service. Above all, perhaps, the "Stuart Papers," now at Windsor, though merely a remnant of an immense collection, are valuable as giving unity and consistency to the whole history, from their central point of view. In them we see the true cause of the Stuarts' failure, not "fatality," but perversity—a perversity against which repeated warnings were of no avail. To them the past was never the school of the future; the ill-success of Charles I.'s measures was no lesson to his sons, least of all to James II. James referred to it repeatedly—he warned his brother against yielding to any demands—"their father had been lost because he yielded." In Charles I.'s attempt to force episcopacy on Scotland we have the type of James' attempt to force Roman Catholicism on England; the spirit was exactly the same, and the result exactly the same. The authoress has done well in giving us so much interesting matter in its original form, instead of weaving her materials into another history. It is only in reading the documents and letters of such an age that its true spirit is felt. A history gives us the facts, and enables us to form a judgment on them from a modern point of view. We see the historical causation of events better when we have long periods of consecutive narrative before us. But to judge the men of the time fairly, we must live with them far more intimately and try to see events with their eyes, and this nothing but the study of original authorities can give. Students therefore should always study at least some part of their history in contemporary writers: it gives reality to the whole subject; it is like actual experiment to a mere theoretical reader of chemistry, like observation of real political life to a recluse student; much becomes at once plain which before was a mystery or a dream. We have not gone at all into the later Stuart history, but have preferred with the authoress to keep our attention fixed on her heroine. The tomb of James II. is yet to be seen, and that of his last descendant at Rome (to whom George IV. paid the last honours), but the tomb of Marie Beatrice at Chaillot has disappeared with the convent itself. It is the hope of the writer of *The Last Stuarts* that this work may be a more faithful guardian of her memory.

CHARLES W. BOASE.

Diary of an Embassy from King George of Bohemia to King Louis XI. of France in the year 1464. Literally translated from the original Slavonic by A. H. Wratislaw, M.A. Bell and Daldy.

MR. WRATISLAW is, we believe, the only Englishman besides Mr. Bowring who has devoted himself to the study of Bohemian literature. We owe to him two translations of important works in that language: *The Queen's Court Manuscript, with other ancient Bohemian poems* (Cambridge, 1852), a work which the writer of this article has translated into French, and which is full of interest for the history of Slavonian literature; *The Adventures of Baron Wenceslas Wratislaw of Mitrowitz*, an account of the travels and captivity of a Bohemian gentleman in the sixteenth century, and a certain number of essays, &c. in periodical publications. The little work which Mr. Wratislaw has just published, though not of so much importance as its predecessors, still deserves the attention of the learned public. George Podiebrad, king of Bohemia from 1458 to 1471, is rightly reckoned amongst the greatest statesmen of modern Europe. He had conceived a grand scheme afterwards resumed by Henry IV. of France, but which unfortunately was never put into execution. As Mr. Wratislaw says in his introduction, "he endeavoured to bring about a council of crowned heads, in which the confusion then existing in Europe should be carefully considered, and means taken to introduce order and quiet into the empire which was miserably tormented by warfare above and lawlessness beneath." It was with this object that he sent an embassy to the court of Louis XI., at the head of which were Lord Albrecht Kostka of Postupitz, and a Frenchman, the Chevalier Antoine Marini de Grenoble, who had formerly been charged with diplomatic missions in Hungary.

One of the members of the embassy kept a diary, which was found in the archives of the town of Budweis (Budieiovice), in Bohemia, by Palacky, who was then preparing his great history of Bohemia, and took a copy of the MS. He was, however, compelled to submit his copy to the censorship, before having it printed in the Quarterly Review of the Bohemian Museum (*Czasopis czeskeho Museum*), an excellent periodical still in existence; and the Jesuit interest was strong enough to cancel all passages relating to ecclesiastic scandals or disorders, or that could be considered disrespectful to the church, so that the document had to be printed with considerable gaps. After this the historian wished to obtain another copy of the MS. for his own use, but found, to his dismay, that it had been stolen from the archives of Budweis, and to this day the worthy patriarch of Slavonic erudition remains convinced that the original copy has been destroyed A. M. D. G. by an over-zealous ecclesiastic.

As it is, the Diary is very interesting, both by what it contains, for the history of the time when it was written, and by what it omits, for the history of the time when it was published. Further details about the share which the censorship has had in his writings are given by M. Palacky in his last work (*Zur böhmischen Geschichtsschreibung*, Prague, 1871); thus the Jesuit father who had been commissioned to examine his history of the Hussite period contented himself with simply demanding its suppression!

The narrative of the Bohemian diplomatist is very simple, and evidently the work of a man more accustomed to handle the sword than the pen. The travellers left Prague in the month of May, proceeded to Bavaria by way of Baireuth and Nuremberg, and then passed through Stuttgart, Baden, and Strasburg. The way in which he transcribes the German names enables us to form a very exact idea of their pronunciation at the time, and of the then limits of the German language. Thus Luneville was still called Lunstot (Lunstadt) by the travellers. After having traversed Lorraine they entered France and followed the king to Abbeville, where they explained to him the subject of their mission. They then returned home by the south of France and Italy. The author notes a number of curious details observed in passing, such as the terror which their Bohemian nationality inspired in some districts, due then to the heretical reputation of their country, and still, to a certain extent, preserved in the opprobrious sense of the word *Bohême* in modern France.

Mr. Wratislaw deserves the thanks of Western scholars for introducing them to this curious little volume, which should find a place in every learned library, and especially deserves reproducing in France after this excellent English translation. One criticism in conclusion. Why does Mr. Wratislaw say that he has translated "from the original Slavonic"? The word Slavonic can only mislead readers who know little of Slavonic matters, and are unaccustomed to distinguish the genus from the species. It would be better to rest content with the word Bohemian, which Mr. Wratislaw has already used in one of his former works.

LOUIS LEGER.

Anna von Luxemburg, Kaiser Karls IV. Tochter, König Richards II. Gemahlin, Königin von England 1382–1394. Von Constantin Höfler, wirklichem Mitgliede der Kaiserlichen Akademie der Wissenschaften. Vorgelegt in der Sitzung am 20. Juli 1870. Wien.

The Avignon Popes. [*Die Avignionesischen Päpste, ihre Machtfülle und Untergang*, Vortrag gehalten in der feierlichen Sitzung der Kaiserlichen Akademie der Wissenschaften am 30. Mai 1871 von Dr. C. Höfler.] Wien.

THE first work is a very learned and elaborate academical dissertation by a well-known Roman Catholic historian, the indefatigable German opponent of the Bohemian Palacky. I believe the author himself will agree with the reviewer, who objects chiefly to the title chosen. There was never much known about the first queen of Richard II., by whom a union between the houses of Plantagenet and Luxemburg was intended to be cemented, nor do a few gleanings from some continental inedited manuscripts hardly add anything more. On the other hand, the work enters deeply into the history of papal policy in mediaeval England, and traces from a lofty yet orthodox point of view the career of John Wycliffe, together with the whole reform movement against the feudal pretensions of the Holy See, which became completely distorted at the time of the popes of Avignon. One does not understand, therefore, why the title was not taken from the principal subject of the treatise, since neither the members of the Imperial Academy at Vienna nor any scholar whosoever will take offence from the matter or the tone in which it is treated. The author is evidently not an infallibilist, but a conscientious member of the church; and the vast amount of his reading contributes much curious material not generally known. The view he takes of Church and State in the fourteenth century may not be liked everywhere. He is not free of mistakes in constitutional questions, as well as in the arbitrary spelling of names or of apparent sins of the Vienna printer. Nor does it seem that his sources have always been poised against each other as nicely as it is required by the modern school of historical criticism. Nevertheless, the book is to be accepted as a new and valuable addition to an intricate field of historical literature, partly political and partly ecclesiastical, as the result of vigorous and honest research, by which much new light is thrown on Wycliffe and his writings, both offensive and defensive. Even after the labours of the late Mr. Shirley and Professor Lechler at Leipzig, certain manuscripts at Vienna and at Prague, as will be seen from Professor Höfler's extracts, still contain many treatises and articles either written by the reformer himself or referring to him and the great controversy which he started. R. PAULI.

Intelligence.

Die echte und die falsche Acca Larentia, by Th. Mommsen, is a slighter work than others of the same kind which Dr. Mommsen has published of late years, but is full of accurate learning, and written with his usual skill. The "true Acca Larentia" is connected with the ancient feast of the Larentalia—a feast of a highly exceptional kind, and one whose meaning was soon forgotten, and is now a hopeless riddle—while the false has grown out of the fable of the twins Romulus and Remus, by the identification of Acca Larentia with the wife of Faustulus. The connection of this story of Acca Larentia with the *fratres* Arvales is obscure, and perhaps recent. The story exhibits the various stages, from simple nursery tale to learned and critical euemerism, through which it has been the fate of ancient legends, and especially Roman legends, to pass.

At the meeting of the historical section of the Hungarian Academy, on October 9, two interesting papers were read. The first was the report by Mr. Thaly on the results of his continued researches in the archives of the castle of Vörösvár. The proprietor of the castle, Count Stephen Erdödy, is the representative of the family of Erdödy-Aspremont, one of those founded by the double process of confiscation and gracious donation on the ruins of the great house of Rákóczy. In 1864 he gave permission to the lamented historian, M. Szalay, to take to Pest two boxes of documents to be copied for the Hungarian Academy. After his premature death M. Csengery undertook the management of their transcription, which was completed about the middle of last year, and an exhaustive report was presented in October by M. Csengery himself to the Historical Society. M. Csengery availed himself, as M. Szalay had done before, of M. Thaly's assistance, who is well known for the interest he takes in everything relating to the *kurucz világ*, as the Hungarians designate the period between 1670 and 1711, comprising the insurrections of Thököly and Rákóczy. Consequently, as M. Csengery's multifarious engagements prevented him from undertaking the work, the historical section of the Academy entrusted M. Thaly with the task of taking back the copied documents to Vörösvár and selecting two more boxes for transcription. These contain for the most part the correspondence of Károlyi, Eszterházy, Forgách, &c. with regard to the administration of the country and the conduct of the war. But there were among them several diplomatic documents; for instance, several letters from the ministers and diplomatists of Louis XIV., Peter the Great, Frederick, king of Prussia, and of Augustus of Saxony and Stanislaus Leszczinszky, kings of Poland. There were, besides several letters from Polish friends of the *kurucz* party and a mass of correspondence from the Hungarian exiles in Turkey, nearly a hundred original Turkish documents. These last were translated into Hungarian by M. Szilády. Before the twelve months were out M. Thaly had taken the two boxes back to Vörösvár, and by permission of the proprietor carried back forty bundles of political papers, besides a number of other interesting documents which had strayed into that part of the archives relating to the management of the Vörösvár estate. These last throw interesting light on the early life of Prince Rákóczy II., on the Hungarian emigration of that day, as well as on the genealogy of several Hungarian and Transylvanian families, thus filling up several *lacunæ* in M. Iván Nagy's work on the latter subject. The second paper was one read by M. Frankl on the occasion of his being elected corresponding member. It related to the negotiations conducted at Rome in 1632 by

Peter Pázmány, primate of Hungary. He was sent by the Emperor Ferdinand II. to induce Pope Urban VIII. to abandon his attitude of neutrality, and to declare himself against the French and the Swedes. The first part of the diary which Pázmány kept at Rome and of the reports that he forwarded to the emperor were published in 1830 by Baron Alois Mednyánszky; the remaining portions were preserved in the imperial archives at Vienna. M. Frankl has besides made use of the diplomatic correspondence between the Papal, Spanish, Tuscan, and Venetian ambassadors with their respective courts.

Contents of the Journals.

Revue des Deux Mondes, Oct. 15.—Amédée Thierry begins an account of "two Empresses of the East," Pulcheria and Athenais, the sister and wife of Theodosius II. An admirable sketch is given of Athenais' poem on the well-known story of Justina and Cyprian, a story not unknown in modern poetry. An article on "Luther's preparatory training as a commentator" describes his revolt against Aristotle's authority, his love for Tauler and the "German theology," his gradual training in Greek and Hebrew. Especially noteworthy is his anxiety to make his translation of the Bible thoroughly German in its language. If we compare his version of the Psalms in 1524 with his later one in 1531, we see that the latter is much more vernacular, and looks less like a translation. His work fixed the language of German prose, and gave the North its literary supremacy over the South.

Revue Archéologique, Oct.—Lenormant writes on the Ethiopian dynasty of Seva (called So in our translation of the Bible, the Masoretic vowels being of little value for foreign names) or Sabaka (*ka* being merely the emphatic article), which conquered Egypt. The fixed dates of Assyrian chronology are used to help in arranging those of Egypt; and "the princes of Noph," in Isaiah xix. 13, are shown to mean "of Napata," the Ethiopian capital. Sabaka's reign is made to last from 724 to 706.

Bullettino dell' Instituto, Aug. and Sept.—Corssen reports on an Etruscan inscription found north of Tresivio in the Valtelline, perhaps the most northerly point at which we can with certainty trace that language as yet. The inscription runs Z.? Esia L. Lepalial, *i. e.* Esia whose father was Larth and mother Lepalia. The Etruscans kept up this fashion of naming a lady's mother when Latin had become the general language; *e.g.* in an inscription of Perugia, *C. Grania C. f. Ludniae gnata.*

Literarisches Centralblatt, Oct. 14.—Points out the worthlessness of Cuno's book on the Scythians, an equivocal name which has sometimes led better authors astray.—Dümmler's *Gesta Berengarii Imperatoris* is commended as tending to complete the series of enquiries which have thrown so much light on Italian history in the ninth and tenth centuries. —Höfler's Anna of Luxemburg (wife of our Richard II.) is shown not to illustrate Wiclif's connection with Germany so much as might have been expected (see above).—Carlo Morbio's *Opere storico-numismatiche e descrizione illustrata delle sue raccolte in Milano* describes the great collection in Milan which has proved so valuable for municipal history. It shows what treasures are to be found in private hands, and the owners can do no greater service to literature than by publishing such catalogues as this.—Geiger's Life of Reuchlin is commended. Reuchlin did such good service in averting the monstrous persecution of the Jews and Jewish writings that the work may be partly looked on as a work of gratitude from Geiger.

Theologisches Literaturblatt (moderate Roman Catholic, Bonn), Oct. 9.—Reviews Stablewski's account of St. Peter Chrysologus of Ravenna (named from his "golden" eloquence, like Chrysostom), who imitated St. Augustine in adopting a sort of "vita communis" with his clergy. The question of the genuineness of some of his homilies is also discussed.—A. von Reumont reviews Höfler's account of the Avignon Popes favourably, pointing out how their conduct really determined the later history of the Papacy.—There is also a good notice of F. Fabricius (1527–1573), one of the leading Humanists, the successor of Rannes and Turnebas.

Gött. gel. Anzeigen, Oct.—Praises Giordano's *Cenni sulle condizioni fisico-economiche di Roma.* The geology, water-supply, and climate are fully discussed. A new Rome seems to be growing up on the plateau east of the northern hills, round the new railway station.—Liebrecht analyses V. di Giovanni's *Filologia e Letteratura Siciliana.* The Italian dialect of the island must come from times previous to the Normans, who made French the state language. They seem to have called Normandy "continorth," which seems very like our English "country north."

New Publications.

ARCHIV F. ÖSTERREICHISCHE GESCHICHTE. Hrsg. v. der Comm. der k. Akad. der Wiss. 47. Bd. 1. Hälfte. Wien: Gerold.

BISSET, A. Essays on Historical Truth. Longmans.

FONTES RERUM AUSTRIACARUM. Hrsg. v. der Comm. der k. Akad. der Wiss. 2te Abth.: Diplomataria et Acta. 35. Bd.: Codex diplomaticus Austriaco Frisingensis; Sammlung v. Urkunden u. Urbaren zur Gesch. der ehemals Freisingischen Besitzungen in Oesterreich. Hrsg. von J. Lahn. Wien: Gerold.

GAIUS. Elements of Roman Law. With Translation and Commentary by E. Poste, M.A. Oxford: Clarendon Press.

HADDAN and STUBBS. Councils and Ecclesiastical Documents of Great Britain and Ireland. Vol. 3: Anglo-Saxon Church to the time of Alfred. Oxford: Clarendon Press.

JORDAN, H. Topographie der Stadt Rom im Alterthum. 2. Band. Berlin: Weidmann.

LANGE, L. Römische Alterthümer. 3. Band: Die Staatsalterthümer. 3. Thl. 1. Abth. Berlin: Weidmann.

LIVY, Books I.–X., with Introduction, Historical Examination, and Notes, by J. R. Seeley, M.A. Book I. Oxford: Clarendon Press.

TRIEBER, Conr. Forschungen zur spartanischen Verfassungsgeschichte. Berlin: Weidmann.

Philology.

The Philology of the English Tongue. By John Earle, M.A. Oxford: Clarendon Press.

THE attempt to familiarise English readers with the results of scientific philology is always an arduous one, but its difficulties are greatly increased when, as in this work, it is based on English itself—a language of whose history and structure most English people are entirely ignorant. It is true that the want of grammatical and critical knowledge is to a certain extent—though very imperfectly—compensated by the training involved in the study of Greek and Latin, but the ignorance of the earlier stages of the language and of the cognate dialects is a serious bar to a thorough treatment of the subject. The chief aim of a popular work like this must therefore naturally be to excite interest and stimulate to further study, rather than attempt anything like a complete analysis of the history and structure of our language.

These requirements we think the *Philology of the English Tongue* likely to fulfil. Every page of the work attests Mr. Earle's thorough knowledge of English in all its stages and of the living Teutonic languages. Of his critical knowledge of Anglo-Saxon, he has already given proof in his edition of the *Chronicle.* The plan and execution of the work will be best seen from an analysis of its contents.

The first chapter is mainly historical. The connection of English with the other Aryan languages is first stated, and their connection illustrated by the transition of consonants as exemplified in "Grimm's law," which is briefly and clearly stated, without, however, any attempt to explain its origin and causes. Then, after a general survey of the old Germanic languages, the relations of the oldest English to the kindred tongues are discussed, and its history traced down to the present day, specimens of each period being given from the most characteristic writings.

Here we may stop to criticize some doubtful points. The inference drawn from the non-occurrence of the A.-S. word *eoten* (giant) in the old dialects of the continent hardly rests on sufficient foundation: if the Old High German and Old Saxon literatures were fully preserved there is every reason to suppose that the word in question would turn up; as it is, the absence of any word from such scanty remains does not prove anything. In treating of Latin words in A.-S. Mr. Earle has fallen into some rather serious errors of derivation. "*Corŭer,*" he says, "is the Latin *cohors.*" What, then, has become of the *h*, and whence did the Eng. word get its second *r*? It may also be remarked that the equivalent Old High German *chortar* generally signifies a flock of sheep, which hardly suits the derivation from *cohors.* There is no reason to suppose that *fæmne* is the Latin *fœmina*:

feima is a poetic word for "woman" in Icelandic. The derivation of *meowle* from *mulier* is phonetically impossible; the Gothic *mawilo* shows that the word is a derivative of *mawi*, Danish *mœ*. But the most remarkable statement of all is that *ortgeard* (orchard) is "a tautological compound of the Latin *hortus* or *ortus* and the Saxon *geard*." This derivation is in itself incredible, and is quite uncalled for when *aurtigards* is known to exist in Gothic. All this shows a disregard of the fundamental principles of scientific philology and a want of acquaintance with the older cognates, which contrasts most unpleasantly with the sound knowledge of the details of English shown by Mr. Earle. Otherwise this chapter is of high excellence. Mr. Earle's estimate of the general character of the A.-S. language deserves to be quoted:—

"Speaking relatively to the times, it was not a rude language, but probably the most disciplined of all the vernaculars of Western Europe, and certainly the most cultivated of all the dialects of the Gothic barbarians. Its grammar was regulated, its orthography mature and almost fixed. It was capable, not of poetry alone, but of eloquent prose also, and it was equal to the task of translating the Latin authors, which were the literary models of the day. The extant A.-S. books are but as a few scattered splinters of the old A.-S. literature. Even if we had no other proof of the fact, the capability to which the language had arrived would alone be sufficient to assure us that it must have been diligently and largely cultivated."

The next two chapters, on spelling and pronunciation, are weak: although no worse than what is usually met with in English works, they are far below the standard of German philologists, imperfect as their treatment of sounds generally is. Mr. Earle makes no distinction between originally short and long vowels, confuses sound with mere letter-changes, and altogether treats the laws of sound-change—the foundation of all sound philology—in a very meagre and unsatisfactory way.

In the following chapters, which treat of the parts of speech, inflections and the distinction between "presentive" and "symbolic" words, commonly distinguished as predicative and demonstrative, the difference between English and an inflectional language, such as Latin, is clearly and forcibly stated, but we think Mr. Earle has hardly gone deep enough into the subject, and has consequently exaggerated the importance of the distinction. The history of inflections in the original Aryan language may be summed up under two periods: (1) in which the relations of words in a sentence were expressed by a rigorous and unvarying system of collocation, as in Chinese and modern English; (2) in which a general attrition of the unemphatic words took place. The leading feature of the old Aryan collocation was to place the emphatic (presentive) word *before* the symbolic one.

The result of the uniform postposition of the symbolic element in Greek and Latin is that we unconsciously assume that all "flexion" must come at the end of a word, and consequently, when exactly the same phenomenon takes place, only with præ- instead of post-position of the symbolic element, we consider it as something quite distinct from "flection." Yet this is all the difference between Latin and English: Latin says, *love-I;* English, *I-love.* There is no reason why we should not write *ilove* in one word; the voice runs straight on without any pause, just as in *amo*, which, if *I love* is correct, ought to be written *am o.* The fact is that the whole question of word-division requires to be re-investigated systematically. One result of such an investigation would probably be to modify our views on the subject of "inflection" very considerably. What ground there is for distinguishing such forms as *wenestu* for *wenest pu* with their postposition, non-accentuation, and modification of the symbolic word, from the Latin *putas*, it is difficult to see, even from Mr. Earle's point of view. Yet he classes them under "symphytisms" as something quite distinct from the "inflectional" *putas.* To argue that these phenomena are not *real* inflections because they happen to have developed themselves 1000 A.C. instead of 1000 B.C. is rather arbitrary and unscientific.

The peculiarities of the various parts of speech are handled in separate chapters: the history of the inflections, the distinction between weak and strong forms, &c., are traced, and many words are discussed at length, and their changes of meaning explained. This part of the work shows Mr. Earle in his best light: his critical knowledge of our language, and his keen observation of its living peculiarities, make these chapters peculiarly attractive.

We are, however, sorry to see Mr. Earle reviving Horne Tooke's explanation of the conjunction *if*, A.-S. *gif*, as the imperative of *gifan*, which the most superficial comparison with the forms of the old cognates shows to be untenable.

While remarking on the simplicity of our verbal endings, the fact might have been mentioned that in spoken Danish an absolute levelling of the personal terminations has taken place: *jeg troer*, *du troer*, *han troer*, *vi troer*, *i troer*, *de troer.*

The chapter on syntax, treated under the three heads of collocative, flectional, and phrasal syntax, is short, but gives a good view of the more salient features of English syntax.

The work concludes with a chapter on prosody. Here, again, Mr. Earle's foundations are shaky: he confuses stress with tone, or, to go to the root of the matter, fails to distinguish between the *size* and the *rapidity* of sound-vibrations. Practically the chapter is a treatise on accent in the former sense, interspersed with remarks on alliteration, metre, euphony, and other kindred subjects. HENRY SWEET.

RESEARCHES ON ALBÍRÛNÍ.

DR. E. SACHAU, who is engaged upon the translation of Albírûní's *Asár al Báleya*, for the London Oriental Translation Fund, has sent us the following preliminary notice of his researches. Compare Sir H. Rawlinson's remarks in *Quarterly Review*, Oct. 1866, pp. 688, &c.

The court of the first princes of Ghazna was a centre to which men of art and science from all parts of Western and Central Asia flocked together. It was the time when the interest in and the cultivation of philosophy—Greek philosophy in an Eastern garb—reached its zenith, the time of Ibn Sînâ and Alfârâbî. Science and literature were cultivated for their own sake, not for theological purposes. In fact the poets and historians of that age were in a certain sense in direct opposition to Islâm. Most of them were Iranians by birth, and were fully conscious of the superiority of the old Iranian civilisation to the new order of things, established by illiterate Bedouins. Guided by these ideas, Firdausî revived and immortalised the traditions of Iran in his Shâhnâma, while Bîrûnî enquired into its antiquities. Having grown up at a time and in a country where Zoroastrian faith and customs were still prevalent, and being enabled by his travels to study them in their provincial peculiarities and differences, the latter was eminently fitted to be the last historian of that grand but perishing civilisation.

Bîrûnî was at the same time an authority in philosophy, and unrivalled, in his time, in mathematics, astronomy, and chronology. It is his antiquarian researches on the history, chronology, and religion of Central Asia to which we attribute the greatest importance. He extended his researches over a great variety of subjects. Being assisted by a knowledge of languages, certainly astonishing in an Eastern scholar (he knew, besides Persian and Arabic, Sanskrit and Hebrew, and probably also Greek and Syriac), he has collected all the traditions on the historical chronology of the Egyptians, Greeks and Romans, Hebrews, Syrians, Arabians, Persians, and Hindus. We must note as particularly valuable those parts for which the author drew his information not only from written documents but also from oral traditions and from his own experience and observation. This is the case with India, of which he treats in a separate book and in single chapters, scattered through his other works; but still more so with Central Asia.

Bîrûnî not only *collected* traditions, but knew also how to examine them. His mode of enquiry is very little different from that of a

modern historian. In most cases he gives moral proofs of the facts which he asserts; he examines his sources, and distinguishes them according to their origin and tendencies. Being entirely devoted to his subject, and without any preconceived bias, he is as particular in relating Hindu as in Zoroastrian, in Egyptian as in Greek, in Christian as in Muslim traditions.

That of his numerous works to which we here allude is *Al'âthâr Albâḳiya 'an Alkurûn Alsâlifa*, "The remaining traces of former generations," a technical and historical chronology of all the nations then known, except Hindus and Chinese. It treats of their division of time, their eras, their dynasties and festivals; giving at the same time the whole historical and mythological apparatus required for their explanation.

The most valuable part of *Al'âthâr Albâḳiya* seems to be that which refers to the Central Asiatic Mesopotamia, the country between Oxus and Jaxartes, and its southern and northern centres of civilisation, that is, Sughdiana and Khwârizm. Bîrûnî's information on this subject is alike new and important, because these countries were the home of Zoroastrianism, and the focus of that Central Asiatic civilisation which still, shortly before it was trodden down by the Moghuls and Tatars, struck a traveller like Yâḳût with admiration. By the help of Bîrûnî we shall be able to trace the outlines of the dialects of Sughdiana and Khwârizm, and to bring back the history of these countries to comparatively very old times. Besides this we learn from *Al'âthâr* much on the life and ideas of the Zoroastrians, not to be found in their own literature, on their mythological notions, on the relations between religion and practical life, for instance, agriculture, all of which one would in vain look for anywhere else.

At present, however, and in the present state of my researches, it is still too early to form a final judgment on the importance of Bîrûnî's work. For its full and just appreciation a whole series of monographs will be necessary. And this work cannot be commenced before all the books of Bîrûnî, as well as single chapters, in which he treats of the same subject, are published in print.

Bîrûnî composed two other works, in which he discusses the subject of *Al'âthâr Albâḳiya*, or great portions of it, in a different form:—(1) *Alḳânûn Almas'ûdî*, a work on chronology, astronomy, and mathematical geography. Besides the complete copy in the possession of Lady Elliot, there is another copy in the Bodleian Library, which contains only the first half of the work, and in this the chronological part. (2) *Kitâb-altafhîm*. This seems to be an abbreviation of the contents of the preceding work; it discusses the same subject in a short and precise form, in questions and answers. Of this the Bodleian Library possesses two copies. Unfortunately the *Ta'rîkh-khwârizm*, of which long extracts are reproduced in the *Ta'rîkh-i-Baihaḳî*, does not seem to exist in Europe. Yâḳût, in his geographical dictionary (ed. Wüstenfeld, p. 483), tells us that he had had a copy of it.

To these works we can add a composition by one Kardîzî ('Abû-Sa'îd 'Abd-alḥayy b. Alḍaḥḥâk b. Maḥmûd Kardîzî), a pupil of Bîrûnî's, who wrote in the same spirit as his great master on the same subjects, about fourteen or fifteen years after Bîrûnî's death, under the prince of Ghazna, 'Abd-alrashîd, A. H. 444–5. Unfortunately the MS. which I found in the Bodleian (Ouseley Collection) does not contain the whole work, but only disconnected portions of it, *e.g.* on the festivals of the Iranians and Hindus, on the chronology of the old kings of Persia, of the Khalifs and the rulers of Khurâsân, an account of the civilisation and ethnology of the Hindus and Turks (*i.e.* all the inhabitants of northern countries). In many cases the statements of Kardîzî are solely drawn from Bîrûnî, whom he frequently quotes by name. Not long after this time the spirit of true criticism disappeared in the East, and since Rashîd-aldîn almost all the chronicles are framed after the same pattern. A literary undertaking like that of Bîrûnî was, as far as we know, never since attempted by any Eastern scholar.

The greatest difficulty for the editor and translator of these works consists in the numerous foreign words handed down in that ambiguous Arabic character. It is possible, however, to restore them to some degree of certainty, as we have the same text before us not only in different MSS. but the same material in different wording is the MSS. of at least two different compositions.

In my opinion the great importance of the subject demands that these works (as far as they treat of the same subject) should be edited not only in translations but also in the original Arabic texts. Scholars will always like to refer to the originals, and the one work will help to explain obscure passages in the other. A beginning will be made with the translation of *Al'âthâr Albâḳiya*, which I hope to send to the press in the autumn of 1872. EDWARD SACHAU.

Vienna, Oct. 14, 1871.

RECENT CUNEIFORM RESEARCHES.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—The study of the cuneiform inscriptions is constantly bringing to light fresh facts of great importance for Babylonian and Assyrian history. The most valuable of the documents lately examined is an Assyrian copy made from the Babylonian history of Sargon I. and Naram-sin, his son. It relates the wars and conquests of Sargon in Elam, Syria, Babylonia, Kazalla, Subarti, &c. His greatest expedition occupied three years; in it he penetrated to the Mediterranean, and set up a monument there. At another time he suffered a reverse, and was besieged in his own capital, Agane; but marching out of the city at the head of his army he attacked the besiegers, and routed them with the loss of their camp. Sargon was succeeded by his son Naram-sin, who continued the conquests of his father, and completed the great temple of Venus at Agane. Naram-sin's two chief exploits were the conquests of Apirak and Magan. The inscription in which they are mentioned has been inaccurately rendered by some French scholars, who have produced a father for Naram-sin by combining the two geographical names. Considerable interest attaches to the conquest of Magan, as this was the ancient cuneiform name of Egypt, and it is therefore possible that this event represents the Hyksos conquest of Egypt. Unfortunately there is a fragment in the tablet which contains the history of Naram-sin, and the name of the king of Magan is lost; we are therefore deprived of the means of deciding this question. Other tablets of this period mention the exploits of Rim-sin, who was either the same king as Naram-sin or contemporary with him. Rim-sin conquered the royal city Karrak (? Apirak), and the Babylonians attached so much importance to this event that they made it a chronological epoch; we have seven tablets dated in various years of the capture of Karrak. After a reign of about thirty years Rim-sin was attacked and finally defeated by Hammurabi, probably the leader of the Kassi, a warlike tribe on the eastern border of Babylonia. This date cannot be later than 1700, and may be a century earlier, so that this cannot be, as I at first supposed, the "Arab conquest" mentioned by Berosus. GEORGE SMITH.

British Museum.

Intelligence.

Professor Pott has published another volume of what he calls a new edition of his *Etymologische Forschungen*, but what is in reality a new work, a *Comparative Dictionary of the Aryan Languages*. The first volume appeared in 1859, and was devoted to *Prepositions*. The second volume (1861) treated of *Roots* in general. In 1867 the third volume was published, which formed the beginning of the comparative dictionary (*Wurzel-Wörterbuch*). It comprised the roots ending in *a* and *i*. The next volume came out in 1867, treating of roots ending in *u*, *ū*, *v*. Then followed, in 1869, the fifth volume, comprising the roots ending in *r* and *l*; in 1870 the sixth volume, comprising the roots ending in nasals and sibilants; and now in 1871 the seventh volume, comprehending roots ending in mute consonants. The work is a real *thesaurus* in every sense of the word, though the treasures which it contains are thrown together in such a manner that an eminent Italian scholar has compared the work to what the plain of Shinar may have been after the downfall of the Tower of Babel. The present volume contains an highly important introduction, chiefly concerned with a refutation of Schleicher and his idea of a primitive and typical Aryan language. It also enters upon an examination of Curtius' *Chronology*, and calls attention to the fact that there is in the history of language, besides *Phonetic Decay*, another principle of change, *Dialectic Growth*, and that phenomena like the *Lautverschiebung* must be referred to the latter, and not to the former.

The Philosophical Faculty of the Munich University have, by a unanimous vote, conferred the title of Doctor Honoris Causa on Mr. E. W. West, on account of his excellent edition of the Mainyo-i-Khard. (*Trübner's Record.*)

Mr. Joseph Zedner, author of the invaluable Catalogue of Hebrew Printed Books in the British Museum, died at Berlin on the 10th ult.

Prof. Grätz has just brought out a commentary on the Song of Songs, with a new translation, similar to the work on Koheleth, reviewed in our last number.

Mr. G. Smith has just published a pamphlet called the "Phonetic Values of the Cuneiform Characters," which Assyrian students will find extremely useful. A few pages, describing and illustrating the derivation of the ordinary cuneiform characters from their hieroglyphic originals, are followed by a copious and well-arranged syllabary, which contains 379 characters in all (about 200 being compounds) besides several combined groups. As Mr. Smith remarks (p. 7), "the list is defective in some places:" thus we may add to No. 10 the values of *se* and *essid*, to 159 of *khut*, *luga*, and *cun*, to 169 of *gut* and *khar*, to 50 *β* that of *tur*, to 179 of *pi*, to 208 of *gā*, to 281 of *buzur*, to 302 of *khā*, and to 357 of *tan*. We also mark the absence of the characters sounded *zakh*, *sicura* (= *citim*), *dhul*, and *nim*.

Γάλα (γάλακτος), Lac (Lactis), *der graeco-italische Name der Milch*, by Dr. Hermann Brunnhofer, is an ingenious and instructive paper, which errs perhaps chiefly in attempting to prove too much. The stem γάλα is traced in γάλιον, γαλάτιον (names of plants), γαλαθηνός, ἔγγαλον (πρόβατον), γαυλός, and γάλως. Applied to plants, it seems to mean "sap." The writer rejects the derivation from a root γαλ, Sansc. jval, "to shine," and derives it from a supposed gal, to "swallow or eat;" bringing in also βάλανος, glans, gula, &c., and Sanscr.(?) *galam*, "water." In some of these words, especially the names of plants, the idea of a liquid, or of something white, seems much more suitable than that of eating. The explanation of the κτ as a diminutive suffix seems doubtful: the analogy of ἄναξ points to something else.

Micklosich has just published a new dissertation on the interesting and philologically precious Slavonic elements imbedded in the Magyar language.

The *Göttingische gelehrte Anzeigen* for September 27, contains a highly appreciative review of Dr. W. Wagner's *Medieval Greek Texts* (see *Academy*, vol. i. pp. 274, 275), by Dr. Ellissen, the editor of the *Analekten*, in which he praises the careful revision of the text of the poems there published, the valuable remarks on the literature in the preface, and the thoroughness with which Dr. W. has investigated doubtful points for himself, instead of following blindly the dicta of Koraës, as many other students have done. Dr. Wagner is the more to be congratulated on this estimate of his work as the same article contains somewhat unqualified vituperation of M. Gidel, the author of *Études sur la littérature grecque moderne*, against whom the reviewer has an old literary grudge; and the veteran Koraës is not treated with very great consideration. With respect to the first of the poems in Dr. W.'s collection, called "The Recognition," Dr. Ellissen with good reason controverts the view, derived originally from Max Büdinger, that the Andronicus there referred to was a historical character. But the greater part of the article is occupied by a discussion of the authorship of the *Lament for Constantinople*, which Koraës, in vol. ii. of his Ἄτακτα, and others since his time, including Dr. Wagner, have attributed to Georgillas, the author of the *History of Belisarius* and the *Plague of Rhodes*. The reviewer, on the other hand, maintains the view which he adopted in his *Analekten*, that it is by another author and of later date, thereby endeavouring to overthrow M. Gidel's highly probable supposition that the development of rhyme in modern Greek poetry can be traced in the writings of Georgillas, being absent from the *Belisarius*, occasionally found in the *Lament*, and regular throughout in the *Plague of Rhodes*. He disputes the generally received opinion that the *Belisarius* was written before the fall of Constantinople, and would bring it nearer in date to the *Plague of Rhodes* (A. D. 1498). While admitting the great similarity in style and vocabulary between the *Lament* and the *Plague*, he refers it to imitation on the part of the author of the former. Great as Dr. Ellissen's authority is, we do not consider that he has made out his point here. The rest of the article, which is continued in the following number, is occupied by a favourable criticism of M. Demetrios Vikelas' essay on *Modern Greek Philology*.

Professor Geppert, of Berlin, has just published the second number of his *Plautinische Studien*, containing the deviations of his readings of the difficult Ambrosian palimpsest from Ritschl in the plays hitherto edited by the latter. Plautine literature is, among other things, remarkable for two quarrels, the first between Pareus and Gruter, and the second between Geppert and Ritschl. Many of the readings of Geppert were subsequently confirmed by Studemund's renewed collation of the palimpsest, and in the second edition of his *Trinummus* Ritschl was actually obliged to mention Geppert in more than one place, though formerly he had persistently adhered to the plan significantly called in German *einen Gegner todt schweigen*. Prof. Geppert gives in his preface a specimen of Ritschl's way of doing late justice to his work by illustrating Ritschl's note on *Trin.* 295, "*moribus* Geppertus sive tacite sive casu" (an emendation adopted by Ritschl) with the note actually read in his edition and fully explaining the reason of his conjecture. Plautine students should not neglect Prof. Geppert's readings of the palimpsest as contained in this publication.

Contents of the Journals.

Zeitschrift für die österreichischen Gymnasien, xxii. 5.—Joh. Oberdick: On Æschylus. [Gives several conjectural emendations of the text, based upon inferences from the Scholia. Vindicates the use by Æschylus of εἰ = εἴθε.]—J. Mähly: On Virgil's *Argumenta Ovidiö Nasoni adscripta*. [Suggests a number of not very convincing conjectures.]—Horatii Opera recens. O. Keller et A. Holder, vol. i., rev. by Gerlach. [The edition deserves warm praise, although exception may be taken to some of the readings of the text. Withdrawing from the rash conjecture of recent Horatian critics, the editors appeal to the MSS. and the earliest tradition of the text as the only safe basis.]—De Latinitate Scriptorum Historiæ Augustæ, &c. Scripsit C. Pauker: rev. by Foerster. [A valuable contribution to the study of the *Sermo plebeius*.] Dalbrück und Windisch: Syntaktische Forschungen, erster Band, rev. by Fr. Müller. [A successful step in the right direction. Comparative Syntax has been unduly neglected in comparison with the study of Sounds and Accidence. But, the reviewer asks, was it well to select the sacerdotal language of the Vedas for comparison with the popula dialect of Homer? The old-Bactrian literature would have been more suitable.] xxii. 6.—Stanger: On the Knights of Aristophanes. [A collection of valuable notes on the play, supplementary to the recent commentaries of Ribbeck and Kock. Deals in conclusion with the tradition of Eupolis' share in the authorship of the second Parabasis.]—Oberdick: The Suppliants of Æschylus, with Introduction and Commentary, rev. by J. Kvičala. [The Introduction contains little new matter, excepting an examination of the Scholia of Æschylus, as affording a basis for a criticism of the Æschylean text. But how the editor may be misled by this his favourite view, is seen in his alteration of ὦμῇ ξὺν ὀργῇ to ἡμῖν ξὺν ὁρμῇ in l. 187; and similarly in many other passages. The commentary is generally sound, although here also the reviewer finds reasons for differing from it on many passages.]—Nägelsbach: Hebräische Grammatik, rev. by Ed. Sachau. [Of some practical value, but hardly adequate.]—Cassel: Hebräisch-deutsches Wörterbuch nebst Paradigmen der Substantiven und Verba, rev. by Ed. Sachau. [Opportune undertaking.]

Centralblatt, Oct. 21.—Wilson's Theatre of the Hindus, new ed. rev. by A. W[eber]. [The new edition, welcome as it is, would have been improved by a few of the most urgent corrections; a complete revision is of course impossible, owing to the immense mass of new material. Five of these dramas have as yet been published by no other scholar, though a nearly complete version is reported to be lying in the desk of a certain eminent Sanskritist.]

New Publications.

AL-HARÎRÎ's Durrat-Al-Gawwas. Herausgegeben von Heinr. Thorbecke in Heidelberg. Leipzig: Vogel.

AMELUNG, Dr. Arth. Die Bildung der Tempusstämme durch Vocalsteigerung im Deutschen. Eine sprachgeschichtl. Untersuchung. Berlin: Weidmann.

APOSTLES, Apocryphal Acts of the. Edited from Syriac MSS. in the British Museum and other Libraries by W. Wright, LL.D., Ph.D. Vol. I.: The Syriac Texts. Vol. II.: The English Translation. Williams and Norgate.

APOSTLES, The Conflicts of the Holy, transl. from an Ethiopic MS., together with the Epistle of S. Dionysius the Areopagite to Timothy, transl. from the Ethiopic, and the Rest of S. John, transl. from the Armenian, by Rev. S. C. Malan. Nutt.

CORNELISSEN, J. J. Codicis Daventriensis vetustissimi Servii commentarios continens brevis descriptio; accedunt: ad Ciceronem, Apulejum, Minutium annotatiunculae criticae. Berlin: Calvary.

DOSITHEI ars grammatica ex codice Sangallensi ed Henr. Keil. Halae. (Leipzig: Teubner.)

FICK, Aug. Vergleichendes Wörterbuch der indogermanischen Sprachen. Ein sprachgeschichtl. Versuch. 2. Abth. 2. Hälfte. [2. umgearb. Aufl. d. "Wörterbuchs der indogerman. Grundsprache." Göttingen, 1868.] Göttingen: Vandenhoeck and Ruprecht.

HERODOTI historiae. Rec. Henr. Stein. Tom. II. Berlin: Weidmann.

HITZIG, F. Sprache und Sprachen Assyriens. (With plate.) Leipzig.

JORDAN, H. Topographie der Stadt Rom in Alterthum. 2. Bd. Berlin: Weidmann.

KITÂB AL-FIHRIST. Mit Anmerkgn. hrsg. v. Prof. Gust. Flügel. Nach dessen Tode besorgt v. Dr. J. Rödiger u. Dr. Aug. Müller. Bd. 1, den Text enth. [Assisted by Germ. Oriental Soc.] Leipzig: Vogel.

MEZÖ-KOVESD, U. de. La langue magyare. Son origine, ses rapports, avec les langues finnoises ou tschoudes, ses particularités. Paris: Bossange.

MUFF, Chrn. Ueb. den Vortrag der chorischen Partien bei Aristophanes. Halle: Mühlmann.

PETRONII satirae et liber priapeorum. Iterum ed. Franc. Buecheler. Adjectae sunt Varronis et Senecae similesque reliquiae. Berlin: Weidmann.

PLINII SECUNDI, C., naturalis historia. D. Detlefsen rec. Vol. IV. Libri XXIII-XXXI. Berlin: Weidmann.

SCHMIDT, Joh. Ueb. Berthold v. Regensburg. Wien: Gerold.

SCHMIDT, Johs. Zur Geschichte d. indogermanischen Vocalismus. 1. Abth. Weimar: Böhlau.

SCHWEIKERT, Ernst. De Acrone, qui fertur, Horati scholiasta. Epistola critica ad Herm. Usenerum. Coblenz. (Berlin: Calvary and Co.)

SKEAT, W. W. A Handlist of some Cognate Words in English, Latin, and Greek. Macmillan.

ERRATA IN No. 31.

(Accidentally omitted in No. 32.)

In page 419 (a) line 5, for "precipitate" read "precipitated."
" " line 40, for "thus" read "then."
" " line 41, for "found" read "fused."
" (b) line 7, for "ammonia" read "ammonium."
" " line 13, for "heated" read "treated."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Friday, December 1, and advertisements should be sent in by November 27.

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General Literature.

PAUL HEYSE'S NOVELS.

Ein neues Novellenbuch. Von Paul Heyse. Hertz: Berlin.
Gesammelte Werke. Von Paul Heyse. 10 Volumes. Vol. I. Gedichte.

In German encyclopædias of the last century we look in vain for the word *Novelle* in any other than its legal sense, though the name and the thing were familiar and popular in France and Italy, and the thing, at least, in England. Since then, however, few forms of prose literature have received more attention from German critics, or been greater favourites with the best German authors, than this; and the result has been to develop a quite new variety of imaginative narrative, which has little but its name and a certain poetical conscientiousness in common with the masterpieces of Boccaccio. Tieck, the principal agent in the change, seems not quite to have understood its import, or to have disguised it to himself by reading between the lines of the old objective storytellers some of the refinements of motive and intention which, in their place, he would have imagined. With him the *Novelle* sometimes verges on the allegory and sometimes on the fairy tale, and his definitions lay more stress on the strange and exceptional nature of the subject-matter than on the compactness or even the ideality of its treatment. And by strange he means something more than what is offered by the old Italian novelists, or narrators of romantic, pathetic, and comical incidents. He means things incredible as well as merely unexpected, extraordinary by nature as well as in fact, psychological prodigies, sentimental monstrosities, intellectual miracles.

Later writers, and amongst them Heyse, show a tendency to revert, at least in theory, to the older novelistic form, with the one distinction clearly established, that their studies proceed from within outwards, instead of presenting sharp, ideal, but still purely objective outlines. Critics have often enumerated all that the *Novelle* is not—not a fiction cut short, not an idyll, not a study of character, not a sketch from nature; and what remains after negatives have been exhausted is certainly as legitimate a literary product as the novel in its English sense, or the romance. In fact, the number of restrictions imposed on the artist serve of themselves to raise the standard of the work; for what is so difficult to do at all is clearly not worth doing otherwise than well. From the positive point of view, the *Novelle* might perhaps be described as the prose equivalent at once of the sonnet and the drama, approximating to the former in its finish and the methodic art with which the climax must be prepared for, and coinciding, almost exactly, with the latter in range of subject. A good *Novelle* abridged is simply the argument for a good tragedy, melodrama, or comedy, but, in its perfect form, unlike the drama, the representation of character is subordinated to the pictorial effect of two situations and the lively pourtrayal of the incidents which should lead direct from one to the other. The strange and wonderful are only requisite so far as they may help to give the appearance of novelty to variations on such ancient themes as Love and Death.

So fertile a writer as Heyse—for the volume of tales mentioned at the head of this review has had eight predecessors—may be excused if he sometimes chances to strike the same note more than once; but as variety is the essential of his chosen literary vehicle, the doubt suggests itself whether Love and Death may not be called upon a little too often. Out of seven tales in the volume before us, four or five are concerned with love and death: in one, a pair of lovers are made happy at last; in two, they are not exactly happy, or happy with drawbacks. In other words, love plays a part in all, and death in half, and the proportionate share assigned to the twin divinities in the other works of the writer is very nearly the same. Perhaps we should not feel inclined to count the number of times which he makes use of the most potent weapons of the novelist's craft if they did not sometimes fail to produce their full effect. It is easy to commit murder on paper, but when we read of a lady who expires for no reason in particular, our feelings are not harrowed, for we question whether she was ever alive. On the other hand, if a passion too strong for the human frame to bear is plausibly depicted, the effect is the same whether a *Deus ex machina* sets everything straight at last or not. All depends on the skill and verisimilitude of the execution; and, to compare Heyse only with himself, *Rafael* is a more powerful work than *Lottka*, though the heroine ends in a nunnery instead of the Morgue. A lady loves Raphael for his pictures' sake, but she had vowed to her dead husband to take the veil at a year's end or marry none but his own false brother. Before vanishing into the cloister, she comes to Raphael to beg for one drawing to cheer her loneliness, and finds she has long been the lady of his dreams. He implores her to stay, but she fears the jealous brother-in-law's vengeance, and, lest Raphael should be lost both to art and her, she leaves him at daybreak. A friend of the painter's sees her on her passage to the church, resigned and even happy; and the poem ends with the reflection that none but Raphael could deserve such fortune. This is one of the tales in verse, and parts of it read like a far-away echo of the *Bride of Corinth*. Less pathetic as well as less graceful is the story with which we have compared it, of a young woman who leaves her lover to take poison because she had had a bad mother. On the score of morality there is nothing to choose between the two stories; and therefore, when one leaves an harmonious and pleasurable impression, and the other a spasmodic and distinctly painful one, there must be a real artistic inferiority in the latter.

We should have much preferred to consider the morality of Heyse's *Novellen*—which has been assailed—apart from their other merits; but unfortunately that is not easy, as social customs and prejudices are amongst the forces represented in action by the novelist; and if he appears, in his own person, to underrate the validity or cogency of the superstitious usages to which the actors in his fiction submit, he puts either himself or them in the wrong. In the preface to his eighth volume, the *Moralische Novellen*, he points out that modern poetry illustrates the revolt of the individual, no longer against abstract fate, but against the social order. This social order, however, unless the artist is content to stop short of tragedy, must be conceived to be

fixed and final as destiny itself, not an obstacle to be argued away or surmounted at pleasure. Otherwise his characters will seem to dash themselves gratuitously against a brittle barrier, or to win hollow triumphs over an imaginary opposition. The novellist is the more pledged to this kind of conservatism when he claims to deal with exceptional cases superior to ordinary standards, for the strength of the rule, above which the individual rises, is the only possible measure of his supremacy. Tieck is on this point somewhat more consistent than Heyse; he argues, relying on the example of Boccaccio, that the *Novelle* may choose its subjects outside the boundaries both of conventional and true morality, and so it certainly may, without artistic impropriety, provided those boundaries are simply ignored in the light-hearted Florentine fashion. Heyse does not claim to exercise this privilege in its integrity, but his least successful, and longest, productions are taken up with strange cases of conscience, in which he alternately sets and resolves such moral problems as are not, to use his own words, provided for in the Ten Commandments. Herein he certainly deviates from the higher paths of pure art, to which scruples of all kinds are anathema, but such a result follows almost unavoidably from the exaggerated subjectivity of the German *Novelle;* to make a tale of changing moods interesting, the moods must be abnormal, and we are thus brought back to the fanciful unreality of Tieck, with a moral lurking treacherously in the background.

In instancing a few of the tales which seem least satisfactory in this way, we run the risk of proscribing some especial favourites with the author's admirers, but in the essential conditions of harmony, unity, and precision, the following—*Der Kinder Sünde der Väter Fluch*, *Der Weinhüter*, *Lottka*, *Die Pfadfinderin*, *Der Kreisrichter*, taken as a whole—leave much to be desired. Others, to which the objection of a confused moral atmosphere might also apply, have a coherence and ideal finish which establish their right to be considered works of art. Such are *Auferstanden*, *Die Stickerin von Treviso*, *Im Grafenschloss*, and one or two more, in which the contradiction between the individual and the social order is set at rest with the southern specific, a stiletto. The first impression produced by all these tales is that of a highly morbid idealism, and in spite of the skill with which the author handles his uninviting materials, no after-consideration does away with the consequent sense of imperfection. The pleasure derived from the art of the novelist is secondary compared with that afforded by the contemplation of an intrinsically beautiful picture. The commonplaces of morality apart, it may be thought that *Die Stickerin von Treviso* presents such a picture: a girl is in love with the saviour of her country, and for her country's sake renounces all of his love but its bitterness. But if there were no such thing as morals, we should think stories ugly which tell only of a son in love with his father's mistress, or of a woman's reluctance to give a stepfather to her illegitimate son. Or rather, such stories are meaningless unless we presuppose the moral conceptions which make them distasteful. These are the tales which Heyse laboriously defends as *sittlich* in the preface to the volume of *moralisch* contents which he dedicates to his friend Frau Tout-le-Monde and her innocent daughters, Louise and Martha and Agatha. It is a pity that, to judge from the prospectus of the collected edition of his works, the *Novellen* are not to be re-arranged in accordance with some classification of this kind, a threefold division being perhaps the best. We should have preferred to put in the front rank all the shorter and more finished novelettes which may be read with unmixed satisfaction by old and young: such as *L'Arrabiata*, *Das Mädchen von Treppi*, *Auf der Alm*, *Erkenne dich selbst*, and the like, in the volume just published, *Das schöne Käthchen*, a very pretty and ingenious story in the author's best, *i. e.* his playful and least ambitious, manner. After these would follow all the tales which, without being exactly *unsittlich*, make a less purely pleasurable impression, or those which fail to satisfy the formal conditions of a perfect *Novelle*, as for instance when the story is told in letters, or when the narrative is deficient in incident. Last of all should come the lengthy psychological studies in which the *Novelle* abandons the field of imaginative art to make friends with the mammon of speculative *Tendenz*.

It is here that Heyse's uncertain command of tragic motives makes itself most felt—a defect at which we have already hinted, and endeavoured to account for by supposing him to be less intimately convinced, than in his poetical capacity he should be, of the reality and necessity of the moral forces he represents in action. His real excellencies, on the other hand—a charming style, a light humorous touch, a mastery of pictorial and pathetic effect, a subtle power of calling up in his readers the very mood which answers best to his own—are least conspicuous in these works, and what there is original in his theory of human nature and fate can be studied as well elsewhere. Perhaps theory is too precise a name for what is rather a habit of feeling than a habit of thought; but a discussion of Heyse as a writer would be incomplete if it omitted to point out why the frequent juxtaposition of the images of love and death, already noticed, cannot be treated as accidental. Nothing is more characteristic of the novelist than his conception of love as an apparition, rather than a passion. He recognises no law, human or divine, which has the right or even the power to keep those who love each other asunder, but when they have once met, the force which brought them together seems to burn itself out at once. The union consummated, perhaps, in defiance of honour, piety, or religion, dissolves after the bridal night at the touch of a fanciful whim or scruple; sometimes the infidelity is buried in the grave, but not always, and the author's chief care seems constantly to be lest the afterthought of ordinary life and its drudgery should impair the effect of his favourite climax, a moment of blind felicity vanishing as it is reached. We are not concerned to enquire whether this type of catastrophe is *moralisch*, or *sittlich*, or both, or neither. In some of the *Novellen*, as we have seen, it takes a satisfactory poetical shape, but it will not bear much repetition, and it is not amongst those ends which justify every means. In these days we are chary of our emotions, and in the face of an heroic death or a generous sacrifice we look instinctively for the sufficient reason, and in Heyse we sometimes look in vain, as far as ordinary motives are concerned. Artists, however, are allowed to follow a reasoning of their own, and the novelist is not perhaps wrong, seeing that his favourite theme is, "All for love, or the world well lost," when he bribes his characters, as it were, to renounce this world with a good grace by giving them, before they die, a taste of heaven compared with which earth is not worth regretting.

Another characteristic of Heyse's manner is the extreme simplicity with which he tells a story, and which appears sometimes almost as a want of art, sometimes as its highest perfection. The reader is never admitted behind the scenes or into the confidence of the characters, and any unexpected development which is given to the action is as much a surprise to him as to them. But it is only in the simpler pieces that this appears as an unmixed advantage: too abrupt a surprise misses its effect, and looks like an arbitrary freak of the author's omnipotence over his own creatures. Thus we are more bewildered than touched or gratified by the *dénoûment* in *Auferstanden* and the *Pfadfinderin*, two very queer

stories, which resemble each other in their queerest feature, namely, the reconciliation of a husband and wife by means of the officious intervention of the lady's lover. Of Heyse's general unmistakable and unmixed merits, we have not, unfortunately, left ourselves space to speak as fully as they deserve, and if we therefore seem, on the whole, to have done him less than justice, the responsibility must fall upon the gratuitously perverse way in which about half his subjects are chosen. He is easily and constantly admirable when he allows his humour to play freely upon pleasant subjects; when he takes, momentarily, for granted the possibility of a happy marriage, or when he indulges his native melancholy within the limits of lyrical propriety.

H. Lawrenny.

Journals kept in France and Italy from 1848 to 1852.
By Nassau William Senior. London: King.

The publication of this book is certainly well timed, dealing as it does with the majority of the great questions, political, social, and economic, which France periodically agitates to the advantage of the human race. For that reason the materials it affords for comparisons between the revolution of 1848 until the *coup d'état* and the recent events by which France has been distracted give it a value beyond the mere interest which from its nature it would at any time possess. Of the work as a whole, there is however little to be said, for it is made up of a series of unconnected notices in which the author never speaks in *propriâ personâ*, and the critic is met with the further difficulty that the names of the authorities for the quotations of which the work is composed are in themselves sufficient to command at least an external assent to their opinions. Hence there is no measure of merit applicable to it, unless it be the one embodied in the aphorism of Joubert, "Si les questions montrent l'étendue de l'esprit, les réponses en montrent la finesse." Happily the possibility of its application is as vast as the gradations of merit lying between Alexis de Tocqueville and the day labourer who acted as guide to Mr. Senior in the mountainous neighbourhood of Eaux-Bonnes, or the maker of millstones from whom he solicited an opinion on the Republic, which tallied with that of the illustrious Dunoyer.

Identity of interest in the same branch of science—political economy—naturally drew Mr. Senior to Dunoyer, whose utterances fill a large space in the journal; while the economic reasons he assigns for the revolution of 1848, together with his account of the workings of the "ateliers nationaux" during the administration of Lamartine, are among the most striking contributions to the book. We learn, from him, that in one mairie alone a mere supplementary bureau enrolled from March the 12th to the 20th more than 1000 new applicants every day. A month later one-half of the population of Paris was living on eleemosynary employment. No one was more alive than Lamartine himself to the necessity of subduing the monster which he had himself created. Émile Thomas in his *Histoire des Ateliers nationaux* quotes him as speaking of them as "a thunder-cloud always before our eyes."

"This army," he continues, "of 120,000 work-people, the great part of whom were idlers and agitators, was the deposit of the misery, the laziness, the vagrancy, the vice, and the sedition which the flood of revolution had cast up and left on our shores. The provisional government had created these *ateliers* as a means of temporary relief, to prevent the unemployed work-people from plundering the rich or dying of hunger; but they never concealed from themselves that the day when this mass of *imperious idlers* was to be broken up, scattered all over the country, and employed in real work, must bring a change which could not be effected without resistance, without a conflict, without a formidable sedition."

It is worthy of note that the necessary relief afforded to the population of Paris during the siege was not less directly the cause of the late outbreak when it was withdrawn. Lamartine, who coquetted with socialism, and inscribed upon his banner its watchword of the "organization of industry," was at all events the first who succeeded in the organization of idleness.

Dunoyer is both epigrammatic and correct in his idea of socialism as "centralisation logically carried out."

"It is merely," he says, "the theory of a paternal government which treats its subjects like children, to be all taken care of by the State."

In this he is supported by Horace Say:—

"The French, accustomed to the constant and powerful interference of their government, believe it to be omnipotent, and the working classes, who are told that they are the 'peuple souverain,' require this omnipotence to be exercised for their benefit. They believe that it is in the power of the government to put them in easy circumstances, and on that supposition are justly enraged if they have not the will."

Mr. Senior returned to Paris in the January following the *coup d'état*, and discussed the actual situation as well as the events of the 2nd of December with Tocqueville, Say, Faucher, Dunoyer, Lord Normanby, Circourt, Dumont, the Duc de Broglie, and others. The general impression conveyed through the medium of their conversation is that, although everyone disapproved, no one disliked the high-handed measure which delivered France from a constitution which Lord Palmerston condemned as unfit to govern a club, much less a nation. As to the policy of the President, if it was correctly rendered by the confidential authority who unbosomed himself to Mrs. Grote, and whose communications she regards as official, we can only say that it is fortunate for many reasons that the programme was modified.

"'The *salons* and the shops,' he said, 'have governed too long; we shall throw ourselves on the masses. Two passions are predominant in the mass of the people, to which a ruler of France can always have recourse—the love of glory and the hatred of England. On these foundations we can build securely.'

"'You propose war, then?' said Mrs. Grote.

"'Certainly. We have already sent a message to Belgium; we have asked for the twenty millions and interest for the siege of Antwerp, and we have required the dismantlement of Namur, Mons, and the Fort de Gand.'

"'Anything more?'

"'Nothing at present from Belgium; but we must have Savoy. We can indemnify Piedmont with Parma and Placentia.'

"'Where will you find the money?'

"'Our system,' he replied, 'is to support war by war. The foreigner (*l'étranger*) will pay the expense.'"

The proposal that the government should dispense with the aid of the *salons* and shops and throw itself on the masses is ordinary enough, but the notion that a ruler of France could always build securely on the love of glory and hatred of England is delightfully crude. On this conversation being repeated to M. de Circourt, he observed that he had no doubt such advice had been given to the President. "He is bent on war, *and from war I expect his downfall.*"

The journal in Italy, which occupies the interval between May 1850 and January 1852, has its interest greatly impaired by the effect of its juxtaposition with the more stirring events in France. The sentiments of the Italians whom Mr. Senior consults have a greater appearance of *naïveté* about them than those of their Gallic brethren, and it is difficult to lull the suspicion that some of them, for instance, the Duke of Sermoneta, although acknowledged to be "the cleverest man in Rome," was ignorant of the nature of an interviewer. Otherwise the destiny of their remarks was so perfectly understood by the friends of Mr. Senior that a few of them, notably M. Thiers, revised his report of their conversation. Doubts may perhaps arise whether the authorities quoted, being mere flesh and blood, were really so superior to temptation as to neglect such

brilliant opportunities for publishing not the views which they really held but those with which it was to their advantage to be accredited. But it is hardly a paradox to say that their communications have a greater air of truth than of sincerity about them. FRANCES MARY CHARLTON.

Proverbes Chinois, recueillis et mis en ordre par Paul Perny, M.A. Paris : Firmin Didot Frères, Fils et Cie, 1869.

PROVERBS have ever found their most congenial home in the East. The tone of the Oriental mind is such as to cause it to delight in those dark sayings which Eastern languages by conciseness and elegance are particularly fitted to express. In the case of the Chinese this is eminently the case, and consequently proverbs abound in all their works, more especially those of a light character. The care with which native scholars aim at conciseness in the construction of their sentences, the value they attach to the use of the correct rhythm and cadence in their periods, and the constant introduction of antitheses, naturally prepare the way for the employment in their writings of proverbs for which the subtle bent of their mind has a peculiar relish, while the extreme richness of the language gives them a choice of words far beyond the range of any European tongue. So thickly studded with proverbs is Chinese both written and colloquial that the task of forming even an approximately complete collection of them would be quite impossible. All that can be done in this way by anyone is to collect such as he may meet with in daily conversation and reading, and in the few native compilations which are in print. This, M. Perny tells us, was the course he pursued in preparing the work before us, and the result is that he has succeeded in laying before his European readers upwards of six hundred specimens of Chinese proverbs. Some years since Sir John Davis published a similar work in English, and with that exception M. Perny's volume is, as far as we know, the only book of the kind existing.

Nothing, as M. Perny says, characterizes a people so truly as its popular proverbs and sayings. In them we discern the prominent traits of the national character, and in them is faithfully reflected the social condition of the people. In the volume before us we have quite enough on which to found a very accurate estimate of the present condition of China. "Les mandarins en face des sapèques sont comme les sangsues à la vue du sang" gives us an insight into the degradation to which the mandarins, after centuries of peculation, have fallen in the eyes of the people, and the proverb which follows shows how closely corruption is mingled with the administration of justice, and gives us the key to the origin of the numerous popular outbreaks against the tyranny and misrule of local mandarins which have for years distracted the unhappy country. "Si les sapèques tombent entre les mains des satellites (of the mandarins), c'est comme si l'agneau tombait dans la gueule du loup." Again, when we read such a saying as this, "Le bon feu n'est pas employé pour faire des clous; un homme de bien ne se fait pas soldat," we have explained to us the weakness of the foreign policy of the government, and the continued existence of those roving bandit armies which scour the country unchecked and hold the nation in terror. Among the proverbs of a country where the Literati, of whom we have heard so much lately, are so highly esteemed and venerated we should naturally expect to find some making mention of their excellence; M. Perny has collected several such, from which we may quote the following:—"Les sages sont la perte d'un royaume; les savants sont les délices d'un festin," or, as we should have preferred, as being more correct, "Les savants sont la perte d'un royaume; les gens de lettres sont les délices d'un festin." And again, "Tous les arts mécaniques ont quelque chose de vil; l'étude des lettres est la seule chose noble, élevée." The degraded condition of the Chinese women and the artifices and vices to which they are driven by reason of their weakness find expression in many of the sayings in the work before us. "On cache la vérité en présence des époux; on ne dit rien de faux en présence des amis," betrays how thoroughly falsehood and deception have permeated through all the relationships of life, and on what an unsound footing domestic life in China stands. The frailty of women is neatly expressed in the words "Niu te woo ke, Foo noo woo chung," which M. Perny has translated thus—"La vertu de la femme n'est pas profonde; mais sa colère est sans fin." To some it will not be a matter of surprise to find many of the proverbs identical with those in common use amongst ourselves. For instance, "L'homme propose, Dieu dispose," "Believe nothing that you hear and only half what you see," "There is no smoke without fire," and numberless others, have their exact counterparts among the Chinese.

M. Perny's book is not without its faults. Some of the proverbs are incorrectly rendered, and others might, with a little more care, have been imbued with a larger share of the spirit of the originals; we observe also that a few appear more than once, displaying a carelessness which in a volume of this size is hardly excusable. We are disinclined however to find fault with the work of anyone who attempts to popularise Chinese among European nations, and there is, besides, much in M. Perny's book to attract the attention of those who find an interest in the study of national folklore.

ROBERT K. DOUGLAS.

LITERARY NOTES.

Professor R. Hagen, in his book, *Die romantische Schule* (Berlin, 1870), p. 636, professes to be in doubt whether the *Nachtwachen von Bonaventura* are a work of Schelling's or not. As he calls these *Nachtwachen* one of the most highly spirited productions of romantic poetry, Prof. Paul de Lagarde, of Göttingen, writes to us that, in December 1854, he asked the late Varnhagen von Ense what he knew about the book in question, which, from the fact of having the name Bonaventura on its title-page, seemed clearly attributable to Schelling's authorship. Varnhagen told Dr. Lagarde that Superintendent Mann, of Charlottenburg, near Berlin, was in possession of a copy of the book, given to him by Schelling himself, and bearing on the fly-leaf an autograph dedication of Schelling, and that Mr. Mann knew the book to be written by Schelling himself in a very short time to make some money, of which the philosopher was then in temporary need. Prof. Lagarde does not think the question settled by this reference, as he knows but little about the late Mr. Mann, and nothing at all about Schelling's money affairs, but thought it worth while to lay Varnhagen's statements before the public.

In reference to the article on Spiritualism in the current number of the *Quarterly Review*, Mr. Alfred R. Wallace has written to us to protest "against that assumption of complete knowledge united to nearly total ignorance of the subject" which characterize the adverse criticisms to which Spiritualists are exposed. To this rule the *Quarterly* article, in Mr. Wallace's opinion, forms no exception. Its general plan is to "choose a number of the less important phenomena whose explanation is possible by the theories of 'expectant attention,' 'unconscious muscular action,' and 'unconscious cerebration,' and to pass over in silence a number of equally well-attested phenomena which cannot be so easily explained." The writer does not possess even "a tolerable knowledge of the literature of this puzzling subject," whilst he shows by several indications that he has never himself assisted at a dark *séance*, nor *read through* the reports of those which he criticizes. This last is notably the case in the evidently second-

hand account given of Professor Hare's experiments, of which the essential particulars are ignored or misstated.

Without expressing any opinion as to the nature or explanation of the alleged facts, we leave our readers to judge between one of the most eminent naturalists of the day and the anonymous writer in the *Quarterly Review*, as to the accuracy with which the phenomena have been described. But we entirely agree with Mr. Wallace in condemning the disingenuous personal depreciation of the scientific men concerned in the matter: which is a mode of attack—as we have had reason to say before on a recent occasion—as obsolete as it is unworthy of a respectable periodical.

A series of important articles by Mr. Pistorius, on the highlands of Sumatra, and the popular institutions of the country, has been republished from the *Tijdschrift voor Nederlandsche Indie*. They are said by a Dutch critic in the *Gids* to abound in picturesque descriptions of nature, and to introduce us to a knowledge of many facts of the highest value for the knowledge of the East in general. The account of the Mohammedanism of Sumatra is especially commended. Mr. Pistorius seems to have been the first to draw attention to the efforts of the Hanîfitic sect to obtain the religious supremacy of Sumatra.

Professor Huxley, in the current number of the *Contemporary*, replies to the Quarterly Reviewer of the *Origin of Man*, to Mr. Wallace, and Mr. Mivart. His criticism of Mr. Mivart's appeal to Suarez as authorising evolutionism involves more than one *ignoratio elenchi:* in the first place, it does not follow that because a Roman Catholic *may* hold whatever Suarez held he *must* hold whatever Suarez held; in the second place, Mr. Mivart quotes Suarez upon a question of abstract theology, not upon one of Biblical interpretation. It is not a sufficient reply to the arguments in favour of a distinction in kind between human and animal intelligence to insist on the grotesque consequences of isolated and extreme expressions; still less is it a *reductio ad absurdum* of the theory that man's development was superintended from on High to point to other instances where the organization seems higher than is required by the conditions of existence. The interesting question, to which Mr. Mivart has contributed so much, whether natural selection is a subordinate law of evolution, or is, for us at any rate, *the* law, is dismissed almost without discussion.

Mr. W. H. Pater, in the *Fortnightly Review*, discusses the tenderness and the mysticism resulting from a confession of ignorance which distinguish the works of Michelangelo from the theatrical *tours de force* of his followers. He points out that birth and resurrection are his favourite subjects, and draws an interesting parallel between the passionate aspiration Beatrice roused in Dante and the soothing influence Vittoria Colonna exercised over Michelangelo.

Professor R. Ellis, in the current number of *Macmillan*, explains the origin of a curious literary mistake. Balzac in one of his *Entretiens* quotes some extracts from a poem of his own on Nero, with the remark that he had found the fragment in a worm-eaten parchment, just as Scott professed to get his mottoes from old plays. The *Entretiens* were so much better known than the poems that for more than a hundred years the "fragment" continued to figure in collections as the work of Turnus, a poet of the period, of whom we possess two genuine but unintelligible lines.

Prosper Simeon Hardy, a Paris bookseller, and joint syndic of the trade with a member of the house of Didot, left eight folio volumes of MS. *Mémoires*, now in the National Library at Paris. They apparently contain little of interest beyond the facts that the author was once a schoolfellow of Juigne, the archbishop of Paris, that he was a Jansenist and a parliamentarian, and that he expected everything from the early days of the French Revolution; also that he knew a canon who had 4000 masses ordered for Louis XV. during his illness in 1744, 600 after the attempt of Damiens, and three in his last illness.

Art and Archæology.

A Descriptive Catalogue of the Works of George Cruikshank; Etchings, Woodcuts, &c., with a List of the Books illustrated by him, by G. W. Reid, Keeper of the Prints and Drawings in the British Museum. With an Essay on his Genius, by Ed. Bell, M.A.; and 313 Illustrations. Bell and Daldy.

THIS is a publication that takes one by surprise. That an artist in his lifetime should receive such a celebration as these three thick and splendid quarto volumes, looks not only like fame, but like a kingly superiority to all other men who have devoted their lives to popular art. Albrecht Dürer or Marc' Antonio, a century and a half after their deaths, receive a feeble commemoration of the kind, and yet we are not sure we have a full list of their works. Stothard, the most lovely draughtsman we in England have had as an illustrator, and nearly as productive as Cruikshank during his shorter but still long period of work from 1780 to 1820 or so, has not yet received any attention of the kind, although engravings from his inventions are even more enthusiastically collected than those of the living veteran, nor has Chodowieki, the prototype of Stothard, been so diligently treated of in his own country, where elaborate bookmaking of this kind is a national characteristic. If we enquire into the reason for this superior attention paid to George Cruikshank, we are at some loss to satisfy ourselves, but we must come to the conclusion that the comic element, an element which generally militates against the permanent success of works of art, and which *painters* are generally careful to exclude—applied, as in the case of an artist to things of the day, showing the passing incidents, manners, and appearance of the times—gives his works their interest to us, the sons of the men to whom the Prince Regent and Pierce Egan's *Life in London* were contemporary interests.

In the year 1803, no less than sixty-eight years ago, the boy Cruikshank, whose father had let him "play at etching" with his own copperplates, began to execute works for publishers; and there actually exists a sheet of sixteen small subjects, one of which represents "himself taking his plate to the bookseller W. Belch, whose name appears on the façade of the shop;" so early did the propensity to introduce himself in his designs begin, a habit afterwards encouraged, Mr. Cruikshank himself says, by his publishers. Perhaps the earliest artistic remembrance of the present writer, dating from the time he walked under the charge of an elder brother to his first school, is the delight he had in the headings to Lottery advertisements issued by Mr. Bish, the National Lottery agent. These used to be distributed to the public by a man touting at the door of the office, and consisted of a couple of verses telling how a milkmaid, a poor *dandy* or other notability, had drawn a prize of 20,000*l.* at that office, above the verses the veritable milkmaid being represented in ecstacies by Cruikshank. Of these a fresh example appeared every month, all of them possibly irrecoverable now, and not even mentioned in this Catalogue. The name of Cruikshank, however, was borne by other members of the family, and I think we may venture to say that it is impossible to distinguish the works of one from another at the earlier time of George's career by internal evidence. In a letter to Mr. Reid given in the preface, the artist says himself, "It will not excite much surprise when I tell you that I have myself, in some cases, had a difficulty in deciding in respect to early *hand-work* done some sixty odd years back, particularly when my drawings, made on wood-blocks for common purposes, were hastily executed (according to price) by the engravers." This reference to the prices then given for this kind of work reminds us of what might with great advantage have been

introduced either into the preface and admirable Catalogue by Mr. Reid or into the very interesting essay by Mr. Bell, "On the Artist's Genius and Works." The reader may remember that in Mrs. Bray's Life of his father, she has judiciously printed Stothard's account with the publishers of the *Novelist's Magazine*, 1783, showing that the young artist received for his designs (among the most beautiful things of the kind ever done) only a guinea each. The drawings must have been highly finished preparations for the engraver; and if Mr. Cruikshank had enabled the authors of this work to place on record similar facts in relation to his own drawings, the information would have been equally interesting and important in the annals of English art. Infinitesimal no doubt were the prices, a good copy of some of the drawings being worth as much as the entire pay the artist originally received, but it is to be hoped Mr. Cruikshank would not for that reason decline to make the public his confidant.

That the element of price must be carefully kept in mind in estimating and understanding Cruikshank's seventy years' productions is more and more evident on going over the pages of this Catalogue, as well as in examining the two volumes of illustrations. It is quite clear that, for the first twenty years of his career, his must have been the cheapest and worst-paid art-work going, the publishers employing him being unknown in "the Row" for the most part; and this is not surprising when we reflect that Smirke, Thurston, and others possessing comic powers, as well as Stothard, the first Corbould and many others, possessing superior training and higher taste, occupied the richer field. It may seem severe on Mr. Cruikshank to say this, and yet it is necessary to be said to judge him correctly, as it is not till we come down to the dates of Harrison Ainsworth and Dickens, and his own *Omnibus*, when his chances were much improved and his prices increased, that his etchings especially, but also his drawings on wood, show the richness of invention and elaboration of workmanship that place them within the category of perfect art. The tremendous power of satire and the savage humour, in such things as *The Green Bag* and *The House that Jack Built*, are qualities perhaps much higher than even those that belong to Cruikshank as an artist at any period of his career, but we have not space here to enter on that consideration.

The Catalogue describes at considerable length (addenda included) 2726 etchings, and about 2000 woodcuts, while separate books, tracts, &c., some having twenty separate illustrations or more, amount to nearly 500! The field of speculation suggested by the titles of these is wonderfully curious; "Tom, Jerry, and Logic," "Dandys and Dandyzettes," and other London satires, are mixed up with passing events and characters, "Boney," as the Emperor Napoleon was called, Sir Francis Burdett, Castlereagh, the Thistlewood plot. Then we find the British novelists, Fielding, Smollett, Goldsmith, &c., in which the artist shows far more affinity with the first than with the last, and other sets of standard works. The two volumes of illustrations include many of his best etchings, those for *Peter Schlemihl*, Grimm's *German Tales*, *The Irish Rebellion*, *Oliver Twist*, *Life of Falstaff*, and others.

W. B. Scott.

EXHIBITION OF CABINET PICTURES AT THE FRENCH GALLERY, 120, PALL MALL.

This gallery opened to the public on the 30th October, consisting, as usual, of pictures by "British and Foreign Artists;" and this year it seems as if the French had in some measure ceased to produce new pictures, inasmuch as both here and in the Bond Street Exhibition, called the New British Institution, which we shall notice immediately, we find a large predominance of Belgians, and an infusion of other nations, if we may believe such names as Noerr and Kobinsky. Perhaps there are now more institutions for the show of pictures in London than are required for our own art, and so the proprietors resort to Belgium, that exhaustless *fabrique* of pictures, and to wherever else the educated artist is to be found without a market. Some twenty-five years ago, when Art Unions were improving the prices received by the then rising generation of artists, we remember that Mr. Chambers, of Edinburgh (whether Robert or William we now forget), wrote to the papers that he had found pictures with more work in them at half the price in Brussels, and advised Art societies to import them. This enlightened advice, ignoring the cultivation of English art, seems now being acted on, and in a few years we may find the characteristics of our school, even of our water-colour and landscape art, disappearing in the mistaken necessity to compete with the foreigner in his own style. This result would be very deplorable, because picture-making, except from a genuine love of nature, seen from the point of view in harmony with our national tastes, is a sort of diabolic art, producing hybrids and monsters. In the present exhibition we see several works which we cannot distinguish as either French or English. One of these, thoroughly French in an executive way, is betrayed by its thoroughly English motive—(116) "Reviendra-t-il," by W. M. Wyllie, in which the returned zouave is received by his old parents with an upbraiding expression; the old soldier his father would rather he had died in his country's defence than thus turn up again in excellent health! This is in many respects a noble picture. But here, on the other hand, we have inflicted upon us (84) "A Parisian Home, 1870," by T. E. Saintin, and (101) "Où est mon père?" by Mrs. K. Bisschop, widows weeping for the loss of their brave husbands supposed to be killed last year. One of these, by the medallist of last season, is a still-life picture, with the young lady's face as hard as the stove she sits by.

There are however a good many noteworthy works in the room, and first of all, one of the very best things Alma Tadema has yet done—(67) "Pottery Painting," perfect in drawing and expression, and equally perfect in colour; a simple composition, one figure, properly speaking, but, as it seems to us, beyond all praise. (19) "The Unexpected Return," by Carl Hoff, is a triumph in its way, a costume picture, skilful and dramatic, although affected in some of the secondary figures; and (81) "Spanish Courtesy," by L. Jimenez, is still more skilful, painted apparently by a Spaniard with French education—a hopeful mixture. "On the Mediterranean" (180), by C. Bolonachi, is an admirable sea-picture; and a "Cattle Scene in Holland" (193), by A. Mauve, is equally good in its way. "Going to the Meet in the Olden Times" (203), by M. Gierynski, is one of the completest productions in the room.

The English pictures (about half) comprehend the works of several good artists—T. Faed, Frith, Archer, Nicol, Oakes, and others. These are not important for the artists, but they have a certain freshness compared to the foreign figure pictures. "The Haunted Wood" (189), by J. Pettie, is really charming in its *naïveté*, and the style of painting most ably expresses the sentiment. "Harvest" (161), by J. Smythe, and "Harvesting in Showery Weather" (144), by Mrs. Newcomen, ought to be mentioned; and here we find, as we did last year in a gallery in Bond Street, ship and sea pieces by W. L. Wyllie, painted with such vigour and truth that we feel inclined to repeat the praises then expressed.

NEW BRITISH INSTITUTION GALLERY, 39, OLD BOND STREET.

Here, too, we may begin with continental contributions: indeed the great majority of the good pictures are from Belgium. "Jeune Fille de la Hesse et son Chien" (13), by Professor Verlat, is a small picture, but admirably painted by the most versatile of modern painters. Numbers 18 and 25 are a pair of miniatures by D. Col, the one called "A Political Discussion," the other "The Tasters," belonging to a class of cabinet pictures we rarely try. Except when removed from us by ancient costume, or by the conventional Irish type, we altogether abstain from the comic element, such as M. Col shows us in his innocent though demonstrative quidnuncs. "L'Attente" (26), a young woman of the Low Countries in the early part of the sixteenth

century, in a thoughtful but waiting attitude in church, is a good example of the pupil of Leys, who continues to practice exactly in his master's field. But the most important work in the room is an "Idylle" (149), by Van Lerius. It represents a nymph, one of the train of Diana she may be, wading in a stream, and watching very prettily the little fishes about her feet. This *motif* is well expressed, the action indicating a coming attempt on the part of the girl to catch them. The painting of the flesh is marble-like of course, white, round, and thoroughly able, but without the least fascination. It is a better picture however than any by the same hand yet seen in London, as far as we know. "The Little Marauder" (45), by Van Haanen, deserves mention; and some landscapes, especially (152) "Souvenir des Ardennes," by J. Van Luppen, and several by A. Wust. We are told that this artist is an American resident in Antwerp: his subjects are in Norway, and possess a decidedly northern colour and sentiment.

By our own artists, here is "Charles Surface selling the Family Pictures," from the *School for Scandal* (56), by C. Calthrop, full of cleverness both in manner of painting and in the characterization. Until looking into the catalogue we took this for a French production, so that we fear the painter's faculty is only of an imitative description. The most beautiful picture in the room, one which *is* English in its interpretation of nature, is (59) "The Golden Hour that fadeth into Night," by P. R. Morris. This artist, who now and then does something that stands out from all others, has succeeded in expressing here the sweetest feeling of evening and of village life. "Rent Day" (102), by C. M. Webb, is a very able work; and we must mention "By the Waters of Babylon" (39), by J. Cuthbert, as full of good design. In landscape we have a small "Corner of the Farmyard" (43), and a larger work, "The Redbank on the Wye," by C. H. Lucy, the first landscapes we have ever seen by him. M'Callum, Stannus, and others, also appear to advantage. This gallery seems as if it were going to be the exhibition room of the rising generation, the men who, some day or another not very far ahead, will take the lead. Here is Oliver Madox Brown's "Mazeppa" (176), showing excellent action of both horse and man, the involuntary rider tied painfully on the back of the animal struggling to quit the wild water for the iron shore. After two or three years' daily study from the antique and living model there is no saying what high powers of design this young artist may not show. "November" (170), by C. J. Lawson, is more accomplished in painting, indeed very masterly in imitation of nature. "Pleasant Reflections" (4), by P. Macquoid, barring the sad pun in the name, is also remarkably able, especially the sky. W. B. SCOTT.

ART NOTES FROM NORTHERN ITALY.

THE numerous restorations of ancient churches now in progress in Central and Northern Italy are, so far as I have had opportunity of observing, directed by a just taste and intelligent appreciation of the architecture of past ages. The mediæval is respected and preserved; and it is the obvious aim of these undertakings to reintegrate without altering these sacred buildings so cared for.

At Venice several, and among the most remarkable, of these works are now advancing to completeness, some commenced by the Austrian, others by the Italian authorities; and in every instance worthy (as they impressed me) of more or less commendation. The restorations of St. Mark's were begun many years before the change of government, and the entire northern side of that basilica was renovated, the ancient material and all the sculptures of different dates being carefully replaced, by an architect named Biondelli, who finished his task in 1862. In 1865 another architect, named Dorigo, began the works still in progress at the southern side, and directed according to the same principle—a reintegration of the antique with the use of the same material, and the refitting of all parts after such repair as is found necessary. Signor Dorigo proceeds slowly on system, employing comparatively few labourers, and scrupulously superintending all they do. I learn with regret that it is intended to restore the façade by the same process after the present works have been finished. In the course of the early works it was discovered that, conformably with local traditions, the original design of the architecture was simple, the construction of brick little overlaid with ornament, and thus the splendid incrustation of coloured marbles and heterogeneous sculptures was but a mask of later origin concealing the older aspect of the ducal basilica. The "Storia della Repubblica di Venezia," by Francesco Zanotto, a valuable work published since the restorations in question were begun, points out this confirmation of the conjectures of other local historians and critics as to the original character of St. Mark's cathedral.

Restorations at the church next in grandeur and in historic importance at Venice, *SS. Giovanni e Paulo*, were begun fourteen years ago, and are yet far from completion. The exterior has been isolated, so that every part of its elevation, and especially the pentagonal apse, with its stories of lancet windows, are brought fully into view, unobstructed by modern buildings. No injury inflicted by time has been fatal to any leading features of this great church founded in 1240; and it has only been necessary to strengthen the lofty columns, and renew the foundations of the two which mainly serve to support the cupola. The painted glass has been removed, and is (I understand) to be, if possible, restored, or else replaced by other glass-paintings prepared at the factory employed in the service of the Duomo at Milan. The chapel of the Rosary, destroyed by fire in August, 1867, and in which perished on that occasion the masterpiece of Titian and one of the most admirable Madonna pictures of Giovanni Bellini, is now in part rebuilt and re-roofed. Two other Venetian churches, interesting examples of the later Gothic and the earlier Renaissance, are undergoing repairs that deserve notice. *S. Maria dell' Orto*, with a fine façade (1474) and sculptures attributed to Bartolomeo Buono (or Bon), had been used as a barrack for five years before 1862, when it was determined to repair and reconsecrate this remarkable church. I cannot approve of the extent to which colour and gilding are introduced in the new embellishments; and though on the flat wooden ceiling such decoration is suitable, its profuseness around archivaults and on the capitals of marble columns seems discordant with the gravity of style and massiveness of forms in this interior. With curious inconsistency an archaic relief of the Virgin and Child and Angels, by Giovanni de Sanctis, has been deprived of the brilliant tints and gilding by which this relief, placed over the door of the sacristy, had been originally bedizened. I can more unreservedly commend the repairs now going on at *S. Maria dei Miracoli*, perhaps the most exquisite Venetian example of the Renaissance style, rich in sculptured *ornato* and inlaid work (intarsiatura) of coloured marbles—a masterpiece of the architect Pietro Lombardo, who built this small but conspicuous church 1481–9. The method adopted for the restoration, commenced about six years ago, on account of which it has long been closed, is like that of St. Mark's: the removal and retouching of all the details, for replacement after the stonecutter has done his task, but no alteration of design or admission of novelty. The exterior of the whole building is already thus renewed. In the interior I found all the marble incrustations, friezes, &c. lying heaped up on the pavement, except in the choir alone, which is nearly finished; this part being raised above the nave, and provided with ambones projecting from the balustrades round its platform.

The cathedral of *S. Donato*, on the Murano island, which, according to Ughelli (*Italia Sacra*), was founded 950 and consecrated in 957, has been undergoing restoration since 1867, though such works have been suspended for the last ten months, to be, however, soon resumed. The pentagonal apse, with two storeys of arcades, and very curious inlaid work, has been completely renewed with the old material; so also the keel-formed wooden ceiling, which is to be painted. It has not been found necessary to touch the columns of Greek marble or their Corinthian capitals, but the present altars, in bad modern style, will be restored to an older type, and the high altar provided with a pillared canopy like that at St. Mark's. The grand and sombre, long-neglected, but most impressive Duomo, on the more distant and almost deserted island of Torcello, is destined to become also the object of restoring labours.

At Verona I found operations recently commenced at the historical basilica of *S. Zenone*, which promise well, and have already swept away several tasteless adjuncts and alterations for which the capitular clergy were responsible. Entering this majestic church, we now see at once to the extremity of the spacious crypt, divided into aisles by forty-eight columns of red marble, like that at the less important S. Miniato near Florence, The removal of whitewash has brought to light many mediæval

frescoes on the walls (some indeed thus rescued long before the works recently undertaken); and among these the most remarkable is a painting, near the tribune, attributed to Altichieri, and, I should say, worthy of that master, whom one learns to rank high after seeing his frescoes at Padua; the subject of this is a Crucifixion, with five Saints, one of whom presents a kneeling donator, and angels hovering around the cross. In the cathedral of Verona has lately been rescued from whitewash an important composition in fresco, occupying considerable space on the wall of an aisle, namely, several saints, dignified and characteristic figures, standing each apart within a framework of painted architecture, an inscription being fortunately preserved with the artist's name, Giovanni Falconetto, and the date 1503. Vasari supposes that this Veronese artist died in 1534, aged 76; Lanzi, that he was probably living in 1553.

I cannot but look with some apprehension on repairs, however judicious or desirable, in a church so rich in memories, and of architecture and art-contents so worthily corresponding to the sanctities of the past, as *S. Ambrogio* at Milan. The restorations still progressing here began fourteen years ago. The high altar, under which were lately discovered three skeletons, believed to be those of St. Ambrosius, St. Gervasius, and St. Protasius, is undergoing restoration, and the highly curious canopy above it, with archaic reliefs on the four sides, has been already restored and regilt in the details originally so ornamented. This canopy, resting on porphyry columns, is among the objects by which the church was enriched when almost rebuilt by Archbishop Galdinus, 1169. A crypt has been found under the mosaic-adorned chapel of St. Satyrus—which is supposed to be another and more ancient church, known as the basilica of Fausta, incorporated with the Ambrosian; and here are to be laid the relics of St. Satyrus and St. Victor, hitherto kept in a sculptured marble urn over the altar of that chapel. Some remnants of the frescoes adorning the walls and pillars of the nave have been brought to light by the removal of stucco. On the whole I must speak favourably of all that has yet been done or undertaken at S. Ambrogio. The grave dignity, the older charm of this celebrated church, and its severely simple architecture, do not appear injured by the works hitherto carried out.

At Pavia I was glad to hear of the project to finish the cathedral according to the designs of Cristoforo Rocchi; this being determined by, and to be accomplished at the cost of, the wealthier citizens, who have opened a subscription. One benefactor left 50,000 francs by will, and as much as 100,000 francs is already supplied for the undertaking. Some incipient works, too little advanced for any estimate of style, were to be seen against one of the lateral walls of this cathedral. The magnificent Certosa of Pavia fortunately requires no repair, nor any touch from modern labour in any one of its elaborate and splendid details. Its marble and mosaic encrusted chapels, gorgeous choir, and vast Renaissance cloisters may now be visited in every part by both sexes. Cloistral restraints are removed, though eight Carthusian monks (three only in priest's orders) still remain here as guardians and officiating ministers of this famous sanctuary. At Piacenza I saw with pleasure the restoration, and I believe strictly in the original type, of *S. Antonino*, the former cathedral, founded in the tenth, and partly (as, no doubt, in the acute arches of its interior) a building of the twelfth century. Some grotesque reliefs round the portal are, I believe, the oldest details here; of the frescoes on the interior pilasters (mentioned by Messrs. Crowe and Cavalcaselle) I could find only one, the single figure of St. Anthony the Hermit.

Comparing the works for church-restoration carried out in recent years by ecclesiastical government at Rome and by constitutional government in other Italian cities, one is struck by singularity of contrast. In the pontifical metropolis ecclesiastical antiquity has been overlaid and disguised under modern splendour, often with questionable taste; under the monarchic *régime* it has been scrupulously revered and preserved, so far as possible, in the processes of renovation! The Italian Government has been accused, and not without cause, of systematic and unsparing antagonism against the claims and privileges of the hierarchic body, and indeed of all ecclesiastical institutions. The spirit and intention with which such sacred monuments as I have above alluded to are now cared for with lavish expense for their benefit announce the strength and reality of the opposite feeling, the Catholic and traditional, in the Italian mind, and perhaps may be construed as a guarantee for the maintenance of the old religion, however modified or newly influenced, in this classic land—the centre of so many supremacies.

C. I. Hemans.

EIGHT MINIATURES BY JEAN COUSIN (?).

M. Ambroise Firmin-Didot contributes to the present number of the *Gazette des Beaux Arts* an extract from a forthcoming work on Jean Cousin, which he is at this moment preparing for the press. In this extract he announces that by a lucky accident he has become possessed of the *livre d'heures* of France Claude Gouffier, whose name has been lately associated with the faience Henri II., fabricated under the walls of his celebrated château of Oiron. The book contains eight miniatures (there have been apparently more), and these eight miniatures are, M. Firmin-Didot thinks, undoubtedly executed by the hand of Jean Cousin. This assumption is based on a comparison of the breviary in question with the *livre d'heures* of Henri II. in the *Musée des Souverains*. It should however be remembered that the only grounds on which the miniatures of the *livre d'heures* of Henri II. are attributed to Cousin is the carefully qualified assertion of Rigollot in his *Histoire des Arts du Dessin*, and Rigollot gives but the echo of doubtful tradition. The very date too at which the Gouffier breviary was executed is an additional reason for hesitation. For M. Firmin-Didot tells us that in an inscription inserted in the ornamentation of the frontispiece Gouffier bears the title of *chevalier* de Boissi, which he had from 1544, till he changed it for that of *marquis* in 1564. This work was therefore produced at some time during the very twenty years when we know Cousin to have been in the fullest activity as a glass painter, when he was conducting such immense undertakings as the windows of the *Sainte-Chapelle* of Vincennes and those of the church of St. Gervais. It is possible that Cousin began his career as a miniaturist; later in life he may have furnished designs to others, or have aided them by superintendence, but it is difficult to believe that he turned away in the midst of his more important labours to execute with his own hand work of such a totally different character as the decoration of breviaries.

The article in question is accompanied by an engraving of a fifteenth-century French oil-painting in the collection of M. Poncelet. It represents a female figure, half-length, partially draped, and holding a vase. She has been christened Artémise. A note is appended by the editor, in which he remarks that, though in execution this picture resembles neither Cousin's *Jugement dernier* in the Louvre nor his *Eva prima Pandora* in the possession of M. Chaulay at Sens, he does not know by whom else it can be: so, "*Signons là donc jusqu'à preuve contraire, Jean Cousin.*" To the portraits by the hand of Cousin which still exist at Angers, or to the Descent from the Cross in the Museum of Mainz, no reference is made, though any positive decision as to the genuineness of a painting by Cousin can hardly be pronounced without taking these works into account.

E. F. S. Pattison.

ART NOTES.

In the fourth number of this year's issue of the *Zeitschrift für bildende Kunst*, Dr. Moritz Thausing branded as forgeries that series of chalk and charcoal portrait sketches which pass at Berlin, Bamberg, and Weimar, under the name of Albrecht Dürer. Dr. Thausing spoke with such unhesitating positiveness, and his special knowledge of the subject gave his opinions such weight, that the question seemed for ever decided: but A. von Eye, the last biographer of Dürer, took up the gauntlet in the *Anzeiger des Germanischen Museums*, 1871, No. 3; and in the *Beiblatt* of October 6th to the *Zeitschrift für bildende Kunst* Dr. Lübke also comes forward to express his own conviction of the genuineness of the drawings in question, to demand further enquiry, and to deprecate a too hasty conclusion against their claims.

The duplicates of the Print Collection of the Royal Museum at Berlin are now in course of sale. The first auction began on the 30th October and lasted till November 9th, under the direction of Rudolf Lepke. The catalogue of this first division has been carefully edited by J. E. Wassely. The number of the en-

gravings, etchings, and woodcuts, offered to the public amounts to 1949, and they are considered to be for the most part of real value.

The *Beiblatt* of the *Allgemeine Zeitung*, No. 296, contains a minutely detailed account of a little known early work of Raphael's, existing at Città di Castello. It is the procession flag of the church of the Trinity, and is composed of two pictures skilfully pieced together. The upper piece depicts the creation of Eve, the lower represents the Trinity. It is in a bad condition, but is carefully preserved from injury and restoration in the palace of the Count della Porta.

Dr. Julius Hübner, the director of the Dresden Gallery, sends to the present number of the *Zeitschrift für bildende Kunst* a notice signed by more than twenty more or less well-known names, in which the highest place is claimed for the Dresden Madonna as a genuine and greatly improved replica by Holbein. It is to be hoped that those who have signed this document will not be long before they give to the world the grounds on which they base this assertion.

New Books.

CHATTERTON, T., The Poetical Works of. Edited by the Rev. W. W. Skeat, M.A. Including the acknowledged Poems and Satires, the Rowley Poems (partially modernised), and Essay proving their Authorship, a Memoir, and Selections from the Prose Writings. In 2 vols. Bell and Daldy.

CORNELIUS, Peter. Weihnachtslieder. Ein Cyklus für eine Singstimme mit Pianofortebegleitung. Leipzig: Fritzsch.

DANTE-GESELLSCHAFT, Jahrbuch der Deutschen. Dritter Band. Mit einer photographischen Tafel und einem Plane von Rom. Leipzig: Brockhaus.

RÖSSLER. Romänische Studien. Duncker u. Humblot.

Theology.

A New System of Christian Dogma. [*Christliche Dogmatik.* Von Dr. Alois Emanuel Biedermann, Professor der Theologie in Zürich.] Orelli, Füssli, and Co., 1869.

[FIRST ARTICLE.]

PHILOSOPHICAL THINKING, when it does not take up an attitude either independent of or hostile to religious doctrine, may ally itself with it in one of three ways. It may endeavour to show either that such doctrine is, as it stands, the most rational exponent of the highest truth, thus subjugating philosophy to religion; or it may endeavour to absorb it into itself by showing that it is merely a symbolic expression of facts to the true exposition of which the forms of pure thinking are alone adequate, thus subjugating religion to philosophy; or, thirdly, an attempt may be made to show that religion and philosophy are two modes of spiritual activity parallel, but not mutually exclusive: either as correlative to two sets of truths, the one conceived as divine and super-rational and only communicable by a direct outward revelation, the other human and apprehensible by the unassisted grasp of the reason; or as two separate, but equally real and legitimate, attitudes of the human mind towards the same body of objective truth: two forms (in other words) in which that truth is conceived.

Dr. Biedermann's work might, on a superficial examination, appear to be an attempt merely to re-read Christian doctrine into philosophical language. But it is distinctly a theological treatise: its purpose being rather to reconcile religion with thought than to subjugate the one to the other. It aims, indeed, at giving an adequate expression, in the language of reason, to the principle of the Christian religion and to the religious truths embodied in the traditional forms of Christian doctrine; but it is religious and not philosophical truth for which it seeks to find an expression.

The work falls into three parts: *first*, the discussion of principles: the essence of religion, the attitude of religion to thought and knowledge, the fundamental principle of Christian doctrine; *second*, a historical account of Christian doctrine as exhibited in the Scriptures, and in the confessions of the various churches; *third*, a critical examination of the Christian doctrines in detail by the test of the ordinary understanding, and the exhibition of their content in its ultimate and most adequate rational expression.

The second part, as properly speaking only auxiliary to the main purpose of the book, need not be dwelt on here, further than to say that the analysis of which it consists has been performed with the acuteness of a thorough dialectician and the fulness of treatment and knowledge of a trained theologian. The distinctive feature of the work—that which raises it above works of pure history or criticism—is the constructive effort of the first and third parts: an effort which would appropriately be supplemented by a treatise on Christian ethics.

We reserve to another notice our judgment on the speculative success of the essay, contenting ourselves at present with an analysis of the first part.

1. *The Essence of Religion.*—Religion, in whatever form it may appear, and it appears in all human beings in some form, whether acknowledged or not, may be best defined as a mutual relation between God as infinite and man as finite spirit. This relation is, on the side of man, not merely passive, but consists in the self-determination of the human spirit towards God: nor merely partial, but an act of the whole mind, reason, feeling, and will. This process implies the raising of man as a finite spirit above the natural conditions by which, as such, he is limited, into a freedom which, on the other side, consists in an absolute dependence upon the infinite spirit: a freedom from the world only possible through dependence upon God.

The relation of the infinite spirit to the finite is made known by revelation, which may be either immediate or mediate. Immediate revelation is the personal sense felt by the human soul, without process of reasoning, of its relation to God: mediate revelation is the sense of this relation as the result of inference, drawn from the contemplation of the uniform working of the laws of outward nature and of the moral law in human life. The other term of the religious relation—the state of conviction produced by revelation—is faith: not a special act either of knowing or willing or feeling, but the activity of all these three functions in relation to the contents of the revelation.

The true apprehension of the nature of religion as thus defined is, however, made difficult by the psychological conditions under which we seek to realise the meaning of the terms. The mutual workings of spirit, finite and infinite, which are represented by the words revelation and faith, are conceived by the unreflecting consciousness as (so to say) two magnitudes standing over against each other, whereas they are in reality only moments of one spiritual process. This is due to the aptitude of the human mind to rest in the symbolism which is to it the most natural expression of spiritual truth: indeed the only possible means of imaging it. In its ordinary processes, indeed, the mind passes from perception to reasoning by the formation of general ideas, which, though not really objects of sense, are abstractions from sensible objects, and realised as mental images. Such abstractions can be dealt with by the understanding as if they were sensible objects without fear of contradiction or anomaly. But there are other general ideas which are not abstractions from the phenomena of sense, but additions to them: hypotheses introduced to explain them. A collective multitude of phenomena produces on our mind an impression to which we give utterance by calling it a living creature: we attribute to it a life or soul, an idea drawn from the con-

sciousness of our own personality. Such an idea cannot be handled as an object of sense, for it is not drawn from the senses, the substance to which we attach it not being apprehensible by them. When we speak of a spirit or a life as a thing, we talk of an insensible object as if it were an object of sense. Spirit, acknowledging the existence of spirit, can yet only symbolize it to itself in this imperfect embodiment. The notion of spirit as a thing being, as it were, a metaphorical notion, the understanding cannot deal with it: but is reduced either to denying the existence of spirit altogether except as a form of matter, or, while admitting its existence, to criticize the form in which the mind has attempted to embody its idea.

From this difficulty in imaging to the mind the relations of spiritual existence arise two partial conceptions of religion, which may be called respectively supernaturalism and rationalism. Supernaturalism, emphasizing (and rightly) the real existence of the supersensible world, but embodying it in a sensible form, does not allow to the human mind its full powers of apprehension, but is apt to conceive faith as merely receptive. Rationalism, on the other hand, dwelling with equal right on the human element in religion, is apt to drive the divine or supersensible element into the background, and at length, denying it altogether, to represent religion as a mere product of the human reason. The concrete reality of the religious life, thus partially misconceived by supernaturalism and rationalism, is fully seized by mysticism, which, however, denies at the same time the possibility of any philosophical *rationale* of the matter.

Philosophy, analysing with strictness the phenomena of religion, recognises as given in revelation three cardinal truths: the unity of essence between the infinite and the finite spirit; the contrast in their modes of existence as finite and infinite; and the possibility of a communion of life between them. Hence God is revealed to man as the infinite spiritual cause of all existence: as the infinite law of action: as infinite power in the religious life: man recognising this revelation in his reason, his conscience, and his sense of religious freedom. In his reason: for mind, though conditioned at all points by the material world, is led inevitably to recognise mind as at the bottom of all natural processes; in his conscience, which sets over against the finite will an infinite rule of action, and in his religious freedom, in which his spirit, made independent of circumstance, enjoys unchecked communion of life with the Spirit of God.

The medium of revelation must in all cases be a state of the human consciousness. The existence of such a state may be coincident with some outward natural phenomenon, and may in imagination be indissolubly connected with it: but such outward phenomenon remains, nevertheless, unessential to the revelation.

Faith, arising from the simple feeling of the existence of the supersensible world, first attaches itself to natural objects which it takes for representation of that world: this is the primitive and barbarous form of religion. The inadequacy of such objects to their end being felt, faith attaches itself no longer to them, but to a mental envisagement or image of the supersensible. This process, being an attempt to represent a non-sensible object in the forms of sense, involves a contradiction between the form of the symbol and the thing symbolized. It is, however, the process most natural to the religious consciousness, and as a matter of fact almost universal, though it cannot be said in strictness that the essence of religion consists in it. Religious conviction expresses itself directly, and without any analysis of its relation to its object; and the readiest form for such simple expression is the idea of a communion between two personalities, the human and the divine. So far is this the case that the mere act of reflecting on a religious idea has a tendency to destroy its religious character. Conviction, pure and simple, however obtained, is the soul of religion. A chemist who analyses water and air into their elements drinks and breathes them in the same form as the ignorant multitude: so the religious life is independent in itself of the process of thought which analyses its forms. But as the chemist's power of analysis enables him to discover and eliminate noxious elements, where they exist, in water and air, so the forms of religious intuition are criticized and progressively spiritualised by the action of the reason. Yet religion and philosophy will probably never entirely assimilate, and even the strictest thinkers will always represent their religious ideas in symbols.

As the faith of mankind progressively purifies itself, so does the outward expression of it in worship and in the moral life grow from less spiritual into more spiritual forms, renewing itself constantly by a recurrence to its original source.

2. *Relation of Faith to Thought.*—The ordinary antithesis of faith to knowledge is better expressed by the antithesis of faith to thought. Believing and thinking are different phases of mental activity, which cross each other, but are not mutually exclusive. Each is concerned with what transcends sense, but thought is engaged merely in knowing the laws which underlie the phenomena of nature, while to faith these phenomena are the expression of a supersensible power with which the human soul is in constant and active relation. In this sphere faith may arrive at convictions with regard to its object either with or without the assistance of the thinking faculty strictly applied. It may rest on personal or on universal grounds; but however this may be, the decision as to the truth of religious belief must rest ultimately with the reason. It follows from this that the general question whether revelation does or does not consist in the communications of truths transcending the capacity of human thinking can only be decided by the reason itself. The laws of being, so far as man can know it, and of thought being identical, thought is a law to itself, and must exercise itself as freely on the contents of revelation as on any other object that is presented to it.

3. *Principle of the Christian Religion.*—The Christian religion having its origin in the spiritual life revealed in the personality of Christ, it is in His life and doctrine that its principle is to be sought. What was the new religious element revealed in the person of Christ, the newly found relation between God and man of which His life was the sum and embodiment? This kernel of the Christian religion Dr. Biedermann finds in the "sonship of God" claimed by Christ. From this idea germinated and round it grew and gathered the faith and religious life of the Christian community. The history of Christian doctrine, therefore, is the history of the development of this principle, as it strengthened itself and ramified under the varying impress of circumstances. No one historical development of it can, however, be considered as its final and only expression. As different periods of history may have struck out for themselves expressions of the Christian principle adequate to the time and so relatively true, so the principle itself must be acknowledged to be constantly subject to the process of fresh development.

H. NETTLESHIP.

(*To be continued.*)

Intelligence.

The Rev. J. W. Burgon maintains unreservedly the authenticity and originality of *The Last Twelve Verses of St. Mark*, in 323 pages of somewhat acrid declamatian interspersed with minute research. It was worth while to show, in detail, that the writers in various centuries

who notice the absence of this section of our Gospel from MSS., few or many, were for the most part only copying Eusebius; for their names are arranged in the editions too much as if they were all independent witnesses. An investigation of the neglected Catenæ on St. Mark and of certain marginal scholia found in late MSS. has corrected some errors of collators, and slightly reduced the force of this patristic evidence. Under these heads Mr. Burgon has done good service, grave errors and exaggerations notwithstanding. As a new and "decisive" testimony on the other side he sets up "the Lectionary of the East," that is, the system of lessons which Bingham's diligent reading of Chrysostom proved to have been used in northern Syria late in the fourth century, extended by imaginative processes to all the Greek and Syrian churches, and backwards in time almost to the Apostles. The new and striking facts about + τέλος +, which stands within the text of many Cursive MSS. after xvi. 8 *and* 20, point not to the marking of ancient lections, but to the recognition of a first and a second ending to this one Gospel, just as many Armenian MSS. insert Εὐαγγέλιον κατὰ Μάρκον in both places. Mr. Burgon's way of exhibiting the principal evidence could not fail to mislead an unwary reader. He never displays it all together, and often speaks of a part as if it were the whole. He treats the short duplicate ending of the Gospel as if it had no bearing on the question at issue. He boldly cites the Old Latin as rendering "emphatic witness" to the genuineness of the twelve verses, though its three primary MSS. are wanting here, and one of the surviving three substitutes the duplicate ending; and though Tertullian and Cyprian never cite the section, as they must certainly have done had they known and accepted it, Tertullian, *De Baptismo*, 12, 13, Cyprian in his *Testimonia* and divers epistles, if not (both writers) elsewhere. The one Latin testimony previous to Augustine and Jerome comes from an African bishop at the Council of Carthage in 256, as the one clear Greek ante-Nicene testimony (Mr. Burgon numbers six) is that of Irenæus: and the inherent weakness of negative evidence cannot be pleaded for such verses as the last six of St. Mark. But when authorities are in conflict, clear principles of criticism become indispensable, and here Mr. Burgon signally breaks down. Etymological guessing, without knowledge of the filiation of languages, is a true image of textual criticism of the New Testament conducted without reference to the hidden genealogies and circumstances of transmission to which the extant evidence owes its form. With all his industry and learning Mr. Burgon betrays no conception of the delicate and complex investigations by which alone it can be decided how far an authority or a group of authorities can be safely trusted in a given reading. This is the more unfortunate as he desires his book to lead the way in displacing multitudes of readings which have been adopted on early manuscript evidence within the last hundred years. In the present state of our knowledge even the most conservative criticism, if it be unscientific, must generate only universal doubt and confusion. Mr. Burgon, it ought to be said, successfully disposes of many applications of the "Concordance text," by which Mark xvi. 9-20 has been distinguished from the rest of the Gospel, while he injures the effect of his argument by refusing to see the two or three real difficulties of this kind which remain. He does not notice the significance of the opening phrase Ἀναστὰς δὲ πρωῒ πρώτῃ σαββάτου, so otiose in its triple repetition of facts already told, if taken as an original part of the chapter; so natural and apposite as the first words of a complete succinct narrative from the Resurrection to the Ascension, transferred entire from another record, whether written or oral. The high antiquity of the narrative cannot reasonably be doubted, and almost as little its ultimate if not proximate Apostolic origin. F. J. A. HORT.

The Rev. J. B. M'Caul, a son of the late Dr. M'Caul, of King's College, London, has published *The Epistle to the Hebrews in a paraphrastic commentary, with illustrations from Philo, the Targums, the later Rabbinic writers, and Christian annotators, &c. &c.* (Longmans and Co.). He considers himself pledged by the Thirty-nine Articles to his own view of Inspiration, a view which "to believers (?) is a sufficient explanation of the exceptional phenomena of any separate portion of God's word." Passages cited from the LXX. are guaranteed to contain the correct sense of the original, hence arise some curious "riddles of exposition" (p. 165), which the writer does his best to solve. As a fair typical note in a detail of no extraordinary importance, we may refer to that on προσεκύνησεν ἐπὶ τὸ ἄκρον τοῦ (*sic*) ῥάβδου αὐτου (*sic*); see also on x. 7, 38; xii. 6, &c. But the chief characteristic of the commentary is its constant reference to traditional testimony in behalf of the thesis that the Christ of the Epistle to the Hebrews fully answers the expectations of the ancient Jewish church, and that the author—who is assumed to be St. Paul—"moves in an atmosphere of ancient Jewish interpretation in his application of the Old Testament prophecies to the Messiah." We may grant that some knowledge of Rabbinic modes of thought is an element of New Testament exegesis, which is too much neglected by English students, but it is no less certain that Mr. M'Caul's bias is too exclusively traditional, as might be gathered from his broad preliminary assertion that "nearly all, if not all, the modern objections against, and supposed discrepancies in, the Holy Scriptures have been repeatedly and amply disposed of by the early Jewish writers, and also by Christian divines of the last three centuries." C. TAYLOR.

Mr. Kingsbury's admirable and idiomatic translation of Delitzsch's *Commentary on the Hebrews* (Edinburgh: Clark, 1870) is a contribution of far higher value to exegetical literature. No side of the subject can be said to be absolutely neglected, though the author displays his greatest powers in archæological and specially theological disquisitions. His method of exposition, on which he lays much stress, is the reproductive, *i.e.* he gives a continuous summary of the contents of the epistle, instead of limiting himself to the explanation of difficulties. Dr. Delitzsch had the advantage of coming after Bleek, whom he rivals and in some respects exceeds in learning, though not in sobriety of judgment. He is also thorough and comprehensive in his discussion of diverging opinions. The reader should have been warned that only two of the five appendices in the original are reproduced in the translation. In parting from this work we cannot withhold our opinion that a really first-rate commentary on the Hebrews has yet to be written. Material enough has been collected by Dr. Delitzsch in this commentary, and in the Rabbinical notes to his Hebrew translation of the epistle lately published, as well as by Bleek, Lünemann, Wieseler, Ritschl, &c., not to mention the older critics, and it only requires a trained and independent judgment to employ it to the best advantage. T. K. CHEYNE.

The September number of the Leyden *Theologisch Tijdschrift* contains a friendly but discriminating review, by Dr. Kuenen, of Dr. R. William's *Hebrew Prophets*, vol. ii., from a more "advanced" critical position than the author's. We hope to notice both the book and the review on the next opportunity.

M. Derenbourg intends soon to edit Saadia's Arabic version of the Old Testament.

Contents of the Journals.

Contemporary, November.—Rev. F. Garden shows that the use of the word "Person" by the Latin Fathers was not an imitation of Greek terminology; Persona and ὑπόστασις arose independently.—Prof. Calderwood gives a slight but thoughtful analysis of Dorner's History of Protestant Theology.—Rev. J. Ll. Davies describes the views and objects of Erastus, which related to the judicial censorship of morals assumed by the Church.—Rev. J. Hunt gives some fresh and vigorous thoughts on the place of German theology in the history of religion. He protests against Dr. Dorner's misleading application of the term Pantheism to the systems of Schelling, Hegel, &c.; and against the English and Calvinistic, but not German nor Lutheran, principle of resting Christianity on the formal canon of Scripture.

New Publications.

BURGON, J. W. Last Twelve Verses of St. Mark Vindicated. J. Parker and Co.

EWALD, H. Die Lehre der Bibel von Gott, od. Theologie d. alten u. neuen Bundes. Bd. I.: Die Lehre vom Worte Gottes. Leipzig: Vogel.

WILKINS, A. S. Phœnicia and Israel. A Historical Essay. Hodder and Stoughton.

ZIEGLER, H. Irenäus, der Bischof von Lyon. Berlin: Reimer.

Science and Philosophy.

The History of Philosophy from Thales to Comte. By G. H. Lewes. 4th edition, corrected and partly rewritten. 2 vols. Longmans.

BOTH the merits and defects of Mr. Lewes as a historian of philosophy are too well known for it to be necessary to dwell on them in noticing the fourth edition of his work. The excellences of the book quite account for its remarkable popularity. Mr. Lewes has an eager passion for philosophical truth, and a perfect intellectual sincerity, of which even the "general reader" can feel the charm: a quick, definite, elastic apprehension, such as the historian of philosophy especially needs: a style so lively and transparent that his errors and misapprehensions are always discerned at once, and do not spread (like those of some writers) an impalpable but gradually condensing fog over the reader's vision: and a perpetual activity of mind, so that he never once lapses into the laborious idleness of merely *narrating* opinions without feeling that he has seized their full import and bearing. The defects of the work are due in a great measure to the author's own philosophical position. In its

original form it might fairly have been entitled "An Essay on the Futility of Metaphysical Enquiry, illustrated by studies of the most eminent historical examples." And though in each succeeding edition we find the unhappy metaphysicians treated with more and more respect: still the interval that divides many of them from their historian is too vast to be crossed even by his vivacious and versatile sympathy. From the hostile eminence of positivism he makes, as it were, daring and successful raids into the metaphysical regions: but does seem to seize the citadels and conquer the country. To drop metaphor, he gives always a clear and vivid presentation of certain aspects or portions of each system that he describes: he sometimes reaches with rapid penetration its centre, and contrives to look at it from within: but he cannot, in the case of the profounder thinkers, maintain himself at this point of view: and is always liable to lapse suddenly into a manner of thought quite alien to that which he is trying to represent. The chief illustrations of such lapse meet one in the chapters on Kant and Hegel: but I may notice a striking instance in a single sentence which occurs in the midst of a very effective and (as far as I can judge) accurate account of Leibnitz. "The monad," he says, "as a spiritual existence is penetrable, for spirit is capable of receiving all forms within it." No doubt each spirit, according to Leibnitz, is capable of representing and ideally containing the whole universe of being: but surely it is the fundamental assumption of Leibnitz that the monad is in every aspect impenetrable: therefore all these representations and ideas must be developed from within, and pre-exist potentially in the monad before their development.

In the present edition, the chapters on Berkeley and Fichte are somewhat enlarged: that on Kant has received large additions of considerable interest, especially in reference to Kant's psychological distinctions: while those on Leibnitz and Hegel have been almost re-made. All the additions are improvements: and so are, I think, the omissions—chiefly of certain contemptuous phrases.

In revising his account of Berkeley, Mr. Lewes was unfortunately not able to avail himself of Professor Fraser's admirable edition: which has completed the work that Ferrier began, and finally slain the absurd caricature of the philosopher which the Scotch school (including even the erudite Hamilton) had sent abroad. This misrepresentation Mr. Lewes has always combated: but absorbed in the endeavour to convey to the reader a general notion of Idealism, he does not give as definitely as he might the exact process—really a varying and gradually developed one—by which Berkeley "banished metaphysics, and recalled common sense." In one passage, Mr. Lewes unfortunately follows Mr. Fraser in one of the few points where he is, I think, an unsafe guide: viz. in his neglect of the gulf which separates *Siris* from Berkeley's earlier philosophy. The system set forth in the *Principles, &c.*, and in *Hylas and Philonous*, is a clear, coherent, shallow, Spiritualistic Empiricism, which it is confusing to call Idealism: whereas in *Siris* we have an interesting, but dark, ineffective effort to attain a deeper view of mind, and to expound the "intellectus ipse" as the source of form and harmony in a reasonable universe. Here alone is there any trace of the affinity to Kant which Mr. Lewes notices.

The chapter on Leibnitz is in most respects excellent. Mr. Lewes has managed—with much assistance from Kuno Fischer—to give the general reader a real glimpse into the construction of this paradoxical and misunderstood system. The common misapprehension of Leibnitz is due to the fact that his best known doctrine—the Pre-established Harmony of Soul and Body—is usually treated as a variation on the basis of Cartesian dualism, a different answer to the problem presented by Descartes' sharp division of the two entities. It is thus that Hamilton treats it: and Mr. Lewes in his third edition described Leibnitz as "belonging to the Cartesians." The mistake is natural, because Leibnitz discusses his own doctrine in language obviously accommodated to Cartesian conceptions: but the mistake is fundamental, as it is the very essence of the monadology to transcend this dualism, and to regard body as one phase or aspect of spirit. This Kuno Fischer has brought out admirably: but his explanation of the pre-established harmony, which Mr. Lewes has accepted, seems to me a rare instance of perverse ingenuity in a writer as penetrating as he is brilliant and suggestive. He regards the doctrine as really expressing the relation between the two elements or phases of the monad. But to call this a *harmony* would be a most violent "accommodation" of language. Surely the harmony is between the dominant monad or substantial form of the human organism and the ever-varying aggregate of subordinate monads which we apprehend as its matter: and thus only a specially striking case of the harmony which pervades the infinite universe of monads, and, indeed, constitutes it a universe.

A controversy in *Nature* on the question whether (Kantian) Space and Time ought be called "Forms of Thought" has led Mr. Lewes to add two new sections to his chapter on Kant, in which the latter's use of psychological terms and distinction of faculties is discussed. As to the special point that started the controversy, Mr. Lewes has shown, I think, not that Kant would not have complained of the obnoxious phrase, but that he would have had no right to complain of it, from his own laxity in the use of his terms. But the dispute suggested the more interesting question, how far the distinction of "Verstand" and "Sinnlichkeit" as respectively active and passive can be maintained. Here again Mr. Lewes fails to convince me that the distinction was not of fundamental importance to Kant: but it is certainly untenable. Either "active" means "voluntary," in which case "Verstand" is not active in furnishing the categories: or it only imports that the cognitive faculty modifies the object in cognition, in which case "Sinnlichkeit" (in Kant's view) is active.

It seems, however, less important to call the "Forms of Thought" by their right name, than to describe accurately their place in Kant's system. Mr. Lewes several times represents Kant as saying that "sensibility impresses its forms on Noumena."* This is surely a serious error: it gives instead of Kantism that mixed system which Hamilton and others in Britain have made out of Kantism and common sense. Not *things*, but their "impressions on the mind" (dialectically separated by Hume's scepticism from the "impressing" things), were in Kant's view the "matter" of cognition. "The thing itself," says Kant with unusual liveliness of style, "kann nicht in unser Erkenntnissvermögen einwandern." This mistake gives a great twist to much of Mr. Lewes' criticism and sends it wide of the mark. He continually regards as form what Kant regards as matter: as when he says that light, heat, and sound cannot be denied to be forms, though special forms, of sensibility. But even allowing for this divergence, I cannot understand the criticism (which is emphasized and developed in this edition) that Kant ought to have regarded the mental forms as "results of the organism": for in conceiving an organism we are applying the forms of intuition and the categories in full maturity: we cannot therefore at

* May I suggest that this word ought to be printed "Noümena"? Mr. Lewes is probably unaware how many philosophical persons in our island pronounce the word as a trisyllable.

the same time regard it as furnishing a complete philosophical explanation of these.

A good deal of Mr. Lewes' criticism of Kant is based upon his abolition of the famous distinction betwen "analytical" propositions and those that we affirm universally and *à priori*, while yet they are synthetical. Mr. Lewes maintains the view (held also by Ferrier) that all our universal judgments are based upon or exemplify the law of identity, and cannot be denied without a contradiction in thought: are, in short, all analytical. This view was thus illustrated in the third edition: "When I say 'fire burns,' I assert universality and necessity as emphatically as when I say 'the angles of a right-angled triangle are equal to two right angles': I am simply asserting an identical proposition. I have not, nor can I ever have, experience of fire in all its possible manifestations; *nor have I experience of all possible triangles.*"

It is impossible to state more boldly the empiricist view of geometry than this last clause does. But in the new edition it is absent: we are now told that "having constructed the triangle, there is nothing in its concept that I have not myself put there." So, in fact, I *can* make the assertion in respect of all possible triangles. But what does Mr. Lewes mean by "constructing" the triangle. He does not mean that I have drawn it on paper or represented it as drawn in imagination: for I can equally produce or represent the production of fire. *Why* is there "nothing in the concept except what I have put there" in one case and not in the other? This is just the question to which Kantism gives one answer: rejecting which, Mr. Lewes seems bound to offer another.

The chapter on Hegel as modified in this edition, we may take, I suppose, as the answer to Mr. Stirling's challenge. (By the way, it is hardly fair to quote, as an *admission* of Mr. Stirling's, a passage from the part of his work which that whimsical writer calls "Struggle to Hegel.") Mr. Lewes' outline of the system is fair enough: for though no Hegelian would admit that Absolute Idealism lands us in a world of mere "relations," I do not see how a reader who refuses to think even temporarily in any other notions than those of common sense can be helped to a nearer approximation. But when he comes to describe the method more in detail, he is scarcely successful. In other chapters he intermingles rather too much criticism with his exposition: but we feel this defect especially in the case of a thinker so difficult to expound as Hegel. Surely a writer of Mr. Lewes' gifts might have given us some glimpse of the evolution of the notion as it existed in Hegel's thought; as it is, we remain looking at the system on the outside and from a distance, and it does not lose a particle of its grotesque strangeness. Mr. Lewes not only throws no light on the meaning of the Logic, but makes dimness hazier by hastily throwing together in his exposition notions and statements which are separated for Hegel by long intervals of evolution. I will give one illustration of this from his account of the earlier part of the logic.

> "Being, having, suffered a Negation is determined as Quality—it is Something, and no longer an Abstraction. But this something is limited by its very condition: and this limit, this negation, is external to it: hence Something implies Some-other-thing. There is a *This* and a *That*. Now the Something and the Some-other-thing, the *This* and the *That*, are the *same* thing. *This* is a tree: *That* is a house. If I go to the house, it will then be *This*, and the tree will be *That*. Let the tree be the Something, and the house the Some-other-thing, and the same change of terms may take place. This proves that the two are identical. The Something carries its opposite (other-thing) within itself: it is constantly becoming the other-thing."

Now, the statement that "Something is no longer an Abstraction" sets the reader wrong at once. Hegel says it is true, that "Something rightly passes with crude conception for a *Real*." But he adds that it is "still a very superficial determination;" and of course in the whole passage is speaking of the mere notion of Something, so that the mention of trees and houses imports a gratuitous air of absurdity. What Hegel is saying in the passage referred to might be briefly popularised thus. We cannot conceive "Something" without conceiving it as "Other" to Another thing, which is also of course a Something. That is, Something and Other are opposed, and yet whatever is Something is necessarily also Another thing. In the effort to get out of this contradiction we come to the notion that Something is Other *relatively* to some other thing, and thus get the category of relative existence: but something refuses to be thought as merely relative, we are also forced to think it as existing "an sich." Thus we have two fresh categories or points in the process of thought. The process, as a whole, seems to me as arbitrary and fanciful as it does to Mr. Lewes: but in parts at least it can be made intelligible and plausible, so that we can momentarily imagine ourselves accepting it. Mr. Lewes does not help us to reach even this point.

Turning from the method to its results, Mr. Lewes says that, "when Hegel is dealing with History or with Nature, the worthlessness of his method and palpable failure of its application are manifest." The statement is hard to controvert, as far as Nature is concerned. The absurdities of the *Encyclopedie* are perhaps not decisive in themselves: but they seem only grotesque illustrations of the general sterility of the system on the side of physics, and its total irreconcilability with the triumphant progress of modern science. But if under "History" Mr. Lewes includes the history of thought, his assertion is strange. Surely the renovating and fertilising influences of Hegelianism in this department are as undeniable as its barrenness and failure in physics; and Hegel's intense effort to apprehend as necessary the historical evolution of philosophy, into whatever errors of detail it may have led him, has left palpable and ineffaceable traces on all subsequent study of the subject.

H. Sidgwick.

Report of the Commissioners appointed to enquire into the several matters relating to Coal in the United Kingdom. Vol. I.: General Report and Twenty-two Sub-reports.

Although more than five years have elapsed since the appointment of the Royal Commission to investigate the probable available quantity of coal in the coal-fields of the United Kingdom, yet this first volume speaks of an amount of labour and careful investigation that few persons are aware of, and which it must have been difficult enough to prepare in the time which has been devoted to it. The general results of the commission are first stated. It was found convenient, in order to determine several of the questions they had in hand, to appoint five committees of the members to investigate separate subjects. In regard to the possible depth of working, increase of temperature was the only cause it was necessary to consider, as limiting the point at which it may be practicable to work coal. The committee, looking to possible expedients which the future may elicit for reducing the temperature, considered it might fairly be assumed that a depth of at least 4000 feet might be reached. Another consideration affecting an estimate of the quantity of available coal is the amount of waste incident to mining it. The committee who investigated this point state that, although manifest improvement is being made in the working of coal, so that in many instances waste in working is reduced to a minimum, yet under favourable systems of working the loss is about 10 per cent., while in a very large number of instances the ordinary waste and loss amount to 40 per cent. A geological committee reported on the coal under the Permian and newer strata; in the north of England this

subject was investigated by Professor Ramsay; whilst that on the probabilities of finding coal in the south of England was reported on by Mr. Prestwich. Many years ago Mr. Godwin-Austen concluded that the Coal-measures might possibly extend beneath the south-eastern part of England. He showed that the Coal-measures which thin out under the Chalk near Therouanne probably set in again near Calais, and are prolonged in the line of the Thames valley, parallel with the North Downs, and that, continuing thence under the valley of the Kennet, they would extend to the Bath and Bristol coal area. These views are supported by many eminent geologists who gave evidence before the commission, but they have been controverted by the late Sir Roderick Murchison, who contended that in consequence of the extension of Silurian and Cambrian rocks beneath the Secondary strata of the south-east of England, and of the great amount of denudation which the Carboniferous rocks had undergone over the area of the south of England previous to the deposition of the Secondary formations, little coal could be expected to remain under the Cretaceous rocks. Upon a general review of the whole subject, Mr. Prestwich adopts, with slight variations, the views of Mr. Godwin-Austen, and he is led to the conclusion that there is the highest probability of a large area of productive Coal-measures existing under the Secondary rocks of the south of England. He shows that the thickness of these overlying rocks is not likely to exceed 1000 or 1200 feet, and considers that there is reason to infer that the underground coal basins may have a length of 150 miles, with a breadth of two to eight miles. Mr. Prestwich redirects attention to the grounds for believing in the existence of coal on the south side of the Mendips, and under adjacent parts of the Bristol Channel, but at a depth of not less than 1500 to 2000 feet; and he further mentions a small new coal basin in the Severn valley, near New Passage. So much has been written on the probabilities of coal beneath the Secondary rocks of the south-east of England that we are surprised that the Government was not induced to cause borings to be made to a sufficient depth, and in several localities, so that the question, which, as will be seen, is of the utmost importance to the country, might be finally settled one way or the other—for until this is done at the public expense, the whole is likely to remain a question of theory—and in the estimates of our available coal and of the period it is likely to last, all considerations connected with these theoretical supplies have to be omitted.

It is shown by adopting 4000 feet as the limit of practicable depth in working, and allowing for waste and loss in mining, that in the known coal-fields of the British Islands we have an available quantity of coal equal to about 90,207 millions of tons; and in this estimate all beds of coal of less than a foot in thickness were excluded; whilst in the same coal-fields, at depths exceeding 4000 feet, there is an amount of coal equal to about 7320 millions of tons. Again, the coal which probably exists at workable depths under the Permian, New Red Sandstone, and other superincumbent strata, is stated as about 56,273 millions of tons. Thus we have in the British Isles an available amount of coal equal to 146,480 millions of tons, and from careful estimates of the increasing consumption of coal as proved during the last fourteen years, it is calculated that we have a store that will last about 276 years. This however is sufficiently alarming. We trust that before long the great question of the existence of coal in the south-east of England may be settled—meanwhile we look forward with interest to the publication of the remaining volumes of the Coal Commission Report, wherein will be published maps, sections, and the chief part of the evidence upon which the conclusions we have now given are founded.

HENRY WOODWARD.

Scientific Notes.

Zoology.

The Origin of Insects.—Sir John Lubbock, Bart., F.R.S., read a paper before the Linnean Society, on November 2, on this subject, which has always presented one of the most difficult problems to the Darwinian theory. There is great difficulty in conceiving by what natural process an insect with a suctorial mouth like that of a gnat or butterfly (Diptera or Lepidoptera) could be developed from a powerful mandibulate type like the Orthoptera, or even the Neuroptera. M. Brauer has recently suggested that the interesting genus *Cambodea* is, of all known existing forms, that which most nearly resembles the parent insect-stock, from which are descended not only the most closely allied *Collembola* and *Thysanura*, but all the other great orders of insects. In these insects we have a type of animal closely resembling certain larvæ, which occurs both in the mandibulate and suctorial series of insects, and which possesses a mouth neither distinctly mandibulate nor distinctly suctorial, but constituted on a peculiar type capable of modification in either direction by gradual changes, without loss of utility. The complete metamorphosis of the Lepidoptera, Coleoptera, and Diptera, will then be the result of adaptive changes brought about through a long series of generations.

Change in the Habits of a Bird.—A writer in *Nature* for October 19 records a remarkable instance of the entire change of habits in one of the native birds of New Zealand since the colonisation of the island by Europeans. The Kea (*Nestor notabilis*) is a member of the family of Trichoglossinæ, or brush-tongued parrots, feeding naturally on the nectar of various indigenous flowers, or occasionally on insects found in the crevices of rocks or beneath the bark of trees. For several years past the sheep in the Otago district have been afflicted with what was thought to be a new kind of disease, first manifesting itself in a patch of raw flesh on the loin, the wool gradually coming completely off the side, and death being often the result. It was discovered that this was caused by the attacks of the Kea, or mountain-parrot, which threatens to become exceedingly destructive to the flocks. It is supposed that the taste for this kind of food was first developed from the parrots being induced in the winter season, when their proper food was scarce, to attack the "meat-gallows" on which the carcases of sheep were hung to dry the skins.

Phosphoric Properties of the Glowworm.—According to M. Jousset (*Comptes rendus*, Sept. 4, 1871) the ova of the glowworm share the phosphoric properties of the parent insect. Two specimens confined in a glass tube by the experimenter deposited about sixty eggs of the size of a pin's head on the following day. The skin of these eggs was so delicate that they could not be touched without breaking it, the micropyle was very apparent, and their colour yellowish; it was most worthy of note, however, that they were endowed with brilliant phosphorescence immediately after being laid, up to the time M. Jousset lost them, through their drying up from accidental exposure seven days subsequently. On being crushed in the dark the liquid exuding from one of these eggs, and spread on glass, was highly luminous, and remained so until the moisture had entirely evaporated.

Sericulture.—The general adoption this past year throughout the silk-growing districts of France, Italy, and Austria, of the "selection" system introduced by M. Pasteur has been attended with the most marked success. The quantity of cocoons produced from one ounce of the silk-moths' eggs has been raised from thirty to as many as fifty, or in some cases even sixty kilogrammes; the total number produced this year by M. Pasteur's method reaching no less a number than three million kilogrammes, represented in currency by eighteen or twenty million francs during the present low price of the raw cocoons, or from twenty-five to twenty-six millions under ordinary conditions. The great saving effected by the selection system is likely shortly to render the European silk-growers entirely independent of the accustomed supply of eggs from Japan and China. (*Comptes rendus*, Sept. 25, 1871.)

Vine Disease.—The ravages among the vines occasioned by the recent appearance of the insect parasite, *Phylloxera vastatrix*, is engrossing the earnest attention of the French wine-growers. Among the numerous experiments resorted to, to eradicate the pest, the submission of the roots of the vines affected in a solution of phenic acid, adopted by M. Planchon, has been attended with the most satisfactory results; that of the application of gas-tar, pursued by M. Billebault, being also very favourable. (*Comptes rendus*, Sept. and Oct. 1871.)

Microzooic Disease.—The observation made by M. Zundel, veterinary surgeon of Mulhouse, that on cattle during gestation being confined together in the same building, a single case of abortion was invariably followed by that of the remainder, has led to some important investigations on the part of M. Franck, of Munich. According to this last authority the envelopes of the cast fœtus in such instances are found to be accompanied by a prodigious number of Bacteria and Microzooids, which in his opinion, once introduced into the passage of the vagina,

multiply there, penetrate to the uterus, and then commence the work of decomposition, terminating in the death and abortion of the fœtal animal. Disinfection of the stables, and the injection of a solution of permanganate of potash into the vaginæ of the remaining cattle, is the course commended by M. Zundel for the arrest and destruction of the contagious agents.

New Phyllopodous Crustacean.—Dr. A. S. Packard, Jun., publishes the description of nine new North American Phyllopods in the *American Journal of Science and Arts* (August, 1871). Four of these belong to the genus *Apus*, two to *Estheria*, and the remaining three respectively to the genera *Streptocephalus*, *Limnadia*, and *Lymnitis*. One *Apus* (*A. himalayanus*) must be excepted from the above, having been collected from a stagnant pool in Northern India, where, for five months previously, there had been no rain upon the earth.

Transformations of Squamipinnate Fishes.—In the *Annals and Magazine of Natural History* for November, Dr. Albert Günther satisfactorily demonstrates the correctness of Surgeon Day's view, that *Tholichthys*, hitherto regarded as a distinct genus of fishes, is only a developmental stage of certain Squamipinnate types, such as *Chætodon* and *Holacanthus*. Enumerating other reputed species which have been proved to be the immature conditions of higher forms, Dr. Günther expresses his opinion that *Rhynchichthys* will ultimately be shown to be the young of *Holocentrum*; *Acronurus* and *Keris*, of *Acanthurus* or *Nascus*; and *Couchia*, that of *Motella*.

Facial Arches of Embryo Salmon.—In a paper communicated to the Royal Microscopical Society, and published in the Society's *Transactions* for November, Mr. W. Kitchen Parker, F.R.S., the President, contributes the result of his recent investigation into the form and uses of the facial arches of the salmon. According to this distinguished authority, the young salmon has one more arch in front of the mouth and one more behind than the larval frog: it has under the head nine arches in all, two in front of the great mouth-slit and seven behind it. The first arch, or pair of rods, is the trabecular arch formed by the "rafters of the cranium;" the second is the pterygopalatine; the third, the mandibular; the fourth, the hyoid; and the remaining five are the branchial. The last arch is imperfect and functionless as to respiration.

Botany.

The Monocotyledon the Universal Type of Seeds.—A paper under the above title, by Mr. Thomas Meehan, was read at the Indianapolis meeting of the American Association for the Advancement of Science, in August last. The view of the writer is that all seeds are primarily monocotyledonous, and that division is a subsequent act, depending on circumstances which do not exist at the first commencement of the seed-growth. The true explanation of the so-called polycotyledonous embryo of Coniferæ he believes to be that the cotyledons are not original and separate creations, but a divided unity. In acorns from various species of *Quercus* all varieties of structure were found, from a division into numerous and irregular cotyledons, through the ordinary form with two equal cotyledons, to a condition with two very unequal cotyledons, separated from one another only with great difficulty, the division of the embryo into cotyledons being the last condition, and not the first. The division into cotyledons he believes to be a necessity occurring subsequent to organization, and existing from the position of the plumule alone. In monocotyledons the plumule is directed parallel to or away from the cotyledonous mass, when it remains in an undivided state. But in dicotyledons the plumule is directed towards the apex of the mass, and, as in the case of roots against stone walls, or mushrooms under paving stones, the disposition in the growing force of plants is to go right forward, turning neither to the right nor the left; so in this mass of matter the development of the germ would make easy work of the division, and no doubt often at so early a stage as to give the impression we have been under hitherto, that the division is a primary and essential process.

Influence of Green Light on the Sensitive Plant.—In order to test the effect of green light on the sensitiveness of the *Mimosa*, M. P. Bert placed several plants under bell-glasses of different coloured glass, set in a warm greenhouse. At the end of a few hours a difference was already apparent: those subjected to green, yellow, or red light had the petioles erect, and the leaflets expanded; the blue and the violet, on the other hand, had the petioles almost horizontal, and the leaflets hanging down. In a week those placed beneath blackened glass were already less sensitive, in twelve days they were dead or dying. From that time the green ones were entirely insensitive, and in four days more were dead. At this time the plants under the other glasses were perfectly healthy and sensitive; but there was a great inequality of development among them. The white had made great progress, the red less, the yellow a little less still; the violet and the blue did not appear to have grown at all. After sixteen days the vigorous plants from the uncoloured bell-glass were moved to the green; in eight days they had become less sensitive, in two more the sensitiveness had almost entirely disappeared, and in another week they were all dead. Green rays of light appear to have no greater influence on vegetation than complete absence of light, and M. Bert believes that the sensitive plant exhibits only the same phenomena as all plants coloured green, but to an excessive degree. (*Bull. Soc. bot. de France*, xvii. p. 107.)

Physics.

Action of Light on Chlorine.—The *Philosophical Magazine*, October, 1870, contains a short communication by Dr. Budde, of great interest in connection with molecular physics. Admitting the hypothesis of Favre and Silbermann, and Clausius, that the molecules of most elementary gases consist of two atoms, this seemed naturally to lead to the conclusion that the so-called combination of two elementary gases must be preceded by a splitting-up of their molecules into atoms. It is known that a higher degree of chemical activity is induced in chlorine through insolation, which may be accounted for on the supposition that light tends to resolve, or actually does resolve, the chlorine molecule into its constituent atoms. If so, then insolated chlorine always contains a certain proportion of free atoms (increasing, no doubt, with the intensity of the light), which, together with Avogadro's theorem, leads to the conclusion that free chlorine through insolation increases in specific volume, the more so the more intense the active portion of the rays falling upon it. In order, therefore, to test the conclusion that chlorine, when exposed to chemical rays, must expand, but, when brought back into the dark, re-contract to its original volume, the following experiments were made. A Leslie's differential thermometer was filled with chlorine, and illuminated by various parts of a solar spectrum, produced by means of a glass prism; sulphuric acid saturated with chlorine was used as index fluid, and in some confirmatory experiments carbon tetrachloride. It was found that, whereas, when the one bulb was illuminated by the ultra-red plus red rays, there was only a movement of the index of $\frac{1}{2}$ to 1 mm.; exposure to the blue plus violet caused a movement of from 5 to 6 mm.; and to the violet plus ultra-violet of 6 to 7 mm.: the experiments being repeated several times with substantially the same results. These results prove the existence of a substance which apparently behaves to actinic as most other known bodies do to thermic rays. Control experiments seem to show incontestably that these effects are not due to thermic action. Thus a differential thermometer charged as above was kept in a water-bath, and exposed to direct sunlight. By alternately shading the one or the other of the bulbs, displacements of the index amounting to several centimetres were produced, which the author is inclined to attribute essentially to the action of the chemical rays: (1) because a CO_2 thermometer under the same circumstances exhibited no action; and (2) because, on shading the bulbs with a plate of blue cobalt glass, about one quarter of the effect of the insolation remained.

On the Effect of Temperature on the Prism in Distorting the Lines in the Spectrum.—It is well known that, when a bisulphide of carbon prism is employed in spectroscopic observations, an alteration in temperature causes an alteration in the position of the lines. H. Blaserna (*Pogg. Ann.* 8, 1871) points out that the same cause of error, though to a smaller extent, exists in the case of a glass prism, and that as the prism cools the deviation of the line observed increases, whereas with bisulphide of carbon the reverse holds good. Thus, in his instrument with a flint-glass prism of 60°, a movement of the line D of 3″ was observed for each degree centigrade, and since the interval between D and D′ in the same instrument was 12″, an alteration in temperature of 4° C. would suffice to bring D into the position previously occupied by D′. From this follows that the only reliable method, when it is desired to compare spectra, is that of superposition.

Simple Method of Exhibiting Absorption Spectra.—E. Lommel (*Pogg. Ann.* 8, 1871) describes a method of exhibiting the absorption spectra of soluble colouring matters, whereby the employment of solutions in glass vessels is avoided, consisting in the use of gelatine plates coloured by the required material, which, in order to avoid injury, are enclosed between glass plates. A collection of various colouring matters can thus be made, which are at hand at any moment when required for demonstration. The preparation of perfectly homogeneous and transparent plates succeeds even with substances insoluble in water, but soluble in alcohol, such as anilin colours, chlorophyll, &c. Chlorophyll-gelatin, however, does not give the same absorption spectrum as a chlorophyll solution, but that of solid chlorophyll, as exhibited by leaves in transparent light. Such a difference in the spectra was not observed with any other colouring matters.

The Solar Protuberances.—In the *Revue scientifique* for October 21, M. Rayet, of the Paris Observatory, gives an abstract of P. Secchi's papers, "Sulle Protuberanze solari e le Facole" and "Sulla distribuzione delle Protuberanze intorno al disco solare," published in the *Atti dell' Academia pontificia de nuovi Lincei*, anno xxiv. The conclusions at which he has arrived are summed up thus:—(1) The southern hemisphere of the sun is at present richer in protuberances than the northern hemisphere. (2) In general terms, the protuberances are numerous in those regions where the faculæ are numerous. (3) The protuberances are highest in the regions where they are most numerous.

New Books.

AGASSIZ, Elizabeth C. and Alexander. Seaside Studies in Natural History. Marine Animals of Massachusetts Bay. Radiates. Boston: Osgood and Co.

BENCE, Jones. The Royal Institution; its Founders and first Professors. Longmans.

BÜCHNER, Dr. Ph. Th. Lehrbuch der anorganischen Chemie. 1ste Abtheilung. Braunschweig: Vieweg.

FITTIG, Dr. R. Wöhler's Grundriss der organischen Chemie. 8te umgearbeitete Auflage. Leipzig: Duncker u. Humblot.

HAGENBACH, E. Die Zielpunkte der physikalischen Wissenschaft. (Lecture.) Leipzig: Voss.

JUKES, J. Beete, Letters, &c. of. Edited by his Sister. London: Chapman and Hall.

MAIN, Rev. R. The Admiralty Manual of Scientific Enquiry. 4th edition. London: John Murray.

PEIRCE, Prof. Jas. M. Three and Four Place Tables of Logarithmic and Trigonometric Functions. Boston: Ginn Brothers.

PETERS, Dr. C. F. W. Astronomische Tafeln und Formeln. Hamburg: Mauke.

QUAIN'S Lehrbuch der Anatomie. Deutsche Orig.-Ausgabe. Bearb. von Prof. C. E. E. Hoffmann. Schluss, mit 267 Holzsch. Erlangen: Besold.

TRENDELENBURG, A. Kleine Schriften. 2 Bde. Leipzig: Hirzel.

VIRCHOW u. HIRSCH. Jahresbericht über die Leistungen u. Fortschritte in der Anatomie u. Physiologie für 1870. Berlin: Hirschwald.

Philology.

EARLY EASTERN GEOGRAPHY.

[SECOND ARTICLE.]

Yâkût's Geographical Dictionary. [*Jacut's geographisches Wörterbuch*, auf Kosten der deutschen morgenländ. Gesellschaft herausgegeben von Ferd. Wüstenfeld. Bd. I.–IV. Leipzig: in Commission bei Brockhaus, 1866–69.]

NOT long before the publication of Prof. de Goeje's *Istakhrî* (see article on "Early Eastern Geography," *Academy*, vol. ii. pp. 460-462) the last part of the text of another great work appeared, which forms at once a summary and in many respects the conclusion of Arabic geographical literature. We refer to Yâkût's *Geographical Dictionary*, written in the third decade of the thirteenth century. Yâkût was the son of Greek parents, but kidnapped at an early age, and sold as a slave to Hamât, in Syria. Here he received a careful education; from a freedman he became a merchant, and in this quality made long journeys, in the course of which he amassed great stores of learning. He wrote several works, of which only two are extant: the *Lexicon of Geographical Homonyms*, edited some time since by Prof. Wüstenfeld, and to which the author gave its last form just before his death, and the great *Geographical Dictionary*, the text of which now lies before us through the indefatigable zeal of the same Orientalist. If in many respects Istakhrî's work is equal in value to the only important general view of geography which has come down to us from antiquity, that of Strabo, Yâkût's book is far superior to the only extant geographical dictionary by a Greek, even if we can imagine what Stephanus of Byzantium must once have been from the miserable excerpts which we possess, aided by a single fragment of the original. Even the extent of Yâkût's work is much greater than that of Stephanus ever was. The former occupies four closely printed volumes, averaging nearly a thousand pages each, and be it remembered that an Arabic line contains much more matter than a Greek one. Some of the articles are extremely long; for instance, that on Baghdâd takes up seventeen pages, that on Haleb (Aleppo) twelve, that on Damascus eleven, and that on Bokhârâ six. Of course, most articles are much shorter than these, yet we often find a whole or half a page devoted to some quite unimportant place. The total number of the articles is very much larger than in Stephanus. As a grammarian, Yâkût is greatly superior to Stephanus, and, what is here of much more importance, he has a very much better acquaintance with the literature connected with his subject, and with the actual geographical circumstances of his time. He bases his labours primarily on the best geographical works of an earlier age. In particular, he has made use of Istakhrî in an edition closely allied to the Gotha epitome, and makes so many longer or shorter extracts from it that de Goeje derived great assistance from them in settling the text of that work. Yâkût also makes use of many historical works. Balâdhorî's extremely important work on the conquests of the Arabs (edited by de Goeje, Leyden, 1866) could in great part be restored, were we to lose it, from Yâkût. His knowledge of literature is shown by his copious and sometimes excessive quotations from the ancient and modern Arabic poets. The most unimportant station in the Arabian deserts has an article to itself if it happens to occur in a verse of some old Beduin poet.

The knowledge which Yâkût has gained from books he supplements by the results of his own travels and oral enquiries. He visited Asia just at the right time, when the Mongols were about to extend their devastating inroads to the Mohammedan regions. Of many places he reports that since his visit they had become a prey to these savage hordes. A generation later he would have found scarcely any traces of former prosperity. But our author's notices are by no means purely geographical. He gives the exact spelling and pronunciation of nearly all the places mentioned. In this respect he is our chief authority. Here and there he may fall into an error, but without him we should be quite at a loss. Besides this he takes a great deal of trouble in finding out the signification of names, of course not with uniform success, as for instance when he explains Greek or other foreign names from the Arabic, or proposes equally impossible etymologies. Still, he has given us much valuable linguistic material in these discussions, and shown that he has a solid acquaintance with classical Arabic. At each place, too, he mentions the celebrated men who were named after it (or had their *Nisba*), with or without biographical notices, a plan which at any rate is more rational than the statements (often so unprofitable) about τὸ ἐθνικόν in Stephanus. All this material is arranged with great judgment. When he has something fabulous to relate, he generally adds that he does not believe it. It is true that his articles are not all worked up equally, nor have all the countries within his horizon received the same kind of attention. The neighbourhood of Baghdâd seems to be described with most accuracy; Yâkût was himself well acquainted with it, and besides the city was often mentioned in the verses of the court-poets. How much more jejune would this account have been a few decades later, when Hulagu's Mongols had wasted that fine country!

Yâkût's dictionary is beyond all question a mine of various information, and a noble monument of its author's scientific spirit, industry, and discretion. It is no wonder that so large a work shared the fate of the lexicon of Stephanus. It was reduced to a meagre epitome, though not with such a thorough absence of plan as the Greek work, of which sometimes more was omitted, sometimes less, out of mere indolence. The epitome of Yâkût, entitled *Marâsid-al-ittilâ*, was edited by the elder Juynboll (Lugd. Bat. 1852–54), and became an indispensable companion for every Arabic scholar; but the more it was used the more it excited the wish for the publication of the complete work. Many were deterred from this undertaking by the physical exertion it involved. At last Prof. Wüstenfeld resolved to crown his

achievements in Arabic literature by editing Yâkût. Ten years ago he began the transcription, and a long time was consumed in preliminary work, before the first volume of the text could appear; the other volumes followed remarkably quickly. All that yet remains is the indices, which will be very extensive, and the corrections.* In fact, the editor had the wisdom to abstain from attempting to produce a text perfect in all its details, a course which would have deferred the publication almost indefinitely. He resolved to bring out the whole work, without longer delay than necessary, with the consciousness that many points in it would need correction. Many such have already been discovered, and many more will be detected afterwards, especially in the poems, for which purpose other MSS. may by degrees be collated. The MSS. of Yâkût are, to a certain extent, very incorrectly written. The reason is that the author's fair copy scarcely reached to the end of the first letter, so that the greater part of the work had to be taken from a rough draught, which was probably not very well written; hence even the oldest copies abound with errors. Still we must be thankful that this important work is still extant in its entirety, and that thus Wüstenfeld has been enabled to produce such a good edition of it. TH. NÖLDEKE.

History of Assur-bani-pal, translated from the Cuneiform Inscriptions. By George Smith. London: Williams and Norgate.

IN the *North British Review* (July 1870) Mr. George Smith has given a history of Assur-bani-pal, the greatest of the Assyrian monarchs, derived from the cuneiform inscriptions. Assur-bani-pal, the son of Esar-haddon, was the Sardanapalus of the Greeks; whose empire included Egypt, Lydia, and Elam. The first two kingdoms, under Psammetichus and Ardys, finally succeeded in recovering their independence; but Elam, long formidable to its neighbours, was completely devastated and ruined by the Assyrian generals. In the volume before us, Mr. Smith divides the king's reign into eight periods respectively marked by the two Egyptian wars, the siege of Tyre, the conquest of Karbat east of the Tigris, the wars with the Minni in Armenia and with Urtaci and Te-umman in Elam, the revolt of Saül-mugina (Sammughes), Assur-bani-pal's brother and viceroy of Babylonia, the expedition into Arabia, and the Elamite campaigns, which resulted in the total overthrow of that monarchy. He further points out that Assur-bani-pal, like Esar-haddon, bore a second name, Sin-inadina-pal, which is identified with the Kineladanos (Ἰσινιλάδανος) of Ptolemy's Canon.

The cuneiform text of the Annals is accompanied by an interlinear transliteration and translation. It is followed by a few pages of notes and corrections, which contain an interesting account of the Church Calendar of the Assyrians. Each month and day was assigned to a particular deity, the 7th, 14th, 19th, 21st, and 28th, being called days of *sulum*, or "rest," on which certain works were forbidden, like the Hebrew sabbaths, though it must be noticed that the Accadian original means "evil day." Mr. Bosanquet, who, together with Mr. Fox Talbot, has borne the expense of publishing the book, adds an appendix on chronology, in which he puts faith in Ktesias and the Books of Judith and Tobit, identifies Sardanapalus, Nabopolassar, Nebuchodonosor, and Labynetus or Nabu-Nahid (!), changes Daniel's "Darius the Mede, the son of Ahasuerus," into the Persian Darius, son of Hystaspes, believes that Sennacherib is meant by Jareb in Hoshea, makes Tiglath-Pileser reign eleven years in association with Shalmaneser and Sargon, Shalmaneser being further a cotemporary of Sennacherib (!), and in spite of the Assyrian Canon foists "Assurdaninpal" with a reign of nineteen years between Shalmaneser the Great and Samsi-Raman.

Mr. Smith is to be congratulated upon his work, which will be useful both to the philologer and to the historian. The arrangement and type are extremely clear, a few unimportant misprints excepted, such as *su* for *sa*. The author's extensive acquaintance with the inscriptions and his acuteness in decipherment are, however, occasionally marred by an apparent want of philological training. Thus (p. 329) *śikhirtu*, "circuit" (from סחר), is said to come from the same root as *pakhiru* (Babn. *bakhiru*, בחר, "choose"), with an impossible interchange of ס and פ; *ets-caranu*, "cornel" (p. 334), is compared with פֶּרֶס; and *śikhumastu* (which ought to be read *śikhubartu* or *śikhupartu*, "prostration," from the common quadriliteral *iśkhupar*, "it prostrated," a lengthened form of סחף) is connected with *śikhu*, "revolt" (p. 335). In several cases I should dispute the rendering of particular words; *mutstsa* (p. 158), for instance, is "exit," not "whole" (from the Pael of יצא); *assu* (p. 58), "when," not "who;" *edin* (read *estin*, p. 123), not "then," but "a certain;" *cēni* (p. 4) is "established" (from כון); *caras-i* (p. 11), "my people"; *buśuris* (p. 10), "like the sun" (B. M. S. ii. 58, 40); *musad-bib-su* (p. 105), "he who made him plot," like *dabab surrāti idbub* (p. 266), "he plotted a plot of insidiousness" (so p. 257, "when Elam heard of the insidious plot of Accad"); in p. 119, *nankharti*, "presence," must be read, *nammurti*, would be "light;" "feet" (p. 28) is *ritte* (from ירד), not *śangute*, "chains;" *maśar* (p. 305) should be *makhir*, "presence;" *rutu* (p. 76) should be *subtu; abti* (p. 69) should be *apti; de* (p. 107) should be *gā*. *Curut* (p. 163), which is left untranslated, is "feast" (cp. כְּרָה); and *latturri* (p. 118) is merely *mat urri*, "the region of light," like *mat musi*, "midnight," parallel with *mayal musi*. A perception of the niceties of grammar is also wanting—a fault common to most Assyrian students. Thus the verbal form in *-u*, *-uni*, is frequently translated as though it were the simple aorist (e. g. *epusu*, p. 6; *ikhdhūni-nni*, p. 253); hence the exact sense is missed of constructions like *itsbatūni-va emuru*, "when they had taken they saw." Mr. Smith, however, avoids the mistake of reading *nu* for *ni*, which Mr. Norris commits in his Dictionary. So, again, we find (p. 7 *et pass.*) *ili rabati* instead of *rabi* or *rabuti* (masc.); the dual *katā* is read *kati* (p. 146 *et pass.*), and *likki'* (p. 315), *akki'*; *yusadhba'a* (p. 47) is derived from בוא (as though it were *yustebā*) instead of טבא (= טוב); the precatives *lullic* (p. 125), *lēmur* (p. 315), are translated "I will go," "he shall see;" and *ilkūni* ("they had taken") becomes "I carried;" *ezuzu cabatti* (p. 108), a masc. nomen permanentis nom. and a fem. abstract acc., are rendered "the strong and mighty one;" *la-catsir iccimu* is made "of defection the remover," as if we were dealing with an Aryan and not a Semitic language; and a mistranslation of *yuzahinu* ("they adorned") has caused the omission of *sa*, "when," in p. 19, where *ili* is nom., as in p. 180. *Yāpi* (p. 37) should be read *yā'a*, like *ma'a* for *ma*, with the same meaning as *yāti* or *yāsi*, though not identical with them in origin. *Yāti* is a pronoun: *yās-i* ("myself") is the Heb. אִישִׁי (cp. *raman-i*).

Now and then Mr. Smith seems to have missed the right interpretation of the original. In p. 5, *ana natsir tsakhri śaruti-ya* is simply "to protect my subjects;" *allacu khandhu* (p. 17), "by a long journey (one came);" in p. 44, ll. 46, 47, we must translate, "and those who sinned against the great oaths (and) the benefits which their (*i.e.* the gods') hand sought" (read *yubahhi'*); in p. 118, l. 7, "he caused to rest and the one sun (*samsi suva*) (was) like the other (sun);" *lēcimu damkativ* (p. 145) means, "plague take him;"

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* Since the above was written, the 6th vol. containing the indices has appeared; the 5th will contain the corrections.

and the passage at the bottom of p. 183 ought to be rendered, "He (Assur-bani-pal) saved (*i.e.* kept to) the mountain, and on the frontier of Elam, the frontier of his own country, remained, and to (inspire) terror and to possess the forces and the frontier did not cross (it)."

Errors and oversights, however, are inseparable from all new studies; and these can progress only through the labours and mutual criticism of many students. Mr. Smith's work ought to be in the hands of every Assyrian scholar.

A. H. SAYCE.

Novae Commentationes Platonicae. Scripsit Martinus Schanz. Wirceburgi: typis et sumptibus Stahelii.

To ascertain the manuscript tradition of the text of Plato is confessedly a most laborious task, and one who undertakes it with the zeal and scholarly qualifications of Professor Schanz deserves the sincere gratitude of all interested in the critical study of ancient literature. Having collated the Codex Clarkianus from cover to cover, he publishes the first-fruits of his labours in the volume now before us. The book includes discussions on sundry grammatical points in Plato, emendations on the Euthydemus and other dialogues, a model collation of the Clarkianus with an account of the MS. and exposition of its value as tested in detail. The model collation (of the *Symposium*) is made on the principle of noting everything—"enotavi vel levissima," he says—even such ordinary occurrences as the omission of breathings in words governed by a preposition (*e.g.* παρ' αυτῷ) and of accents in περί, καί, μέν, τό, and the like. The nemesis which unfortunately attends such efforts after photographic minuteness is that exactness is beyond the reach of human patience, and that the eye, wearied with trifles, comes to neglect matters of far greater interest to the student. Among the very few facts thus overlooked by Dr. Schanz we may mention the reading ὁ ἐγλυμμένος in *Symp.* 216 D, where he leads us to suppose that the MS. gives ὁ γεγλυμμένος, as printed in Hermann's edition. We find ourselves unable to accept some of his statements as to what the MS. has or had in places in which a corrector has been at work. In p. 173 A, for instance, the erasure after ἢ is of a ν a little above the line, and is therefore due to a *third* hand, which has simply corrected a correction and thus restored the first reading—a phenomenon not so very uncommon in the Clarkianus, although it seems to have escaped the collator's vigilance. In 176 B, again, the original reading was most assuredly ῥαῖστον ἦν; in 186 B there is no shadow of doubt that it was ὑγιεῖ νοερὸς, the "falso Jahn" of Dr. Schanz being, to say the least, gratuitous. We suspect, indeed, that his memoranda must have now and then got into some confusion; at least, it is impossible to frame any other hypothesis to account for such a note as "ἀνδρίαν τον pr. m." on 194 B, or for his emphatic but groundless contradiction of Jahn's assertion that the manuscript reading in 194 C is ἴσως οἵοιο αἰσχρὸν ὂν ποιεῖν. We shall not touch the subject of "levissima" beyond remarking that a more precise description of the place in *Symp.* 183 C might have been desirable, because we have here a curious and convincing proof that the copyist was for once conscious of having done wrong in appending the ν ἐφελκυστικόν. This single circumstance is enough to show that the capricious evidence of the Clarkianus is not decisive on a point like this, and to make us hesitate before admitting the critical rule laid down in the present volume (p. 157), "hac in re igitur Clarkianus sequendus esse videtur et ν etiam in iis locis (ac plurimi sunt) restituemus, ubi manus secunda ν erasit." The same rule, it seems, is to be observed in regard to the vexed question of the crasis in Plato: the process, however, by which this result is established is little more than an enumeration of the instances in which the crasis occurs or does not occur in the traditional text, with an occasional appeal to the Clarkianus as a final authority in cases of divergence in the tradition. Whether this mechanical procedure, which seems to reduce criticism to an affair of arithmetic, would satisfy Cobet or Badham, we do not pretend to decide; but it forcibly reminds us of one thing, namely, that respect for the Oxford MS. may very easily degenerate into a superstition. Excellent as it is, the Clarkianus is far from immaculate. The copyist blunders like the rest of his tribe; as for the crasis, he does not always spare it even in the familiar καλὸς κἀγαθός; and if he leaves it undisturbed in certain instances, *e. g.* in ταριστεια (= τἀριστεῖα) in *Symp.* 220, the reason is that he did not care to manipulate a comparatively unfamiliar word. If, however, we may state a surmise of our own, the MSS. of Plato still preserve numerous traces of disguised crases (and elisions) which have escaped the notice of the professed editors. We think so highly of what Dr. Schanz has done that we feel some scruple in expressing our regret at what he has left undone. Our chief regret is that he did not disregard "levissima" after a few characteristic specimens, and turn his experience of the Clarkianus to more profitable account, by classifying its ascertained mistakes and assigning them to their paleographical or other sources. The result would have been a "logic of error" invaluable as a guide to the readings of the older MSS. of which the Clarkianus is the lineal descendant, and furnishing a positive basis for criticism where the text still requires amendment. Such a logic of error, moreover, would have been a seasonable warning that the Clarkianus is after all only a book, and, as such, not infallible.

Besides this purely critical matter, the present volume contains a series of sections discussing the parallelisms in Plato, his rhetorical repetition of words, the omission of the verb "to be," &c.: as to this part of the work, it may be sufficient to remark that it resembles in its general scope the *Digest of Idioms* of the late Mr. Riddell, though perhaps hardly equalling the mature and finished excellence of that well-known piece of grammatical analysis. But Dr. Schanz, unlike Mr. Riddell, gives us incidentally a number of interesting suggestions on the text: in *Phaedr.* 228 B, for instance, he proposes to read ἰδίᾳ μὲν ἰδὼν in lieu of the vulgate ἰδὼν μὲν ἰδὼν, for which no apology seems possible, least of all that in which the editors usually acquiesce. Let us conclude by noticing a philological novelty. The conjunction of the imperfect and aorist (hardly a very recondite point, we should imagine) Dr. Schanz illustrates by a formidable array of examples, early among which comes a passage in *Rep.* viii. 569 B:—γνώσεται ὁ δῆμος οἷος οἷον θρέμμα γεννῶν ἠσπάζετό τε καὶ ηὔξε. We wonder whether it it is now a received doctrine at Würzburg or elsewhere that ηὔξε is an *aorist.*

I. BYWATER.

DECLINE OF THE HIGHER EDUCATION IN PRUSSIA.

THE rapid growth of Berlin threatens, if a competent witness is to be trusted,* to damage the cause of the higher education there. The pamphlet before us, the authorship of which is attributed to a celebrated Aristotelian scholar, is a sketch, thrown into epistolary form, of the present condition and prospects of education in the Prussian capital: the writer's ostensible purpose being to warn his countrymen against French

* *Briefe über Berliner Erziehung.* Zur Abwehr gegen Frankreich. Berlin: Trowitsch.

influences. The ideal cherished by men of high culture and earnest character always makes them quick to perceive the weak points in the social circumstances in which their lot is cast, and something should, no doubt, be deducted on this score from the author's testimony. Still his sound sense and the intrinsic probabilities of the case lend a high colour of likelihood to his account. The evil complained of is the prevalent listlessness of the boys in the *Gymnasia*. For this several causes are assigned. In the front stand the social distractions of the capital, which tend more and more to rob domestic life of the privacy and inner repose which properly belong to it, and to accustom parents and children alike to a hollow, formal, and purposeless existence. From the cradle upwards the child is exposed to an artificial atmosphere. His very toys are no longer playthings, but elaborate pieces of mechanism, which from his point of view he will do best, after a day's staring at them, to pull in pieces. As he grows on, his time is largely taken up with children's parties and balls: he becomes *blasé*, prematurely developed, and indisposed to strict training of any kind. Meanwhile his parents are themselves too much occupied in meeting social requirements to give him much of their time. A tutor or governess, chosen but too often from a class of persons undertaking for a livelihood a duty for which they have neither taste nor aptitude, is called in: and the process of mental disintegration goes on. For even supposing the existence of a higher capacity in the persons thus engaged to undertake a vicarious office, they must as a rule follow, not lead, the general tone of the family in which they live.

The teaching and learning in the public schools of this country suffers from the number of boys sent thither, not to be educated, but to obtain or keep up a particular social tone. The sore point lies elsewhere in Prussia. There the boys are crowded into the schools for the sake of obtaining a curtailment of the time of military service. All boys who have been in the second class (our fifth form) at a *Gymnasium* or *Realschule* for half a year are entitled (of course on receiving a certificate of industry and good conduct) to the privilege of only one year's drill. This naturally draws to the schools a number of boys whose interest in the work is merely formal: the classes are overfilled, the teachers disgusted with their hopeless task, and the general tone of the work lowered. Sent to school with such ends and prospects, the average Berlin boy finds his work a burden to him, and has to be helped through it by an extra teacher employed at home for the purpose. Meanwhile the artificiality of salon life and the general atmosphere of city society corrupts his natural freshness and innocence. No inconsiderable share in the production of this effect is attributed by our author to the influence of bad romances and bad music. Nor will the writer allow that the general tone of the teaching body in the Berlin schools is such as to oppose a solid barrier to these debasing influences. The dignity of learning, he complains, is not respected as it deserves: the high vocation of teacher is too often prostituted to the necessity of earning a livelihood. Many teachers object to the restraints imposed by the usage of educated society, and prefer the complete self-abandonment of the beershop (*das absolute Sichgehenlassen beim Bier*). Thus the indifference of a large class of scholars on the one hand and the unworthy conception of their profession adopted by the teachers on the other combine to lower the tone of the schools, which accordingly, with some exceptions, are more and more losing the character of training-grounds for good classical scholars.

To meet these evils, the writer proposes that greater strictness should be adopted in granting admission to the *Gymnasia*, in order that the exclusion of boys manifestly unfit for classical training may be more certainly secured. To supply an education for boys thus excluded, he would have set on foot a movement for opening fresh schools, in which the staple of education should consist in the German language, history, and literature, with the addition of mathematics and natural science. The wretched fragment of Latin acquired at the *Realschulen* could, he thinks, be easily dispensed with. For the use of classics, he urges, only begins when the pupil is really in a condition to appreciate the difference between the ancient and the modern idioms. Lastly, the teachers themselves, when appointed to higher classes, should in some way be bound over to prosecute independent study. "If we cease to be men of learning, and to render ourselves fit to maintain an intimate relation with such men, we must become mere mechanics, and the strength of our minds must decay: a danger to which we are sufficiently exposed already by our constant intercourse with the young, and our want of contact with the grown-up world"—a remark, like many others scattered up and down the pamphlet, which deserves the serious consideration of all engaged or interested in education.

JOTTINGS ON OLD FRENCH MSS.

TO THE EDITOR OF *THE ACADEMY*.

SIR,—In looking through the various manuscript catalogues in search of old French MSS., I found lately in the "Handschriften der öffentlichen k. Bibliothek zu Hannover, beschrieben von Eduard Bodemann" (Hanover, 1867), at page 100, the following description of No. 578:—"Les Romans de Fierenbras, d'Alexandre et de Charles. (Vellum XIV. c. 100 ff. in 8vo. with 101 paintings.)

"Inc.: [S]eigniurs ore fetes pees
Ffranke gent honoree
Gardes kil ni ait nois
Ae corouce ne mellee
Si orres bone chanchon
Ae bien enluminee et.

Expl.: Ici est li finement del Romance de Fierenbras, Dalisandre: et del bone roy Charls."

If we read the heading, "Li Romans de Fierabras d'Alixandre et de Charle-Magne," we recognise at once the "Chanson de Geste" known under that title, the known MSS. of which Dr. Gröber, in a very judicious study, has lately related to each other. The present MS. seems to have been unknown to Gröber as well as to all scholars who reviewed his book. It deserves, however, to be noticed the more as it contains a different version from all hitherto known, so far at least as can be judged from the three initial verses, which do not occur either in the Provençal or in the French text.

In the same MSS. collection is also a fragment of the end of "Girbert de Metz," which forms part of the "Chanson des Loherains."

In conclusion I may mention that an assertion made by Mons. A. Jubinal in his *Rapport sur les MSS. de Berne* requires rectification. He says that the scarcely legible fragment on the concluding leaf of the Berne MS. 113 was probably part of the "Chanson d'Antioche." I find, however, that this fragment contains nothing of the kind, but only a poetical version in decasyllabic "tirades monorimes" of two passages of the first book of the Maccabees. EDM. STENGEL.

Intelligence.

In Prof. Eckstein's useful little volume, the *Nomenclator Philologorum*, we observe, among the comparatively few English names, that of Dr. Dodd, the contemporary of Johnson. This is another instance of a prophet being without honour in his own country. Dr. Dodd's chief title to fame is that he was a popular preacher and hanged for the crime of forgery. We know not on which of the two grounds he has found admission into the philological Walhalla, but it is obvious that during the last few centuries a considerable number of Englishmen must have qualified themselves for this distinction.

The new quarterly journal *Romania*, conducted by MM. Paul Meyer and Gaston Paris, and devoted to the philology and archæology of the Romance languages, will appear in January. We are compelled to reserve to our next number an analysis of the very interesting prospectus.

Contents of the Journals.

Philol. Anzeiger. vol. iii. No. 5.—L. Krahnen: Analyse der Rede des Oedipus in Soph. *Oed. Tyr.* 216, flg.—O. Ribbeck: Epikritische Bemerkungen zur Königsrede im Oedipus Tyrannos. [Ribbeck had proposed to place vv. 246–251 after v. 272, and now answers somewhat angrily those, of whom the reviewer is one, who have not accepted the transposition.]—F. Berbig: Ueber das *genus dicendi tenue* des Redners Lysias. [Careful study, affirming the opinion that Lysias is the chief representative of the style in question.] F. Jonas: De ordine librorum L. Annaei Senecae philosophi. [Judicious discussion of an interesting question.]—V. Duruy: Histoire des Romains, &c. [Contains suggestive reflections, but is uncritical.]—L. Freitag: Tiberius und Tacitus. [An attack on Tacitus rather than a defence of Tiberius.]—Joannis Aurispae epistola edita ab H. Keilio. [An interesting letter, with an account of a journey along the Rhine made by Aurispa during the Council of Basle, partly with the object of enquiring after MSS.]

Revue Celtique, No. 2, August, 1870.—I. M. G. Perrot: On the

disappearance of the Gaulish language in Galatia. [Furnishes evidence in support of the theory announced in his De Galatia provincia Romana, regarding the prompt disappearance of the Celtic language in Asia Minor; and in disproof of St. Jerome's statement on the subject.]—II. J. F. Campbell: Fionn's Enchantment. [The Gaelic version of a popular Highland tale about Finn mac Cumhail, contributed by Mr. MacPherson, with a readable translation by Mr. Campbell.]—III. John Peter: Welsh Phonology. [Proposes a new classification of "vocalic nfection," based upon the "authorised pronunciation of modern Welsh." Ambitious, but crude.]—IV. D'Arbois de Jubainville: Phonetic study on the Breton dialect of Vannes. [Continued from previous number.]—V. Reinhold Koehler: Saint Tryphin and Hirlande. [Identifies the Tryphin of the Breton Mystery, St. Tryphin and King Arthur, with Hirlande, duchess of Brittany, whose history forms the third in Ceriziers' Three Stages of Innocence. The confessed Irish origin of Saint Tryphin, and the parentage indicated in the name of Hirlande, or d'Hirlande, added to the similarity of their lives, support the theory.]—VI. R. F. Le Men: Traditions and Superstitions of Lower Brittany. [Most valuable. Deals principally with dwarfs, who play queer pranks amongst the Bretons. The author would find the very counterpart of his tales in Croften Croker's Fairy Legends of Ireland.]—VII. L. F. Sauvé: Proverbs and Sayings of Lower Brittany. [Most of them in rhymed couplets, and not very old.]—The Miscellany contains: Mythological notes, by Whitley Stokes, on the *Luchorpan* (vulgo *Leprochan*), Rosualt (a sea monster), Names for "God," *Cennruaich* (an idol destroyed by St. Patrick), spirits speaking from weapons, the bull-feast, and the octi-partite constitution of man; a description, by M. Wattenbach, of an autograph of Marianus Scotus in the Imperial Library of Vienna; a brief notice, by C. Thurot, of a small grammatical treatise by the Irish abbot Sedulius (circa 820); an etymological notice on the name of Abelard, by M. Ernest Renan; a note by the editor respecting the Irish "Goddess of War." In the bibliographical notices books are praised too indiscriminately.

Gött. gel. Anzeigen, Oct. 11.—Rabbinowicz' Variæ Lect. in Mischnam is noticed by H. E., who finds fault with the use of neo-Hebrew in the notes. Nov. 1.—The fragments of Jacob of Edessa printed by Dr. Wright are described by Dr. Nöldeke. Jacob's grammatical terminology is, as usual, very much at variance with our own, *e.g.* ג and ת are called "thick" sounds, כ, ת, ם *mediæ*, and ק *tenuis*. It is not quite clear what pronunciation he wished to express by his vowel-signs, but according to Nöldeke, not that of the later Western Syrians. Dr. Wright, it is true, appeals to the representation of Z'qâfâ by the Greek O, but such phenomena are probably due to readers of a later age. Nöldeke thinks that the sound in Jacob's time approached more nearly to *â* than *ô*; and this seems to be confirmed by the choice of א as a vowel-sign, especially as Jacob has evidently, besides, one if not two signs for *o*. There is another point in which his pronunciation differs from that of the later W. Syrians, viz. the vowel *ê*, instead of *î*, which he attaches to the *r* in חרתא, "alia." His pronunciation of the consonants is tolerably modern.

North American, Oct.—Delbrück's Conjunctiv and Optativ. [One of the most valuable books, both for comparative grammar and for classical philology, that has appeared for years.]—Müller's Lectures on the Science of Language, new ed. [The reviewer examines objections to the former article on the same book in the *N. A. R.*, and criticizes M. Müller's fundamental principles with excessive severity.]

Zeitschrift für vergleichende Sprachforschung, xx. 3.—Fick examines the connection of a number of words, chiefly from remote branches of the Indo-Germanic family. He gives a new derivation of μέροπες (seizing, understanding, from μαρπ-, as στεροπή from στράπ-τω), but without explaining the name Merope, one of the Pleiads.—Zeyss examines (1) the form *sest.* on a Pelignian inscription; (2) the Umbrian particle *hunt* or *hont* (= Celtic demonstrative *hun*, *hon*, *hyn*, &c.); and (3) *tamen*, which he explains as a local *tame* with suffix *ne*.—H. Gradl, writing on German dialects, traces remains of the dual in the pronoun, also some peculiar suffixes (obst gaist, ob du gehst, &c.).—W. Schwartz, on the legend of Prometheus, offers a theory which departs somewhat from that of Kuhn. He takes the word as Kuhn does, from the root *manth* (to whirl round, also to seize, rob); but finds the "natural element" lying at the root of the myth, and uniting the two (meaning "whirl" and "rob") in the wind, especially the whirlwind, which was imagined to steal the lightning from the cloud. Some interesting proofs are given (in addition to those in Tylor's book) of the universal use of an instrument for kindling fire by means of a whirling or churning movement. Prometheus, in Schwartz's view, is not the fire-churn itself, but the wind, supposed to act in the same way in striking out the fire contained in the thunder-cloud.—B. Delbrück reviews Ludwig's book, The Infinitive in the Veda, and shows at length the groundlessness of the new theories advanced in it. —*Suum cuique* claims for Benfey the first suggestion that Lat. *-crum* and *-clum* are only euphonic variations of *-trum* and *-tlum*.

Rheinisches Museum, vol. xxvi. pt. 4.—H. Nissen: On the Histories of Pliny. [Shows by a comparison of Tacitus and Plutarch that the Histories of Tacitus rest on a similar work of Pliny as their basis. The article is valuable as indicating the mode in which Tacitus worked up his materials.]—H. A. Koch: On Placidus. [On the importance of the Glosses for the criticism of Plautus.]—E. Rohde: The Sources of Iamblichus in his Life of Pythagoras I. [Points out *inter alia* the fact that Iamblichus made direct use of Nicomachus, and did not borrow from Porphyry.]—L. Müller: Four Emendations on Lucilius.—E. Hiller: De Adrasti Peripatetici in Platonis Timaeum commentario. [Chalcidius had a first-hand acquaintance with Adrastus, and did not depend on the similar work of Theo Smyrnaeus.]—L. Urlichs: Aristides once more. [A reply to Dilthey.]—F. Ritschl: Canticum and Diverbium in Plautus. [Proves in the most elaborate way that DV and C in the MSS. of Plautus stand for *diverbium* and *canticum*; that the former is prefixed only to the Iambic senarii which were simply recited, the latter to scenes in lyrical aud trochaic metres in which the words had a musical accompaniment. The article contains some severe strictures on Dziatzko's article in a former number of the *Rh. Mus.*]—K. Lehrs: On the cultus of Artemis.—L. Urlichs: On Ammianus. [The Fulda MS. was probably acquired by Poggio at Constance.]—A. Riess: On the Historia Apollonii.—N. Wecklein: On Pindar and Aeschylus. [Amends a fragment of the latter.]

New Publications.

ALWIS, J. de. Descriptive Catalogue of Sanskrit, Pali, and Sinhalese Literary Works of Ceylon. Vol. I. Trübner.

BARDT, C. Die Priester der 4 grossen Collegien aus römisch-republikanischer Zeit. Berlin: Ebeling und Plahn.

BENEDICT, Frider. De oraculis ab Herodoto commemoratis quaestionum pars I. Dissertatio philologica. Bonn: Cohen und Sohn.

EBELING, Oberlehr. Dr. Schulwörterbuch zu den Schriften d. Cajus Julius Caesar m. besond. Berücksicht. der Phraseologie. Berlin: Ebeling und Plahn.

HARTMANN v. AUE, Erec. Eine Erzählung. 2. Ausg. Von Mor. Haupt. Leipzig: Hirzel.

HERZOG, E. Untersuchungen üb. die Bildungsgeschichte der griechischen u. lateinischen Sprache. Leipzig: Teubner.

JACUT's geographisches Wörterbuch aus den Handschriften zu Berlin, St. Petersburg, Paris, London u. Oxford auf Kosten der deutschen morgenländ. Gesellschaft hrsg. v. Ferd. Wüstenfeld. 6. Bd. 2. Abth. III. Register der Personen-Namen. Leipzig: Brockhaus.

KÜHNAST, Oberlehr. Prof. Dr. Ludw. Die Hauptpunkte der Livianischen Syntax. 2. Hälfte. Berlin: Weber.

LEHRS, Prof. K. Nachtrag zu Horatius. Erneute Erwäggn., durch Vahlen veranlasst, üb. die Epistel an Augustus. Leipzig: Vogel.

LEXICON HOMERICUM. Composuerunt C. Capelle, A. Eberhard, E. Eberhard etc. Ed. H. Ebeling. Fasc. I. Berlin: Ebeling und Plahn.

MEYER, Paul. Les derniers Troubadours de la Provence. Paris: A. Franck.

MIKLOSICH, Frz. Ueb. die zusammengesetzte Declination in der slawischen Sprache. [Aus "Sitzungsber. d. k. Akad. d. Wiss."] Wien: Gerold's Sohn in Comm.

MÖBIUS, Th. Dänische Formenlehre. Kiel: Schwers.

MÜLLER, Mor. Beiträge zur Kritik u. Erklärung d. Livius. Stendal. (Berlin: Calvary und Co.)

OESTERLEY, Herm. Gesta Ramanorum. Fasc. I. Berlin: Weidmann.

SANCT BRANDAN. Ein latein. u. 3 deutsche Texte hrsg. v. Dr. Carl Schröder. Erlangen: Besold.

SCHMIDT, J. Zur Geschichte d. indogerman. Vocalismus. 1. Abth. Weimar: Böhlau.

SMITH, George. The Phonetic Values of the Cuneiform Characters. Williams and Norgate.

TRAUTMANN, Mor. Bildung u. Gebrauch der Tempora u. Modi in der Chanson de Roland. I. Halle: Lippert.

VALERI FLACCI SETINI BALBI, C., Argonauticon libri 8. Ed. Carol Schenkl. Cum (lith.) tabula geographica (in qu. fol.). Berlin: Weidmann.

VLACHOS, Dr. Angelos. Elementar-Grammatik der neugriechischen Sprache. 2. verb. Aufl. Leipzig: Brockhaus.

WACKERNAGEL, Wilh. Gothische u. altsächsische Lesestücke nebst Wörterbuch. Basel: Schweighauser.

ZINGERLE, P. Chrestomathia Syriaca. Rome and Leipzig.

ERRATUM IN No. 35.

Page 504 (b), lines 1 and 2, read: "not an infallibilist but *yet* a conscientious member of the Church."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Friday, December 15, *and advertisements should be sent in by December* 11.

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General Literature.

Goethe's Faust. Parts I. and II. Translated by Bayard Taylor. Strahan and Co.

To the numerous attempts at reproducing Goethe's *Faust* in the English sister-tongue a new one has lately been added by Mr. Bayard Taylor, the well-known American author. All the great nations have produced certain standard works eminently representative of their genius, but at the same time appealing by the universal character of their ideal sources to a wider circle than that circumscribed by the time or language in which they are written. To liberate such works from those limits, and interpret in this way the highest achievements of an individuality foreign to their own nation, remains the worthiest task of recreative poets, but is, if at all, scarcely ever attainable by one man or by one age. It would require a rare combination of gift and knowledge to equal the flight of Dante or Shakespeare; only the consecutive labour of generations, where one workman stands upon the shoulders and learns by the faults of his predecessors, can, under favourable circumstances, reproduce the grand and subtle beauties of the masterpieces of literature. Only on the uncouth foundation of Eschenburg's prose translation Tieck and Schlegel were able to erect their masterpiece of the German Shakespeare, which just at present is again being cleared of the still numerous imperfections attaching to it. In this common task it is of very little importance to determine strictly the relative merits of each single workman. Every one of them is entitled, nay, even bound, to avoid the mistakes and adopt the achievements of his predecessors; and to a question about the authorship of the happy rendering of some pathetic or facetious passage the only appropriate answer would be in the words of the Code Napoléon, "La recherche de la paternité est interdite."

These few introductory remarks seemed necessary to explain the *raison d'être* of Mr. Taylor's work, and also the light in which it would perhaps be best to consider it. The task of comparing minutely the merits of our translation with the score or more already in existence would be equally tedious and barren in results. For us Mr. Taylor's labour is merely of importance as the latest—not the last—phase of English reproductions of *Faust*. This phase it may be fairly said to represent by the unusual skill displayed in it, as well as by the very essence of its formal scheme. Only one of the former translations—that of Mr. Brooks—tried to render exactly the metres of the original, and to this Mr. Taylor's rendering is decidedly superior. It shows, indeed, in a degree rarely to be met with even amongst Germans, the principal faculty required for such a task—that is, a perfect understanding of and sympathetic entering into Goethe's philosophical scheme and poetical peculiarities. Careful study is also displayed in the valuable notes, which, founded on the best German commentaries, will be found to meet fully the wants of an English reader not familiar with the labyrinth of German metaphysics, as introduced chiefly into the Second Part of *Faust*. Mephistopheles' negative humour and ironical bitterness seem to have been particularly congenial to Mr. Taylor's muse, and we select the two following specimens from his speeches the excellence of the rendering of which we cannot praise more emphatically than by saying that they read quite as well in their English garment as in the original German. After the Lord's departure—in the Prologue in Heaven—Mephistopheles soliloquises in this way:—

> "I like, at times, to hear The Ancient's word,
> And have a care to be most civil:
> It's really kind of such a noble Lord
> So humanly to gossip with the Devil!"

In the following lines of the Classical Walpurgis-Night, the "Northern Phantom" tries to establish his affinity with his classical colleagues, notwithstanding a certain shudder felt by him at their unwonted aspect:—

> "Forwards! the doubt, my strength benumbing,
> I won't encourage foolishly;
> For were the witches not forthcoming,
> Why, who the devil would Devil be?"

In dealing, too, with the lyrical charm and dramatic pathos of *Faust*, Mr. Taylor, although as a rule not equally happy, has sometimes been remarkably successful, in evidence of which we quote Faust's passionate address to Margaret of the First, and the dirge on Euphorion's death (Byron's or Goethe's own ideal self, whichever it may be) of the Second Part:—

Faust. (Part I. Sc. XII.)

> "O tremble not! but let this look,
> Let this warm clasp of hands, declare thee
> What is unspeakable!
> To yield one wholly, and to feel a rapture
> In yielding, that must be eternal!
> Eternal!—for the end would be despair.
> No, no,—no ending! no ending!"

Chorus. (Part II. Act III.)

> "Not alone! where'er thou bidest;
> For we know thee, what thou art.
> Ah! if from the Day thou hidest,
> Still to thee will cling each heart.
> Scarce we venture to lament thee,
> Singing, envious of thy fate;
> For in storm and sun were lent thee
> Song and courage, fair and great."

A particular difficulty to the English translator must have been those antique metres which Goethe has applied in the Classical Walpurgisnacht of the Second Part. Upon the whole our translator has overcome these difficulties remarkably well, only the iambic trimeters (or hexameters, as he incorrectly describes them) have repeatedly been a stumbling block to his achievement. Without a very careful handling of the caesura this impressive metre is apt to fall into the monotonous tediousness of the French Alexandrine, with which it has an equal number of syllables. Everything depends on avoiding the occurrence of the end of an iambic word, or a monosyllable after the first half of the second dipodium, that is to say, in the middle of the verse. Mr. Taylor has scarcely observed this rule, and sometimes even prolongs this objectionable pause by adding a strong punctuation in the same place. In consequence his trimeters remind one sometimes but too distinctly of that monotonous jingle which mars even the sound of Corneille's splendid heroics. The following two distichs, for

instance, would be perfectly in their place in an exactly metrical translation of a French classical tragedy :—

"Helena.

Name not those joys to me ! || for sorrow all too stern
Unendingly was poured || upon my breast and brain.

Phorkyas.

Nathless, they say, dost thou || appear in double form ;
Beheld in Ilion, — || in Egypt, too, beheld."

It must, however, be said in Mr. Taylor's excuse, that in some, although very few, cases Goethe himself has not avoided the same inelegance. Much more unaccountable are various other shortcomings in Mr. Taylor's rendering, which we now shall have to consider a little more closely. They are partly of a metrical kind, such as imperfect rhymes like *feeling—compelling;* partly they originate in a want of correctness and elegance of diction. Every poet ought to draw the line at inversions like the following :—

"And grasps me now a long-unwonted yearning,"

by which the beautiful line of Goethe,

"Und mich ergreift ein längst entwöhntes Sehnen,"

is literally but not very melodiously rendered. Sometimes the concise nature of the English in comparison with the German idiom left a surplus of metrical space to Mr. Taylor in the filling up of which by additional words of his own he is not always very successful. In the Prologue in Heaven, the Lord gives Mephistopheles permission to act with perfect liberty in his attempts at misleading Faust's transcendental aspirations,—

"Du darfst auch hier nur frei erscheinen."

This Mr. Taylor translates by

"Therein thou'rt free, *according to thy merits;*"

which addition is, to use the very mildest term, absolutely meaningless. Much worse, however, is the following instance of the same kind. Faust, after a long discussion with his companion, winds up with this *argumentum ad hominem*—

"Wer Recht behalten will und hat nur eine Zunge,
Behält's gewiss"—

the meaning of which is, "Who wants to have the better of his adversary in argument is sure to have it if he only possess a tongue." Mr. Taylor says :—

"Whoever
Intends to have the right, if but his tongue be *clever* (!),
Will have it certainly,"

which is exactly the reverse of what Goethe wishes to imply. Faust means to say that he himself is by far the more clever of the two, but that the Devil has the louder voice and the longer breath. Goethe also would never have thought of calling Spain the lovely land of wine, song, and *slumber!* or letting Margaret exclaim, as the climax of despairing love and agony,—

"Henry ! I shudder to *think* (!) of thee ;"

which under the circumstances, and as equivalent of the heartrending "Heinrich, mir graut vor dir," appears inconceivably flat and silly. In some very few instances Mr. Taylor seems not to have been aware of the exact meaning of his original, which appears rather surprising in a man who has addressed Goethe, by way of dedication, in almost reproachless German *ottave rime*, and shows himself throughout as an excellent scholar of German language and literature. In Wagner's words (I. sc. ii.), "Dost thou thy father honour," &c., a conditional sentence is mistaken for an interrogative one; while the term "worthless," applied to Helena (II. act iii.), renders but imperfectly the humourous *nuance* of "Hat sie nichts getaugt."

The foregoing remarks may suffice to show how far Mr. Taylor has approached the ultimate aim of a perfect translation of *Faust*, and how much still remains to be done by himself or by others. In his introduction to the Second Part, which he evidently regards with the predilection of a mother for a particularly troublesome child, our author raises again the much ventilated question of the comparative merits of the two divisions of the drama, claiming for the second "a higher intellectual character if a lower dramatic and poetical value." We fully agree with the second half of this assertion. It seems indeed justified by the original scheme of the whole work as indicated in Mephistopheles' programme, "Wir sehn die kleine, dann die grosse Welt." "The little world" of the First Part, that is to say, the despairing struggle of the human heart for individual happiness, offers more and deeper passionate moments to the dramatic poet than the great world of the second. Here the hero is deprived of almost all personal attributes, and becomes the symbol of humanity in general, which passing through the intermediate ages of a merely political or aesthetical existence obtains at last the harmonious use of its faculties in a life of persistent and successful activity :—

"He only earns his freedom and existence
Who daily conquers them anew."

Unfortunately the waning power of Goethe in the latter days of his life proved unequal to the task of carrying out poetically this grand but essentially philosophical idea. Besides, the poet's lively interest in scientific matters, which already had been all but fatal to the *Wahlverwandtschaften*, induced him in *Faust* to make deplorable digressions on heterogeneous topics. The different kinds of mountain strata, and the relative merits of the Plutonian or Neptunic theories, Mr. Taylor would in vain persuade us to consider as a worthy object of the poet's ironic verve. Still be it far from us to detract anything from the grand conception and the frequent passages of sublimest beauty which make the Second Part of *Faust* a study of the highest interest to every literary scholar, or of Mr. Taylor's merits in reviving this interest again by his excellent translation.

Fr. Hüffer.

LITERARY NOTES.

In the *Augsburg Gazette* for Nov. 10, 11, Julian Schmidt gives an amusing account of a Hungarian novelist, Maurice Jókai, who seems to combine rational and hopeful patriotism and thorough knowledge of Hungarian life and character with a vivacious prodigal inventiveness scarcely inferior to that of Dumas. His novels have an enormous circulation, and the best of them would repay translation if the mixture of extravagance and realism in them, the former predominating, did not prove too crude. At the same time, it is but fair to add that the German critic appears to have formed his opinion from *Fekéte Gyémántok*, "Black Diamonds," the wildest of Jókai's recent productions, if not the most extravagant he has ever written. A criticism by a fellow-countryman, M. Gyulai, which appeared a few years ago in the *Budapesti Semle*, was considerably less favourable, greater stress being laid on Jókai's contempt for probability, and his disregard of Hamlet's advice, not to overstep the modesty of nature. More than one of his novels have appeared in a German translation, some of them by the author himself. A collection of his earlier tales has been published in an English translation (in Constable's *Miscellany of Foreign Literature*), as also *The New Landlord*, translated by A. J. Patterson.

Mr. Cox's *Popular Romances of the Middle Ages* will be a disappointment to those who expect to find in it a sequel to his *Aryan Mythology*. The greater part of the volume consists of abridged versions of some of the best known romances; the

omissions are arbitrary, and there are no references, so that the result is useless to readers who do, and misleading to those who do not, know the original works. The introduction (80 pp.) applies (parenthetically to Elijah) to Arthur, Tristram, Lancelot, Roland, Olger, and the rest the usual touchstones, with the usual result of enrolling them in the company of solar heroes, whose names Mr. Cox delights to recapitulate with Homeric frequency and fulness. Here, unfortunately, his conception of the province of comparative mythology seems still to stop, and in his notes he expressly disclaims all concern with such questions as the date or nationality of any particular legend or hero, and with all researches whose object it is to point out differences of detail rather than general resemblances. The only objection to this method of treating mythology, properly so called, is its inadequacy: thus it is true in a sense that Phoibos and Tantalos are "the same;" *i.e.* they are both solar conceptions, though from an entirely different point of view, and their identification is unfruitful rather than incorrect. But when we come to the legendary literature of modern Europe, its oldest monuments contain some elements which are not primarily mythological, and to set these on one side as of no account is to abandon the hope of defining precisely which are so. Had Mr. Cox been better acquainted than appears from the present volume with the special literature of this part of his subject, he would scarcely have been able to rest contented with so meagre a conception of its importance.

"Johannes Laicus" (*Augsb. Gaz.* Nov. 15, 16) gives curious instances of the survival of pagan customs and superstitions in the Catholic world, especially the very ancient use of the skulls of saints as drinking-vessels for pious pilgrims. He remarks on the disuse of good old heathen German names, but is consoled for the fact that "half the female sex is called Anna" by reflecting that the still more common "Nanny" has less to do with the supposed mother of Mary than with Nana, Nancia, the wife of Baldr.

G. Waitz sends two unpublished letters of Goethe to *Im Neuen Reich;* they are addressed to Pauline Gotter, and only of interest as completing the series taken from *Aus Schellings Leben.*

Readers of the *Nuova Antologia* for May will remember that Professor Imbriani of Naples not only adopted Prof. Liebrecht's suggestion of a French original for Schiller's *Braut von Messina* (see *Academy*, vol. i. p. 62), but described an Italian tragicomedy by Andreini, called *Lelio Bandito*, as the prototype of the *Robbers.* The plagiarism in both cases appears not proven, but Otto Hartwig (*Im Neuen Reich*, Nov. 3) wastes a good deal of valuable patriotism on the discussion, which scarcely deserves to be made a national question.

We understand that Mr. Gover, of the Madras Civil Service, has a volume of Dravidian folk-songs preparing for publication. It is to be desired that, if he deals with questions of ethnology at all, they may be thoroughly discussed. It would be a pity to impair the authority of such a work by unsupported contradictions of the belief of competent persons such as found their way into a very attractive article in the *Cornhill Magazine* for November.

A Hungarian newspaper, the *Reform*, has commenced in its *feuilleton* a series of critical articles comparing and contrasting *Az Ember tragediája*, "The Tragedy of Man," by Madách, with Goethe's *Faust.* In calling the attention of the reader to the first article, it observes that, as long as Hungarian literature remains destitute of a periodical review, it is the duty of the daily newspapers to open their columns to what little in the way of literary essay Hungary still produces. Otherwise such essays will either be swollen into books or not be written at all, both of which, as the editor very well observes, would be a great misfortune for Hungarian literature. As the poem of Madách is one of the most ambitious of the literary ventures of recent Magyar poetry, we hope shortly to return to this subject.

Professor Mendelssohn is going to bring out a book about the relations of his father to Goethe, in which several of Goethe's poems hitherto not printed will be published.

Art and Archæology.

EXCAVATIONS IN ROME.

Rome, November 15.

The activity with which excavations, &c. have been carried on during the past season and are still progressing here redounds to the praise of the Archæological Committee appointed by the new government, and the annual subvention of 100,000 francs assigned for such undertakings has been hitherto well employed. The authorities have placed under control of the committee an immense area, comprising the Forum, the Palatine, the Colosseum, the Circus Maximus, the Thermæ of Antoninus and Titus, and the temple of Claudius, and external to this circuit the ground where numerous Columbaria exist, near the Appian gate; on all which sites it is forbidden to build or appropriate, and none but the aforesaid committee can undertake *scavi* or other such works. The Forum may be expected ere long to present a totally new aspect, with revelations of the antique beyond all yet realised, and much light thrown on ancient topography at this centre. Most interesting are the discoveries in the vicinity of the beautiful ruins below the north-east angle of the Palatine, where has been found a spacious and lofty platform, ascended by a broad staircase with two lateral flights, the landing-place itself at a somewhat lower level than the portico, of which three Corinthian columns alone stand erect, and therefore, we may infer, connected with it by other steps. Those columns have given rise to more dispute among antiquarians than any other ruins in Rome. They were long (and by many still are) called the Temple of Castor and Pollux, but are regarded by the German archæologists and also by Canina as the Curia Julia. It is true that the mention of that edifice in the *Monumentum Ancyranum* justifies doubt as to the claims of the ruins in question below the Palatine; but the recent discoveries seem confirmatory of the notion that the Corinthian portico belongs to some building of first-class character, and *political*, not religious. Nothing has been found at all similar to the peribolos, or sacred enclosure of a temple, but traces of the outer courts of a great public building, with a stately façade looking eastward. A substruction of walls, rectilinear with the columns, seems to be one side of a vestibule communicating with the interior (according to one theory no other than the hall of the Senate-house), and other fragments lately brought to light—cornices, capitals, broken fluted shafts—attest the splendour of this edifice. The adjacent Julian Basilica is now completely laid open; the files of pilasters, four dividing its length like the nave of a church, have been restored to a certain height. The ruined arcades near the north-west angle are also partially restored, wherever ancient material still stood in its place; and these are regarded by the Roman archæologists as the Tabernæ Veteres, in immediate connection, as we now see, with the Basilica, and from one of which buildings, as they stood in primitive times, Virginius seized the knife wherewith he slew his daughter. In the recently published *Bulletino* of the German Institute is a learned article by Signor Pellegrini, which treats exhaustively the subject of the Tabernæ Veteres and the investigations concerning them.

It is intended completely to lay open the Forum to the depth of that ancient level which is at the maximum twenty-seven feet below the modern level. In consequence almost all the houses around this area will have to be destroyed, and the churches left isolated accessible by steps or bridges. The portions of the supposed Curia Julia have been already excavated no fewer than thirty times, but never to great extent, or with anything like the scale and perseverance of the present works.

In the museum of antiques found on the Palatine we notice, among late additions, an expressive though far from pleasing bust of Seneca crowned with ivy, and a sarcophagus with mutilated *relievi* of the story of Iphigenia, her intended death at the altar, and her rescue by Diana. In the Antonian Thermæ the works, continually pursued, aim at reducing the whole interior to its original level, and have brought to light many rich pavements in coloured marble, with various ornamental patterns, besides remains of stately architectural details, porphyry shafts, white marble capitals, and fragments of sculpture. In the magazine of antiques within these ruins, three male torsos and one female torso of good style have been recently added to the collection; one of these sculptures, with a chlamys thrown over

the left shoulder, and of colossal scale, apparently a god or hero, having been found not in these Thermæ, but on the Monte Citorio, in the course of the works for the new Chamber of Deputies, in the building formerly used for the tribunals and parliaments. Immense piles of *débris* have been heaped up along the walls, or otherwise disposed of, leaving the many compartments of the Thermæ without encumbrance. In the Frigidarium has been discovered a partition-wall along the narrower axis of the great parallelogram, which seems to be one of a series of divisions breaking up that area into numerous bath-chambers. Like the Colosseum, these ruins have been almost totally divested of the forest-trees, wild shrubs, and creeping plants which partially concealed them. Indeed the process of stripping might have been carried out with a more sparing hand —for why uproot wild flowers and parasites, together with the more objectionable timber that hastened the work of decay?

At Ostia, the labours resumed under Signor Rosa's directions aim rather at the object of preserving from decay and injury things already found than of extending the *scavi* farther; but the Thermæ on this site, supposed to be of the Antonine period, have been excavated more fully and with fresh results—the opening of other chambers, and among art-fragments, a finely ornamented bronze vase, broken in several pieces. The Ostian ruins have in some parts suffered lamentably since their recent disinterment, no precautions having been taken by Signor Visconti, the former superintendent, for protecting them. Next week will be commenced, as I am glad to report, the *scavi* at the Villa of Hadrian, purchased from Duke Braschi by the new government for the furtherance of antiquarian interests. Already have been uprooted the orchards and vineyards within the enclosed ground overstrewn by that grandly picturesque city of ruined palaces, in order to leave clear space; but the forest-trees, among which tall cypresses and solemn pines form a conspicuous and appropriate ornament to the scene of antiquity, will, as good taste requires, be left. It is not expected that great artistic wealth will be disinterred here, for that Tiburtine villa has been often ransacked, both in modern and ancient times. Its statues, transferred to the Vatican and Capitol, are well known; and the last noticeable art-treasure yielded by this soil was the favourite mosaic called "Pliny's Doves," now in the Capitoline Museum. That oft-copied original was dug up in the excavations carried on by Monsignor Furietti, 1737, since which date there have been no more such labours in the ground occupied by the imperial villa. The statue of the poet-boy, and the monument with Greek inscriptions, found at the demolished Salarian gate, have been moved to the above-named museum. C. I. Hemans.

THE UNCATALOGUED MASTERPIECE.

In a letter signed "C." in the *Times* of Nov. 17, the writer drew the attention of the public to an undated, unsigned, but important painting, existing in the establishment of the Misericordiæ at Oporto. The subject of this picture is the Fons Misericordiæ, above which is the figure of the crucified Saviour, to right and left the Virgin and St. John. In the foreground on the right kneels the figure of the founder of this establishment, Emmanuel the Great of Portugal; behind him are his six sons; opposite to him his third wife Eleanor, daughter of Philip I. of Castile; behind her are two princesses, apparently about fifteen or sixteen years old. In the background are groups of adoring men and women, amongst whom figures a bishop. The picture, which measures about 9 feet by 5 feet, is painted on panel, and is in a fair state of preservation. By the Portuguese it is ascribed to Gran Vasco (Fernandez Vasco). The writer of the letter in question attributes it, however, to Roger van der Weyden the Younger; but the very existence of Roger van der Weyden the Younger is a matter of doubt; and in the *Times* of Nov. 22, "C.'s" letter was answered by the distinguished art critic, Mr. Robinson, author of an *Essay on the Early Art of Portugal*, which has been translated into Portuguese by the Lisbon Society for the Promotion of the Fine Arts, and which forms, we believe, part of a more extensive work on the same subject now in progress. In 1865, Mr. Robinson minutely examined the work in question, and though he corroborates the assertion made by "C." that this painting is *not* by the hand of Fernandez Vasco, the artist of the celebrated paintings (one signed by his hand) existing at Vizen, he goes on to state that "C." is wrong in assuming a total absence of resemblance between the Oporto work and those at Vizen. On the contrary, there is, says Mr. Robinson, a strong resemblance in the general style, sufficient to make it certain that both the work at Oporto and those at Lisbon are the production of Portuguese artists. The name of the painter Mr. Robinson has not yet discovered; but he has seen at the old convent Madre Dios, near Lisbon, works which he considers to show traces of the same hand, and expects that sooner or later the artist will be identified owing to the habit which obtained amongst these early Peninsular artists, of frequently signing their works in legible and conspicuous characters.

Mr. Robinson concludes by mentioning the existence of a fine altar-piece by Holbein, in the private collection of the present king Dom Fernando. This painting is signed, and dated 1519. Though executed at Basle, it is known to have been taken to Lisbon from London, where, in the reign of Charles II., it had served at Whitehall as the altar-piece of the chapel of Catherine of Braganza, who, on her return to Portugal as a widow, presented it to one of the Lisbon convents.

Considerations of size and risk alone prevented it from being contributed to the recent Holbein Exhibition, where it was unfortunately only represented by a miserable photograph.

ART NOTES.

The history and archæology of ancient art have suffered a severe loss in the death of Professor Dr. Karl Friederichs, director of the antiquarian department of the Royal Museum at Berlin. He died after much suffering on October 18, in the forty-first year of his age. It is understood that he has left the manuscript of the second volume of his *Bausteine zur Geschichte der Griechisch-Römischen Plastik* ready for the press. This volume deals wholly with the subject of antique bronzes.

In the *Beiblatt* for Nov. 3 of the *Zeitschrift für bildende Kunst*, Dr. Moritz Thausing makes a spirited and satisfactory reply to Dr. Lübke's article in the defence of the pseudo Dürer drawings in Berlin, Bamberg, and Weimar. Dr. Lübke brings a great name won as art-historian into this conflict, but the public must, we think, receive as an ultimate verdict the decision of such men as Dr. Thausing and Dr. Zahn, whose special studies have fitted them to speak positively to a special point.

The Roman altar found whilst digging the foundations of the new theatre at Cologne has been placed in the museum of that town. It is decorated by eight reliefs, separated from each other by columns. The subject of one of the reliefs appears to be Orestes pursued by the Furies, another is supposed to represent Orpheus and Eurydice; but for the most part it is difficult at present to name them positively.

An artistic curiosity of great value has lately come to light in Vienna. It is a complete set of wooden chessmen, some inches high, richly carved, and full of character, by no less a master than Albrecht Dürer. The work is in perfect preservation, and its genuineness (according to the *Augsburg Gazette*) can scarcely be doubted, as it has been for centuries in the possession of the same family, which, though of late resident in Austria, came originally from Nuremberg, and possessed besides this work a large oil portrait by Lucas Kranach, of a city notable, their relation. The last owner only leaves a daughter, and it is believed this interesting heirloom will soon become public property.

The 11th and 12th parts of Franz Schmidt's important illustrated work on Cologne Cathedral are just out. The plates are executed with the greatest care and exactness, and are accompanied by a historical text written by Dr. L. Ennen. In opposition to the deductions of Schnaase, Dr. Ennen maintains that the designs for the entire cathedral were already prepared in 1247.

Dr. W. Lübke's edition of Kugler's *Kunstgeschichte* will be completed before the end of the year. We have at present only the two first parts. The work of revision has been most

thoroughly done, and the book is brought up in every department to the standard of present knowledge. The illustrations as well as the text have received many additions and undergone essential alterations.

J. A. Kranner contributes to the *Zeitschrift für bildende Kunst* of the 20th October a valuable paper on the technic of fresco-painting. He gives a minute description of the method which he advocates, and claims for his system the advantage that the artist can work the whole day, or for days at a time, on the same ground, the excretion from which forms a transparent and protecting crust over the whole.

The fourth edition of Dr. W. Lübke's *Geschichte der Architectur* has now appeared. It has been so carefully gone over and improved by the author that very little remains in the old form of the work as published fifteen years ago.

Ferstel's design for the new Vienna University buildings has received the sanction of the government, and will now be laid before the academic body. The works are to commence early next year.

The sale of the library of the late Marquis de Laborde, the accomplished archæologist and art-critic, is to commence at Paris on the 8th January, 1872. The first part of the catalogue is now out. In this division (Beaux-Arts, Archéologie) the whole field of art is more or less well represented, but it is especially rich in works relating to the various branches and periods of French art.

The *Augsburg Gazette* (Nov. 6) gives a short biographical notice of the whilom popular genre-painter Heinrich Marr, who died on the 28th of October. His father was first a butcher, then an innkeeper, at Hamburg, and combined the exercise of the latter profession with that of dramatic author; August Lewald reports that his pieces were popular, and had even a kind of merit. The son had a genuine mechanical talent of about the degree and quality which we meet with in the good anonymous work of an artistic age. His popularity was at its height thirty years ago, and has been steadily declining since.

The *Nachrichten* to *Göttingische Gelehrte Anzeigen* for Nov. 15 give "an account of recent archæological discoveries, in letters from Petersburg and Pompeii." The Czar's collections contain many works of art referred to by Winckelmann and others, and it is important to know where these now are. The accounts from Pompeii promise a full comparative view of the frescoes, &c.

Dr. Heinrich Schliemann writes to the *Allg. Zeit.* (Nov. 22) to give an account of the progress of his excavations in search of Trojan ruins on Mount Hisarlik. He has reached a depth of 4 metres. Roman work and a number of curious round terracotta objects perforated with two holes, which he supposes may have served as weights in weaving, are found at the depth of 2 metres, and below these fragments of pottery with Phœnician figures, and, what is curious, as showing that at a remote period sharks must have abounded in the Mediterranean, specimens of the backbone of that fish polished for walking-sticks.

At the Demidoff sale in 1868, Terburg's "Congress of Münster" was knocked down to an unknown person for 182,000 francs. The director of the National Gallery had followed the biddings up to 180,000, beyond which point he did not feel warranted to pass. It next became known to some that the real purchaser was, as had been suspected, the Marquis of Hertford, but to the public the picture was as lost, and all hope of obtaining it for the nation seemed to have disappeared. Contrary, however, to expectation, it will now become a part of the national collection; Sir Richard Wallace, who inherits largely under the will of the late marquis, has addressed a letter to the director of the National Gallery in which he with great generosity offers the picture as a free gift to the nation.—We understand also that Sir Richard is about to lend the finest paintings of the Hertford Collections for exhibition at the South Kensington Museum.

Selected Articles.

Nachlese von der Holbein-Ausstellung. C. v. Lützow. Zeitschrift für bildende Kunst, Nov. 17.

Rückblick auf die Holbein-Ausstellung in Dresden. C. Schnaase. Im Neuen Reich, No. 45.

Renaissance in Bayern. W. Lübke. Zeitschrift für bildende Kunst, Nov. 17. [Students of the decorative work of the Renaissance will find much valuable and interesting matter in the series of articles under this title, which Dr. Lübke concludes in the present number.]

New Books.

Asbjörnsen, P. Chr. Norske Folke-Eventyr. Ny Samling (med Bödrag fra Jörgen Moes Reiser og Optegnelser). Christiania: Dybwad.

Bitter, C. H. Beiträge zur Geschichte des Oratoriums. Berlin: Oppenheim.

Casetti, A., e Imbriani, V. Canti popolari delle provincie meridionali. Vol. I. Roma, Torino, Firenze: Loescher.

Di Giovanni, V. Filologia e Letteratura Siciliana. Studii. Parte II. Letteratura. Palermo: Lauriel.

Führich, L. R. v. Moritz v. Schwind. Eine Lebensskizze. Leipzig: A. Dürr.

Gottschall, R. Die Deutsche Nationalliteratur des. 19. Jahrhunderts. Literarhistorisch und critisch dargestellt. 3te verbesserte und vermehrte Aufl. 1ster Bd. 1ste Lief. Breslau: Trewendt.

Imbriani, V. La Novellaja Fiorentina, cioè fiabe e novelline stenografate in Firenze dal dettato popolare e corredate di qualche notarella. Napoli: Tip. Napolet.

Köhler, Heinrich. Polychrome Meisterwerke der monumentalen Kunst in Italien vom 5. bis 16. Jahrhundert, dargestellt durch 12 perspectivische Ansichten in Farbendruck von 6 Lieferungen à 2 Blatt mit Text gr. Fol. Lieferung 1 enthält Intorno della Stanza, "Camera della Segnatura" in Roma, Intorno di San Pietro in Roma. Leipzig: Baumgärtner.

Krause, J. H. Die Musen, Grazien, Horen u. Nymphen mit Betrachbung der Flussgötter. Halle: Schwetschke.

La Fascination de Gulfi (Gylfa ginning). Traité de Mythologie scandinave composé par Snorri, fils de Sturla. Traduit du texte norrain et expliqué dans une introduction et un commentaire critique perpétuel par Frédéric-Guillaume Bergmann. Strassbourg et Paris: Treuttel et Würtz. (Edmonston and Douglas.)

La Leggenda della reina Rosana e di Rosana sua figliuola: ed. da A. d'Ancona (edited for the first time). Livorno: Vigo.

Le Message de Skirnir et les Dits de Grimnir (Skirnisför-Grimnismál). Poëmes tirés de l'Edda de Saemund, publiés avec des notes philologiques, une traduction et un commentaire perpétuel par F. G. Bergmann. Strassbourg et Paris: Veuve Berger-Levrault et Fils. (Edmonston and Douglas.)

Lizio-Bruno, L. Canti populari delle Isole Eolie (Lipari Isles) e di altri luoghi di Sicilia. Messi in Prosa Italiana ed illustrati. Messina: Ignazio d'Amico e Figli.

Ludwig, Otto. Shakespeare-Studien. Nachlass, herausgeg. von Moritz Heydrich. Leipzig: Cnobloch.

Motteroz, ouvrier imprimeur-typographe. Essai sur les gravures chimiques en relief. Paris: Bossange.

Naumann, Emil. Deutsche Tondichter von Sebastian Bach bis auf die Gegenwart. Berlin: Oppenheim.

Ornamente aus der Blüthezeit italienischer Renaissance. (Intarsien.) Originalaufnahmen von Valentin Teirich. Publication des k. k. österr. Museums für Kunst und Industrie. Wien: Beck'sche Buchhandlung.

Ortwein, A. Deutsche Renaissance. 1. Abth.: Nürnberg. Autographirt und hrsg. v. 2. Lfg. Leipzig: Seemann.

Per Nozze Nissim, d'Ancona. XLV Canti popolari de' dintorni di Marigliano (Terra di Lavoro) Napoli, Vittorio Imbriani. (200 copies privately printed on coloured paper.)

Pitrè, G. Canti popolari etc. Vol. II. Palermo.

Robert-Dumesnil, A. P. F. Le peintre-graveur français, ou catalogue raisonné des estampes gravées par les peintres, &c. Tom. xieme. Supplément by G. Duplessis. Paris: Vve Bouchard-Huzard. Leipzig: Weigel.

Rogers, C. Monuments and Monumental Inscriptions in Scotland. (Grampian Club Publication.) Griffin.

Schnaase, C. Geschichte der bildenden Künste. 2. Aufl. 4. Bd. 2. Abth.: Die roman. Kunst. Bearb. unter Mithilfe v. A. Schulz u. W. Lübke. Düsseldorf: Budeus.

Vigo, L. Ciullo d' Alcamo e la sua Terzone. Bologna: Tipi Fava e Garagnani.

Theology.

A New System of Christian Dogma. [*Christliche Dogmatik.* Von Dr. Alois Emanuel Biedermann, Professor der Theologie in Zürich.] Orelli, Füssli, and Co., 1869.

[Second Article.]

The constructive part of Dr. Biedermann's work consists in an application to the body of Christian doctrine of the principles laid down in his introductory section. This implies (i.) a criticism of the Christian theology according to the canons of the understanding, (ii.) the construction of a dogma which shall embody the contents of that theology in the form required by philosophical thinking. The second of these sections, which is the distinctive and important part of the work, naturally falls into three divisions: Theology, Anthropology, and Christology.

(1) No consistent religious interpretation of the facts of human nature is possible without a theology: "nisi divinitatis rationem penitus excusseris, nescies humanitatis" (Minucius Felix, *Octavius*, 17). The technical terms of Dr. Biedermann's theology are the profound and comprehensive formulae of the Hegelian metaphysic. This metaphysic, by its recognition of the infinity and absoluteness of God on the one side, and the finitude and relativity of man on the other, as necessary correlatives—of the self-realisation of the Infinite in the finite and the finite in the Infinite, their unity in their apparent separation—avoids, like the Christian theology, the extreme conclusions both of Deism, which separates man from God, and of Pantheism, which resolves the one existence into the other. The method of the Christian theology, however, is condemned by Dr. Biedermann as too anthropomorphic. It has pursued too far the tendency to personification, which is to a certain extent necessary to all expression of religious feeling. It has represented correlative principles as separate and opposing entities, and has thus presented to the understanding a series of propositions expressing or implying apparent contradictions, which the understanding, in its turn, is not slow to expose. For instance, the overstraining of the conception of a personal relation of God to nature has given rise to a crude and uncertain notion like that of the ordinary supernaturalism; and this last in its turn to the fruitless controversy on the nature and existence of miracles. In the sphere of morals, the same error has produced the immoral fatalism of the extreme predestinarian doctrine. The fact however represented by these partial aspects remains the same: in the one case, the indwelling of the Infinite Spirit in Nature, the manifestation of Him; in the other, the working out of His agency in the length and breadth of the moral law.

God is the Absolute Spirit, whose activity in relation to created or finite existence is threefold. He is revealed namely, first, as the immanent spiritual principle manifested in the order underlying the material universe. The indications of reason, wisdom, and goodness afforded by this order constitute the positive relation of the world to God. Its negative relation to Him is obvious in the element of limitation and imperfection inherent in individual existence. Evil, which consists in this limitation and imperfection, is, properly considered, not a check to the full workings of the Spirit, but the medium through which they are accomplished.

Secondly, God is revealed to man in the conscience (a term by which Dr. Biedermann understands the right direction of reason as well as of will and feeling) as the eternal law of conduct. This act of revelation is both natural and supernatural: natural as effected through the material organization of the individual; supernatural as pointing to a law absolute and unattainable by finite existence. But supernatural only in this sense: for the distinction of natural and supernatural as commonly applied to outward phenomena dissolves in the light of philosophical analysis. Only the misreading of the inward revelation has given rise to the false idea of the necessity of miracles as evidence for it.

But so far man is only conscious of a God revealed as law, outward and inward: the final consummation is the resolution of the contradiction, the sense of perfect liberty in the union of the human spirit with the Divine, the destruction of sin in grace. To the mind which has reached this height God is also revealed as Providence: not, that is, as the author of "special providences," but as the Spirit moving in and ruling events, in union with whom all things are seen "to work together for good to those who love God." This reading of the stages of revelation is in essence identical with the Pauline doctrine of the progress of the soul from the dispensation of nature (*τὰ ἀόρατα αὐτοῦ ἀπὸ κτίσεως κόσμου τοῖς ποιήμασι νοούμενα καθορᾶται*) and of the law to that of grace.

(2) The human soul, though finite in virtue of the non-spiritual basis which conditions its spiritual life, bears, in virtue of its spirituality, the image of God, but in respect of the limitations of its existence is opposed to Him. Like in essence (*Wesen*), opposed in substance (*Subsistenz*)—this is the formula by which Dr. Biedermann avoids a pantheistic identification, or a deistic separation of God and man. On this contrast between the spiritual and the non-spiritual element in man is based the communion of life with God in which religion consists. The sense of contradiction between these elements, the travail of the spirit's struggle to conquer its own finality, is the sense of sin. Through this travail the progress to religious freedom must be made, and the image of God, existing in the soul as spiritual, must be realised in its consciousness. But sin, existing only in individuals and individual acts, does not lie (as the Church doctrine has wrongly read the facts) in a previous condition of the human race. A state of perfection did not precede, and degenerate into, a state of corruption; but the state of corruption, in the race and the individual, precedes the state of perfection, which is the end and issue of its development. The failing of the individual as finite, the perishability of the non-spiritual and the imperfection of the spiritual element are the means by which the Infinite Spirit reveals and realises its working in the finite mind. Evil in nature and sin in man, though not connected, as the Christian representation has it, by a necessary filiation, have the same basis, the limitation, namely, of all created existence. In the consciousness of the individual who sins and is conscious of the result of his act they are connected as cause and effect. Punishment for sin may be conceived either as temporal, in relation to the guilty individual, or as eternal, in relation to the divine law infringed. Atonement for guilt is realised in the complete freedom of the religious life; until this be attained, the desire for redemption can only be half satisfied, whether by aspiration or moral action ("the works of the law").

(3) The life of Christ exhibits "the union of the divine and human natures brought into the actual unity of a personal spiritual life" (§ 795), realised in action and passion before the eyes of men. No system of Christian doctrine, therefore, can be complete which ignores the historical element here introduced. The power of Christianity as a religion lies precisely in this historical element—in the spectacle offered to mankind of a concrete embodiment of the principle of salvation worked out in a life on the stage of history. This, according to Dr. Biedermann (who in his method of dealing with the existing records of the life of Christ is at one with Strauss and the negative critics), is

the truth which underlies the orthodox Christology, in which the person of Christ has been identified with the Christian principle and its developments. The complete consciousness of the Fatherhood of God of which the life of Christ is an example, while it has served as the basis for the vast superstructure of Christian dogma, survives the defects of conception under which that dogma labours, and remains as the centre of religious union and worship for all who in whatever form attach their spiritual life to it.

These are no more than the salient points of a work which deserves a long and attentive study from all who are interested in the future of Christianity: the more so as its aridly dialectical form, and the conscientiousness with which the author has avoided all gloss or emotional phraseology, will prevent it from becoming widely popular. A large part of Dr. Biedermann's views is now theoretically and practically the common possession of many minds. But his work is advantageously distinguished from most books of advanced theological criticism by the thoroughness of its method. The author has attempted, not the treatment of an isolated point, dogmatic or historical, but the formation of a consistent scheme of theological doctrine expressed in philosophical language adequate to the time. In employing the language of metaphysics for his purpose he has adopted the only plan which could give breadth and consecutiveness to his treatment. At the same time (and here we venture to think that the book is most open to attack) it is doubtful whether he has really succeeded in combining the religious and the philosophical points of view. Rejecting as fatally perverse Hegel's definition of religion as thought in the form of symbol (*Vorstellung*), and insisting constantly that the import of the work of Christ and of Christian dogma is religious, not metaphysical, Dr. Biedermann may be fairly supposed to give to the religious intuition an authority quite equal to that which he claims for thought. To the latter he apparently allots the task of correcting from time to time the expressions of the religious sense. This is probably an attitude which few thinkers can for long maintain. In the case of the majority of thinking persons philosophy and religion appear as distinct forces, the one of which, gaining the upper hand, only recognises the other so far as to adopt its language for the better expression of its own needs. Symptoms of the conflict appear in Dr. Biedermann's book where they would most naturally be expected: in his treatment of the question of the personality of God. In this instance he considers the common expressions of religious conviction as permissible, though inadequate when compared with the formulae of philosophy. Thinkers with whom the philosophic interest predominates will probably question even the permissibility of a comparatively imperfect expression, while those in whom the religious sense is so strong as to embody itself in its natural language will resent the mere toleration conceded to them by their rivals. The position however taken up by Dr. Biedermann is one which in one form or another is constantly adopted by minds in whom the religious instinct and the critical faculty are both strongly developed: nor are the great services rendered by such minds both to religion and criticism to be undervalued because the impulse of their nature has driven them to assume a somewhat isolated attitude.

In his Christology, as is natural, Dr. Biedermann is less easily assailable. The life of Christ cannot be adequately treated alone, as has too often been the case, from the point of view of a popular philosophy or an imperfectly tempered religious sentiment. It must be viewed and interpreted in connection with the development of the religion of which it was the basis. Dr. Biedermann has clearly grasped what appears to be the essential points of the question: first, that the core of Christ's teaching was a principle acted out rather than a precept or set of precepts delivered, and a principle essentially religious, not merely ethical or metaphysical: secondly, that the condition of the records is such that it is in this principle and not in the details of the life that the foundations of Christian faith must be laid: thirdly, that the life of Christ as a whole must remain the historical basis of Christian cultus and union.

H. Nettleship.

NOTES ON DR. R. WILLIAMS, DR. EWALD, BISHOP COLENSO, AND THE 'SPEAKER'S COMMENTARY.'

It is with much reluctance that we express but a qualified approval of the second (alas! posthumous) volume of Dr. R. Williams' *Hebrew Prophets*. The design of the work is excellent, and deserves the heartiest recognition. Hypothetical as an arrangement of the Prophets must necessarily be, it is indispensable to an approximately correct appreciation of them; and, after all, the arrangement in the Jewish Canon, so far as it is not fortuitous, seems to be chiefly based on hypothesis. When we add that, in sympathy with the highest prophetic ideas, and in the power of applying them to the needs of the present, Dr. Williams is equalled by few commentators, if any, we have awarded the highest praise for which the lamented author would have striven. At the same time we cannot pretend to be satisfied with the quality of Dr. Williams' scholarship. It is indeed no reproach to an eminent dogmatic theologian to have but a slight insight into the genius of an Oriental language, or the problems of an obscure literature, but it would be a serious misfortune if his work came to be regarded, either at home or abroad, as at all representative of the best English Biblical criticism. We gladly admit that the present volume shows a perceptible advance on its predecessor. The violations of philological propriety, both in the translation and the notes, though still numerous, are, we think, rather fewer than in the first volume. The translation, however, is still disfigured by an exaggerated distrust of the traditional verse-divisions, and by a strange incapacity for perceiving the law of parallelism. The improvement is more obvious in that portion of the work which relates to the higher criticism. The introduction to Jeremiah is decidedly abler than that to Isaiah; and there are several scattered remarks of value, though somewhat crudely put forth, relating to the origin of doubtful passages. Lastly, the commentary continues to be in the best sense edifying, and not the less so from the strong controversial or rather "irenical" element with which it is penetrated. We cannot, however, suppress a regret that this advantage has been purchased by the omission of much useful information, particularly on the relation of Jeremiah to previous and contemporary writers. On the whole, we cannot do otherwise than repeat a judgment already expressed in these pages, that although the book has several popular qualities, which ought not to be depreciated, it is too deficient in philological accuracy to be of much use to critical students. [It was the writer's intention to subjoin a few passages from Dr. Williams in support of the foregoing criticisms. As however the line taken by Dr. Kuenen, in the *Theologisch Tijdschrift* for September, agrees in the main with his own, he prefers to conclude with a brief sketch of the article referred to. The chief objections brought by Dr. Kuenen are these:—1. The principle of chronological arrangement is imperfectly carried out, especially in the book of Jeremiah. 2. Dr. Williams adheres too closely to the authorised version—an objection which seems to us to be hardly borne out by facts. 3. "He not unfrequently proposes explanations which are absolutely inadmissible, and which he himself would have rejected had he possessed in a larger measure that 'keen sense' of what the Hebrew language admits." Instances of this are Hab. iii. 9 as rendered by Dr. Williams; Zeph. i. 5 *b*; iii. 19 *a*; Jer. ii. 3; v. 22, 24; xii. 14; xvii. 2, 3; xxii. 6; xxxi. 10, &c. On the other hand Dr. Kuenen notices suggestions of value on the origin of Hab. iii.; Zeph. iii. 14-20; Jer. v. 10, 18; xvi. 14, 15; xxiii. 7, 8; xvii. 19-27; xxv.; xxix. 10-14. But the interest of the book centres, he thinks, in the theological position of the author, in the singular combination of a firm belief in the supernatural with a sincere acceptance of the modern critical method. He dwells with evident sympathy on the views held by Dr. Williams as to the nature and objects of prophecy, in illustration of which he makes several extended quotations. And the friends of the author cannot but appreciate the delicacy with which the moderate censure is so completely thrown into the background that the general impression left by the article is highly favourable to the work under review.]

A new work (*Die Lehre der Bibel von Gott*, erster Band) by a writer so well known in England as H. Ewald appears to demand a notice, though its venerable author is too unsolicitous of novelty for it to furnish much matter for criticism. It is in fact an attempt to prove, though in a very different way from Lord Hatherley, "the continuity of Scripture,"

and the unity of its religious teaching. Dr. Dorner has already remarked on the significant fact that Ewald, alone among liberal and semi-liberal critics of the Bible, should refuse to recognise the principle of doctrinal development (*History of Prot. Theology*, E. T. vol. ii. p. 437). The present work seems likely to justify the observation, though it would be unfair to speak positively on this point until the appearance of another part. The first volume contains only "The Doctrine of the Word of God," which is considered under three heads—1. Of the nature of the revelation of the Word of God; 2. Of revelation in heathendom and in Israel; and 3. Of revelation in the Bible. The first division, too, contains three sections—1. Revelation and the fear of God (=religion); 2. The degrees of revelation; 3. The results of revelation: the second, three—1. The institution of a true community of God; 2. The struggle against all degeneration of revelation, *i. e.* the opposition of heathenism to the true religion; 3. The formation of the power of the Holy Spirit: and the third, five, relating to the antecedents, origin, sanctity, and practical value of the Bible. Under the second head (Revelation and Heathenism) we notice several interesting philological notes. And there is at least one external novelty, the elegant type and margin, for which Ewald's readers will be only too grateful. We may take this opportunity of recommending to them a work on Ewald's great predecessor in the religious and æsthetic appreciation of the Bible—*Herder als Theologe*, by August Werner (Berlin: Henschel). Herder is not as well known as he ought to be, and this thorough though, like the works of Herder himself, somewhat diffuse volume will do good service in recalling attention to his merits.

The indefatigable Bishop Colenso has published the first part of a detailed examination of the *Speaker's Commentary*. We dissent from his view of the representative character of that work, and regret the severity, while fully admitting the acuteness, of his reply to Bishop H. Browne. A calm discussion of the arguments advanced by more competent writers than the Bishop of Ely in the remainder of the first volume will be a much greater service to popular theology. Do they meet the counter arguments of the actually leading critics on the opposite side? An instance to the contrary, not as yet dealt with by Bishop Colenso, occurs in the Introduction to Deuteronomy (p. 793), where "the newer school" is represented as seeing in that book "the *primæval quarry* out of which the writers concerned in the production of the preceding books drew their information." Let the reader test this assertion for himself by a reference to the works of Graf and Kuenen.

T. K. Cheyne.

Contents of the Journals.

Zeitschrift für wissensch. Theologie, vol. xv. No. 1.—Hilgenfeld on the Epistle to the Hebrews.—Kluge on Holtzmann's essay, The Address of the Epistle to the Hebrews.—König on the Relation of the Epistle to the Ephesians to that to the Colossians.—Hilgenfeld on Keim's Galiläische Stürme.—Spiegel on the 10th article of the Augsburg Confession.—Notices of Books.—A. H. on the Apocalypse of John to the Jewish Apocalypses.

De Gids, October and November.—The Development of State and Religion in Ancient Israel, by Prof. Land, parts 1 and 2. [Sceptical to an extreme, but replete with striking suggestions, particularly etymological.]

Theol. Tijdschrift, Nov.—The Apostle John in Asia Minor, by J. H. Scholten. [An acute examination, occupying the whole number, of the evidence for this tradition].

New Publications.

Archiv für wissensch. Erforschung des Alten Testamentes, herausg. von Adalb. Merx. Band 2, Heft 2. Halle: Buchh. des Waisenhauses.

Colenso, J. W. The New Bible Commentary . . . critically examined. Longmans.

Kleinert, P. Untersuchungen zur alttestamentl. Rechts- und Literaturgeschichte. I. Das Deuteronomium. Bielefeld: Velhagen u. Klasing.

Palmer, E. H. The Desert of the Exodus. 2 vols. Deighton, Bell, and Co.

Weiss, B. Das Marcusevangelium u. seine synoptischen Parallelen erklärt. Berlin: Hertz.

Weiss, H. Die grossen Kappadocier Basilius, Gregor v. Nazianz u. Gregor v. Nyssa als Exegeten. Braunsberg: Peter.

Weiss, J. H. Zur Geschichte der jüdischen Tradition. 1. Thl. Vienna: Herzfeld u. Bauer.

Wellhausen, Jul. Der Text der Bücher Samuelis untersucht. Göttingen: Vandenhoeck u. Ruprecht.

Science.

The Straits of the Baltic. [*Untersuchungen über physikalische Verhältnisse des westlichen Theiles der Ostsee: Ein Beitrag zur Physik des Meeres.* Von Dr. H. A. Meyer.] Kiel: Schwers.

The necessity of an accurate and complete knowledge of the physical geography of the sea, of the form of the bed in which it rests, its temperature and manner of circulation, not only as an aid to navigation but as a prelimary to the study of the distribution of marine life, is now so far recognised that systematic observations tending towards this end have become a part of the regular duty in British and American government vessels; and that the subject is of strong interest in German scientific circles is evinced both by the numerous observing expeditions sent from that country to the polar seas, and by the active examination of the waters which bound its northern coasts at home. Dr. Meyer's present work contains a record of actual observations made in the western Baltic during several years, with a clear and ample discussion of these, and forms perhaps the most important contribution to the literature of this subject that has yet resulted from individual energy and private means, besides affording a new example of the thoroughness by which German scientific work is usually characterized.

In the preface the author explains that he was led to the more particular examination of the physico-geographical relations first of the Bay of Kiel, by discovering in his study of the fauna of this portion of the Baltic,* that at certain seasons a great variety of marine life, usually sought for only in the North Sea, is to be found here also, changing however, in species and quantity, in different seasons and years.

The bay was soon found to afford too narrow a field of observation, the variations in the nature of its waters being only dependent in the smallest degree upon local causes; and since no trustworthy results could be obtained without simultaneous observation at various points in the western basin, especially at its entrances, stations were arranged by Dr. Meyer at seven places in and near the Great and Little Belts and the Sound. The tables which are printed in an extended form in the volume give the daily record of specific gravity and temperature at various depths, the direction of currents, the water level, wind and weather of three points in Kiel Bay, from April 1868 to May 1870, and similar observations, though for somewhat shorter periods, at Eckernförde, Sonderburg, Friedericia, Svendborg, Korsör, and Elsinore. The results of these are further illustrated by graphic representations.

A preliminary chapter treats of the instruments employed, the aërometer, thermometer, "current drag" (somewhat similar in form to that used by Dr. Carpenter in the Gibraltar under current), and an apparatus for raising a specimen of the water from a required depth. Some of these are specially adapted to observation in a shallow sea, and would be of no value in the deep ocean; still many valuable practical hints may be obtained from the experiences here recorded.

The Baltic, like the Mediterranean, is truly an inland sea; the periodical changes of level, due to the ebbing and flowing of the tide, are scarcely recognisable within it, but irregular and slight variations of level take place from other causes; it is by far the shallowest of the European inland seas, and with the exception of one small area, is everywhere less than 100 fathoms in depth. The three entrances to the Baltic taken together at their narrowest points give a total width

* *Ueber die Fauna der Kieler Bucht;* Prof. Möbius and Dr. Meyer, 1865.

of 13 English miles; the narrowest point of the Gibraltar Strait measures 8 miles. The average depth of the Baltic entrances is however only 10 fathoms, whilst at its narrowest point the Strait of Gibraltar reaches down to 400 fathoms, and even at its shallowest, over the "ridge" which extends between Capes Trafalgar and Spartel, the average depth is at least ten times that of the Baltic Sounds.

This circumstance of itself, however, does not in any way explain the difference of salinity which exists between the two seas, the freshness of the Baltic and the great saltness of the Mediterranean; and these relations must be referred to the much greater area of land, in proportion to the extent and mass of the inland sea, which is drained to the Baltic than to the Mediterranean,* and to the difference in position of the two seas with their drainage basins—the one extending over a region in which evaporation is rapid, the other in a latitude where the rivers may return a vastly greater quantity of rain-water to the sea, since evaporation is comparatively slow.

As a rule the upper water of the Baltic decreases in salinity to eastward of the Cattegat, till in the north of the Gulf of Bothnia and in the Gulf of Finland, potable water may be taken from the surface; but this decrease is not at all constant, and every part of the sea is subject to continual changes, though the upper water is almost invariably less saline than the under. Dr. Meyer believes that the unequal salinity of the North Sea and the Baltic is the cause of a double stream in each of the straits, the Sound and the Belts; and maintains that the heavier water of the North Sea pushes itself in the form of a wedge beneath the water of the upper stratum which is constantly becoming mixed with the fresh water from the land, and is therefore lighter, pressing it out of the bays away from the land and out of the Baltic itself. It is remarkable that Dr. Meyer, independently, employs almost precisely the same manner of proof in showing that such an interchange should take place as that given by Dr. Carpenter in describing the reverse process from inverse conditions which exists in the Mediterranean.

A table of fourteen special observations (p. 23) made in the most favourable station for observing this under stream (the mid-channel of the Great Belt, off Korsör), and at various times in different months and years, does not however bear out this conclusion so satisfactorily as could be desired, for at six trials out of fourteen, as the table shows, the upper and under streams were found to flow in the same direction, or there was but one stream in or out; and further, when the whole current was found to flow *inward*, the winds were from a westerly point in most cases, when the whole current was *outward*, the winds were generally from the east. The actual observations thus leave a doubt as to whether the difference of specific gravity is the first moving cause in producing the contrary upper and under streams which are frequently established in the entrances of the Baltic; still there can be no doubt that the existing difference of density between the waters of this inland sea and of the ocean offers the most favourable condition for, and as it were invites the formation of a double current, under any wind which tends to move the surface water towards the straits from any part of the Baltic.

Taking the mean specific gravity (1·01345) of the water at several depths to 16 fathoms, observed daily for several years in Kiel Bay, as representing the density of the water in the western Baltic, and assuming the specific gravity of the North Sea water at 1·02500, the greatest observed density in the under current in the Great Belt, it appears questionable whether even this difference of weight could, unaided by the winds, give rise to a double current, when it is remembered that some parts of the Great Belt are nowhere deeper than 18 fathoms, and that the other straits are much shallower.

Dr. Meyer proceeds to show how the regularity of the inflowing and outflowing currents is disturbed by various meteorological causes, so as to bring about variations in the mean salinity of the Baltic in different seasons and years. The first and main disturbing influence is that of the wind, and this manifests itself in various ways, by the formation of waves, which tend to mix the upper and under strata in this shallow sea and to equalise their salinity, or by driving the waters outward through the straits to such an extent that the under stream may be completely stayed, or, again, by reversing this process and causing the surface water of the North Sea to flow inward.

With the same relative frequency the winds in autumn and winter have, on account of their greater strength, a more powerful agency than in spring and summer from the same direction; and since in the former seasons the west wind is most prevalent, the inflow of North Sea water is greatest in the latter part of the year, and the increase of salinity in the water of the Baltic is then most considerable. The disturbing influence of the winds is reduced in winter, when a great portion of the north and eastern Baltic is covered with ice, and the easterly winds have then no power to drive the fresher waters to the west. It results from this that in spring, when the thawing process sets in, a strong surface-current of fresh water flows to westward and continues even into the first months of summer.

The periodical changes of temperature in the air and of atmospheric pressure have, as such, Dr. Meyer believes, no direct influence upon the state of the sea, and though the greatest rainfall in the Baltic basin occurs in summer, yet this is the season of greatest evaporation, and vegetation being then at its maximum, a greater part of the moisture is retained on the land.

As previously remarked, these researches were undertaken in order to arrive at a knowledge of the influence exerted by changing physical relations upon the varying fauna of the Bay of Kiel. The explanation of the bearing of the results obtained on this question is reserved by Dr. Meyer for a continuation of his work more specially devoted to this subject, yet he indicates the main points of interest and enquiry. In autumn and in the beginning of winter many species of marine animals unknown at other seasons are to be found in the Baltic, and are probably driven thither by unusually continuous and powerful west winds. Among the strange fishes which have appeared in these seasons are the Mediterranean tunny and the *Labrus Lupus*. The polar seas are also represented by occasional whales, drawn into the inland sea by the currents or following in pursuit of the medusae on which they feed.

Dr. Meyer concludes with the strong recommendation of an extended and continuous observation of the currents, temperature, and density of the waters of the Baltic, not alone because physical geography and meteorology will thereby be benefited, but because such examinations are indispensable to an understanding of the conditions under which the varied fauna and flora of the sea may exist, and lead to the solution of very practical questions, especially those relating to fishery.

It may be remarked that the volume in itself is a model of most excellent typography. KEITH JOHNSTON.

* The area of land drained to the Baltic measures nearly 4·5 times the extent of the surface of that sea, whilst the land drainage to the Mediterranean is only double its superficies. The cubic mass of the Mediterranean, which the smaller fresh drainage could affect, is also incomparably greater than that of the Baltic.

A Synonymic Catalogue of Diurnal Lepidoptera.
By W. F. Kirby. Van Voorst.

In this laborious work the author of a useful little *Manual of European Butterflies* gives a list of all the species of Butterflies described up to the date of publication, with references to all the chief authorities and the various names under which each has been described or referred to. The native country of every species is also given, thus affording valuable materials for the study of geographical distribution. The general reader will be surprised to learn that this list of the names of butterflies forms an octavo volume of 690 pages, there being more than nine thousand described species and varieties of butterflies; and as many of the specific names occur several times over, the index, which consists of 130 columns of very close print, contains about twelve thousand separate references. When we consider that this volume contains only the true butterflies (the moths being many times more numerous), some idea may be formed of the immensity of the range of the entomologist's studies. The value of such a work to students is very great, while the labour of compiling it is of the most thankless and unremunerative kind; and although some faults of place and of detail could be pointed out, it would be ungracious as it is unnecessary to refer to them here. The work is published by Mr. Van Voorst, and every naturalist who can afford it should add it to his library, not only for its intrinsic value, but as a recognition of the service bestowed on science by its painstaking author. A. R. Wallace.

THE ALLEGED "OPEN POLAR SEA."

TO THE EDITOR OF *THE ACADEMY.*

Sir,—Neither the telegram announced by Dr. Petermann nor the letter from Mr. Payer to the Frankfort Society by any means imply a new discovery, still less a discovery of "an open Polar Ocean." Mr. Payer states vaguely that in *about* lat. 79° N. there was open water extending from 40° to 42° E., or about twenty miles, and again in 70° E., in the early part of the autumn; and that this water abounded in whales. This fact is merely a confirmation of a long series of observations in the sea between Spitzbergen and Novaya Zemlia, by Dutch and subsequent navigators. The Polar pack, in this part of the Arctic Seas, has usually been found in 76° during the navigating season; but in unusual years, when the heavier fields have not drifted down during the summer, vessels have, towards the end of the season, found open water as far north as 82°. On May 23, 1806, Scoresby observed his lat. in 81° 12′ 42″ N. In 1707 Captain Gillis reached the parallel of 81°; and Captains Snobbigger and Ryk-ys found indications of extensive open water midway between Spitzbergen and Novaya Zemlia, in a subsequent year. This is simply because the heavy Polar pack had not drifted south as usual, while the looser floes had been cleared away by the unusual prevalence of particular winds. Mr. Payer has hit upon a similar year. The old Dutch whalers called these years "*south ice years*," because the ice had drifted much farther south, in smaller and flatter floes, after breaking away from the great Polar pack; and thus left open water much farther to the north. In such years the whalers steered to the east, instead of going up the west coast of Spitzbergen. The whales seen by Mr. Payer are a sign of the near proximity of ice; and the fact that these whales come down from the north, towards the end of the season, is a proof that there is not sufficient open water round the Pole, in the late autumn and winter, for them to breathe in.

All this has been well known for centuries. The Polar pack is usually met with, in the navigating season, between Spitzbergen and Novaya Zemlia, in 75° or 76°. Hudson reached it in 75° 29′, and Wood in 75° 59′. In very unusual years it is not encountered until the 82nd parallel is reached. But no discovery worth recording will have been made until either the Polar pack has been passed, or the open sea that vivid imaginations have put in its place has been sailed over. We know the minimum width of this Polar pack; for in 1827 Parry travelled over the loose packs for 92 miles, and at his extreme point a strong ice blink was seen on the northern horizon with a yellow tinge, denoting the field ice. Here we have a certain width of 100 miles at least, possibly many more. This Polar ice is in fields often 30 miles wide by 100 long, and 15 to 50 feet thick. An exploring steamer, reaching the pack in autumn, must bore through it, if she can, and then she will be beset; for young ice is formed during nine months of the year in latitude 78°. Mr. Payer now knows well enough, what "eminent geographers" never will understand, that young ice, forming in October, will very soon stop even a screw steamer, and is by no means to be despised.

This is not the route for useful Polar exploration.

A writer in the *Spectator* of November 11 repeats the fallacies of the "wide immeasurable ocean" to which "Wrangel gave the name of *Polynia*," and of Morton's "swell of a boundless ocean" in Kennedy Channel. *Polynia* is merely the Russian name for a water hole in the ice, and was in vogue long before Wrangel's time. That explorer found the ice to be rotten at a distance of about 100 miles from the Siberian coast, and on two occasions open water covered with floating ice was seen in the offing. Hedenstrom and Anjou also saw open water to the north of New Siberia in March. But these phenomena were merely the results of local currents in a very shallow sea. The "boundless ocean" in Kennedy Channel was a water hole, or *polynia*, caused by the same influences. It rests on the evidence of a single witness, Dr. Kane's steward, and Dr. Hayes found the same locality to be entirely frozen over when he visited it! It is disheartening to find writers repeating these exploded fallacies, and indulging in speculations which were considered inexcusable even in the days of credulous old Moxon.

Theorists have done incalculable injury to the cause of Arctic research. The way to explore the unknown Polar Region has been pointed out by Captain Sherard Osborn, whose views are shared, not only by McClintock and other experienced English Arctic officers, but by Captain Koldewey, the accomplished and intrepid leader of the German expeditions. That officer, as soon as he had acquired actual experience in the ice, was convinced that the practical Osborn was right, and that the theoretical Petermann was wrong. This deplorable groping about the edge of the Polar pack, with announcements of "boundless oceans" every time a water hole is reached, is mere waste of money and labour. Two well equipped gunboats up Smith Sound, with officers instructed by men like Osborn, McClintock, or Koldewey, would explore all the Greenland coasts, reach the North Pole, and settle most of these Arctic problems in one season, while every department of science would receive benefit from the results of such an expedition.

C. R. Markham.

Scientific Notes.

Physiology.

Respiration of Fish.—In his valuable lectures, now in course of publication in the *Revue scientifique*, M. Gréhaut points out several interesting peculiarities in the respiration of fishes. In the first place, as was to some extent shown by MM. Humboldt and Provençal, fishes are able to live in water until almost the whole of the oxygen it contains in a state of solution has been used up. M. Gréhaut fully corroborates these statements. In one experiment he placed five goldfish, weighing 78 grammes, in a flask containing 1102 grammes of water, at a temperature of 17°·5 Cent. A litre of this water was found to contain 7 c. c. of oxygen, 15·4 c. c. of nitrogen, and 34·6 of carbonic acid. At the expiration of two hours and a quarter, the animals being asphyxiated, an examination of the water showed that the proportions of the gases had altered to the following:—oxygen, 0·0; nitrogen, 15·6; carbonic acid, 48·7: in other words, the nitrogen remaining almost unaltered, the oxygen had altogether disappeared, and double its amount of carbonic acid had been added to the fluid. Another curious point was that fish breathe by their skin as well as by their gills, nearly as great a change in the composition of the gases contained in the water being observed when the animals were suspended up to their branchiæ as when the whole body was immersed. Lastly, it was found that the presence or absence of the swimming bladder had little effect on the products of respiration.

Anatomy of the Brain.—A very elaborate account of the anatomy of the brain appears in the recently published part of Stricker's *Manual of Histology*, now in course of translation by Mr. Henry Power for the New Sydenham Society; and a paper by the same author appears in the *Wien. Akad. Sitzungsberichte*, Band lx. Abtheilung 2, on the central projection of the special senses. The former is too difficult and complicated for any *résumé* to be given of it, but in the latter he points out:—1. That the central projection-area of the auditory labyrinth is represented by the walls of the Sylvian fissure, whither he has been able to trace a fasciculus from the nuclei of origin of the auditory nerve. 2. The central projection of the eye he considers to exist in the cortical

substance of the occipital and of the temporal lobes, since he has been able to demonstrate the presence of connecting fibres passing to these regions from the nuclei of origin of the optic tract. 3. The central projection-area of the skin is effected by the parts of the cortex of the cerebrum investing the occipital and temporal lobes. It is noteworthy that both the sensory roots of the spinal cord and the tracts which represent the sensory nerves of the head possess a direct origin from the cortex of the cerebrum without intervention of the cerebral ganglia. 4. The central projection of the organ of smell, the medullary fibres of the olfactory lobe, is connected with the medulla of the anterior commission, as Malacarue and others have shown, and this not only in mammals but in man. The anterior commissure conducts fibres connecting the two cerebral lobes, as well as the two olfactory lobes, and may therefore be regarded as an olfactory commissure. The medullary fibres which this commissure sends to the cortex run to the same regions of the cerebral cortex (namely, to the temporal and occipital lobes) as the central radiations of the vesical organs and skin.

Circumstances influencing the Size of the Red Blood Corpuscles.—Dr. Manassein, of St. Petersburg, has been led to make an interesting series of experiments on the effects of various conditions on the red corpuscles of the blood, from considering that every influence which occasions a great alteration in any of the functions of the body must necessarily alter the physical and chemical relations of its component parts. He found that nearly all circumstances that increased the temperature of the body caused diminution of the size of the corpuscles. Thus septicæmia, or poisoning an animal by the injection of putrid matter into its vessels, which produces a febrile state, with increased animal heat; exposure of the body to a high temperature; keeping the animal in a room surcharged with carbonic acid—all cause diminution in the size of the red corpuscles: whilst breathing oxygen, exposure of the whole body to cold, the administration of hydrochlorate of quinine, cyanic acid, and alcohol, all of which tend to lower the temperature of the body, produced enlargement or expansion of the corpuscles. Muriate of morphia constituted an exception, for though producing depression of temperature, it causes diminution of the size of the corpuscles, which is probably explicable on the view that it exerts an inhibitory influence on the respiratory acts, and therefore leads to the accumulation of carbonic acid in the blood. Lastly, acute anæmia causes dilatation of the blood corpuscles. (See *Centralblatt*, No. 44, 1871.)

Geology and Geography.

A Glacial Epoch at the Equator.—Mr. James Orton, of Poughkeepsie, N. Y., contributes a paper to the *Annals and Magazine of Natural History* for November, in which he combats Prof. Agassiz' theory of a glacial epoch in the valley of the Amazon. His objections fall under four heads. In the first place, he considers positive proof is wanting where the most unquestionable evidence is requisite, in that all traces of glacial erosion, present in other countries in the form of furrows, striæ, or polished surfaces, are here entirely absent. Secondly, Prof. Agassiz' theory rests mainly on his assumption that Tertiary deposits have never been observed in any part of the Amazonian basin, no fossils of any description having been encountered in the vast clay beds skirting the great river previous to Mr. Orton's expedition across the continent in the year 1867. In this excursion, however, the banks of the Upper Amazon proved to be highly fossiliferous, yielding abundant examples of the Tertiary genera *Turbonilla*, *Neritina*, *Meraria*, *Tellina*, and *Pachydon;* a list further augmented in the year 1870 by the English collector, Mr. Hauxwell, who added to the above representatives of the genera *Isæa*, *Siris*, *Ebora*, *Hemisinus*, *Dyris*, and *Bulimus*. The whole series is in a most beautiful state of preservation, the epidermis in many instances remaining intact; the valves of the *Pachydons*, in particular, are seldom separated, and very rarely broken. Thirdly, Mr. Orton questions the possibility of glacial formation at the equator, where there is such little variation of temperature, the oscillation from summer heat to winter cold in the northern latitudes giving rise to that periodical partial liquefaction of the surface on which all glacial phenomena are dependent. Lastly, the writer considers the theory of a continental glacier at the equator, involving the simultaneous glaciation of the surface of the whole earth as entirely opposed to all known biological and hydrological laws.

A Pachypodous Reptile.—In an article on *Acanthopholis platypus*, published in the *Annals and Magazine of Natural History*, Mr. H. G. Seely, F.G.S., speculates further on the affinities of this remarkable Dinosaur, indicated by the characters of the metatarsal bones. According to this author, the possession of five massive well-developed metatarsal ossicles, instead of only four, and perhaps a rudimentary fifth, as in *Hypsilophodon*, *Scelidosaurus*, and other genera of the order, invests this animal with a new interest, and would seem to point out a bond of affinity with *Elephas* and allied pachypodous Mammalia. Among recent Reptilia, this foot structure approaches most closely that of the Crocodilia and Chelonia, and more especially that of the Emydidæ among the latter. According to the same author, the characters afforded by the caudal vertebræ indicate also a close approximation to the mammalian type. *Acanthopholus horridus*, the type species of the genus, instituted by Prof. Huxley, was described from remains discovered in the chalk-marl of Folkestone. *A. platypus*, the species first introduced by Mr. Seely, is derived from the Cambridge Upper Greensand.

Cretaceous Foraminifera.—The Foraminifera of the chalk of Gravesend and Meudon, published by Dr. Chr. G. Ehrenberg in his *Mikrogeologie*, form the subject of a review by Messrs. T. R. Jones and W. K. Parker in the *Geological Magazine* for November. While testifying to the accuracy and artistic success of Dr. Ehrenberg's plates, these authorities avail themselves of the opportunity of correcting the nomenclature adopted in accordance with the system more recently accepted.

The Recurrence of Glacial Phenomena during Great Continental Epochs.—In *Nature* for November 23rd, Prof. A. C. Ramsay publishes a paper in which he recurs to his theory, already published, that in the North of Europe, and some other parts of the world, a great Continental epoch prevailed between the close of the Upper Silurian times and the end of the Trias or commencement of the deposition of the Rhætic beds; in other words, that the Old Red Sandstone, Carboniferous strata, Permian beds, and New Red series, were chiefly formed under terrestrial conditions, all, with the exception of the Carboniferous series, in great lakes and inland seas, salt or fresh. The Permian strata in particular appear to have been deposited under conditions to which the salt lakes in the great area of inland drainage of Central Asia afford the nearest modern parallel. The glaciers of the Grampians, at that time much higher than they are now, Prof. Ramsay believes marked an episode in Old Red Sandstone times, and yielded much of the material of the boulder beds of the Old Red Sandstone. In these regions, and in North America, the Carboniferous strata were evidently formed under the influence of a warm, equable, and moist climate, and there do not appear to be any glacial phenomena in connection with this epoch. But respecting Permian times there is evidence of ice-borne boulder beds, marking another glacial episode occupying part of Permian time, just as our last great glacial epoch formed an episode in those late Tertiary times of which the present time forms a part. During the Triassic period there is no certain sign of glacial phenomena in the British area. Prof. Ramsay is of opinion that at the present time there is an intimate connection between past glacial phenomena and the occurrence of lakes, large and small, many of which are true rock-bound basins; and thinks that this cause would be found to characterize ancient Continental recurrent glacial epochs through all past time, if perfect data were accessible or had been preserved from destruction by denudation and disturbance of strata.

Classification of Fossil Crustacea.—In the *Geological Magazine* for November, Mr. Henry Woodward, F.G.S., publishes a report of the committee, consisting of himself, Dr. Duncan, and Prof. Etheridge, appointed to prosecute investigations into the structure and classification of the fossil Crustacea. During the past year the author has published figures and descriptions of 21 species, 18 of which owe their introduction to the scientific world to himself. The majority of these belong to the Phyllopodous order of the Crustacea; the remainder being referable to various groups of the Podopthalmia, Edriopthalmia, and Merostomata. The extensive chronological range of the Iropodous group is one of the most important facts elicited by recent investigations, *Prearcturus gigas* (H. Woodward), from the Old Red Sandstone of Rowlestone, Herefordshire, presenting characters which show it to be very closely allied to the existing type *Arcturus Baffinsii*. Mr. Billing's views that the whole of the Trilobita should be referred to this same order are favourably commented upon in the same paper.

An Extraordinary Crinoid.—The diagnosis of Prof. Hall's remarkable fossil genus *Lichinocrinus* is revised by Mr. F. B. Meek in *Silliman's American Journal* for October, 1871, the following being the characters it possesses in accordance with his more recent observations. Bodies discoidal, or depressed plano-convex, growing attached to shells, corals, trilobites, and other marine objects, entirely destitute of arms or pinnulæ, ambulacral openings, or pectinated rhombs; free surface concave in the central region, composed of numerous small, non-imbricating, polygonal plates without definite arrangement; mesial depression provided with a long, slender, perforated, flexible, column-like appendage, composed of five longitudinal series of short, alternately interlocking pieces; attached side exhibiting no openings or sutures, but occasionally, regularly arranged, radiating striæ, corresponding to radiating lamellæ which occupy the whole of the internal cavity. The entire absence of free or recumbent arms or pinnules, as well as of the most minute ambulacral or other opening, save in the minute perforation of the slender column-like appendage, renders this type the most anomalous of all the representatives of its class.

Lofoden Islands.—In the November number of *Fraser's Magazine*, Mr. Edmund W. Gosse, whilst pointing out the Lofoden Islands as a fresh field of summer recreation and adventure, draws a charming picture of their fantastic peaks, crags, and glaciers, in the wonderful colouring of the arctic landscape in midnight and midday. The paper has also a geographical interest, since Mr. Gosse has been at consider-

able pains during his tour to obtain the accurate native names of the chief summits of the islands: names which are not to be found in ordinary maps. Many, if not all, of the names given may however be seen on Norwegian maps, such as that by Carl B. Roosen, published at Christiania in 1862, on a scale of about 20 miles to an inch; and in a short time the Norwegian government survey maps, begun in 1869, on the scale of $\frac{1}{100000}$ of nature, which is already complete for the northern portion of the country, may be expected to be at the service of any one who, diverging from the ordinary southward stream, seeks the desolate grandeur of the coastlands in the north.

Chemistry.

Meteoric Iron from Greenland.—At a meeting of the Geological Society, held 8th November, a letter from the embassy at Copenhagen, transmitted by Earl Granville, was read, announcing that a Swedish scientific expedition, which had just returned from the coast of Greenland, had brought to Europe some masses of meteoric iron of vast size, the largest weighing 25 tons. During the discussion which followed, Mr. Forbes, who had recently returned from Stockholm, stated that these masses were first discovered last year by the Swedish Arctic Expedition, which at the time brought back some masses of considerable size. The expedition of this year, however, succeeded in collecting more than twenty additional specimens, the largest weighing more than 49,000 Swedish pounds, and having a maximum sectional area of about 42 square feet. It is placed in the hall of the Royal Academy at Stockholm. The second largest, weighing 20,000 lbs., has been presented to the Museum of Copenhagen, as a compliment to Denmark, on whose territory the masses were found. They contain nearly 5 per cent. of nickel, and from 1 to 2 per cent. of carbon, and are quite identical in chemical composition with many irons of known meteoric origin. When etched, they exhibit the usual markings that characterize meteoric iron. These masses were discovered on the shore, between the ebb and flow of the tide, and lying on basalt, probably of Miocene age, in which they appear to have been originally imbedded. Fragments of similar metal are met with in the basalt; and the rock itself contains minute particles of iron identical in composition with that of the large masses themselves, while some of the latter enclose fragments of the basalt. As they differ in their chemical and mineral characters from iron of terrestrial origin, and are identical in this respect with undoubted meteoric iron, it is assumed that they are members of a shower which fell in the fluid basalt during an eruption in the Miocene period. On their arrival at Stockholm, they were found to oxidize and crumble away with great rapidity, and all attempts to prevent decay has as yet been unsuccessful. There is a specimen of this remarkable find in the British Museum.

Synthesis of Mellitic Acid.—In his report of the 44th *Versammlung deutscher Naturforscher und Aerzte*, which was held at Rostock in September, Prof. Victor Meyer gives (*Ber. der Deut. Chem. Gesell. zu Berlin*, 1871, No. 14, 801) a brief outline of the important discovery by Prof. Schulze, of the above university, of a method of artificially forming this acid by the direct oxidation of carbon by permanganic acid in an alkaline solution. Various forms of carbon—such as charcoal, which had been heated in a current of chlorine, that produced when tartar is charred, that resulting from the decomposition of carbonic acid by phosphorus, and graphite also—when oxidized in this manner gave, in addition to a plentiful amount of oxalic acid and some other acids not yet investigated, one which the author first termed anthraconic acid, as he found it to closely resemble in its reactions mellitic acid, and to accord with it in composition. The free acid and the salts of lead and calcium were analysed. As however the behaviour of the new body with nascent hydrogen appeared at first sight to render its identity with mellitic acid doubtful, the author continued the enquiry in association with Prof. Baeyer, whose researches in this field are well known, and Dr. Carstanjen; and these chemists soon succeeded in establishing the identity beyond question. It gave the very characteristic euchrone reaction. The ammonium salt, which both in its habit and sparing solubility resembled mellitate of ammonia, was converted by heat into euchronic acid, the watery solution of which struck a dark blue on the addition of zinc. To remove all possibility of doubt, some of the acid was distilled with soda-lime, and benzol obtained; this was further converted into aniline, and the latter identified by its colour reactions. A fuller study of this remarkable oxidation may materially contribute to our knowledge of the constitution of the carbon molecule, and throw light on the mode of formation of the beautiful mineral in which mellitic acid occurs.

Separation of Nickel from Copper by Electrolysis.—In the *American Chemist*, October, 1871, 136, Dr. J. M. Merrick gives a very simple and elegant method of separating those metals for analytical purposes. If to a solution of the mixed sulphates of nickel and copper a few drops of sulphuric acid be added, the whole of the copper may be removed by depositing it on platinum by means of a battery; and if the remaining solution be then rendered alkaline with ammonia, the whole of the nickel may be "plated out" in the same way. The author gives in detail the results of a number of determinations which were quite satisfactory. In throwing down the latter metal the platinum wire or plate, forming the anode, becomes blackened at the commencement with what is probably a deposit of peroxide of nickel. When the process is nearly finished, this black deposit begins to disappear, and vanishes as soon as the decomposition is complete.

Pucherite.—This new mineral, a rhombic anhydrous bismuth vanadiate, derives its name from the locality where it has recently been met with, the Pucher Mine at Schneeberg, which so far back as the year 1700 was worked for bismuth. It was in opening up the old mine during a recent search for ores of this metal that the new vanadiate was found by A. Frenzel (*Journal für praktische Chemie*, 1871, 227). It occurs by no means unfrequently, and associated with bismuth ochre. The crystals are very small, one gramme of pucherite being in one case obtained from two pounds of ochre. As yet it has only been found crystallised. It has a reddish-brown or brownish-red colour, is somewhat translucent, and has a lustre superior to that of glass, and inferior to that of diamond. It possesses the hardness of fluorspar, a specific gravity = 5·91, and the following percentage composition:—

		Bi_2O_3, VO_5
Bismuth oxide . . .	73·16	71·49
Vanadic acid . . .	27·19	28·51
	100·35	100·00

The Shergotty Meteorite.—A chemical investigation of this stone, which fell at 9 A.M. on the 25th August, 1865, at Shergotty, in India, has been recently made in Vienna by E. Lumpe; and the results are given in the first part of *Mineralogische Mittheilungen*, a new journal of mineralogy, edited by Prof. Tschermak, and forming a supplement to the *Jahrbuch der k. k. geol. Reichsanstalt*. This meteorite is composed almost exclusively of silicates, only a trace of native iron and a very small amount of sulphur having been detected. Its composition is:—

Silica	50·21
Alumina	5·90
Iron protoxide	21·85
Magnesia	10·00
Lime	10·41
Soda	1·28
Potash	0·57
	100·22

These results show that the Shergotty stone belongs to the class which includes the meteorites of Stannern, Juvenas, and Jonzac. The mineral characters have been studied by Prof. Tschermak, who finds this stone differ from all meteorites previously examined, in being made up of an angitic mineral and a colourless silicate crystallising in the cubic system. The latter constituent is to receive a fuller investigation. It is shown by Prof. Tschermak that the stone analysed at Göttingen, in 1868, by Dr. F. Crook, and held by him to be the meteorite of Shergotty, is a specimen of another fall.

A New Class of Platinum Compounds.—By conducting a mixture of chlorine and carbonic oxide over platinum black at a temperature of 300° to 400°, P. Schützenberger (*Journal für prakt. Chemie*, 1871, 159) has observed that the metal becomes readily corroded, and compounds are formed that sublime and condense on the cooler parts of the tube. They form a mass of bright yellow needles, or a yellow crust with crystalline structure, which is made up of products of the union of CO and Pt and Cl in which the amounts of platinum and chlorine are as 197 (Pt) to 71 (Cl_2). He has isolated carbonylchlorplatinide, $COPtCl_2$; dicarbonylchloroplatinide, $C_2O_2PtCl_2$; and sesquicarbonylchloroplatinide, $C_3O_3Pt_2Cl_4$. He moreover obtained, by evaporating a solution of platinum chloride in alcohol over sulphuric acid, a compound of the form $PtCl_4, 2C_2H_6O$, a reddish yellow deliquescent crystalline body that commences to decompose at 50°.

Methylation of the Phenyl Group in Aniline.—In a paper bearing this title in the *Ber. der Deut. Chem. Gesellsch. zu Berlin*, 1871, No. 13, 742, Drs. Hofmann and Martius report the results of the continued action of methylic alcohol on aniline hydrochlorate. The reaction takes place at from 280° to 300°, the hydrogen of the ammonia fragment being first replaced by methyl in the following manner:

$$\left.\begin{matrix}CH_3\\H\\H\end{matrix}\right\}N,HCl + \left.\begin{matrix}CH_3\\H\end{matrix}\right\}O = \left.\begin{matrix}C_6H_5\\CH_3\\H\end{matrix}\right\}N,HCl + \left.\begin{matrix}H\\H\end{matrix}\right\}O$$

$$\left.\begin{matrix}CH_3\\CH_3\\H\end{matrix}\right\}N,HCl + \left.\begin{matrix}CH_3\\H\end{matrix}\right\}O = \left.\begin{matrix}C_6H_5\\CH_3\\CH_3\end{matrix}\right\}N,HCl + \left.\begin{matrix}H\\H\end{matrix}\right\}O$$

The methylation of the phenyl then commences:

$$\left.\begin{matrix}C_6H_5\\CH_3\\CH_3\end{matrix}\right\}N,HCl + \left.\begin{matrix}CH_3\\H\end{matrix}\right\}O = \left.\begin{matrix}C_6H_4(CH_3)\\CH_3\\CH_3\end{matrix}\right\}N,HCl + \left.\begin{matrix}H\\H\end{matrix}\right\}O$$

$$\left.\begin{matrix}C_6H_4(CH_3)\\CH_3\\CH_3\end{matrix}\right\}N,HCl + \left.\begin{matrix}CH_3\\H\end{matrix}\right\}O = \left.\begin{matrix}C_6H_3(CH_3)_2\\CH_3\\CH_3\end{matrix}\right\}N,HCl + \left.\begin{matrix}H\\H\end{matrix}\right\}O$$

They have not yet succeeded in producing the base containing the pentamethylated phenyl group, but have formed compounds corresponding to those whose formulæ are given above from toluidine, xylidine, cumidine, and cymidine.

Atomic Weights of Nickel and Cobalt.—These numbers have recently been determined anew in America by R. H. Lee (*Ber. der Deut. Chem. Gesellsch.* 1871, No. 14, 789). Cobalticyanides of strychnia and brucia were prepared in a state of great purity, and weighed quantities of them ignited; the carbon burnt off in air and oxygen, and the metal reduced in hydrogen. The mean of eighteen determinations gave the number 59·10. An analysis of the double cyanides of nickel and each of these alkaloids, repeated twelve times, gave the number 58·01 for the latter metal.

Melolonthine.—This new organic compound contains both nitrogen and sulphur, and is a crystallisable constituent of the *Melolontha vulgaris*, in which it occurs together with leucine, sarkine, salts of uric acid, oxalate of lime, and possibly some xanthine. To prepare it, P. Schreiner (*Ber. der Deut. Chem. Gesellsch.* 1871, No. 14, 763) caused a watery extract of the crushed insects to coagulate, and precipitated the filtrate with lead acetate; the filtrate from this again gave on evaporation, beside a deposit of leucine, crystals of melolonthine. It has the formula $C_5H_{12}N_2SO_3$, and differs from cystine by one molecule of acetamide, and from taurine by one molecule of propionitrile.

New Books.

Berce, M. E. Faune entomologique française. Lépidoptères. 4me vol. Hétérocères nocturnes. 2me et dernière partie. Paris: Deyrolle.

Bischof, G. Lehrbuch der chemischen u. physikalischen Geologie. Supplement-Band. Bonn: Marcus.

Burmeister, G. Anales del Museo publico de Buenos Aires. Entrega octava. Buenos Aires: Imprenta de La Tribuna. Paris: Savy.

De Ferry, H. Le Mâconnais préhistorique. Mémoire sur les âges primitifs de la Pierre, du Bronze et du Fer en Mâconnais et dans quelques contrées limitrophes. Ouvrage posthume. Avec notes, additions et appendice par A. Arcelin, accompagné d'un supplément anthropologique par le Dr. Pruner-Bey. Mâcon: Durand. Paris: Reinwald.

Garnier, Jules. Les migrations humaines en Océanie d'après les faits naturelles. Paris: Bertrand.

Hansen, P. A. Untersuchung d. Weges eines Lichtstrahls durch eine beliebige Anzahl v. brechenden sphärischen Oberflächen. Leipzig: Hirzel.

Phillips, J. The Geology of Oxford and the Thames Valley. Macmillan and Co.

Pourtalès, Count. Illustrated Catalogue of the Museum of Comparative Zoology at Harvard College. No. 4: Deep-sea Corals. Cambridge (Mass.): University Press.

Siebold, C. Th. E. von. Beiträge zur Parthenogenesis der Arthropoden. Leipzig: Engelmann.

History.

Fontes Iuris Romani Antiqui edidit Carolus Georgius Bruns. Editio altera aucta emendata. Tubingae MDCCCLXXI in libraria Lauppiana.

The first edition of this work appeared eleven years ago. The words on the title page, "quos in usum praelectionum edidit," are now changed into a simple "edidit," and the author has also omitted the motto taken from three passages in Justinian, which formerly served as an exact description of his book: "ut nihil antiquitatis ignoretur—*τῶν ἔμπροσθεν νομοθετησάντων γνώμας ἐκ τοῦ πλήθους τῶν βιβλίων ἐπὶ ἔμμετρόν τε ἅμα καὶ εὐσύνοπτον συνηγάγομεν ἄθροισμα*,—ut vilissima pecunia facilis earum comparatio pateat tam ditioribus quam tenuioribus." The present edition, much enlarged and improved, still only costs four shillings; but the book has also, as the alterations in it show, established itself as something more than a help to students following the author's lectures, and will be found very serviceable by all who are seriously interested in the history and antiquities of Roman law, without having access to original sources, and by jurists and philologists in want of a convenient and trustworthy book of reference. The subject is divided, as in the first edition, into three parts: I. Leges; II. Negotia; III. Scriptores; but the treatment is more comprehensive, and the first part in particular now includes both the fragments of the so-called *leges regiae* and the Twelve Tables, and all the other laws which have been preserved by inscriptions or ancient writers in the original words; it includes, too, all the Senatus consulta relating to legal matters, but the Praetorian edicts are left unnoticed, so that for them Rudorff's meritorious work has to be referred to. Similarly, in the second part, all inscriptions of a business or mercantile character are admitted, down to the third century after Christ, the limit assigned by the editor to his collection. As in the former edition, in the third part the professional law writers are left out, as well as the more generally known and accessible authorities. Some appropriate additions to the number of selected authors and selected passages give us extracts of juristic interest from Festus, Varro *de lingua Latina* and *de re rustica*, Cato *de re rustica*, Nonius Marcellus, the Scholiasts on Cicero, Terence, Horace, and Virgil, the *Origines* of Isidore of Seville, and the *Agrimensores*. For educational and purely academical purposes the book has gained rather than lost by its additional completeness and regard for the higher claims of science, and the mode of treatment has improved even more than in proportion. In the first edition this was, from the philological point of view, that of a mere *dilettante:* the author sprang arbitrarily from one passage of the ancient writers to another; he omitted and transposed without warning; the choice of readings did not always rest on the best texts or on uniform principles; in the extracts from Festus, the passages of Festus himself and his epitomist Paulus, who lived in the Carlovingian period, are inextricably confused; and besides all this numerous misprints disfigured the text, especially in the Greek passages and their accentuation;* no such defects mar the present edition. Taken in connection with Huschke's *Iurisprudentia Antejustiniana*, or Gneist's rather less extensive *Institutionum et regularum juris Romani syntagma*, the work before us is now well suited for young jurists and philologists, who in their studies of Roman law and antiquities will find it supply the place of all the usual classical authorities save and except Justinian; and even his *Institutes* are given in Gneist's work.

Martin Hertz.

Historical Essays. By Edward A. Freeman, M.A. Macmillan.

Like all Mr. Freeman's writings, the review articles collected in the present volume irresistibly bring to mind Goethe's conception of the historian, in contrast with the poet, as the athlete of literature. That special power over a subject which conscientious and patient research only can achieve, a strong grasp of facts, a true mastery over detail, with a clear and manly style—all these qualities join to make the historian of the Conquest conspicuous in the intellectual arena. His opening essay treats the difficult subject of the mythical and legendary side of history with much acuteness and with unusual power of welding together the varied instances brought forward to uphold the argument. But skilfully as this is presented, it will by no means lead to unconditional acceptance of the writer's conclusions. The most that can be said for them amounts to this: should future research bring fresh evidence to light, that evidence may, and probably will, confirm a happy historical conjecture, but in cases where such confirmation cannot be hoped for the true explanation of myth and legend—those unfailing concomitants to the early history of nations—will always remain as far off as ever. The article on "The Relations between the Crowns of England and Scotland" brings out the writer's well-known predilections. He frankly states

* Cf. *Jahrbücher f. klass. Philologie*, vol. lxxxiii. pp. 214, *sqq.*

that the relations between the two crowns during the tenth and eleventh centuries did not make Scotland a fief of England, and that the feudal dependence of Lothian upon the English crown, after that territory became Scotch, can only be conjectured; but he lays undue stress on what is only a more or less probable hypothesis, the imperial position of our Old-English kings in relation to the states of Britain and also upon the high personal character of Edward I. It seems to us that the whole history of Edward's dealings with Scotland exactly illustrates the hopeless confusion between right and wrong, between truth and falsehood, which constantly offers itself in the middle ages. But amid that confusion one great fact, noticed page 71, is always visible, a fact so significant that, in reviewing the struggle, it should be kept steadily before the mind. While the Scottish nobles—a set of men whom Norman connections and hopes of subsequent profit had made unpatriotic and servile—were ready to accept Edward's claims, the strong after resistance to those claims was an impulse and a movement of the whole nation. The spirit in which Mr. Freeman approaches this episode of English history may be fairly contrasted with the tone of an article—one of his very best—upon Charles the Bold, where the case between the duke and the Swiss confederacy has been stated with judicial fairness. One leading tendency of this book, to exalt the personal character of some favourite hero, is nowhere more marked than in the essay devoted to the Emperor Frederick II. That he was intellectually above his own age, nobody will care to deny, but is not admiration carried too far when it sets the splendid mediæval freethinker above every future age of the world, and proclaims him as the greatest genius who ever wore a crown? (p. 286). Perhaps it may be said that with all his large-mindedness, with all his high and brilliant qualities, Barbarossa's grandson just stopped short of genius. For by Mr. Freeman's own showing (p. 288) his was a mind without originality of design, without power of independent action, incapable of unwearied and lifelong devotion to one great object: in short, utterly wanting in those very qualities which set the seal of genius upon character. But if Frederick's character be somewhat too highly rated, on the other hand the thoughtful analysis of that of Thomas à Becket commands attention, not only for its display of critical power, but also as illustrating the position of mind of a champion of modern thought towards a great ecclesiastical champion in the middle ages. The essayist's opinion of Becket's asceticism, as a thing artificial, forced, and overstrained, can by no means be said to apply to a more secular quality of his own. On the contrary, the full honesty and naturalness of Mr. Freeman's partisanship of certain individuals and certain races bars close criticism of it; the more so as his bias seems too purely subjective in its kind to mislead others. For the reader quickly finds out that he must not expect impartial sympathies in a writer whose mind, Teutonic through all its inborn tendencies and qualities, has furthermore been naturalised, so to speak, in the great German school of historical criticism. Mr. Freeman's views upon the relations between the rising kingdom of France and the rising empire of Germany are thoroughly matured, and may be perfectly just, yet, that question apart, it strikes us that any man who takes the trouble to compare them with the treatment of that subject by able French writers may gather for his pains some insight into the readiness with which the events of mediæval history lend themselves to widely divergent lines of argument, and to the development of entirely opposite conclusions; and also some observation of the fact that what may be called psychological patriotism can, like the patriotism of nationality, give its strong and special colouring to the issues of those events. The last article of the series, that on presidential government, written in 1864, indicates the difficulty of removing an obnoxious or incapable president. Since the date of its appearance, the parliamentary struggle in the United States between 1865 and 1869 has set that difficulty at rest. It showed that the president's authority can be set aside by the joint action of both branches of congress without violation of constitutional law and without hindrance to the due course of legislative business. George Waring.

Memorials and Times of Peter P. J. Quint Ondaatje. By Mrs. C. M. Davies. Published under the auspices of the Historical Society of Utrecht. Utrecht, 1870.

The Historical Society of Utrecht has done good service in publishing *The Memorials and Times of Peter Quint Ondaatje*, a Dutch statesman whose restless and eventful life covers the whole of that disastrous period in the history of his country which extends from the first rising against the Stadtholder in 1787 to the general peace in 1815. The author, Mrs. C. M. Davies, the daughter of an English diplomatist, devoted much time to the study of Dutch archives. She afterwards published an able and exhaustive history of Holland in 1844, and was engaged upon another historical work at the time of her death in 1863. The present publication is a further result of her researches, which has hitherto remained in manuscript, and the Utrecht Society has shown discernment and sound judgment in selecting it to form one of their series.

The sudden fall of the United Provinces from a position of the first importance among the nations of Europe was not caused by any decay either in the virtues of their citizens, the steady bravery of their soldiers, or the enterprise of their merchants. In the days of their adversity the Provinces showed that these qualities were possessed by their sons in as large a measure as when they defied the power of Spain and swept the narrow seas. The selfish policy and the marriages of the Orange family appear to have given rise to complications which led to foreign interference; and subsequent invasions finally reduced Holland to the position of a mere dependency of Napoleon's overgrown empire. At least this is the impression which is left by a perusal of the memoirs of Ondaatje. The patriots, among whom was the subject of this biography, who first rose against the Stadtholder's government in 1787, did not seek for violent democratic changes, but merely demanded a restitution of the ancient rights and privileges of the people, in their integrity. The action of these men is condemned, by those who are wise after the event, as having given rise to a Prussian, and then to English, French, and Russian invasions; but it seems hard that the criminal ambition of foreign powers should find any excuse from the alleged imprudence of native patriots, whose motives have never been impugned.

Ondaatje was born at Colombo, and was descended from a family long settled in Ceylon. He was educated at Leyden and Utrecht, and was soon conspicuous among the first of those who were inspired, by the results of the wars between England and her colonies, with ideas of liberty and popular government. He is remarkable as the only East Indian who has ever taken a leading part in European politics; and it is not a little curious that, at the same time and in the same country, a South American should also have been a prominent actor. General Miranda commanded a division of the army in which Ondaatje served as a volunteer.

The first fruition of the ideas produced in Europe by

the American revolution was in the United Provinces. "Holland," says Mrs. Davies, "was as it were the pilot boat sent forward by Europe, ere she ventured forth on the stormy waves of revolution." The ardent and impetuous temperament of young Ondaatje seems to have hurried the usually cautious burghers of Utrecht into revolutionary measures fully two years before the States-General met at Versailles. But the rising hopes of the patriots were crushed by an invading Prussian army, and Ondaatje became an exile. Burning with hatred of the invaders, he joined the army of Dumouriez as a volunteer, and returned to his country in the ranks of the French republicans. As soon as the Batavian Republic was proclaimed, we find him serving in the ministry of war, working with untiring zeal to equip that fleet which was nobly lost off Camperdown. He afterwards became a director of the Dutch East India Company, and solicitor to the marine, and he continued in office, even during the usurpation of Louis Bonaparte. But the Dutch East Indian, with his passionate love of country, and his aspirations after liberty, must have passed these latter years in bitter disappointment. The bright hopes with which he had commenced his political career twenty years before had been cruelly dispelled. Absolute dependence on a selfish foreign despot was all that had come of his resistance to the rule of the Stadtholder, which at least was national. His country had been overwhelmed with a succession of disasters, and Ceylon, his native island, the home of his youth, had been ceded to strangers, and never more could be a Dutchman's home. With the general peace of 1814 a Prince of Orange was joyfully welcomed as a deliverer, and Ondaatje felt that his career in Europe was closed. Disappointed in the hopes of republican liberty which had gilded the dream of his youthful enthusiasm, beholding his country deprived of her freedom, of her independence, and her commerce, and sacrificed to the caprices of a foreign tyrant, he at length learned to estimate the value even of an Orange government, which, whatever its defects, was at least national. But he saw that the new constitution must be worked by new men. He solicited a civil appointment in the East Indies, and died in Java on the 30th of April, 1818.

The memoir relates the career of a gifted and patriotic statesman, who lived during the most instructive period in the history of the Netherlands. His life comprises the story of that stormy and disastrous epoch during which Holland passed from the old-world rule of the Stadtholders, through a long agony of revolutions and invasions, to her present constitutional monarchy. C. R. Markham.

THE STUART MONUMENT AT ST. PETER'S IN ROME.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—The Marchesa Campana's valuable work on the last Stuarts contains (vol. i. pp. 123, 124) the commonly received statement that it was George IV. who erected to the Chevalier de St. George and his two sons, *Regiae stirpis Stuardiae postumis*, the monument in St. Peter's—a statement repeated in Mr. Boase's review of the Marchesa's work in *Academy* (vol. ii. p. 502). The fact is that four years ago I showed in the *Augsburger Allgemeine Zeitung*, 1867, No. 75 (*vide* review of the Marchesa Campana's volumes, *ib.* 1871, Nos. 218, 219), that it was not the British king who paid the last honours to the last descendants of an unfortunate race, but Monsignor Angelo Cesarini, bishop of Milevi, Cardinal York's friend and executor (fiduciary heir), whom I have had an opportunity of mentioning in the *Memoirs of the Countess of Albany* (Berlin, 1861). I have read the contract, existing in Rome, between Monsignor Cesarini and the sculptor Canova, who, it appears, renounced all emolument beyond the restitution of his expenses. Perhaps it may interest English readers to know that a remarkably fine portrait of Cardinal York, painted by Mengs' rival, Pompeo Batoni, is or lately was on sale at Naples, whilst the Musée Fabre at Montpellier contains a very good portrait of the "Duchess of Albany," viz. Lady Charlotte Stuart, Charles Edward's daughter by Clementina Walkinshaw, who was born at Liège, 1753, and died at Bologna in Prince Lambertini's house on the 17th of November, 1789.

A. de Reumont.

Bonn, November 19, 1871.

Intelligence.

Lettres assyriologiques sur l'histoire et les antiquités de l'Asie antérieure, vol. i., par F. Lenormant (Paris: Maisonneuve), contains three letters, one on Median geography and history, one on Armenia, and a third on the kings of Babylonia and Assyria. The first letter gives much interesting geographical information: Ellibi is identified with Mount Elvend. In the second, M. Lenormant attempts the decipherment of the Armenian inscriptions, and compares the language of them with Georgian. Considerable historical matter is also brought together. M. Lenormant seems, however, to give too much weight to the conjectural affinities of proper names; it must be remembered that the Assyrians were not careful to reproduce the exact pronunciation of foreign words, and that nothing is so liable to change its original form as a proper name.

Mr. G. Smith has published a pamphlet *On the Chronology of the Reign of Sennacherib*, with remarks on some other dates in connection with Assyrian and Babylonian history—valuable from the writer's complete suspension of judgment as to a chronological system, and from the careful summary of monumental evidence.

Herr Vivenot, in continuation of his researches in the archives of Vienna, is about to publish the private correspondence of Thugut.

Contents of the Journals.

Von Sybel's Historische Zeitschrift, vol. xxvi. part 4, contains an article by Dümmler on Liudprand of Cremona, pointing out his sources, and making some corrections. The poetry in him does not come from popular ballads, but is, as so often, the historian's own composition.—Nasse describes the financial and ministerial crisis of 1810 in Prussia, and Hardenberg's plans of finance. Every plan failed, owing to the dreadful pressure put by Napoleon on the resources of the country. The merit of the minister lay in those plans of internal reform which prepared a better future for Prussia.—Hartwig's Napoleon III. and Italy during the time of preparation for the war of independence (1850–58) is an endeavour to estimate fairly the part played by the emperor and Cavour respectively in these great events. Napoleon is estimated more highly than he has usually been of late.—Wattenbach discusses the genuineness of Ligurinus, an epic on the conquest of Milan (the chief city of "Liguria") by Barbarossa, written in 1187, and much doubted since its publication at Augsburg in 1507. The evidence on the whole is in its favour.—H. Stern reviews the political poetry of England during the First Revolution (1640–60), considered not in itself, but rather as a means of illustrating the history, and runs through the leading periods from this point of view.—A set of shorter notices illustrates the period of Frederic the Great and Maria Theresa; and several of the publications of our Rolls series are reviewed, Sir F. Madden's Matthew Paris, Luard's Annales Monastici, and Dimock's Giraldus Cambrensis.

Theologisches Literaturblatt (Rom. Cath.) has a much more favourable review of Lecky, by Dittrich, than that in the *Centralblatt* (see below), though the author cannot agree with Lecky's view that the Catholic church has hindered rather than helped a true moral advance.—Kraus reviews the arguments which show that the red liquid in the "ampullae" of the catacombs is not blood (it used to be assumed that these vessels were proofs of martyrdom), and maintains that *some* few of the ampullae did probably contain blood.—A. von Reumont reviews Dümmler's Gesta Berengarii imperatoris, which contains new material for the history, literary as well as political, of Italy at the beginning of the tenth century.—Stichart's book on the relation of Erasmus to the Church is praised, but a want of strict chronological method criticized.—A notice of Reifferscheid's Examination of the Italian libraries (for the benefit of the new Vienna edition of the Latin fathers) points out that he has printed a revised copy (made by himself) of the Muratorian fragment, and some unedited Epistles of St. Augustine.

Revue des Deux Mondes, Nov. 15.—Amédée Thierry describes the Council of Ephesus in 431, considered as an episode of Roman history in the fifth century, and as illustrating personal character at that time.—An article on Isocrates tries to estimate his place in Athenian history, and the influence of his rhetorical eloquence on the men of real genius who used him as a model in some respects—Plato and Demosthenes.—An article follows on a very important subject, the theory by which

large properties are to pay a much higher proportion of the taxes than small ones.

Revue des Questions Historiques, July 1, describes the battles round Orleans in the late war; the quarrel of Louis XIV. with Pope Alexander VII. about an insult offered to his ambassador at Rome; the various national flags adopted by France (the "white flag" of the Count of Chambord only comes in with Henri Quatre); the papers of Cardinal Gualteris in the British Museum; the provincial estates of Saintonge in 1788; the life of Aymar Ranconnet the jurist (whom Pithou classed among the four greatest men of the sixteenth century); and the diplomacy of Venice.—The usual summaries of German and English literature follow.

Bullettino dell' Instituto di Corr. Arch., October, contains an account of the excavations which the government is making in the Basilia Julia, and of some new frescoes found at Pompeii (the description is not yet finished), and of an inscription found in Algeria containing the name D. Fonteius Frontinianus, the legate of Numidia, in command of the III legio Augusta, a name already well known in inscriptions.

Literarisches Centralblatt, Oct. 28, reviews Vivenot's Account of the Rastadt Congress unfavourably; the book fails to put the conduct of Austria and her minister Thugut in a better light than the usual account.—Nov. 4 contains a valuable notice of Lecky's History of Morals in Europe, blaming severely the merely insular point of view of the author, the want of acquaintance with German sources of information (the French Mr. Lecky has read), and the many inaccuracies, but giving considerable praise to some parts of the work and some of the points of view.—Lehmann's account of Gervinus, the historian and politician, is noticed with commendation.—Tobler's Le dis dou vrai aniel (the oldest known instance of the Parable of the Three Rings) is reviewed and some remarks made on the dialect, which seems to be Northern and to date from the time of Robert II. of Artois, between 1270 and 1294.—Nov. 18 reviews Dahn's Die Könige der Germanen, vol. vi., which contains the history of the West Goths, and especially those of Spain. Their rapid absorption in the Roman population is contrasted with the way in which the Franks kept up a close connection with the German fatherland, and the economic results of the destruction of the small free holdings by the royal nobles described. The book is most important for the early history of Spain.—Nov. 25 reviews Prutz' Frederick I., vol. i. (1152-65), favourably, but with some corrections in detail.—Otto Mejer's Zur Geschichte der römisch-deutschen Frage, vol. i., is an excellent work by the well-known canonist; it gives all the later concordats down to the Congress of Vienna, and throws much light on a period of church history not so well known as it ought to be.—The German edition of Bunsen's life is analysed with special reference to the conduct of Prussia in the Schleswig-Holstein question.—Wattenbach's Das Schriftwesen im Mittelalter receives well-deserved praise.—Lingen's Causae Selectae in S. Congregatione Cardinalium Concilii Tridentini interpretum propositae per summaria precum ab anno 1823 usque ad annum 1869 is pointed out as an interesting work; dispensations, parish difficulties, discipline of the clergy, these are the kinds of subjects to which the work refers.

Göttingische Gel. Anz. Nov. 1.—Bresslau praises von Bülow's dissertation on Gero, Bishop of Halberstadt (1160-1176), as a good specimen of critical enquiry into original documents; it relates to the period of Barbarossa's rule.—A. Stern has a more interesting notice of Baumann's book on the Peasant War of 1525 in Upper Swabia, and the nature of the peasants' demands as set forth in "the twelve articles."—Nov. 8 contains a notice of Dümmler's admirably edited Gesta Berengarii (written by a Veronese poet, about 916) discusses its historical value, and adds to the evidence as to the use made of classical authors.—Oesterley shows that the famous collection of stories called Gesta Romanorum, which dates from the fourteenth century, was probably compiled in England.—In the *Nachrichten* of the same date, Waitz shows that the Modena MS. of Sicard of Cremona really contains a later chronicle, compiled at Reggio, and embodying large portions of Sicard, as well as other matter.

New Books.

Archiv f. schweizerische Geschichte. Vol. XVII. Zürich: Höhr.

Arosemena, J. Constituciones politicas de la America meridional, reunidas i comentadas. 2 vols. Havre.

Baumgarten, Herm. Geschichte Spaniens vom Ausbruch der französ. Revolution bis auf unsere Tage. Vol. III. Leipzig: Hirzel.

Besant, W., and Palmer, E. H. Jerusalem the City of Herod and Saladin. Bentley.

Döllinger. Fables respecting the Popes of the Middle Ages. Translated by A. Plummer. Rivingtons.

Emler, Jos. Reliquiae tabularum terrae regni Bohemiae anno MDXLI igne consumptarum. Tom. I. Vol. V. Prag: Grégr.

Hirsch, Ferd. Das Herzogthum Benevent bis zum Untergange d. longobardischen Reiches. Ein Beitrag zur Geschichte Unteritaliens im Mittelalter. Leipzig: Hirzel.

Fontes rerum Austriacarum. 2. Abth. Diplomataria et acta. Vol. XXXV. Wien: Gerold's Sohn. (= Codex diplomaticus Austriaco-Frisingensis.)

Kriegk, G. L. Geschichte von Frankfurt am Main. Frankfurt: Heyder.

Michelet, J. Histoire de France. Nouvelle édition, revue et augmentée. Tom. I. Paris: Librairie Internationale: Lacroix et Cie.

Murault, Ed. de. Essai de Chronographie byzantine, 1057-1453. Tome I. Bâle: Georg.

Oesterley, Herm. Gesta Romanorum, Fasc. I. Berlin: Weidmann.

Oncken, W. E. authentische Erzählung v. der Zerstörung der Stadt Worms durch die Franzosen im J. 1689. (Aus "Zeitschrift f. Geschichte d. Oberrheins.") Karlsruhe: Braun.

Peyrat, N. Histoire des Albigeois. Les Albigeois et l'inquisition. Tom. II. Paris, Brussels, &c.: Lacroix, Verboeckhoven et Cie.

Ranke, Leopold von. Die deutschen Mächte u. der Fürstenbund (1780-1790). Vol. II. Leipzig: Duncker.

Sickel, Th. Zur Geschichte d. Concils v. Trient. Actenstücke aus österreich. Archiven hrsg. 2. Abth. 1561, Sept.-1563, März. Wien: Gerold.

Stahr, Adolf. Kleine Schriften. 1. Band: Biographisches. Berlin: Guttentag.

Trau, Frz. Neue Fälschungen römischer Münzen. Mit 4 Taf. in Kpfrst. Wien: Braumüller.

Wilken, E. Geschichte der geistlichen Spiele in Deutschland. Göttingen: Vandenhoeck.

Ynca Garcilasso de la Vega. First part of the Royal Commentaries of the Yncas. Translated and edited, with Notes and an Introduction, by Clements R. Markham. 2 vols. (containing books i.-ix.). London: printed for the Hakluyt Society.

Zoepfell, R. Die Papstwahlen vom 11. bis zum 14. Jahrhundert. Göttingen: Vandenhoeck.

Philology.

A History of the Modern Greek Language. By Constantine N. Sathas. [Ἱστορία τοῦ ζητήματος τῆς νεοελληνικῆς γλώσσης. Κ. Ν. Σάθα Νεοελληνικῆς Φιλολογίας παράρτημα. Ἐν Ἀθήναις, ἐκ τῆς τυπογραφίας τῶν τέκνων Ἀνδρέου Κορομηλᾶ.] 1870.

The author of the present valuable history of the formation and development of the modern Greek language, Constantine N. Sathas, is well known to the students both of the language and history of medieval and modern Greece for his various important contributions to the literature of these subjects, especially his biographies of learned Greeks from the capture of Constantinople to the outbreak of the revolution (Νεοελληνικὴ Φιλολογία, Athens, 1868); his history of the various revolts of the Greeks while under Turkish dominion (Τουρκοκρατουμένη Ἑλλάς, ἱστορικὸν δοκίμιον περὶ τῶν πρὸς ἀποτίναξιν τοῦ Ὀθωμανικοῦ ζυγοῦ ἐπαναστάσεων τοῦ ἑλληνικοῦ ἔθνους, Athens, 1869), and two volumes of Ἀνέκδοτα (περισυναχθέντα καὶ ἐκδιδόμενα κατ' ἔγκρισιν τῆς Βουλῆς ἐθνικῇ δαπάνῃ, *ibid.* 1867). The work now before us (in 338 pages) is in reality a kind of introduction to the Νεοελληνικὴ Φιλολογία; and these two works by Mr. Sathas, together with Mr. Matthew C. Paranikas' Σχεδίασμα περὶ τῆς ἐν τῷ ἑλληνικῷ ἔθνει καταστάσεως τῶν γραμμάτων (Constantinople, ἐκ τοῦ τυπογραφείου Ἀ. Κορομηλᾶ, 1867), may be said to exhaust the subject in all its bearings.

The attention of the Greeks was at an early time turned to their popular language; and, in fact, soon after the downfall of the Byzantine Empire, it became absolutely necessary to broach the question whether it would be wise to continue the employment of ancient Greek in literary composition of higher pretensions, or adopt the language of the nation. The Church, whose practice was intimately connected with the traditions of the Byzantine Empire, at first obstinately clung to the ancient tongue;

but Greek scholars, who lived abroad and were more free from prejudices, soon came to understand that the sole hope of a regeneration of Greece rested on raising the standard of education in the country at large, and that this could only be done by developing and cultivating the popular language. But as this was not yet reduced to fixed rules, Nicolaus Sophianos drew up a grammar of the modern language—a scholar well-versed in the ancient language, who was so zealous to spread knowledge in Greece that he even founded a press at Venice, which was to issue books for the use of his countrymen. The first book of his Γραμματικὴ Εἰσαγωγὴ (the accidence) was only recently edited by Mr. E. Legrand (Paris, 1870): in the epilogue, addressed to the youth of Greece, we read the memorable words (p. 79):—"Knowledge is acquired, not only by means of ancient Greek, but by any other language employed by mankind, even though it were the most barbarous of the world; how much more by our own speech in common use, which is endowed with such order, harmony, and beauty, that, as I believe, no other comes near it." And, again, in the Latin dedication of his work to the Cardinal John of Lorraine, the author says—"*dum hanc nostram, quam vocant vulgarem, linguam cum illa antiquorum confero Platonis etc., reperi multis in rebus hanc nostram vetere illa minime inferiorem esse.*" But as late as 1769 another Greek scholar, Eugenius Bulgaris, maintained that the modern language was not fit for learned works, and its cause had again to be maintained by a precursor of Koraës, Ἰώσηπος Μοισιόδαξ: see the present work, p. 151.

Long and difficult was the struggle of the modern language against the ancient idiom; and it seems as if the Greeks had been forced from abroad to employ their native speech. It was certainly a German, Martin Crusius, professor at Tübingen, whose enquiries excited a kind of sleepy interest in the modern language among the clergy at Constantinople, and scanty enough was the information they forwarded to him; nay, in receiving it, the German professor is warned by one of his correspondents to beware of the modern words, lest he should spoil his Greek style: μὴ ἔσο πολλῶν γλωσσῶν συζητητὴς ἵνα μὴ βαρβαρίσῃς (Sathas, p. 32). Not long afterwards, in the first half of the seventeenth century, the attention of European scholars was drawn to the modern language, partly by the study of Byzantine literature, partly by the attempts of the Roman Church to make proselytes in Greece. We have in that time the glossaries of Porcius, Vlachos, Meursius, and Ducange—the last, even now, an indispensable work for the study of medieval Greek. The Propaganda employed a number of writers, among whom the learned Leo Allatius claims the first place: Mr. Sathas gives numerous extracts from works of this kind, without speaking very favourably of their style. Yet it was due to the necessity in which the Greek clergy now found themselves to counteract the influence of these publications by works written in the popular idiom, that about this time we meet with the first prose compositions by Agapios Landos of Crete (Νεοελλ. Φιλ. p. 318), and soon afterwards the first preacher of eminence who made use of the modern idiom appears in Elias Meniates (1669-1714: see Νεοελλ. Φιλ. pp. 394-397: ὁ τὴν ἁπλουστέραν δημοτικὴν εἰς τὴν Δημοσθενικὴν ἀνυψώσας εὐφράδειαν, in the present work, p. 71, where extensive specimens of his style are given). After the modern idiom had once proved capable of expressing the deepest feelings of the human heart, as well as the most abstract speculations of a philosophical mind, the current set in decidedly in favour of the modern language. It is true that precisely the eighteenth century produced again a number of writers who employed the ancient language with considerable skill and dexterity (we may here content ourselves with mentioning Alexander Mavrokordatos and Eugenius Bulgaris), but this was due to the great increase of general culture, and the rapidly multiplying number of schools and colleges throughout the country, and to the desire of imitating the style of those great writers whom the Greeks now studied with absorbing zeal. Really wise and practical men saw that it was necessary to adopt the living speech of the nation in preference to the dead language of the ancient Greeks, but at the same time opinions began to differ as to the mode of writing modern Greek. Poetical composition had always been alive in the modern idiom; and such works as the Βοσκοποῦλα, Ἐρωφίλη, and Ἐρωτόκριτος, owe much of their charm to the dialect in which they are written. Many writers thought it actually possible to adopt a similar style in prose, but this was clearly impracticable. What would have been the result? Every writer would have written in his native dialect, there would have been an endless diversity of style and grammar, and hopeless confusion would have effaced the last trace of regularity in the language. Had things been allowed to go on in the way proposed by Christopulos, Catartzis, Philippides, and Vilaras, wise men would at last in despair have given up prose-composition in the modern language, and would have preferred to follow the settled grammar of the ancient language. The true method of writing the modern language was first pointed out by Ἰώσηπος Μοισιόδαξ, whose work, Θεωρία τῆς γεωγραφίας (Venice, 1781), may be considered the first specimen of a correct and pleasing style; and the extracts given by Mr. Sathas, pp. 151-154, show that this was the example followed by A. Koraës, whose first work (Κατήχησις Πλάτωνος) appeared at Leipzig in 1782: see Sathas, p. 236. The system of Koraës consisted in the adoption of a style which was in conformity with the modern mode of thought, and in which the grammatical peculiarities of the modern idiom were carefully observed, while, at the same time, the grammar and dictionary of ancient Greek were cautiously used to enrich and emend the corrupted speech of the modern Greeks, foreign words and constructions being, of course, carefully avoided. Koraës' Prolegomena to his editions of Aelianus, Heliodorus, Isocrates, and Plutarch, ingeniously defended and illustrated his method of writing Greek; and in spite of the opposition made to him by Κοδρικᾶς and Νεόφυτος Δούκας, Koraës had the satisfaction to see his method adopted by the nation at large on the foundation of the Greek kingdom.

Mr. Sathas' work contains numerous specimens of the style of the most important writers, and elaborately enters into the vehement quarrels between the Κοραισταί and Κοδρικισταί. We lack space to follow him there, but invite our readers to turn to his work, which, we promise them, will amply repay the time devoted to its perusal. We should have been glad if Mr. Sathas had added a few words on the present state of the language—but perhaps he has thought it wise to abstain from approaching a wasps' nest. It would have been interesting to see that even now-a-days the state of the language is far from settled, and that opinions still disagree as to the proper mode of writing it. In poetry we should be sorry indeed to lose the native gracefulness of the popular idiom; and such poets as Βαλαωρίτης and Julios Typaldos do their best to keep it alive. But in prose most writers indulge in a "Macaronic" style; and altogether it seems that the adoption of ancient constructions and expressions is now carried too far.

In an appendix, Mr. Sathas gives a curious dialogue on Greek pronunciation by Alexander Helladius (Ἑλλάδιος), a Greek scholar at the beginning of the eighteenth century, in which we meet with some interesting notices on the

English pronunciation of Greek: pp. 334 seqq. Yet Helladius' own style is far from correct; and his qualifications as a scholar may appear from the fact that he quotes a nominative *μούση* as an Ionic form (p. 326). His dialogue is, moreover, carelessly printed (even more so than one would expect it in a book printed in Greece); and in p. 328 it even happens that the words *ὁ δὲ κόραξ, ὡς ἀηδὲς πτηνὸν καὶ ἄλλως ἄχρηστον*, are printed as a hexameter, in spite of their being unpretentious prose.

In p. 30, Mr. Sathas justly queries the reading of a passage taken from Crusius' *Turcograecia*: *πάντες δὲ οἱ Ἕλληνες συνεννοοῦνται μεταξύ των, ἐκτὸς τῶν Ἰώνων χυδαϊστὶ Τσακώνων λεγομένων*—but it is evident that honest Martin Crusius merely misread his correspondent's crammed handwriting, and that we should emend *Λακώνων*: cf. p. 232, *ἡ τῶν Λακώνων ἦν καὶ ἁπλῶς Τζακωνίτικην ὀνομάζομεν.* W. Wagner.

Callimachea edidit Otto Schneider. Vol. I. Hymni cum Scholiis veteribus ad Codicum fidem recensiti et emendati, Epigrammata recognita, Excursus additi. Leipzig: Teubner, 1870.

In the year 1423, the Sicilian John Aurispa, who had been studying Greek in Constantinople, returned to Venice with 238 Greek MSS. One of these was Callimachus. In 1427, Franciscus Philelphus, a friend of Aurispa, and like him a student of Greek at Constantinople, brought another great collection of MSS. also including Callimachus. In both cases Callimachus is spoken of in conjunction with the Orphic *Argonautica* and *Hymns*; and M. Schneider conjectures that the three works, perhaps also Pindar and the Homeric hymns, were included in one codex written at Constantinople. This MS. he believes to have been transcribed by Aurispa and Philelphus separately; and from these two copies spring the two classes of existing MSS. of Callimachus which are not copied from the earliest printed editions, and are therefore of independent value. The two classes differ from each other in one respect: the first is uncorrected, reproduces the original even in its obivous errors, and marks even the shorter lacunae by leaving a space; in the second palpable mistakes are tacitly corrected, and only the greater lacunae are left. The former we may trace to the copy of Aurispa, a man of business habits, and a careful scribe rather than a scholar; the latter to that of Philelphus, a scholar, and less likely to follow slavishly when the text he was copying was transparently wrong. That both classes are derived from one source is demonstrable by the close agreement of their greater corruptions; while, on the other hand, a computation based on the intervals between these corrupt places makes it probable that the original contained twenty-three lines in a page. This original or archetype M. Schneider considers to have been written in the eleventh century, a conclusion based mainly on its resemblance to the Venetian codex *B* of the *Iliad* in regarding *δὲ*, when elided and preceded by an oxytone word, as enclitic; thus, *σέ δ', τεαί δ', μεσαμβριναί δ'. προχανά δ'.*

The first edition was that of John Lascaris, 1494. It seems to have been based on not more than one MS., and that a poor one; yet it was followed, and generally, when altered, spoilt rather than improved, by the subsequent editors up to 1555. H. Stephanus in his *Poetae Graeci*, 1566, used a new but interpolated MS.; and this text was generally adopted by subsequent editors, including Anna Fabri, the future Madame Dacier, till the middle of the eighteenth century. Even then matters did not much improve; for Ernesti, whose edition appeared in 1769, though employing several MSS. uncollated before, was not always accurate in his collations, and, on the whole, adhered closely to Stephanus still. It is much to be regretted that so able a scholar as Blomfield should have contented himself with a mere recension of Ernesti's text; yet the compactness of his edition—containing as it does in one octavo volume, besides the Hymns and Epigrams, the Fragments, some of them till then unedited, with the complete notes of Bentley, and a judicious selection from other commentaries—will always make it a valuable and useful book. In 1861 the Hymns and Epigrams were edited by Meineke, with the help of two new MSS.—one at Paris, the other at Vienna; enough to show the way, not enough to place the constitution of the text on a secure footing. This M. Schneider has at last effected; and we are now, for the first time, able to distinguish the true from the false—the genuine hand of the poet from the interpolations of the fifteenth century.

M. Schneider follows the same plan which he adopted in his *Nicandrea*. The Hymns, with an extensive yet clear apparatus of twenty-one MSS., are followed by the Epigrams, with the various readings of the Palatine and Planudean Anthologies; these by the Scholia on the Hymns; last comes a copious Commentary. As a commentator M. Schneider is sometimes prolix; in particular, he is over-fond of quoting inferior authors like Nonnus, Christodorus, &c. Yet in illustrating the peculiarities in construction and language of a writer who produced so marked an effect upon literature as Callimachus, prolixity is sometimes an actual merit; and this book is full of dissertations, which are not only interesting in themselves, for their completeness and care, but valuable to every student of Alexandrian literature. Such, for instance, are the notes on *-αις* or *-ῃς* of dat. plural, p. 184; on Doric forms, p. 339; on short final diphthongs, p. 191; on the meaning of *μᾶλα*, in the line addressed to Demeter (Δ. Καλ. 137), *φέρβε βόας· φέρε μᾶλα, φέρε στάχυν*; on the vexed question as to the meaning of the *αἴλωρος τὰν ἔτρεμε θηρία μικκά* (*ib.* 111), M. Schneider will be glad to be referred to a more recent paper than those he alludes to, by a well-known *savant*, Prof. Rolleston (*Journal of Anatomy and Physiology* for November, 1867, and May, 1868).

In reference to the explanation and alteration of the text, M. Schneider is not always happy. Thus, in i. 86, *περιπρὸ γὰρ εὐρὺ βέβηκεν*, which Cobet rightly explains of the long stride of the far-ruling Ptolemy, is changed to *εὐθὺ*, "from the moment of his accession." In ii. 14, *πολιήν τε κερεῖσθαι* is changed to *κυρεῖσθαι*, "attains to hoar hairs," on grounds which appear minutely wrong. *Ib.* 20, *κινύρεται αἴλινα μήτηρ*, it is hard to see why Callimachus should be thought to imitate Aesch. *Ag.* 117 rather than Soph. *Aj.* 627; double *αἴλινον* is found in both, but in Sophocles is *distinctly* the cry of a parent for a child—apparently its proper use: cf. Ovid's *Ailinon in silvis idem pater ailinon altis Dicitur inuita concinuisse lyra* (*Am.* iii. 9, 23). *Ib.* 110, *Δηοῖ δ' οὐκ ἀπὸ πάντος ὕδωρ φορέουσι μέλισσαι*, accepted by all editors before, is not improved by reading *ὕδευς*. Even when M. Schneider is palæographically ingenious, he fails to convince; nothing can well be nearer *ἀσύλωτοι* (iii. 213) than *ἀσαύλωτοι*, but the notion of *σαῦλος σαυλοῦσθαι* is rather that of an affected conceited gait than of mere softness or effeminacy, and it may be doubted whether so delicate a writer as Callimachus would have applied it merely in the sense of "unsoftened" to the *shoulders* of the first mythical huntresses. The same may be said of iii. 253, *οἵ ῥα παρ' αὐτὸν Κεκλιμένοι ναίουσι βοὸς πόρον Ἰναχώνης*, where the probability that Callimachus had in view the Homeric *κεκλιμένοι* as exhibited in the passages collected in the notes, combines with the indeterminateness of the expression in itself, to justify its retention against even so slight a change as *κεκριμένοι*. In the well-known passage, Δημ. Κ. 129-134, M. Schneider makes two alterations, *Αἴτινες ἢ ἐξήκοντα κατώτεραι* for

ἑξήκοντα, and καὶ ὥς ποτὶ ἱρὸν ἵκωνται for καὶ ὡς. The former is un-Greek in its inversion, and based on the doubtful assumption that the meaning is "less than sixty years old," where the more natural signification is that given by the Scholia, "sixty years or older;" while the latter, which is interpreted *etiamsi eo usque ad templum venissent*, an interpretation surely impossible, introduces a Dorism at least of doubtful legitimacy, and rendered still more improbable in combination with the accented ὥς, standing as this does habitually with the simple καί. Nor can it be said that if we adopt the natural view and translate, "To them Deo shall give all things in abundance, yea that they may reach the temple," we necessarily imply that this will happen in subsequent years only; and that Callimachus would have been sure to express this. It is enough if we suppose him to mean that if, in spite of their infirmity of body, they accompany the procession as far and as well as they can, they will receive from the goddess all they can reasonably want, even to the extent of perhaps reaching the temple—which we may suppose is regarded as a sort of crowning achievement, like crawling to the top of the steps of cathedrals—a task still performed by old women in some Catholic countries.

In the Epigrams, ἀλγέω τὴν διὰ πάντος (xxxiv. 2) is poorly replaced by ἀλγέω δὴν; in xlii. 5, the MS. reading ουκισυνιφησον cannot be Θεύτιμον δίφησον, in spite of the well-known Latin imitation; it is more likely to be simply Εὐξίθεον δ.: cf. xxxii. 5; in xlvii. 7, 8, where the MSS. read Ἔσθ' ἁμῖν χἄκαστάς (χἄχαστὰς?) ἀφειδέα πρὸς τὸν ἔρωτα· τουτιπαικειρευ τὰ πτερὰ, παιδάριον, M. Schneider's ἧς χἁμῖν καστᾶσιν is hardly an improvement on Ruhnken's and Peirson's Ἔσθ' ἁμῖν κἀκεστὶς, or Haupt's Ἔσθ' ἡμῖν χἄκαστα σάφ' ἥδεα, though none of these is really convincing. Schneider's alteration of Haupt's τουτεῖ, παῖ, κείρω into τουτεῖ ναὶ κείρευ, does not much mend matters; the apparatus suggests as a possibility τοῦτ' ἴσα καὶ κείρει τὰ πτερὰ παιδάριον, "This is as much as clipping your wings, boy." In lix. 2, ἐπ' αἰγιαλοὺς may be right, "lying stretched over the beach"; in lx. 4, M. Schneider's correction, ἀλλαι χ' ἓν δρᾶμ' ἐδίδαξε into ἀλλ' αἰχμᾶν δρᾶμ' ἐδίκαξε, is ingenious, which cannot be said of τὼς for τοὺς in the last line. May not τοὺς πολλοὺς be "the many who once called themselves my Pylades"? In the first Epigram to the passages quoted in the apparatus in reference to τὴν κατὰ σαυτὸν ἔλα should be added one in an anonymous commentary on the fifth book of the Nicomachean Ethics, recently examined by Mr. Bywater, and published in the *Hermes*, v. p. 356; in vi. 9, 10, the meaning would seem to be, "and that the egg of the watery halcyon might no longer be brought forth in my chambers as it used before, for I am breezeless, and therefore the natural resort of birds who love to breed like halcyons in a calm receptacle."

R. Ellis.

Intelligence.

A *Dictionary of Modern Arabic* has been published in two volumes by Mr. F. W. Newman; it appears to be a companion to the same author's *Handbook of Modern Arabic*, with which the undersigned is not acquainted. Judging however from the first-mentioned work alone, he cannot approve of the method adopted in these works. A beginner who is frightened by the alphabet (see preface, p. vii) would do better to give up the study at once than resort to the works of Mr. Newman; for he will find in them such a portentous method of transcription, partly borrowed from the most various sources, partly made up of brand-new characters (pp. xi-xiv), that the pains wasted in getting it up would be equal to those of learning the alphabet as it stands. But—not to dilate on the consistency or inconsistency of the transcription—the work labours under other and internal imperfections. The author sets himself the task of writing a dictionary of modern Arabic, which shall contain the words current in the actual literary language throughout the region where Arabic is spoken. This is an impossible achievement, the true antithesis being, not between ancient and modern, but between literary and popular Arabic. In proportion to the education of a native will be the number of words he will incorporate in his style from the Kāmoos and Jauhari; in proportion to his want of education will be the amount of popular idiom which involuntarily flows under his pen. Hence it is extremely difficult to make a selection from the classic-Arabic dictionaries; a procedure so arbitrary as that of our author (see his own admissions in the postscript, p. xiv, "Words marked K . . . . . perhaps recoverable") is not allowable. The work might have been improved, had the author consulted more and better authorities, *e.g.* Berggren's excellent *Guide français-arabe vulgaire* (Upsala, 1844), the *Dictionnaire arabe-français* (an authority for Syriac) of the Jesuit P. Cuche (Beirut, 1862). But at any rate the author should have named the sources from which his words are derived much more than he has seen fit to do. The significations too are very often quite inaccurate. Opening the book at haphazard, we found under Educate, خرّج (educere ?), ربّى and هذّب (chastise), side by side without any further explanation. And the beginner, or even the "general (? comparative) philologer" (p. viii), is to make what he can out of this! A splendid prospect for comparative philology, when its *data* are to be gathered merely from lexicons, and from the present work in particular! In addition to this main part of his work, the author presents us with an arrangement (but rather a confused one) of words with cognate meanings, which has more or less that deserves recognition. This is particularly the case in the second volume (the first contains the English-Arabic dictionary), the conclusion of which is formed by a most unpractically arranged Arabic-English dictionary. Here we have some expressions of the vulgar Arabic of various countries, though, as before, the needful references to authorities are wanting. In many cases, however, the vocalisation is inaccurate. The Bagdad dialect has طلى, not طَلَى (vol. ii. p. 93); بُرْغى, p. 97; شَطَب, p. 104; مَكْمَع, p. 33. This new dictionary is therefore, in spite of the industry of its author, as useless for scientific as for practical purposes. In fact, the actual requirements of Arabic lexicography can only be satisfied by special glossaries to single authors, and for distinct dialects.

A. Socin.

Mr. A. Burnell writes from Tanjore, Oct. 31:—"I have been much pleased with the discoveries here, and hope that my *Index of MSS.* will prove acceptable to Sanskritists. I expect it will have to be printed in England. I have already copy enough for 450 pages royal 8vo." Mr. Burnell has examined some of the MSS. of Sāyana's *Commentary on the Rig-Veda in Southern India*, but finds in them the same lacunae as in the three families of MSS. known in Europe.

Mr. Edkins, an accomplished Chinese scholar, has made an ingenious attempt—see *China's Place in Philology* (Trübner)—to prove the common origin of the European and Asiatic languages. One of his chief points is the existence of an older form of pronunciation in Chinese, in which, he thinks, there are traces of a connection between the languages of the east and the west of Asia.

The old Latin-Japanese Lexicon, lately reprinted at the college of the Propaganda, is said by the *Phoenix* to be of little use to beginners of the language, or even to the mass of Japanese, because it contains a large number of purely Chinese terms, which are foreign to the colloquial language, and known only to the Japanese *literati*. We owe this new edition to the Vatican Council, at which the Vicar Apostolic of Japan was present.

The well-known Finnish philologer, Professor Aug. Ahlqvist, has started a new periodical in the Finnish language entitled *Kieletär*. This word denotes the goddess or rather the female genius of language. The publication is especially designed to maintain or rather to form a standard literary language among the Finns, and is very much needed as their language is not only divided into strongly marked dialects none of which has a sufficiently acknowledged superiority over the rest, but has been and still continues subject to the influence of an alien language and literature—the Swedish. Apart from this, its acknowledged literary aim, it will afford a great deal of information interesting to Finnish philologists whether native or foreign. It promises to treat of the history and dialectology of the Finnish. The first number contains an interesting description of the peculiarities of Agricola, the founder of the literary language of Finnland, about the middle of the sixteenth century; a few short articles on grammatical subjects; and a defence of the editor's recent work on the words relating to civilisation in the West Finnish languages (see *Academy*, vol. ii. p. 275).

Dr. Hermann Oesterley's new edition of the *Gesta Romanorum* (first part; Berlin: Weidmann) will no doubt be most welcome to all students of mediæval lore. The first part contains an exhaustive account of the MSS. of the Latin, German, and English versions, and the Latin text down to chapter xxiv. We hope that the editor will find it possible in

the following parts of his work to give us concise and complete notes on the various sources, relations, and imitations of each tale, in very much the same manner as we are accustomed to get such information from the great master of this subject, F. Liebrecht.

Messrs. Teubner have just published a new edition of Professor O. Ribbeck's *Tragicorum latinorum fragmenta*, being the first volume of an entirely new edition of the *Scaenicae Romanorum Poesis fragmenta*. The *Quaestiones Scaenicae* of the first edition are omitted in the second, and will be replaced by a new work in German on the history of the Roman stage.

The same firm has issued the first part of Dr. Bernhard Schmidt's work on the connection of modern Greek customs, beliefs, and superstitions, with ancient Greek life and mythology—the most thorough-going refutation of Fallmerayer's well-known hypothesis on the origin of the present Greek nation which it is possible to conceive, and all the more convincing as the author specially disclaims any intention of impugning Fallmerayer, and merely gives an impartial account of his investigations. We hope that this important work will soon be completed, when we shall notice it in our columns at greater length.

Among the recent publications received from Athens, we are glad to notice the fourth volume of M. K. Paparrhigópulos' Ἱστορία τοῦ ἑλληνικοῦ ἔθνους. The work will be complete in five volumes, and the present instalment carries us down to the establishment of a Latin empire at Constantinople (1204). We shall in a subsequent number devote a separate article to this remarkable work, which is not only a great credit to Greek scholarship of the present day, but also a masterpiece of style and diction.

We have also received a treatise on Isocrates by the late Professor A. Kyprianos, Τὰ Ἀπόρρητα τοῦ Ἰσοκράτους ἢ περὶ λόγων ἐσχηματισμένων, in which a successful attempt is made to vindicate the character of the orator against the somewhat depreciating criticisms of modern scholars. Professor Kyprianós, who died at Athens, July 14, 1869, at the early age of 39, is known as the translator of O. Müller's *History of Greek Literature* (the continuation of which, by Donaldson, has been recently translated by M. Valetta), and as the writer of a clever treatise on the authorship of the *Hellenica*, commonly ascribed to Xenophon.

Messrs. Ebeling and Plahn, at Berlin, have just published the first number of a *Lexicon Homericum*, to be completed in 12 to 15 numbers, and which will be the joint composition of a number of scholars (among whom we may notice such excellent names as A. Eberhard, B. Giseke, La Roche, and Schnorr von Carolsfeld), under the editorship of Dr. H. Ebeling. To judge by the number before us, the work will be an excellent and thoroughly trustworthy guide in the maze of Homeric etymology and interpretation.

The new French Quarterly *Romania*, which we mentioned in our last, proposes to do for the Latin nations what the *Germania* does for the Germanic. The subjects to be treated in it fall under two grand divisions, Languages and Literatures; both, however, confined in point of time, with two exceptions explained below, to the period before the Renaissance and the Reformation. Under the first head will be comprised, studies on the Neo-Latin languages, on the Old Vulgar Latin, and on particular dialects represented by ancient monuments, and lastly, on the language of particular writers. Etymology, exegesis, grammatical and lexicographical researches, &c., especially so far as they may throw light upon modern Neo-Latin, especially French *patois*, will complete this department. The other division of the periodical will aim rather at supplying a store-house of *materials for research*, by the publication of inedited treasures from the Old French literature. Studies on literary history, so far as they make use of original materials, and especially investigations in comparative literature aiming at the elucidation of the *origines*, history, and relations of different literary productions, will invest this department to some extent with the charm of novelty. Under this heading the Anglo-Norman language and literature of England will occupy a considerable place. And lastly, the collection of stories, legends, and popular songs in the Neo-Latin countries, and especially in France—forming, along with the study of the *patois*, the two exceptions to the chronological limit of the Renaissance—will render the *Romania* what it is evidently ambitious of becoming, the leading organ of Modern Philology. We heartily wish it success, and shall make a point of recapitulating its contents regularly in our pages.

Contents of the Journals.

Journal Asiatique, No. 61.—Manuel du lecteur, d'un auteur inconnu, publié d'après un manuscrit venu du Yémen et accompagné de notes (M. J. Derenbourg). This is a summary of Hebrew grammar, compiled from works of Sa'adia, Ibn Djannah and R. Jehuda ben Bal'am, or analogous writings, and the Konteros of Ben Asher. It frequently corrects the current texts of these authors. The Hebrew text is followed by an analysis of each chapter, and critical and explanatory notes. There is also a list of unusual technical terms. The manuscript, which contains this Hebrew grammar, and also a Pentateuch dated 1390, was brought from Yemen by R. Jacob Sappir in 1869, and is now in the Bodleian Library.

Philologus, vol. xxxi. pt. 2.—M. Schmidt: The bar in Greek music.—E. von Leutsch: Verg. Ecl. vi. 64.—B. Todt: Notes on the Antigone of Sophocles.—Th. Bergk: On certain marks in the manuscripts of Plautus. [On the meaning of *canticum* and *diverbium*.]—E. von Leutsch: Horat. Epod. vi.—S. Bugge: Contributions to the criticism of the text of Plautus.—E. von Leutsch: On Solon's Elegies.—H. F. Stobbe: On the Consules Suffecti under the Emperors. [Shows that the change in the duration of the consulate from four months to two took place in the eventful year 69 A.D. The writer alters one passage in Tacitus; but why must all the authorities be forced into agreement?]—E. von Leutsch: Theogn. 1155.56.—H. Fr. Zeyss: Explanations of Greek and Latin words.—E. von Leutsch: On Theognis.—J. H. Heller: On Cæsar's Commentaries. [Remarks on the edition published by Dübner four years ago.]—C. L. Grotefend: On Roman inscriptions with a notary's attestation attached. [Certain copies of inscriptions in the Royal Library at Hanover.]—A. Hug: A manuscript fragment of Curtius Rufus.—D. Detlefsen: Emendations on the Naturalis Historia of Pliny.—Th. Wiedemann: Excursus to the dissertation on the age of the historian Curtius Rufus.—E. Krüger: Φωνῆς πτῶσις ἐπὶ μίαν τάσιν. [On a passage of Aristoxenus.]—Extracts from periodicals and the transactions of learned societies.

New Publications.

Ahlwardt, W. Verzeichniss arabischer Handschriften der k. Bibliothek zu Berlin.

Alterthümer. Die, unserer heidnischen Vorzeit. Nach den in öffentl. u. Privatsammlgn. befindl. Originalien zusammengestellt u. hrsg. v. dem römisch-germ. Centralmuseum in Mainz durch dessen Dir. L. Lindenschmidt. 3. Bd. 1. u. 2. u. Beilage-Hft. Mainz: v. Zabern.

Flügel, Geo. Die Quellen in Plutarchs "Lykurgos." Inaugural-Dissertation. Göttingen: Vandenhoeck und Ruprecht.

Friedlein, Godofr. De Heronis quae feruntur definitionibus. (Ex "Bulletino di Bibliografia e di Storia delle science matematiche e fisiche.") Romae. Berlin: Calvary.

Heike-Monogatari. Récits de l'histoire du Japon au 12me siècle. Traduits du japonais par Franç. Turrettini. Atsume Cusa pour servir à la connaissance de l'extrême orient. Recueil publié par F. Turrettini. 1 Fasc. Basel: Georg.

Ibn Aknîn, Joseph. Einleitung in den Talmud. Ein Theil der Abhandlung üb. Maasse u. Gewichte im Pentateuch u. Talmud von Jos. Ibn A. aus dem Arab. ins Hebr. übersetzt. Nebst Seder Tannaim W'Amoraim. Leipzig: Winter.

Κουμανούδης, Στέφανος' Αθ. Ἀττικῆς επιγραφαί ἐπιτύμβιοι. Athens: Wilberg.

Lange, Lud. Commentationis de legibus Antoniis a Cicerone Phil. V, 4, 10 commemoratis particulae 2. Leipzig: Hinrichs.

Lugebil, Karl. Zur Geschichte der Staatsverfassung v. Athen. Untersuchungen. (Aus "Jahrb. f. class. Philol.") Leipzig: Teubner.

Mayr, Dr. Aurel. Beiträge aus dem Rig-Veda zur Accentuirung d. Verbum finitum. (Aus "Sitzungsber. d. k. Akad. d. Wiss.") Wien: Gerold's Sohn.

Mureti, M. Antonii, Scripta selecta ed. Jos. Frey. Vol. I. Orationes. Praefationes. Leipzig: Teubner.

Philostrati, Flavii, Opera auctiora ed. C. L. Kayser. Accedunt Apollonii epistolae, Eusebius adversus Hieroclem, Philostrati junioris imagines, Callistrati descriptiones. Vol. II. (Schluss.) Leipzig: Teubner.

Pseudo-Callisthenes. Nach der Leidener Handscrift hrsg. v. Heinr. Meusel. (Aus "Jahrb. f. class. Philol.") Leipzig: Teubner.

Rabbinowicz, R. Variae lectiones in Mischnam et in Talmud Babylonicum. Pars IV. Tract. Rosch Haschanah et Joma. Munich: Rosenthal.

Rozsek, Joh. Alex. Ueb. 5 Justinus-Handschriften. Graz: Leuschner and Lubensky.

Rühl, Frz. Die Verbreitung d. Justinus im Mittelalter. Eine literarhistor. Untersuchg. Leipzig: Teubner.

Saratustricae Gatae posteriores tres. Latine vertit, &c., Kossowicz. Leipzig: Brockhaus.

Savelsberg, Dr. J. Lateinische Partikeln auf d. u. m. durch Apokope entstanden. (Aus "Rhein. Museum.") Frankfurt a. M.: Sauerländer.

ERRATUM IN No. 35.

Page 506, col. 2, for *Asár al Báleya* read *Al'âthâr Albaḳiya*, as printed afterwards.

ERRATUM IN No. 36.

Page 519, col. 1, line 49, for "Concordance-text" read "Concordance-test."

Prof. A. Geikie, of Ramsay Lodge, Edinburgh, will be glad to receive from his correspondents the use of any letters which they can permit to form part of the biography of the late Sir R. Murchison which he is preparing. He writes that all care will be taken of the documents, and that they will be returned at the earliest possible date.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, January 1, and advertisements should be sent in by December 27.

NOTICE TO SUBSCRIBERS.

This Number completes the Second Volume of THE ACADEMY: which will be ready by the 1st of January, comprising 26 Numbers, bound in cloth, price 15s. Covers may then be had of the Publishers, price 2s. The Index and Title-page will be published with the next Number, January 1.

General Literature.

The Poetical Works of Thomas Chatterton. 2 vols. London: Bell and Daldy. 1871.

This book consists of an edition of the Rowley poems, together with the acknowledged works of Chatterton, an essay on the former, and a life of the poet. The life is from the pen of Edward Bell; the essay from that of Walter Skeat, who also is responsible for the edition of the poems. The distinctive features of the book, considered as a critical collection of Chatterton's works, are, first, the classification of the acknowledged poems in the order of their dates, and, secondly, the modernisation of the language as well as of the spelling of the Rowley poems. Both of these points are important. The life of Chatterton, after his seventh year, was measured less by years than by months, less by months than by days. Any system of arrangement, therefore, which determines the order in which his compositions were produced is valuable to the student of this brief and meteoric flight of genius. Again, the substitution of the modern English words supplied by Chatterton in the foot-notes to his Rowley poems for the preposterous jargon with which he affected antiquity in the text enables the reader to judge freely of the poetical merit of this portion of his work. To have taken this great liberty with Rowley's text would have been unpardonable had any substantial suspicion existed of its genuineness. But, as Mr. Skeat demonstrates in his essay, no such opinion is now possible. Our improved familiarity with Old English reduces the fact of Chatterton's authorship to a dead certainty. The metres and rhymes are modern; the turns of thought, the sentiments, the metaphors, belong to the age of Pope and of the publication of the *Percy Ballads*; words are wrongly coined from the glossaries of Kersey and of Bailey, whose very misprints (as in the case of the word "cherisaunei" printed for "cherisaunce") are adopted in his ignorance by Chatterton; plagiarisms from modern authors abound; finally, the whole turn and texture of the compositions are, to say the least, post-Spenserian. Indeed, the wonder now is only that the antiquarians of last century were deceived by so shallow an imposition. Stripped of its old verbiage, the *Bristowe Tragedie*, which is one of Chatterton's most perfect compositions, and which he half acknowledged, reads like a ballad by Dr. Percy in the style of the antique, except that it shows more genius and more sympathy with medieval character than any other extant ballad by any poetical imitator. Stripped in the same way, *The Battle of Hastings* reminds us of Pope's *Iliad*; the tragedy of *Ælla* recalls Spenser in part and Rowe in part; the splendid *Ode to Freedom* at the end of *Goddwyn* claims kinship with the finest passages of Collins.

To the biography of Chatterton nothing new can be added. After the labours of the Rowley controversialists, of Gregory and Milles and Sir Herbert Croft, of Cottle and of Southey, of Dix and Davis, all of whom had set themselves to discover every extant scrap of Chattertonian information, and some of whom were over-credulous about the details of a tale so fascinating in its romantic features, there remained nothing but to criticize with more or less acumen and to arrange with more or less literary skill. To this work Professor Masson, Dr. Wilson, and Dr. Maitland applied themselves. Indeed, a graceful or a learned pamphlet on "the marvellous boy" became the fashionable offering of aspirants to literature at the shrine of the Muses. Consequently, Mr. Bell has had before him nothing but the somewhat thankless task of reconstruction and redisposal of materials already used. He has done his work well, except for certain confusions and obscurities of style (particularly noticeable on pp. xiii, xiv, xv), from which a memoir of this sort, where "materiam superat opus," should have been guarded. The best passage in the life is that which sets forth the scope and texture of the Rowley romance. Students of Chatterton may be grateful to Mr. Bell for having so clearly realised and defined the puppets of the antique piece of which the Bristol schoolboy pulled the wires. It is a pity that neither Mr. Skeat nor Mr. Bell has applied minute criticism to the statements published by Sir Herbert Croft and Mr. Dix. Yet some of these are, to say the least, questionable. The *Last Verses*, again, copied from the Boston edition of 1857, are totally unworthy of Chatterton's genius and unsuited to the temper of "the sleepless soul that perished in its pride," and whose bedroom floor was covered with the fragments of destroyed poems. Yet these verses are incorporated without comment, on very insufficient authority (see vol. i. p. 266), into the body of the poet's acknowledged works. Finally, we regret the absence from the book of even such a portrait as that which forms the frontispiece to Dix's *Biography*.

The life of Chatterton, which began in 1752 and ended in 1770—less than eighteen years, spent chiefly in a charity-school at Bristol—presents more points of interest than any other career of equal brevity. Whether we consider his descent from four generations of sextons in the church of St. Mary Redcliff, or his solitary childhood among women, or the rapacity with which in his seventh year he began to devour literature, or the extraordinary gift of divination by which he understood the spirit of medievalism, or the precocity of genius which enabled him to compose the eclogue of *Elinoure and Juga* at the age of twelve, or the facility with which he adapted the same powers to satire, or the mass of antiquarian erudition he absorbed without the advantages of leisure or a library, or the secresy and skill with which he conducted his work of forgery, or the stoical constancy which maintained his incognito till death, or his abstemious habits, or the fertility of imagination displayed in the conception of the Rowley Romance, or the dexterity with which he reproduced the styles of the best authors of the day, or the torrents of miscellaneous literature which he poured forth during the last months of his life in London, or the fierce courage and fiery spirit which supported him unbending at the altitude of pride until he broke suddenly in silence and in secret—we are forced to acknowledge that Chatterton presents a phenomenon in its kind absolutely unique. That all this should have been dared, desired, achieved, and suffered during the ten years of boyhood, when most men are plodding at the desk or sporting in the playground, is indeed a lasting miracle. We do not wonder that Chatterton

should have rivetted the attention of poets like Wordsworth, Shelley, Coleridge, Keats, De Vigny, and have inspired such a picture as that of his death by Wallis. There is something that "fascinates and is intolerable" in the sphinx-like personality of a youth so utterly beyond the ordinary laws of life. No one can come in contact with his pungent genius, his complete and impressive individuality, without sustaining a definite and peculiar shock, without feeling himself surrounded by an atmosphere surcharged with electricity. It is this, combined with his versatility, that in the long run will secure for Chatterton a permanent place among English poets. The originality of his intellect is less remarkable in any special portion of his work than in the impulse which suggested the Rowley poems, and the sympathy for the antique which enabled him to produce them. Allowing for this originality of creative genius, which for its force and firmness is astounding in a child of twelve years old, we find that Chatterton in minor points was subject to the spirit of the age in which he lived, and to the literature he had studied. His *Dirge* in *Ælla* was suggested by Ophelia's song; his ten-lined stanza is an adaptation from Spenser; the influence of the *Percy Reliques* can be traced in the *Ballad of Sir Charles Bawdin*, that of Collins in the *Ode to Freedom*, that of Gray in the *Elegy* on Philips. Chatterton's satirical style reminds us of Churchill; his political letters are modelled upon Junius; his African eclogues are suggested by the Oriental eclogues of Collins. Indeed it is singular to find such intense individuality of taste as that which prompted him in the middle of the eighteenth century to revive the spirit of the fourteenth, combined with so much susceptibility to the literary fashions of the day. The same poetical genius which impelled him to create Rowley in an age when Walpole was plastering Strawberry Hill with pseudo-Gothic, and by a bound to overleap centuries and anticipate the slow discoveries of antiquarian research, enabled him to imitate the style of authors who had caught the public ear. He was essentially a dweller in two worlds—in the worlds of pure imagination and of commonplace satire, in the worlds of fancy and of fact, of sincerity and of imposition, of reality and of fiction, of the antique and the present. His genius and his life were alike drawn asunder. To reconcile the contradictions of this double consciousness in some one work of supreme art might under happier circumstances have been the destiny of Chatterton. How he would have accomplished so difficult a task, in what direction the antiquarian visionary and the satirical rhymester would have emerged to make one mighty poet, cannot even be surmised. As it is, the termination of Chatterton's life illustrates this deeply seated duality of his nature. Nothing is more striking in his history than the photographic distinctness with which his determination to suicide and the central passions of his soul are revealed to us in his will, and in the letter on Pride to Barrett, when contrasted with his eager enjoyment of London life, his keen and restless energy, his vanity, his contented pursuit of literary schemes however trivial, and finally his tender love for his relatives. The hypothesis of madness as an explanation of his suicide is but shallow. The psychologist discerns that the soul which had habituated itself morally and intellectually to a double existence, and had veiled its action in profoundest secresy, could carry on the common concerns of life with interest to the very verge of a calmly contemplated grave. J. A. Symonds.

Marlowe's Tragedy of Edward II. With an Introduction and Notes by W. Wagner, Ph.D. Hamburg: Boyes and Geisler.

Dr. Wagner's edition of Marlowe's *Edward II.* is a very handy volume, with brief yet sufficient notes, which are conveniently placed below the text. We have much pleasure in commending this edition to all students of English, as being of considerable interest and importance. But for his being eclipsed by the greater brilliance of Shakespeare, Marlowe's name would have been widely celebrated, and his works well known. Most of them are of unequal performance, but the tragedy of *Edward II.* is well sustained throughout, and may fairly be considered as his best drama. It is doubly interesting from the great general similarity of the plot to that of Shakespeare's *Richard II.* No doubt Shakespeare was well acquainted with it, and may have taken some hints from it, although his obligations to it cannot be distinctly pointed out. Comparisons of these plays have been often made by critics, and the reader can hardly fail to derive profit from studying them together. Peele's play of *Edward I.* may be read also at the same time.

We agree with Dr. Wagner in his supposition that *Edward II.* was probably Marlowe's latest play, as evidenced by its greater maturity of genius, its more quiet yet more sustained energy, and a higher degree of carefulness and continuity of action than are seen in his other dramas. The sense of the dramatist's steadily increasing vigour adds much to our regret for his sudden and violent end. He was stabbed in a brawl at Deptford by one Francis Archer whilst still in his thirtieth year; and a career full of promise was thus cut short at a time when a still larger measure of success seemed within his grasp.

Dr. Wagner has done well in adding, in an appendix, copious extracts from the narrative of the reign of Edward II. as told in Fabyan's chronicle, which Marlowe to some extent followed, and from which he quoted the jesting ballad or "jig" made by the Scotch upon the English slain at Bannockburn. The editor's foot-notes are carefully and well written, with many useful references, and we observe but very few statements to which we should be at all inclined to take exception. At p. 46, however, the editor suggests the derivation of *an* (if) from the A.-S. *annan*, to grant, "just as *gif*, the original form of *if*, is from *gifan*, to give." Both these etymologies are very doubtful. It is not yet proved that there is such a verb as *annan;* the infinitive is *unnan*, the form *an* belonging only to the present indicative; whilst the notion of connecting *gif* with *gifan* is wholly inadequate to explain the Mœso-Gothic *iba*, the Old High German *ipu*, and the Icelandic *ef*, all of which seem to be connected with the Icelandic *ef* or *efi*, a substantive signifying *doubt*. See the note in Dr. White's edition of the *Ormulum*, vol. ii. p. 627; and the remarks of Ihre upon the old Swedish *jef*, doubt; *jefwa*, to doubt.

Dr. Wagner's book presents, internally at least, a favourable contrast to the very poor books of a similar kind issued in "Longmans' Series," but the latter have the advantage of a better binding. If editions of English authors printed (and well printed) in Germany are to meet with much favour in England, that object can be best secured by substituting limp cloth for a paper binding, as many buyers judge by the outward appearance, and paper covers (for such books at least) are simply a nuisance. Walter W. Skeat.

Winged Words. [*Geflügelte Worte. Der Citatenschatz des deutschen Volks.* Von Georg Büchmann. Sechste umgearbeitete und vermehrte Auflage.] Berlin.

The sixth edition of this handy, amusing, and serviceable little book is not likely to be its last, for its subject, the sayings or quotations current amongst all classes, is one to which the words of Horace apply:

> "Verborum vetus interit aetas,
> Et iuvenum ritu florent modo nata virentque."

And as old quotations are forgotten, new ones come into use, which in their turn require explanation. An example of the first kind is given in p. 36, where the author hesitates about treating the words of Egmont, on being told to prepare for death, as common German property. The book which bore the motto—

"Süsses Leben, schöne, freundliche Gewohnheit des Daseins und Wirkens! von dir soll ich scheiden!"

and thirty years ago was to be found in every family, Hufeland's *Makrobiotik*, has disappeared from sight and memory. The serious and indefatigable character of Büchmann's researches is evident in many passages, amongst which the articles *Écrasez l'infâme*, *La grande nation*, *Tempora mutantur*, may be especially mentioned. The chief interest of the book, however, for English readers will be that it represents the German mind, by showing which quotations, from which languages, have been naturalised in the popular speech and literature.

The author has been fortunate in receiving suggestions and corrections from persons of all classes and professions, and that not in Germany alone; but many omissions still remain to be supplied, and curiously enough, most often in the case of the commonest quotations, such as—

"Dic cur hic; Naturalia non sunt turpia; Aut Caesar aut nihil; Divide et impera; Credo quia absurdum; Virtutes paganorum splendida vitia; Dum Roma deliberat, Saguntum perit; Fortiter in re suaviter in modo;" &c. &c.

Besides these "winged words" from the Latin, there is no reference found for the famous εὕρηκα of Archimedes, nor his Δός μοι ποῦ στῷ καὶ γῆν κινήσω; nor for the saying, only quoted in Latin, *Noli turbare circulos meos;* nor for Correggio's *Anch' io sono pittore*, nor for "the sleep of the righteous," whilst Galileo's *Eppur si muove* is proved to have been never said.

On p. 81, *Ja, Bauer, das ist ganz was Anders!* is traced to Richey's *Deutsche Gedichte*, and he is supposed to have taken the idea from an English source ("The case is altered," quoth Plowden); but a German source is far more probable, *e.g.* Luther's *Table Talk* (cf. Oesterley, in his edition of Kirchhof's *Wendunmuth*, note to Bk. 4, c. 90). On p. 44, *Perlen bedeuten Thränen* is perhaps, says Büchmann, older than Lessing. Certainly, for it refers to a superstition widely spread in Germany and elsewhere (see *Der Deutsche Volksaberglaube der Gegenwart*, v. Ad. Wuttke, §§ 325, 553, 561). P. 56—

"Zwischen Lipp' und Kelches Rand
Schwebt der finstern Mächte Hand."

To the parallel Greek, Latin, English, and French forms, quoted by Büchmann, I would add a German proverb, *Eh' man den Löffel zum Munde bringt, kann sich viel begeben* (Simrock, No. 6587), which corresponds most nearly, by mention of the spoon, to the Old French—

"Entre bouche et cuillier,
Avient souvent grant encombrier."

P. 65, *Das Unvermeidliche mit Würde tragen* is referred to a poem of Karl Streckfuss which contains the line, but the thought is much older, and Streckfuss may have borrowed it direct from Diog. Laërt. i. 3, 93, who gives it as a saying of Cleobulos: Εὐτυχῶν μὴ ἴσθι ὑπερήφανος, ἀπορήσας μὴ ταπεινοῦ. P. 98, *Travailler pour le Roi de Prusse:* the phrase may come, as Büchmann thinks, from Cardinal Fleury; but there is another explanation in Max Müller's *Chips*, iii. 220. P. 161, *Si vis pacem para bellum* is said to be abridged from Vegetius' *Qui desiderat pacem praeparet bellum;* but however this may be, Dio Chrysostom had said long before, ὅτι τοῖς κάλλιστα πολεμεῖν παρεσκευασμένοις, τούτοις μάλιστα ἔξεστιν εἰρήνην ἄγειν (*De regno orat.* i. p. 53, Reiske). P. 229, *Hier stehe ich, ich kann nicht anders, Gott helfe mir, Amen!* Of these famous words of Luther's at the Diet of Worms, our oldest authority, Spalatinus' original notes, only gives the last four words. So far Büchmann, but in the *Augsb. Allgem. Zeit.* 1871, No. 270, p. 4761, we read, "The latest researches place it beyond a doubt that these famous words, which have passed into the flesh and blood of our nation, were never spoken in their traditional form, and that the last clause is an addition made some twenty years later." Büchmann leaves out the first clause, this writer the last, and then what remains to us?

The author concludes his remarks on the English quotations current in Germany, by regretting the absence of any complete and readable English work of the same nature as his own.

Felix Liebrecht.

Essays. Sargant. Vol. III. Williams and Norgate.

There are many writers whom the reader is inclined to like for their character as shown in their writings. Mr. Sargant belongs to the smaller class whose character disposes an honest reader to listen to him. Such a reader might find him generally prolix, sometimes eccentric, sometimes commonplace, but he would find something impressive and even stimulating in the independent, persevering efforts of a singularly veracious mind, which, without being subtle, is very acute, and is very robust without being comprehensive or profound. The first essay, after insisting on the evils of idle reading and the consequent sufferings of serious authors, especially on mental and political science, from public neglect and caprice, proposes as a remedy the establishment of an order of merit with three grades: candidates for the order would send in their writings to examiners who would give special weight to originality. Mr. Sargant does not underrate either the difficulties of his scheme or the limitations to its utility: the gravest difficulty of all, the appointments of examiners, he expressly reserves for the united wisdom of the community to grapple with. The essay on the "Princess and her Dowry" lays down the principle that the subject ought to pay the state for all the expense the state is put to on his account, whence it follows that the well-to-do classes, to please whom a court is kept up, should defray the incidental expenses of its dignity by a slight addition to their income-tax. "Comparative Morality" is a *naïve*, thorough, but inconclusive discussion of the statistics of drunkenness and unchastity. The writer points out with great force that in our climate crime and drunkenness are symptoms of the same disease, but that crime is not the effect of drunkenness, for it flourishes equally in the sober south: in his anxiety to make out the best case possible for England he does not investigate the causes of the peculiar brutality of the English sot. The "Purse and the Cashbox" is an attempt to enforce the distinction proposed fifteen years ago by the author between the part of savings which is employed in personal maintenance and that which is reproductively employed. The principal importance of the distinction seems to be its bearing upon the conflicts of employers and employed. According to Mr. Sargant the labourer's real interest is that there should be large sums available for personal maintenance, and spent in purchasing the products of labour, rather than that there should be a large amount of circulating capital. This is the only essay in the volume which seems to call for comment, perhaps for refutation rather than for reflection.

G. A. Simcox.

A Shadow of Dante: being an Essay towards studying Himself, his World, and his Pilgrimage. By Maria Francesca Rossetti. 1871.

Miss Rossetti's elegant volume will be welcomed by numerous readers of Dante, but especially by those who, having

become acquainted with the beauties and wonders of the *Divine Comedy* by means of selected passages, or, having penetrated a certain distance into the *Inferno*, have been deterred from proceeding farther by the intricacy of the poem. The difficulties in the way of understanding Dante arise partly from the numerous interests—political, ecclesiastical, moral, and religious—which he introduces; partly from the encyclopædic character of his knowledge, embracing, besides a wide range of more ordinary subjects, the abstruse studies of astronomy, metaphysics, and theology; partly from the thoroughly mediæval cast of his mind, which causes him to be the most representative writer of his age, and at the same time greatly increases the difficulty of interpretation by allowing an expression or an image to bear more than one meaning; and last, not least, from the elaborate plan of the poem itself. It is to this last source of perplexity that Miss Rossetti has especially addressed herself; and accordingly, beginning with a lucid description of Dante's conception of the universe, and a brief life of the poet, sufficient to explain his political position and the romance of his ideal love, she proceeds to conduct us in her author's company through the three realms of the spiritual world, prefacing our entrance to each by a minute description of its arrangement, its inhabitants, and the system of rewards or punishments according to which they are classified in their respective abodes. By means of this method, which is supplemented by excellent diagrams, we can descend without fear of error from circle to circle of the Inferno; then climb by the steep stairs from terrace to terrace of the mountains of Purgatory, until at its summit we reach the Terrestrial Paradise; and ultimately wing our way from sphere to sphere of the celestial regions. It must be remembered that the *Divine Comedy* is especially adapted for this exact mode of treatment, because it presents us with no vague and gorgeous cloudland, like the *Paradise Lost*, but a scheme of intense reality, in which the times are accurately computed, the distances measured, and all the details so devised as to add definiteness to the conceptions.

The sketch of Dante's *Pilgrimage* which Miss Rossetti has thus given is no common analysis, but a most interesting narrative. In describing each stage of the poet's progress she first details and comments on the circumstances, and then, where the poem is its own best commentary, introduces quotations to illustrate the scenes related. For this purpose she has availed herself of the translation of her brother, Mr. W. M. Rossetti, for the *Inferno*, and of that of Mr. Longfellow for the *Purgatorio* and *Paradiso;* and has shown laudable self-restraint in excluding such passages as contain the most picturesque descriptions and graphic similes, which might prove attractive to the reader, but would be more likely to withdraw him from a perusal of the original. The other difficulties of the poem, besides those arising from the nature of the plan, are also not forgotten, and much help is offered to the reader in passing, towards the elucidation of difficult passages. On this account we the more regret that in the part relating to the *Paradiso* the text should have dwindled to a minimum, and that the quotations should occupy a disproportionate space. If, however, the reader does not intend to peruse this section of the poem in the original, we would urge him not to neglect the latter part of Miss Rossetti's book, because the *Commedia*, even more than other epic poems, in order to be appreciated, must be understood as a whole; and besides, not only do the later cantos contain the sublimest passages of the whole work, but the poet's skill is nowhere so conspicuously seen as in the tranquillity which, without any accompanying sense of monotony, he succeeds in diffusing over every region of heaven, and in the increasing brilliancy of light into which we are ushered in proportion as we ascend higher, so that, when we seem to have reached the acme of radiancy, we are again and again made to feel that we have entered a brighter sphere. It is here, too, that we can best study the serener side of Dante's character, together with that element of tenderness the existence of which in his nature has been sometimes so unreasonably doubted. We may add in conclusion that, though Miss Rossetti has added little that is new to the study of her favourite author, yet she has done good service in introducing illustrative passages from Dante's prose works, which are less familiar to the ordinary reader.

H. F. Tozer.

RECENT NOVELS.

There have not been any great or startling events in the world of fiction during the past year. No new writer of striking merit has appeared, and the existing schools seem to muster recruits in about the same proportions as before; so that the time is favourable for an appeal to the leading novelists not to let the next change of fashion—change of some kind being inevitable every two or three years—be for the worse. It would be invidious to decide who *are* the leading novelists, and a perfectly fair opinion on the subject could not be formed without, as Pascal says, reading a great many very bad books; but it is not difficult to see which schools compete most successfully for popular favour. There is a safe and steady sale for domestic twaddle tempered by religion, and a still larger sale for domestic twaddle tempered by crime, but the followers of Miss Yonge and Mrs. Henry Wood do not presumably read the *Academy*, nor, should we imagine, do readers of the *Academy* seek recreation in the works of those authoresses; so it is unnecessary to analyze their claims to attention—

"Non ragioniam di lor, ma guarda e passa."

The novels which it is still possible for rational beings to read generally belong to one of three varieties, which we may call, for convenience, the sensational, the literary, and the didactic; though the former class can be subdivided, and the last is very small, consisting in fact as a rule of stray works by writers of acknowledged merit, who have taken up a crotchet and earned the right of submitting it to the public for digestion. Such is an unfortunate tract about deceased wives' sisters, by the author of *John Halifax*, which has been published in *St. Paul's;* such is the serial story in *Good Words*, by M. B. Edwards, though here the moral, which has something to do with socialism, is not so obvious as to explain why the author gave the probabilities their *congé* to clear the ground for preaching. This is only half a defect, for of course nothing is so fatal to a novel as the appearance of a foregone conclusion to which incidents and characters are made to conform. As an example of a fixed purpose, masked and extenuated with all the skill possible under the circumstances, we should mention *The Member for Paris*, a tale of the Second Empire, which has (it must be owned at less frequent intervals) most of the merits possessed by the French sketches which appear from time to time in *Cornhill*. The plot is compact and symmetrical, though perhaps too simple for expansion into three volumes; and the author expends much cleverness and local knowledge in giving an appearance of impartiality and necessity to his account of the young radical duke's gradual fall into temptation and discredit. The catastrophe, however, is a little too abrupt; Horace Gérold should have survived the loss of position and popularity for at least two or three years, and then he might, with more truth to life and nature, have died by suicide instead of apoplexy.

By literary novels, the most tantalizing and disappointing of their class, we mean works by men of education and a kind of genius, who have something to say and endeavour to say it with some degree of literary propriety; who know a work of art when they see it, who aspire after ideal truth and beauty, who are, it may be, too conscientious to write poetry without a vocation, and who certainly ought to be able to write imaginative prose. If they cannot do this to the satisfaction of a high critical standard—and it would be plainly unfair to try, let us say, *The Adventures of Harry Richmond* and *A Daughter of Heth* by a low one—there must be something rotten in the state of the literary republic. As a matter of fact there are no general

principles of criticism recognised at once in the production and the appreciation of works of fiction. Writers of more than common originality and semi-poetical instincts, instead of approaching proportionately nearer to a common type of excellence, wear out their own individuality by making it serve to supply not only the materials and the form of their work, but also, too often, the only standard which they will admit as adequate. If this were all, we might be deluged with prose Alastors, Werthers, and Frankensteins, but eccentric genius would be free, and once in a generation or two a great anomalous work might take the world by surprise. But the only semblance of a principle which presided at the birth of the British novel was the principle of realistic probability. Fielding and Miss Austen painted their contemporaries as truly as Gainsborough and Hogarth did theirs, and the scores of painstaking scribblers, who fancy they too are sketching life as it is, are sufficiently influential, thanks to this tradition of what was once an idea, to compel a half-hearted compliance with their usages on the part of the more able idealists. The result of the fusion is naturally a mongrel kind of production; two good things either simply spoilt, or blended together into an extravaganza at once lamentable and absurd. If Lessing had been alive to expound the laws of romance and to assign their proper share of representation and respect to the eternal nature of humanity, to the accidental usage of society, and to the variations of individual character, Mr. George Meredith would perhaps have taken the trouble to write a readable novel, at least his imagination would not have skipped in such an unaccountable manner from studies of high life as Thackeray might have seen it to studies of low life as only Mr. Henry Kingsley does see it, from clear dramatic invention to muddled psychological insight, from the virtues of a clever story-teller to the tricks of a conjuror or a medium. As it is, *Harry Richmond* is as dull as it is perverse, and the reader's patience breaks down long before the author is tired of inventing new characters, performing fresh feats for incomprehensible motives in a world which is not only unreal but inconsistent. *A Daughter of Heth* is not so flagrant an instance of misapplied power, and yet it is nearly as far from being a satisfactory work of art. Mr. Meredith has the raw materials for a good novel, Mr. Black at most for a pretty idyll or pastoral; one wants judgment and self-denial, the other invention and vigour. Yet the popularity of *A Daughter of Heth* is on the whole a consolatory symptom, for it can only be accounted for by its purely literary merits, and as these are not of a kind to be discovered by the general public, they must have been taken on faith from the ordained leaders of opinion in the press, so that criticism cannot be quite impotent yet. As a study of character in good English and diversified by refined and appreciative descriptions of scenery, the book obtained a *succès d'estime* amongst reviewers, who naturally suffer more than ordinary readers from the blank stupidity of ordinary novels, and on their recommendation it was largely ordered from the libraries and read without conscious disappointment, though the plot is weak, the serious characters rather unreal, and the comic ones very conventional. Worse writers than Mr. Black are often more amusing and more life-like, and he is not quite good enough to dispense with those everyday merits. He has poetical feeling and enough literary power to give pleasure for a moment to a cultivated taste, but he is not *interesting*—to borrow a favourite word from the vocabulary of novel readers; and we therefore doubt whether the success of his present work will outlast that of less deserving ones which catch the public taste at once without help from the critics and often in defiance of their protests.

The sensationalists come next in order, for, though the novel of character was at one time a popular and esteemed variety, its day seems over for the present. Even Mr. Trollope deserts the men and women of the world, and, a prey to the creations of his own fertile pen, can see nothing else, but draws Lady Glencora Palliser after herself in one volume after another on a diminishing scale, like the image in two opposite mirrors, or multiplies by ten and by twenty the maiden we all know so well, from whom the story of her love, or perhaps, for a change, her indifference, has to be wrung in a dozen pages of diplomatic dialogue, in which the longest sentence does not exceed two lines and a half. The founders of the sensation novel, the masters of honest burglary and bigamy, murder and madness, poison and police, have, like Mr. Trollope, seen their best days. Mr. Charles Reade and Mr. Wilkie Collins pile up horrors and hairbreadth escapes with nearly all their old circumstantial vividness, and the former at least still retains a touching faith in the potency of capitals, italics, and notes of exclamation. But their public is a hardened public; no mere story of adventure suffices to stir its sluggish pulses; it demands to "put itself in the place" of the murderer or the maniac, to know what it feels like to commit forgery or bigamy. The school of subjective sensationalism which arose in obedience to so natural and consequent a desire is generally supposed to look on Miss Braddon as its founder, though the author of *Guy Livingstone* did something towards popularising what we may call the æsthetics of crime. But Miss Braddon's reputation, like most which are made in a season, is being steadily written away; besides which she really occupied a transitional position between the melodrama of incident and of sentiment. Those of her followers, like "Ouida" and Florence Marryatt (Mrs. Ross Church), who are content to treat a criminal situation altogether from within, can, while such a proceeding has the charm of novelty, extract much stronger sensations out of it than is possible by any other means. It is true, to do these writers and English society justice, that their pictures of vice always have rather the appearance of being constructed *à priori* or else in servile imitation of the traditional French novel. The virtuous indignation of reviewers may succeed for a moment in advertising a stupid book, but it seems probable, though only the statistics of "Mudie" could make it certain, that fiction of this class would soon go out of fashion if treated to a little wholesome neglect on the part of the critics. The breach of no one of the Ten Commandments is intrinsically more interesting than that of the other nine, and *toujours perdrix* is tiresome even when the Divorce Court supplies the game.

Sensational novelists who depend upon one motive only for their sensational effects write themselves out fast, but not faster than young authors spring up to take their place. *Temple Bar*—a magazine which would not be ill-conducted if "padding" were done away with and the standard of its shorter stories raised—generally contains two serial novels by the best representatives of the latest development of whatever passes for sensational. To judge from *Ought we to visit her?* and *Good-bye, Sweetheart!* the authoresses who are most popular for the moment are those who hover just on the verge of immorality or indecorum (like children trying to summon up courage to say "a bad word"), but, instead of passing the Rubicon, trade upon the common delusion that, if they only went just a little farther, they would come to something very exciting indeed. The lady who is known by her romantic and elliptical titles delights chiefly in representing a beautiful and unconventional young woman in the act of throwing herself at the head or, more literally, into the arms of a peculiarly ugly and unresponsive hero. The author of *Archie Lovell* prefers situations in which the same unconventional young lady is on the verge of being "compromised" more or less innocently, so that some skill is required to extricate and marry her. There is not much to be said for either of these views of the elements of romance, but both writers, and especially the one last mentioned, show a capacity for better things, which makes us regret the vulgarisation of their powers nearly as much as Mr. Meredith's vagaries. They can write readable dialogue, and they can conceive a group of characters who are either natural or at least sufficiently life-like to keep up the illusion of reality on which the interest of an ordinary novel depends; they have no need to resort to dishonest or unlawful artifices to amuse and interest their readers. *Ought we to visit her?* would really be a pretty story, but for the recurrence of false alarms to the effect that some one is going to run away with the wife of some one else; and as the threatened impropriety is not committed after all, we cannot see why the authoress should so unnecessarily distract attention from her central and quite unexceptionable position, that when a virtuous ballet-girl marries into Chalkshire society, Chalkshire society ought to call on her. If this writer would study human nature as it is, not as it lends itself to a conventional type of intrigue, and if she would write in accordance with some reasonable conception of what novels *ought* to be liked, instead of being guided by a vague and very possibly mistaken impression of what *is* liked, she might look forward to occupying a respectable place in the second rank of her profession. The prospects of Miss Broughton are not quite so easily determined; her range of subjects is even narrower, and the furious way in which her heroines make love soon palls upon the mental palate; but she has

some technical skill, and if she would only write one novel a year, and study the principal dramatists, she might learn to vary her theme and not meddle with the outside of stronger passions than she can either interpret or represent.

In so cursory a review of the fiction of the year some few books with a degree of modest merit must naturally be overlooked. Mr. George Macdonald, who has written *inter alia* a story in *St. Paul's*, should perhaps be mentioned as the nearest heir and representative of the once thriving school of muscular Christians, though in *Wilfred Cumbermede* both the muscles and the Christianity seem a good deal attenuated. In the other magazines there is nothing which calls for notice except the belief which seems to be gaining ground amongst editors, that any novel by a known writer will do to cut up and publish in serial parts, though the ordeal which was dangerous even to *Romola* is fatal to many harmless little romances. On the whole we have not much to congratulate ourselves upon in the works we have been noticing, except that none of them have achieved the extravagant success which sometimes falls to the lot of a bad book. Our hopes for the future depend upon two improbable events, namely, that some clever lady sensationalists will take the trouble to educate themselves, or some clever men of letters acquire the mechanical rudiments of the art of story-telling. Pending either contingency, there would be an opening for literary partnerships of the Erckmann-Chatrian type, in which one writer should supply the ideas and the other the execution. At present both leave room for improvement.

H. Lawrenny.

LITERARY NOTES.

In a book on the present social condition of Hungary, which has recently appeared at Pest under the *nom de plume* of "Apuleius," a chapter is devoted to a criticism of the novelist Maurice Jókai, which it may be interesting to contrast with the criticisms of Julian Schmidt, noticed in our last number. Jókai began his career as a novelist more than twenty years ago, and in his earliest and latest works we find the same characteristics. The circumstances of national life, and, consequently, the mental needs of the Hungarian public, have entirely changed during that time. Thus, what at first may be considered, in spite of its faults, to have had a beneficial effect, has by this time become in the highest degree pernicious. Jókai, according to "Apuleius," is distinguished by an unreasonable and childish optimism. The good are so certain to come triumphantly out of all their difficulties, the plans of his villains are so sure to be frustrated, that a very short experience of his writings prevents our feeling the smallest anxiety about the results. In the case both of his good and bad characters Jókai recognises neither moral nor physical impossibilities. We are never surprised, if the interests of the story require it, at their doing the most improbable and unaccountable of actions. Both classes are in general characterized by an absence of reason and common sense. His villains consequently remind us of the somewhat ridiculous *rôle* assigned to the devil in popular stories. This weakness of his is most apparent when he attempts to depict characters whom he would wish to represent as wise and sensible people. In a word, his heroes and his villains, his men and his women, his *savants* and his peasants, bear such a striking family resemblance to one another as makes it evident that they are all drawn after the same model. There was a time when this extravagant optimism, this thorough independence of probability and fact, was of service to the nation. In the disorganization of old social and political order, of material ruin, of national and individual humiliation, which followed the disasters of 1849, when actual life contained nothing to satisfy either the Hungarian's heart or imagination, it was a great advantage to have an author like Jókai. His inextinguishable hopefulness and vivacity, combined with a lively imagination and a really extraordinary industry, spread before the eyes of his readers picture after picture, which, however unreal, were pleasant to look upon, and sweet, if but for a moment, to believe possible. But all contempt of the truth brings after it its own punishment. What was but a doubtful benefit when action was impossible, when despondency or rather despair were the evils most to be dreaded, became a positive poison when the time for strenuous and sustained industry had arrived. This was the more injurious in the case of a nation like the Hungarians, among whom, as some would maintain through the physical composition of their blood, or as others with more sobriety and more probability would affirm, through the circumstances of their national history, habits of sustained industry have not yet been formed.

The *Last Tournament*, published in the *Contemporary Review* for December, is the most satisfactory of the additional Idylls of the King, for although there are finer things in the *Holy Grail*, their effect was marred by the violence necessary to compress a whole cycle into an idyll. Even here, perhaps, the necessities of the idyll are too conspicuous. The artifice of beginning with a little scene and then bringing in a long passage of parenthetical explanation palls. Four or five episodes from a lost epic were matter for thankfulness, but when we have the prospect of having the whole epic reconstructed in the form of episodes, it is hardly ungrateful to wish the Laureate had trusted himself less or more, that he had either relinquished the subject sooner or treated it in its natural shape. But the *Last Tournament* is a singularly rich and beautiful poem; the expedition of Arthur against the Red Knight is an admirable pendant to the early expedition against Doorm, and the disloyal tournament at which Lancelot presides listlessly recalls the tournament in *Elaine*, where he conquers strenuously, and the juxtaposition of the death of Tristram with Arthur's return to find Guinevere fled, is masterly. The scene between Tristram and Yseult shows more dramatic power than anything Mr. Tennyson has given us yet, for the wonderful dialogue between Guinevere and the Novice owes its effect wholly to the irony of the situation. Assuming that the interest of the cycle lies in Arthur's shattered ideals, we can only praise the skill and freshness with which Tristram's relation to them is imagined. Dagonet the fool is remarkably ingenious, but a little dull like most of the fraternity.

The *Contemporary* also contains a reprint of Professor Max Müller's lecture on the Philosophy of Mythology. After distinguishing between the sphere of religion and mythology, even in the times when the latter was most influential and productive, he discusses the question of its origin once again, and refers it to the necessarily imaginative character of primitive speech. The explanation is satisfactory so far as general and ideal conceptions are concerned, and shows far more insight into the conditions of the problem than has ever been betrayed by Mr. Coxe, for whose originality Prof. Müller takes up the cudgels; but we look in vain for any plausible argument in behalf of their common position that Mr. Darwin's Man-Ape was surprised to see the sun rise and pained when he set.

A criticism on Mr. George Macdonald, in the same number, labours under the disadvantage of being written by a person (Mr. H. Holbeach) who knows his author so well that he has evidently once admired him too much to be able exactly to estimate the space which he occupied in the thoughts of the general public. If Mr. Macdonald were, or deserved to be, as well known as Mr. Tennyson or Mr. Browning, the article would be useful and praiseworthy; as it is, though not unduly laudatory, it so far misses its aim that any one who had not read *Phantastes* would not gather from the review a very distinct idea of the good and bad in its author's best imaginative prose.

Baron Loránd Eötvös, son of the late minister of public instruction in Hungary, writes to a Pest newspaper to the effect that a new edition of his father's principal work on *The Prevailing Ideas of the Nineteenth Century* is shortly about to appear. The late minister, considering that the language in which the book was written had, during the seventeen years that had elapsed since the first edition, become somewhat obsolete, and that its style was in part somewhat heavy, owing to its having been written originally in German, determined to bring out a second edition, with merely stylistic alterations. Being interrupted in his task by death, it will be concluded by his friend M. Aladár Molnár on the same principle.

According to *L' Unità italiana*, a parchment book of devotions belonging to Charles the Bold, Duke of Burgundy, has been discovered in the national library at Buenos Ayres. It appears

that the former librarian was ignorant of the existence of this bibliographical treasure, which is said to be in an excellent state of preservation.

The desire to find an historical original for Schiller's Max Piccolomini has led Italian and German *savants* to examine the letters of the Piccolomini family which are preserved in MS. in the library of Siena. The results, summed up in *Augsb. Gaz.*, December 2, are that Ottavio had several nephews, who lived and died in the emperor's service, but that the one who would do best for Max was called Silvio. However, the passage of family history is not uninteresting in itself, and contains details which may be useful to future historians of the period.

Art and Archæology.

SOUTH KENSINGTON MUSEUM.

The additions made to this museum since May have been very important and interesting. They have been acquired for the larger part by purchase, of course, but the presentations have been also very extensive and valuable, although perhaps not so much so as in some past years. The progress making towards completion of the entire building dedicated to the museum proper, the applied or decorative art collections, has been also very great. In a few months the great new "South Court," as it is to be called, will be opened, having in one end the porch of S. Jago of Compostella, hitherto seen only in portions near the entrance, and at the other end, the most important of the additions we have to mention, "The Rood Loft from Bois-le-Duc." This is an immense structure of marble, enriched with very striking and rich sculpture of date about 1590. Double columns of red marble support deeply soffited arches with panelled enrichments, over which are spandrels with angels in alto-relievo of white, edged round with black marble. On the upper part of the entire design, which would require space to describe, there are twelve large and three small statues, all of them notable in their way, although belonging to a period of uncertain value in art. This is called a "rood loft," but we have not been able to learn with certainty what place in the church it originally occupied. Its having only one side would indicate that the structure did not stand clear of the wall, as "rood lofts" or "chancel screens" do.

2. The collection of Musical Instruments has been augmented by ten pieces purchased from Signor Mario's effects. These are—a mandoline, 1600; a German viola da Gamba; an old Spanish guitar; an old Indian instrument called a sarruda; "Bagpipe Zampogna," Savoyard, eighteenth century; and a Chinese mandoline. (389 to 398.)

3. Three great bells, two large "burners," a fountain or jardinière of very splendid bizarre design, and other ancient Japanese works in bronze. All these objects (104 to 1037) are of the finest and most characteristic Oriental design; the large hollow vessels called "burners" have been also called "standard bearers," as their use is not certainly ascertained. The whole came out of a ruined Japanese temple, was taken as ballast by an English ship, and has been purchased at the price of the metal. Since reaching the museum, some portions have been stolen—the first depredation we understand ever made on the valuables there. The case is undergoing enquiry.

4. Two painted tables, semicircular, English work, of date about 1800, or a little earlier. These have so close a resemblance to the art of Angelica Kauffmann that they must have been done with her aid in some degree. The legs, thin tapering shape, are gilt. These cost 157*l.* (349 and 349A.)

5. The Waterton Collection of Rings. This collection by Mr. Edmund Waterton, we are happy to say, has here become public property, and will remain intact. The subject is one of curious antiquarianism, and has a certain poetic interest from the uses to which finger-rings were applied. The number is very large, several hundreds, and the examples extend over all historic time. There are Egyptian rings; Gnostic, signets and troth rings; early Christian, Keltic, Anglo-Saxon, Roman, Byzantine, mediaeval, papal rings. If we thought our readers would care to go into the subject with a little study, perhaps we may return to this valuable cabinet. (400 to 1024.)

6. Three pieces of Fulham pottery. This old English ware is now so rare that good specimens are of any value. These three are all very good; one of them especially interesting, being the portrait of "Lydia Dwight, March, 1673," as inscribed on the back, either dead or asleep, it is difficult to say. The proprietor of the works at Fulham, it appears, was called Dwight, so that this piece has the interest of being a commemoration of one of his family. (1051 to 1055.)

7. Watches. Nine chased and enamelled watches of the seventeenth and eighteenth centuries. These are lovely specimens of jeweller's work and enamelling on white grounds. There are five French, two English, one Dutch, and one Swiss, in all nine examples, some of them very small, like our ladies' time-pieces of the newest pattern.

8. Silversmith's work and jeweller's work. Various pieces of these artistic industries have been added to the cases on the centre gallery, some of them very interesting to the amateur in these matters. There are pairs of silver candlesticks (386, 387, and 1333A). A pair silver gilt (388). Three small vases with covers dated 1767, English work (384), very delicate and pretty. A French silver teapot covered with *repoussé* ornament, and other pieces. A pair of candlesticks, Austrian, about 1600, curious. All these things being precious metal cost a large sum, and are only interesting to a narrow circle comparatively. But in the same part of the museum there are also other additions: some wonderfully delicate specimens of modern French *cloisonné* enamel, in the shape of lockets, necklaces, &c.; an Italian set of cameos also, a necklace and earrings; and some additions to the Spanish filagree silver-work. Lastly and best, a German bookcover of brass open work, with a group in the centre, representing the Visitation.

The gifts are numerous; principally these:—A marble group, "Cupid and Pan," by Holme Cardwell, 1862, presented by Mr. Malcolm of Portalloch. An admirable work with an admirable *motif* and a somewhat learned character of workmanship. Nineteen pieces of Portugese and blue Moorish ware from Tunis, or elsewhere on the south coast of the Mediterranean, presented by G. Maw, Esq. Six pictures, additions to the English school, sent by C. T. Maud, Esq. "The Deluge," by Loutherburg, a fine work, engraved under this name, but here called wrongly (as there is a whole family represented) "The Last Man." Three by the late T. Barker; and one, a very admirable work giving a high idea of the powers of the painter, James Ward, of S. Donnatt's Castle, with bulls fighting in the foreground. Also a collection of nine medallion portraits in wax by P. Rouw, 1818, Fox, Pitt, Princess Charlotte, &c., the gift of C. Vine, Esq.

The last object we shall mention has some intrinsic interest, from its analogy to the quern of our northern antiquities and of the invading Roman army. It is a Mexican (Aztec) ancient corn grinder; a flat curved bed of carved green-stone with heavy roller to crush the grain, presented by James Bateman, Esq.

W. B. Scott.

EXHIBITIONS OF PICTURES.

Society of Painters in Water Colours.—This society's exhibition, which opened towards the end of the past month, is one of more than usual excellence. It is called an exhibition of sketches and studies, but this it is not; the first year indeed the gallery was opened in winter, sketches and studies did appear in a much larger proportion, but now these have given place to finished pictures, not so elaborated as in the more important gathering in the later season, but sometimes better on that account, showing more freshness and less pretence. Here we have a great many works, some of them evidently done out of doors, of remarkable excellence. In some cases we see a picture arrested, as it were, and produced in an unfinished state, which is not quite the same thing as a sketch. "The Earl o' Quarter-deck" (194), for example, by G. J. Pinwell, who thus appears to be trying to make a bolder style for himself. F. Walker, too, whose manner has been adopted by others to so great an extent, that in last Midsummer's gathering half the exhibition seemed to be by these two artists, has changed his tone and mode of finish, as in (355) "The Housewife," a beautiful drawing full of rich and full effect, so that those who imitated his stippling with vermilion and yellow will have the field more to themselves.

J. D. Watson, North, Powell, Burgess, are the most conspicuous on these walls, in excellence perhaps as well as in number. Among the newer members, Albert Goodwin, Marsh, and H. S. Marks also are well represented; W. C. T. Dobson, having only two, but both completed heads of a large size, and very considerable beauty. The great picture, however (for there is a great picture), is by John Gilbert (173)—

> "They close, in clouds of smoke and dust,
> With sword-sway and with lance's thrust;"

we need scarcely quote the whole passage from *Marmion*—but the man to man and eye to eye struggle, the struggle of muscular force and velocity, the battle of the middle ages, when concerted action was broken up by individual ferocity and the wild excitement of contagious passion, were never better given on canvas. We are quite aware that some languid souls and utterly domestic individuals may see no fascination in Gilbert's work, but to us it has boundless attraction, not only in the executive, which is masterly, especially in the nobler element of drawing, but in the dramatic power and manly sympathy with the crowning moment of effort, which has hitherto been the highest subject of poetry. We would simply say this picture is the most perfect piece of work of its kind, and ought to be considered only inferior to the two great works by Maclise in the Houses of Parliament. Gilbert, in his lighter subjects, is often over-done and artificial, because incurably mannered; but here we observe nothing of this, every touch of the brush intensifies the action. His other pictures are also very fine, especially the "Halt of Cavalry" (26); also, however, "In Battle Array" (91).

"The Garden" (238), by A. H. Marsh, deserves careful study, as being very nearly a notable success, and possessing very remarkable excellencies. The drawing of the six ladies all sitting in a row is truly good in style; they are all one model, it is true, but then the model or ideal, or mixture of both, is the painter's perfection of Woman, and so the picture approaches the poetic, were it not for the touch of humour apparent in the broad and mild, heavily dressed, Occleve kind of gentleman to whom they are all accessories. With "The Tower of St. Ouen and Street in Rouen" (2), by John Burgess, we may begin to mark a few pictures as they come in the catalogue, without distinction of class. No. 3 is one of T. R. Lamont's Highland subjects, all of them full of gentle feeling and rich colour. "Off Brodick Bay, misty morning" (14), Francis Powell, is a true expression of a summer calm. "Sketch in the Valley of the Ticino, October 1856" (29), by G. P. Boyce, is one of a number all done at this earlier time, having his peculiar excellencies; "Black Alder Bushes" (34) has a landscape sound, but is in fact a female figure with a background of the alders, by J. W. North, perfectly beautiful in expression, and scarcely inferior to the landscape part of this is "Poplar Trees" (79), by the same. "Moel Siabod, from Tan-y-Bwlch" (54), by J. W. Whittaker, and "April" (62), by Albert Goodwin, and "Porch of San Fermo Maggiore, Verona" (101), by W. W. Deane, and T. M. Richardson's large landscape, "On the Falloch, Argyllshire" (82), are all good in their several styles; and (104) "Beechen Hollow," an autumn landscape by J. W. North, is quite admirable in colour and sentiment. "Castle of Ischia" (145), by E. A. Goodall, is evidently a study from nature, and conveys a vivid impression of one of the most notable places in modern history. "Sunset at low tide, Hastings" (148), by Collingwood Smith; "Wray Common, Surrey," by C. Davidson; George Dodgson's four subjects in one frame (178); "The Chimney in the Gatehouse, Kenilworth" (199), by Burgess; Whittaker's Welsh scene (207); "The Sound of Mull, from Tobermorry" (379), by E. Duncan, are all remarkable.

Figure pictures that call for remark there are also: "A Girl at a Stile" (322), by F. Walker; "The Ballad" (320), by J. D. Watson; "In a Wood" (331), by A. H. Marsh; "A Girl in a Black Silk Dress" (338), by E. K. Johnson; and Mr. North's "Two Girls listening to the Nightingale in a Garden Thicket" (361) is very charming. The whole exhibition appears to us to be unusually high in feeling as well as able in execution: perhaps it is after seeing so many French and Belgian works without any intention or emotional suggestion whatever, these English ones affect us more.

Exhibition of Pictures by Léonard of Brussels, 390 Oxford Street.—There is a painter in the Belgian school who stands so much alone that many even among his own countrymen ignore his art, and will not consent to praise him, although all strangers visit his works, now a permanent exhibition in Brussels. This is Wiertz, who is a painter of the class French or Belgian critics are apt to call Idealists, because he makes art serve an end, and is not content with painting for its pleasure in the representation of the body or the material. We have been attracted to an exhibition now opened in Oxford Street by understanding that Léonard, the painter of the works in question, is another Wiertz, inferior executively, but with the same tremendous force of nature and invention, and if any of our readers wish for a new sensation in art, they may repair to the place in question. Monsieur Léonard is a Republican, a sympathiser with the Commune, and he has expressed on large fields of canvas his love for "The People," his detestation of war, his hatred of Jesuits, and other congenial themes. The largest picture in the room is "The Horrors of War," a canvas of about eighteen feet in length filled in every part with a vivid and unmitigated presentment of the direst suffering; not the excitement of battle in which a man falls without feeling his wound, but the wounded and the famine-stricken in the winter, such as must have been visible in the villages of France last January. Many of his pictures have a political bias, and are indeed illustrations of the war just closed.

Society of British Artists, Suffolk Street.—This body has followed all the rest of the world in establishing a "Winter Exhibition," and opened on the 4th of this month with a large collection of works, principally in oils, but also in water colour. In the middle of the room is a portrait bust in marble of the late J. B. Pyne, by Jackson, which has a large and impressive character, like the head of a river god, but which on closer inspection rather disappoints us by deficiency in tenderness of modelling and of refinement in the treatment of the beard, parcelled out as it is into long separate locks. Although the number of works in this exhibition is great, their quality is not encouraging to the visitor to go into their study seriatim. The most important exhibitor is perhaps T. Heaphy, who has a very solidly painted portrait of William Howitt, not, however, looking so old as the original must be. Also "Charles I. and Lady Kate D'Aubigny," who carried a despatch for the king safely by using it as curl-papers, that now impossible adornment being a coquetry on royalist tresses, as patches on the cheek were at a later time. "The Romance of Queen Eleanor and Fair Rosamond" (175), by T. Davidson, has some tragic power. Perhaps Rosamond is too childish, and the whole is marred by the steepness of the perspective, which throws the figures of the queen and her aid or executioner quite above the interior chamber. "Bruges" (216), by A. B. Donaldson, is an unaffected piece of painting, and other pictures by the same hand are noteworthy. "Morning" (165), by J. Emms, a very young painter, is very good indeed, the old wainscoted interior with the bright morning looking in on the wide-awake child crawling out of bed, is very pleasant and simply painted. This is a trifle in size, but the mass of large pictures here will not bear examination. The landscapes predominate in excellence. J. Danby, in his "Greenwich" (93); "Trawlers by Moonlight" (110), by W. L. Wyllie; "Sunlight" (26), by P. P. Pugin; "Pakefield—on the Suffolk Coast" (65), A. Ludovici, Jun.; "Goodrich Castle on the Wye, Monmouthshire" (381), by C. Pearson; and the "Day before the Gale" (233), by W. L. Wyllie—are all worthy of remark. The last mentioned, with bright and calm sea inhabited by porpoises, is indeed an excellent little picture.

Exhibition at the German Gallery, Bond Street.—Here the principal attraction is the second picture of the "Blue Boy," by Gainsborough, the two pictures of which subject excite a controversy somewhat like that for some time going on in Germany about the rival Holbeins. This greater puzzle is, we believe, pretty nearly decided in favour of the Darmstadt picture over the Dresden one, and if the two "Blue Boys" were once placed side by side in an exhibition room, we have no doubt the priority would be soon ascertained. Collectors will never be brought to understand the difference between painting an original picture and painting merely a copy. The double action of intellect and hand seems too much for the collector-intellect; nevertheless, anything once done can be repeated by a skilful

manipulator without the higher faculties necessary to creation. We remember an anecdote told of a life-study by Etty which illustrates this. Maclise, who painted under Etty from the life at the Academy, saw a particular study, as he thought, done by the master, when Maclise also painted the model, and bought it for its association with times past. After he got it home, he thought he might as well send it to Etty and ask him if the picture in question was his, so many of these life-studies had been sold as genuine that were not so. Etty at first said it was his own picture, but as it stood by him day after day he began to doubt, on which he wrote to the individual who originally purchased it, who immediately replied that the life-study in question was at that moment still hanging on his walls, but that he had sent it once to town for some purpose and had found some delay in having it returned! If the painter himself has a difficutty in telling his own handling, it is not likely another will. A copy done at the same time or shortly after the original may be made almost identical by time. W. B. Scott.

DR. ROCK.

The Archæological Institute has lost one of its most valuable members through the death of the Very Reverend Canon Rock, which took place on December 5. In returning from the Cardiff meeting of the Institute, Dr. Rock met with an accident at Gloucester; but though he has suffered much ever since, his friends did not suppose there was any cause for immediate anxiety. Born in 1799, he has been active both as a Roman Catholic dignitary and as an archæologist throughout a long career. His theological works are numerous, but the book by which he is perhaps best known to the public is his *Hierurgia; or, Exposition of the Sacrifice of the Mass*, in which he illustrated the ceremonies of the Church amongst Latin, Greek, and Oriental Christians, not only by historical evidence but from the paintings and sculptures found in the catacombs of Rome and other places. In 1869 Dr. Rock was one of the committee for carrying out the objects of the special loan exhibition at the South Kensington Museum, and contributed an article to the catalogue under the head "Textile Fabrics" (see *Academy*, March 12, 1870); but prior to this, Dr. Rock had been much consulted by the authorities of the Museum, and the care of selection which has so long continued to distinguish the purchases made in this particular department has been due to the chastening influence of his accurate knowledge. He has left a collection of illuminated MSS. which is known to be of considerable value.

ART NOTES.

The fresco of the Last Judgment, by Fra Bartolomeo (Baccio della Porta), which he left to be finished by his pupil Albertinelli when he forsook the world and his profession for the cloister, has just been rescued from the total ruin which has for some time past been gradually overtaking it. Signor Botti of Pisa succeeded in safely executing the hazardous task of detaching it from the wall, and the veto of the minister of public instruction, Signor Correnti (who associated himself on this condition alone with the director of the Hospital of Santa Maria Nuova in the undertaking) has saved the precious fragments from the hands of nineteenth century restorers. The upper portion of this fresco only was completed by della Porta, and by a curious and happy accident—whether it be due to difference of methods employed or to the chances of weather—it is the upper portion which is best preserved.

Eleven volumes of the general catalogue of the National Museum at Naples are now published, and comprise the catalogue of the S. Angelo collection, which occupies two volumes, one for Greek, the other for middle-age coins, the catalogue of the *Gran Medagliere*, which fills five volumes, viz. two of Greek and two of Roman coins, and one of matrixes, stamps of the Royal Mint, &c. The collection of inscriptions divides into two volumes, one for Greek and one for Latin; and two more volumes refer to the pornographic collection, and that of antique arms. As soon as Guiseppe Fiorelli became director of the museum, he started the work of cataloguing; the state of the whole place was deplorable in the extreme, there were no exact inventories, 15,000 bronzes—the richest collection known—were lying about in all directions, without any precise indications. 2400 inscriptions, 8400 terracottas, 3513 precious objects, 4166 objects of glass, and about 10,000 coins and medals were preserved after the same disorderly fashion. Now the museum is arranged in six sections, each containing various collections—three for classical antiquity, one for Oriental objects, one for middle-age and Renaissance, and one for separate collections. The former state of the inscriptions was in the highest degree disgraceful, fragments of the same stone lay unexplained in different and distant parts of the museum, Longobardic and Oriental inscriptions were confused with Greek and with different dialects of Italian. In the old inventory the number of Latin inscriptions amounted to 2343, the present catalogue makes only 2101, but this discrepancy is due solely to the fact that 142 fragments catalogued of old as separate inscriptions have been by the present director reunited to the stones to which they belong.

In the second number of the *Deutsche Warte*, the editor, Dr. Bruno Meyer, puts together under the heading, "Neue Holbeiniana," what he himself terms "a few hasty outlines sketched in as the first essay towards the new picture which must now be painted of the elder Hans Holbein." The position which he maintains is that Holbein the younger, confessedly great as a portrait painter, has been by Dr. Woltmann over-rated as a historical painter. Much of the work of this class commonly ascribed to the younger Holbein should be, according to Dr. Meyer, placed to the credit of his father. In this limited space it is impossible to set before the reader the intricate and somewhat confusedly stated arguments by which Dr. Meyer supports his assertions, but in brief he claims for Hans Holbein the elder the Sebastian's altar in the Pinacothek at Munich, and with this work the title of chief master of the German Renaissance passes from the son to the father.

The extent of the loss which has been sustained through the ravages of the fire which broke out in Warwick Castle on the morning of December 3 cannot yet be accurately estimated, and even the news that the "most important" portion of the collection of paintings has been preserved can hardly allay the anxiety felt by those who recollect that amongst the "most important" were Leonardo da Vinci's "Joanna, Queen of Naples"; Rembrandt's "Dutch Burgomaster" (from the collection of Sir Joshua Reynolds); Vandyck's equestrian portrait of Charles I., attended by the Duc d'Epernon; Rubens' Thomas Howard, Earl of Arundel; Holbein's "Henry VIII."; Veronese's "Margaret, Duchess of Parma"; but the list is endless, the paintings by Vandyck alone amounted to a dozen or so, the Canaletti were numerous and fine (he resided in the castle as a guest during the beginning of the last century); the collection of ancient armour was one of the best in the country, and that of Etruscan vases no less distinguished. The fate of the Venus modelled in wax by John of Bologna, and of the cinque-cento statues from the collection of General Greville, excites grave apprehensions, for they must have been difficult to remove. It is to be hoped that an accurate list of what is saved, checked by comparison with the contents of the old catalogue, may be made public as soon as possible.

In the *Allgemeine Zeitung* of December 2 mention is made of two busts found in the courtyard of No. 26 Hirschelgasse, Nürnberg, by a sculptor, Professor M., which, having been freed from a coating of plaster and oil-paint, prove to be good work (Græco-Roman) in Pentelic marble. One bust represents a woman, the other a man; both are much damaged, restored with plaster, and set on breast pieces of wood. The head of the woman is fitted to receive changes of head-dress, and her ears are pierced so that the earrings might be altered according to fashion.

The chances of three revolutions have driven to London the picture commonly known by the name of the Colonna Raphael. In 1504 Raphael began to paint for the nuns of St. Anthony of Padua at Perugia an altar-piece with a lunette and predella of which the painting in question formed the central picture. In 1663 the nuns disposed of five subjects of the predella to Christina of Sweden; they passed later into the hands of the Duke of Orleans,

but were eventually (1798) sold in London and dispersed among various hands. Two are in Dulwich College, one belongs to Lady Burdett Coutts, a fourth is at Leigh Court, near Bristol, and the fifth is now at Barrow Hill, Ashborne, Derbyshire. It is, however, supposed that none of these five paintings of the predella are really by Raphael's hand. It was not till 1678 that the nuns parted with the lunette and central picture to Count Bigazzini, receiving in return 2000 scudi and a copy of each for their high altar. Both paintings were transferred to the Colonna Gallery, and in 1802 were bought by Cavaliere Venusti for the king of Naples. In 1860 the last king, before embarking for Gaëta, gave the central picture to his friend the Spanish ambassador, Bermudez Castro, Duke of Ripalda, by whom it was conveyed to Madrid; but in 1869 the duke, fearing for its safety, removed it to Paris, where it remained for some months in M. Reiset's cabinet, and was afterwards publicly exhibited in the Hall of Battles in the Louvre. The high price at that time asked by the duke prevented its sale, and at last the public troubles obliged its owner to seek a place of safety for his treasure. In virtue of special arrangements made with the Chancellor of the Exchequer and the directors of the National Gallery, the picture has been deposited in Trafalgar Square, where it is to remain for six months. 25,000*l.*, though less by 15,000*l.* than the sum originally named, is still the price set upon it, and we fear, therefore, that there is small chance for the present of its becoming the property of the nation. The picture is in a fair state of preservation, though it is cracked right across. It has been stated in print that this painting is one of two commissions *left unfinished* by Raphael. Passavant says, "He began it as early as 1504, before his journey to Urbino, but did not finish it till his return to Perugia."

Fresh reports reach us from Italy of the efficacy of the Abbate Maloezzi's method of permanently refreshing the colours of fresco destroyed by exudations of saltpetre. The Academy of Milan has already twice recognised the merits of the discovery, and now the frescoes of Gaudenzio Ferrari at Varallo, esteemed the best of all his works, have been submitted to the action of the restoring liquid invented by the professor. The results are described as quite magical. On one wall alone, where the eye could only trace a few faded lines, eight large figures appeared, shining with all the fulness of brilliant colouring which distinguished the master.

Dr. Schliemann writes again to the *Augsburg Gazette* (November 27) to announce the discovery, not as yet of Troy, but of a curious and inexplicable stratum of stone implements, found between layers of earthenware and other remains belonging to a higher civilisation, and themselves in some cases bearing signs of workmanship which presuppose the use of metals. The owl is a favourite figure in this stone age, and Dr. S. is therefore inclined to regard these ancient Trojans as the ancestors of the Hellenes, but it is almost impossible to determine the relative age of the different remains disclosed till the unequal accumulation of rubbish in different spots can be explained. The men of the Stone age hunted the wild boar with very blunt spear-heads, revered the phallus, and cultivated maize; the round perforated objects in stone and earthenware mentioned in the writer's last letter continue so numerous that he is inclined to abandon the suggestion that they were of use in weaving, and can only say that their shape resembles those found in the oldest grave-mounds in the neighbourhood.

The *Nazione* describes the discovery, by Professor de Fabris, of the monument erected to Cosmo the Elder by his son Pietro in the vaults of San Lorenzo. The severe style of the work suggested Brunelleschi as the architect, but documents seem rather to point to Donatello. The curious thing is that the monument is composed of the very column which supports the tribune of the high altar, so that the inscription at the foot of this, *Cosmus Medices hic situs est Decreto publico Pater Patriae vixit annos LXXV menses III dies XX*, taken in connection with that on the monument, *Petrus Medices Patri faciendum curavit*, leaves no doubt that the tomb is really that of Cosmo.

The Church of St. John the Baptist, West Derby, near Liverpool, which has lately been consecrated after long delay, is well worthy of remark, not only as a thoroughly successful work of art, but as an indication of the most recent tendency of ecclesiastical architecture in England. After various more or less successful attempts to incorporate ideas derived from foreign styles, or claiming to be original or eclectic, the conclusion appears to be gaining ground that none can supersede, probably in actual artistic quality, certainly in influence where association is necessarily an important agent, the English styles of the middle ages. The present work, designed by Mr. Bodley, is not only probably the most faithful and accurate reproduction of the old English church which the present era of revival has seen, but further evinces the strength of the individual designer, to those who are capable of detecting it, as forcibly as the greatest ambition could desire. The tendency of so powerful a precedent should be that the many coquettings with foreign elements, which have dissipated the power of our modern school, be superseded, and its force be concentrated on the development of our indigenous resources. The style of the church is that of the period of well-developed middle-pointed work—that, for instance, of St. Andrews, Ewerby, in Lincolnshire. The interior is elaborately, and on the whole successfully decorated, the decorations having the merit of being subordinate to the constructional design.

We had occasion to witness the effect of one of Messrs. Broadwood and Sons' lately manufactured pedalier grand pianofortes at a performance of M. Delaborde, November 16. The pedalier pianoforte was known as early as the times of Sebastian Bach, who composed for it several pieces, as also did Schumann his admirable *Studien für den Pedalflügel.* The instrument consists of an ordinary grand piano, with a pedal like that of an organ, on which the performer by means of his feet can sound all the notes from AA to $\bar{b}$ while playing with his hands on the upper keys of the manual. The value of this addition of two voices in pieces the effect of which depends on clearness of rhythm and the structure of their counterpoint is obvious. On the other hand, the application of an independent pedal to an instrument the artistic treatment of which depends so entirely on the *nuances* of touch as the piano might appear somewhat dangerous. M. Delaborde, in his selection from the works of Bach and Schumann, showed the power and richness of sound of the excellent instrument to great advantage, although for all the display of his brilliant qualities as a virtuoso we could not help feeling a considerable want of delicacy and intellectual refinement in his touch.

In the *Musikalische Wochenblatt* Richard Wagner publishes an interesting paper on the late French composer Auber, with whom he was personally acquainted. We are gladly surprised at the willingness with which the German master acknowledges the undoubted merits of an artistic individuality in many respects so heterogeneous to his own. The great influence which Auber's masterpiece, the *Muette de Portici*, had on the development of dramatic music in general, and to a certain extent on Wagner's own power of production, are described in the most vivid colours. The startling difference between this and the rest of Auber's operas is explained partly by the strong impression which Italian national life produced on the composer's nature, partly by the revolutionary excitement which filled the atmosphere at that period. At the same time the comic operas of Auber, Wagner says, can be only understood in their connection with French life and manners.

M. Elisée Reclus, whose popular work *La Terre* has lately been rendered into English, has been sentenced to "déportation simple" for life, as a participator in the Commune.

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Physical Science.

PAYER AND WEYPRECHT'S ARCTIC VOYAGE OF 1871.

A preliminary report of the Austrian expedition for the examination of the sea between Spitzbergen and Novaia Zemlia, under Lieutenants Payer and Weyprecht, June to September 1871, has been published in *Petermann's Mittheilungen*, by these explorers. Briefly the objects and results of the voyage, as there described, are as follows:—

From his study of the observed temperatures of the sea in the North Atlantic and Arctic Oceans, Dr. Petermann had shown indisputably the existence of a continuation of the Gulf Stream in the whole space between Bear Island and Novaia Zemlia, and argued that the warm flow, coming in contact with the ice, must have a powerful influence upon its condition beyond this area in still higher latitudes. Previously to this expedition, the whole sea east from Hope Island to Novaia Zemlia north of 76° had only once been visited (in August 1869, when the Rosenthal steamer *Albert* made a short essay northward on the 48th meridian), and was strongly decried on account of the supposed impenetrable condition of its ice. The leaders of the expedition considered it advisable, since so many influential opinions were opposed to the navigability of the Novaia Zemlia sea, to try its actual condition in a summer voyage on the smallest scale, and specially to observe the state of the ice in the south of Gillis Land, since the exploration of this and of the region to north-east of it were thought to be the best objects for future more extensive operations. One of the ordinary little sailing vessels of Finmark used in the seal fishery, with a crew of eight men, sufficed for the purposes of this trial voyage. Starting from Tromsö on the 26th of June, after some delays of contrary winds and being beset in about lat. 74° N. and 21° E., besides groping through constant fog, the vessel was navigated along the ice edge to 40° E. and 75° 30′ N. Thence turning westward, on the 29th of July, Hope Island was sighted, and with it the first icebergs. The whole of the ice that had been seen between this and 40° E. was so light and scattered that it would have offered no hindrance to a steamship. Heavy pack-ice was first encountered south of the Thousand Isles in 76° 10′ N. and 22° E. Sailing eastward again on the 21st of August the latitude of 77° 17′ N. was reached, and very light ice, through which a steamer could have passed, was found in about this latitude from 28° to 36° E. On account of the dense fog nothing was seen of King Carl Land, though it must have been passed closely, since the decreasing depth of the sea and the fresh traces of bears indicated the neighbourhood of land. On the 30th of August the 78th parallel was crossed in 41° 30′ E. and the ice was again seen, now trending to the north-east; to westward there was a strong iceblink, but to northward the sea was free. Here there were many indications of land; driftwood was abundant, and on one piece fresh mud was found; algae, much transparent fresh-water ice, and many southward flying ducks were seen; with a north wind a thick fog came on. "It was now a point of the greatest interest to know whether the open space we had sailed through was only a bight in the ice, or, as we expected, an open Polar sea. To assure ourselves of this, we took a S.E. course to 75° 44′ N. 52° E. From the 78th parallel to the coast of Novaia Zemlia there was not a piece of ice." During the return to Tromsö very strong south-westerly gales were encountered. "If one views the open and navigable sea sailed over by us in connection with the observations of Johannesen in former years at the same season . . . the conviction must inevitably be pressed upon every one that this sea is the key to the mysterious Polynia, the open water in the north of Siberia."

Two weeks after Payer and Weyprecht's vessel had left the coast of Novaia Zemlia in 60° E. a Norwegian captain, named Mack, sailed for twenty-one degrees farther to the eastward (to 81° E.) in open water, without, even at the farthest point reached, seeing a trace of ice in any direction: at the same time he found the temperature of the sea to be as high as 44° F., with a strong eastward current. The open sea navigated in 1871 below the 78th parallel is therefore more than 500 miles in extent longitudinally, and of indefinite breadth. K. Johnston.

The finding this year of the actual winter quarters of the Dutch navigator Barents in the north end of Novaia Zemlia, by a Norwegian fisher, is one of the most curious stories in the history of Arctic exploration. Barents wintered here in 1596–97, after his discovery of Spitzbergen, and before East Greenland, Baffin Bay, or Behring Strait were known, or any European had seen Australia. The log-built house, filled with ice which hermetically sealed up the objects it contained, was found well preserved, and many interesting relics, old weapons, tools, cooking utensils, and hooks, scarcely touched by time, have been carried back to Norway.

Scientific Notes.

Zoology.

Marine Pulmonibranch.—Our knowledge of the anatomy and habits of the marine pulmonibranchiate mollusk *Oncidium celticum* is greatly augmented by recent researches of M. Léon Vaillant (*Comptes rendus*, November 13). According to this authority, this mollusk is equally capable of existing beneath the surface of the waves and above their influence as alone hitherto supposed, its range being restricted to that littoral line indicated by the growth of *Fucus nodosus*. Secreting itself when the tide is up in the crevices and irregularities of the rocks, it issues from its retreat and assumes its most active state about an hour after the tide's retrocession, appearing most abundantly in tranquil weather, but at the same time exhibiting indifference to exposure to the direct influence of rain. The most remarkable character in the organization of this mollusk is its possession of a double respiratory system, the one part being in the form of pulmonary sacs, used by the animal when progressing over the tide-deserted rocks and sand, and the other

extending over the general surface of the integument, and brought into action during the creature's submergence beneath the waves, when the pulmonary sacs are closed. The vessels of the arterial system with their ramifications are described by the author as suggestive of the appearance of the tracheal system of the Insecta, presenting a silvery white aspect, due to the presence in their walls of innumerable oily refringent granules. The principal trunks of this arterial system are three in number; the first anterior, neuro-muscular; the second median, gastro-hepatic; and the last, genital. The blood returns to the heart in a great measure through the medium of venous canals situated in the dorso-lateral walls, which open again into two great lateral sinuses communicating directly with the pulmonary vessels. The reproductive system is constructed on the same type characteristic of the ordinary monæcious Gasteropods, the male and female organs being combined in the same individual, and copulation being effected mutually, as with the Helicidæ. In some points *Oncidum celticum* appears to offer affinities with the Opisthobranchiata, between which and the ordinary Pulmonifera it would seem to constitute a connecting link.

Remarkable Lumbricid.—M. Edm. Perrier describes a terricolous worm from the Antilles, which, while referable to the order of the Lumbricidæ, exhibits several remarkable features characteristic of the Perichætæ. The setæ, for instance, while disposed in four symmetrical rows, are composed of groups of three or four, instead of only two, as in the ordinary Lumbricids; more particularly, however, it shows its affinity to that order in the position of the male genital apertures, which open on the ventral surface of the second segment posterior to the central one, instead of very much in advance of it, as in *Lumbricus* and its allies. In the possession of three pairs of testicles, it exhibits a type of structure dissimilar to that found in the representatives of either of the two orders to which it is otherwise allied, and in which the number of pairs of these organs never exceeds two. *Eudrilus dicipiens* is the new generic and specific title conferred upon this annelid by its describer. (*Comptes rendus*, November 13.)

Anatomy of Orthagoriscus.—The anatomy of *Orthagoriscus Mola* is the subject of an important contribution to the *Comptes rendus* for November 20, by M. S. Jourdain. A remarkable feature in its circulatory system is the origin of a unique vein from the union of the venous branches of the caudal fin, receiving, superiorly, the neuropophysal branches, constituted at their origin by the ramification of the dorsal fin; inferiorly, the hemapophysal branches originating from the ramifications of the anal fin; and transversely the venous branches traversing the muscular masses bordering the lateral region of the tail. In conclusion, the author regards the more recently described species *Orthogariscus truncatus* and *oblongus* as identical with *O. Mola*, the difference in size and proportions being attributable probably to disparity only of age and sex.

Development of the Brachiopoda.—Dr. Edw. Morse publishes in vol. xi. of the *Memoirs of the Boston Society of Natural History* (see also *Ann. and Mag. Nat. Hist.* for December) the results of his recent investigations into the development of *Terebratulina septentrionalis*. Imbued with the conviction urged by Huxley, Milne-Edwards, Hancock, and others, that the investigation of the development of the Brachiopoda would further verify the assumed relationship of that class to the Polyzoa, the author devoted a considerable amount of time in the spring of 1869 towards elucidating this point in the case of the above named species. The harbour of Eastport, Maine, where this form occurs in great abundance, from low-tide mark to a depth of fifteen fathoms, yielded the material for Dr. Morse's researches, which have resulted in fully confirming the most sanguine anticipations of himself and other eminent naturalists. At the earliest stage of its existence the shell of *Terebratulina* is oval and flat, like that of *Singula*, while the mouth of the enclosed animal is surrounded by a single circular row of ciliated, flexible tentacula, bearing a remarkable resemblance to the lophophoræ of the Gymnolæmatous Polyzoa. At a later period the shell thickens and becomes longitudinally furrowed and wider in proportion to its length, and the oval wreath of tentacula becomes compound and gradually assumes a horseshoe-shaped contour characteristic of the higher Hippocrepia or Phylactolæmatous Polyzoa. Other anatomical homologies with that molluscoidan sub-kingdom are inferred by the author in reference to the brachial fold from whence the cirrhi spring, which he compares with the "calice" of the higher Polyzoa; in the presence of another membranous fold bordering the mouth, which he assumes to be the counterpart of the "epistome." The membranes suspending the stomach and intestine in the perivisceral cavity are supposed also to have some relation with the "funiculus" of the Polyzoa. Dr. Morse fully confirms the entire absence of any anal outlet to the intestine, the discharge of the fæces taking place invariably through the oral aperture.

New Flagellate Infusoria.—At the November meeting of the Royal Microscopical Society, Mr. W. Saville Kent, British Museum, read a communication, in which he recorded having lately encountered the majority of the new "collared" types of Flagellate Infusoria *Codosiga*, *Salpingœca*, &c., recently made known to the scientific world by the researches of Professor James Clark, of Pennsylvania, U.S. In addition to the species first discovered in America, he contributes a diagnosis of seven entirely new forms, and at the same time revises that of the former in accordance with his own personal observations. Mr. Kent expresses his dissent from Prof. Clark's opinion that *Monas* and its allies possess a distinct mouth, as he has on numerous occasions seen food absorbed into the body of the former animalcule at any portion of its periphery after the manner of *Amœba*. The above communication, with a plate illustrative of the various species commented on, appears in the *Monthly Microscopical Journal* and *Transactions of the Royal Microscopical Society* for December. All the species recorded are of exceedingly minute size, requiring a magnifying power of upwards of 500 diameters for the satisfactory determination of their character, and were taken by Mr. Kent without exception among *Conferva* from a pond on the estate of Thomas Randle Bennett, Esq., of Wentworth House, Stoke Newington.

An Interesting Crinoid.—Mr. R. W. Rawson, C.B., the Governor of Barbadoes, has recently forwarded to Dr. J. E. Gray, F.R.S., a sketch of a crinoid dredged in the vicinity of Barbadoes, which the latter authority identifies generically with a form described by M. D'Orbigny in 1837 under the name of *Holopus Rangii*; the form of the arms differing, however, considerably from those of that species, Dr. Gray proposes to distinguish it by the name of *H. Rawsoni*, promising shortly to contribute a more detailed description. (*Ann. and Mag. Nat. Hist.* December.)

In his *Médecine et Médecins*, M. Littré has put together some results of his medical reading and experience. Among other points he considers some cases of suspected poisoning, and selects for full discussion those of Alexander the Great and Henrietta of Orleans (daughter of Charles I.). That they were not poisoned is shown in two ways: first, no known poisons, mineral or vegetable, produce such symptoms; secondly, those symptoms are characteristic of certain known diseases. Thus Alexander had a fever of eleven days' duration, at first intermittent, then continuous—precisely the characteristic of fevers in hot countries. He exerted himself to perform the regular sacrifices for the first eight days, when he should have had absolute repose. He seems to have had no medical help, entire reliance being placed on the sacrifices, and the fever ran its full course unchecked. Similarly, Henrietta of Orleans died of an ulcer in the stomach, which had caused incessant pain for some time, and ended by perforating it. On this happening (the exertion of drinking made the last film of surface give way), she immediately lost all strength, and died in a few hours in extreme pain. Any acid or alcali strong enough to have caused such pains would have burnt the upper passages in the process of swallowing, and arsenic or phosphorus would not have caused the instant prostration of strength. The whole discussion is an admirable instance of historical induction, in which the traditional data are tested by accurate scientific knowledge. In some of the ancient cases of poisoning the sudden action of the poison implies the knowledge of some form or other of prussic acid, which might have been got from kernels of fruit, or, as Niebuhr suggests (*Lectures on Ancient History*, vol. i. p. 361, Eng. transl.) from blood; in fact, the prussic acid of modern times was at first, a century and a half ago, prepared from blood. This, says Niebuhr (which Littré does not notice), would account for the stories of Themistocles and others killing themselves by drinking blood.

The first number is issued (for November) of the "*Quarterly German Magazine*: a Series of Popular Essays on Science, History, and Art." This magazine is intended to contain translations of articles which have appeared in the *Sammlung gemeinverständlicher Vorträge*, edited by Professors Virchow and v. Holtzendorff, as well as original articles, each number containing respectively selections from the departments of Science, History, or Art, with copious illustrations. The present number consists of "The Cranial Affinities of Man and the Ape," by Virchow; "Sight and the Visual Organ," by v. Graefe; and "The Circulation of the Waters on the Surface of the Earth," by Dove—all of them articles of importance and interest. It would be desirable that, in future numbers, more pains should be taken to render the articles into good and idiomatic English.

Under the title "Yeast," Prof. Huxley contributes to the December number of the *Contemporary Review* a history of the chemical and biological explanations of the process of fermentation, from the discoveries of Fabroni and Lavoisier at the close of the eighteenth century to those of v. Mohl, Schwann, and Pasteur. He takes the opportunity of correcting a misinterpretation, due to Dr. Stirling, of his views respecting protoplasm, enunciated in his paper, "The Physical Basis of Life."

Dr. Anton Dohrn contributes to *Ausland* for December 4 an article entitled "Englische Kritiker und Antikritiker über den Darwinismus," which is chiefly occupied by a very eulogistic review of the paper by Darwin's "Fidus Achates, Prof. Huxley," in the November number of the *Contemporary Review*, on the recent critics of Darwinism. In this article Dr. Dohrn points out that, while in England the attacks on Darwinism come chiefly from the side of religious orthodoxy, in Germany the doctrine is liable to assault mainly from the standpoint of æsthetic philosophy, which doubts the possibility of an ape being the ancestor of a poet or philosopher.

Botany.

Structure of closed self-fertilised Flowers.—A considerable number of plants belonging to widely separated natural orders, *Viola*, *Oxalis*, *Campanula*, *Salvia*, and many others, are remarkable for having, in addition to the ordinary conspicuous flowers, small imperfect flowers which never open, and are self-fertilised, producing abundant seed. To such flowers the name *cleistogenous* has been given. At the meeting of the Linnean Society on Nov. 16th, Mr. A. W. Bennett read a paper on the structure of these flowers in the genus *Impatiens*. The cleistogenous flowers in this genus are extremely inconspicuous, and are generally borne on different plants, always on different branches, from the handsome spurred flowers; which latter have a peculiar arrangement, in the form of a membrane attached to the staminal tube and covering the pistil, preventing the access of pollen from its own flower to the stigma, and which, not being visited by insects, are therefore generally barren. The inconspicuous flowers consist of a minute nearly regular calyx and corolla, which are pushed off from the pistil in the form of a cap, resembling in appearance the calyptra of a moss. The stamens are of a very different form from those of the larger flowers, and contain a much smaller quantity of pollen, which protrudes its pollen-tubes while still in the anther, piercing the wall of the anther-cell to reach the stigma; and fertile seed-vessels are almost invariably the result. It was conjectured that the cap formed of the calyx and corolla is cast off from the pistil by an elasticity of the filaments, similar to that of the ripe capsules. The cleistogenous are far more numerous than the conspicuous flowers, in the proportion of at least twenty to one, and appear to be produced throughout the summer. Mr. Bennett agreed with Mr. Darwin in considering the cleistogenous flowers as distinct from the other kind from their first origin, and not, as held by Prof. Asa Gray, the result of arrested development.

Vitality of the Cambium Layer of Bark.—A correspondent of the *American Naturalist* for November records that it is the custom in some parts of Massachusetts for the bark to be entirely removed from the apple trees for the whole distance between the ground and the branches, about the commencement of June. The object is to improve the health and fruitfulness of the tree. In about six weeks a new but very thin bark is already formed upon the trunk. For several days after the operation, the hand of the operator and every other object must be kept from contact with the stripped trunk: a heavy rain storm, if occurring within a day or two of the loss of the bark, will kill the tree. It would appear that a portion of the cambium layer must remain upon the trunks of these trees, and must perform all the functions of the entire bark, besides speedily restoring the lost portions.

Selective Affinity of Plants.—At a recent meeting of the scientific committee of the Horticultural Society, an interesting letter was read from Mr. Anderson-Henry (printed in the *Gardeners' Chronicle* for Dec. 9th), in which he stated, as the result of his observations, that some creeping and twining plants will be attracted by certain other species of climbers near which they may be growing, and will be repelled by others, avoiding them carefully in their growth. This is in harmony with the observations of M. Lévy reported some time since, that in tropical forests the lianes display a partiality for climbing up certain kinds of tree, going a long way out of their course to reach them, while carefully avoiding others. No explanation has been offered of this curious phenomenon. At the same meeting it was stated by Dr. Masters that the common sweet-scented meadow-grass *Anthoxanthum odoratum* will not grow by itself, but only in company with other grasses. This was explained by the circumstance that its roots penetrate a less depth into the soil than those of most other grasses, and are therefore liable to be scorched unless protected by other roots.

Physics.

On the Maximum Density and Temperature of Congelation of Aqueous Alcohol.—From a series of determinations of the maximum density and temperature of congelation of mixtures of alcohol and water, in which the following results were obtained—

Weight of Alcohol in 100 Grms. of Solution.	Temperature of Maximum Density.	Temperature of Congelation.
·955	4·15	− ·81
5·85	3·17	− 2·63
7·80	1·82	− 3·54
9·75	− ·19	− 4·45
14·62	−8·48	− 7·47
19·5	..	−12·10

M. Rosetti (*Ann. Ch. Phys.* (4) xxiii. 76) deduces the conclusions:—(1) That in alcoholic solutions containing less than 10 per cent. of alcohol each gramme of alcohol in every 100 of the mixture lowers the point of congelation by ·45° C. (2) In solutions containing more alcohol the increase is more rapid. (3) The temperature of maximum density satisfies the following empirical formula:

$$t = 4·12 - ·295x + ·076x^2,$$

in which x equals the percentage of alcohol. (4) The maximum density and point of congelation of a solution containing 14·40 per cent. of alcohol are at the same temperature, viz. − 7·35.

Simple Method of Filling Barometer Tubes.—The ordinary method of filling barometer tubes and afterwards boiling the mercury in the tube itself is both troublesome and dangerous, on account of the frequent breakage of the tubes during the operation. H. Wild (*Pogg. Ann.* cxliv. 137) adopts the following simple modification whereby all danger of breakage is avoided. A ball-shaped, doubly tubulated glass vessel is connected by means of short lengths of unvulcanised caoutchouc tubing on the one side with the barometer tube, on the other with a drying tube filled with pieces of chloride of calcium and in connection with an air-pump. The whole system is exhausted, and then again slowly filled with air, which, in its passage through the chloride of calcium tube, becomes thoroughly dried, and by a repetition of these two operations a sufficient number of times all traces of moisture are finally removed. Chemically pure mercury is then introduced into the glass globe, and any inherent moisture removed by exhausting and refilling with dry air as before. The mercury is now heated to boiling—this takes place at 300° C., and without bumping, *in vacuo*—and the barometer tube, having been slightly warmed, is carefully filled with the hot mercury by slowly inclining the glass globe; it may then be separated, together with the caoutchouc connection, which must be full of mercury in order to allow for contraction on cooling, and when cold inverted in the usual manner.

Apparatus for Determining Melting Points.—The following ingenious method of determining melting points, invented by J. Loewe, is described in the *Journal of the Chemical Society*, November 1871. A cast-iron bath, which is charged with water or oil according to the temperature required, is fitted with an iron cover provided with a well 4·5 centimetres deep and 2·5 cms. wide. This well is filled with mercury, into which dips a delicate thermometer and also a moderately thick, pointed platinum wire which is in connection with the zinc pole of a single-cell battery; the mercury is in connection with an electro-magnetic alarum, a second wire from which to the other pole of the battery completes the circuit, and the bell consequently rings. The platinum wire is coated with the substance to be examined and then plunged into the mercury; the circuit is thus interrupted by the layer of non-conducting material. The temperature of the bath is then gradually raised until the substance melts, which is indicated by the ringing of the bell in consequence of the disappearance of the layer from the wire and completion of the circuit. The temperature observed on the first ringing of the bell is the required melting point, and, according to the author, highly satisfactory results may be obtained in this manner.

New Books.

Burmester, L. Theorie u. Darstellung der Beleuchtung gesetzmässig gestalteter Flächen. Leipzig: Teubner.

Clebsch, A. Theorie der binaren algebräischen Formen. Leipzig: Teubner.

Cohen, H. Kant's Theorie der Erfahrung. Berlin: Dümmler's Bg.

Dawson, J. W. The Fossil Plants of the Devonian and Upper Silurian Formations of Canada. Montreal: Dawson Bros. London: S. Low, Son, and Co.

Frauenstädt, J. Schopenhauer-Lexikon: nach A. S. sämmtl. Schriften u. handschriftl. Nachlass bearb. Leipzig: Brockhaus.

Loewenhardt, S. E. Benedict von Spinoza in seinem Verhältniss zur Philosophie u. Naturforschung der neueren Zeit. Berlin: Peiser.

Müller, J. Lehrbuch der kosmischen Physik. (Nebst Atlas in 4to.) 3te umgearbeitete u. vermehrte Auflage. Braunschweig: Vieweg.

Pfeffer, W. Die Entwicklung des Keimes der Gattung Selaginella. Bonn: Marcus.

Reinke, J. Untersuchung über Wachsthumsgeschichte u. Morphologie d. Phanerogamen-Wurzel. Bonn: Marcus.

Secchi, P. A. Die Sonne. Hrsg. durch Dr. H. Schellen. Braunschweig: Westermann.

History.

The Ceremonies of the Papal Elections. [*Die Papstwahlen und die mit ihnen im nächsten Zusammenhange stehenden Ceremonien in ihrer Entwickelung vom* 11. *bis zum* 14. *Jahrhundert. Nebst einer Beilage: Die Doppelwahl des Jahres* 1130. Von Dr. Richard Zoepffel, Repetent an dem theologischen Stift der Georgia Augusta.] Göttingen: Vandenhoeck and Ruprecht.

This is one of the ripest fruits of patient and methodical growth, a very remarkable production of the younger school of historical studies in Germany, which with the strictest philological and critical exactness still selects for discussion

medieval subjects in preference to later ones. But the subject being itself of very general interest, the history of the election of the popes during the period when all its distinct details were settled for future observance deserves, indeed, to be treated with close adhesion to the principles of exact scholarship. The historian, the antiquarian, the student of canon law perhaps more than the two former, will thank a young scholar, whose learning and research in ecclesiastical history and law show signs of being equal to the severest test, but from whose unimpassioned and "iron objectiveness" it will be difficult to suspect whether the author is a Roman Catholic or a Protestant.

The book being a concatenation of a number of elaborate dissertations, and having not much in common with a continuous narrative, cannot of course be perused in the usual way, but requires minute and careful study with constant reference to the multifarious sources upon which it is based. Of the three principal sections, there are two which had to be constructed out of the rough unhewn material itself, whereas the second, the middle one, at least can lean upon the work of Francesco Cancellieri, *Storia de' solenni possessi de' Sommi Pontefici* (Roma, 1802).

The first section is concerned with the period from 1059 to 1274, *i.e.* from the famous decree of Nicholas II., which laid down certain fixed principles for the act as well as for the actors in the papal election, to the Council of Lyons, where the entire series of formalities as they are now observed were completed, with the exception of a few less important modifications. When a pope died, certain preliminaries, chiefly with regard to the time and the place of election, had to be arranged. In the preceding centuries the circumstances varied considerably from an apprehension of the forcible interference of the lay power—that of the factious Roman aristocracy or of the emperors. The election itself, "tractatio," as it is officially designated, is conducted in two distinct divisions, the "denominatio" and the "deliberatio." The simple nomination of the former period had begun to give way a little before the middle of the twelfth century to a very circumstantial scrutiny, in process of time and in consequence of the schismatical elections of Alexander III. and Victor IV., until at length a decree of the Lateran Council of 1179 required two-thirds of the votes instead of the highly elastic formula "major et sanior pars." This method, however, proving to be the fertile cause of interminable electionary agitations of the next century, was ultimately in the year 1274, and after the Holy See had actually been vacant for three years, supplanted by election by the conclave of cardinals.

But who elected the pope during this period? According to the more authentic text II. of the decree of 1059 (see p. 70, note 161, *a*) Nicolas II. conferred this privilege upon the "cardinales episcopi," the "praeduces in promovendi pontificis electione." It was his chief object to preclude a renovation of that imperial influence, not long ago so freely exercised by the Emperor Henry III., who in fact had deposed and elevated several popes, though it cannot be proved that he actually nominated them. The church claimed the entire "tractatio" as her own right, leaving to the emperor nothing but the bare consent. It is well known how, during the impending storms, this development was supported by the democratic spirit of a new clerical party. At the very election of Hildebrand, who hitherto held but the rank of "cardinalis subdiaconus," the exclusive privilege of the cardinal bishops, granted by Nicolas II. only a short time before, was completely subverted, and after a struggle of a hundred years more, Alexander III. decreed that all cardinals without distinction of their order should participate in the "tractatio." While the bishops by this time had lost their precedence, the lower ranks of cardinal subdeacons and even acolytes disappeared altogether. Yet a certain consent, the "laudatio," still remained to the lower clergy, the nobility, and people of Rome ("cardinales clerici, reliquus clerus, populus"), but this likewise was adhered to for the last time in the duplicate elections of Alexander III. and Victor IV. In this way the mischievous authority exercised in former ages by the dynasts, the magistrates, and even the mob of the city was at last effectually overcome by Alexander III. Some other ceremonial rites, though separate in origin, appear to have been intimately associated by custom with the "tractatio," namely the change of name, the adoration, and the "immantation." They were, however, not always observed with the same rigidity, nor in the same order; whilst time and circumstances, as the investigation of each separate case sufficiently proves, affected in many respects the number and the privilege of those who partook in them.

In the second section of the present work, treating of the pope's introduction into the Lateran, the development of another set of ceremonies necessitated an extension of the author's researches as far down as the sixteenth century. The Lateran church used to contain several stone chairs of great antiquity and ceremonial significance: the patriarchal seat in the apse of the basilica and the "sedes stercoraria" in the porch are mentioned by the authorities from the twelfth century to the death of Leo X.; whilst the two chairs of porphyry under the arch which leads from the palace into the church seem to have existed as late as the election of Leo X. The successive installation of the popes in these seats was originally performed on the day of election as symbolizing the act of taking possession of the ancient residence of the Latin See. With the close of the twelfth century, however—and not, as has been pretended by some modern writers, at the time of the return of the popes from Avignon—the act of consecration in the church of St. Peter began to be introduced.

In the third section, which deals with the signature of the minutes of election and the oath of allegiance, the author very learnedly explains the origin and meaning of the enthronization in St. Peter's, which now and then might take place in S. Pietro in Vincoli, where there existed another ancient chair. The enthronization in the chair of the prince of the apostles having been adopted with important significance in the age of Gregory VII. began to fall into desuetude in the fourteenth century, when, and especially during the absence of the popes from Rome, a regular coronation was definitely substituted.

In an appendix Dr. Zoepffel gives a documentary account of the double elections of Innocent II. and Anaclet II., together with a review of all the customs and rites promiscuously broken and observed by either side. The letters and reports of the adherents of each party furnish the most valuable evidence, from which, in connection with the contemporary historians and a number of curious scraps of canonical tradition, the whole process may be reconstructed according to the programme which our author lays down as the nett result of his enquiry into the usages prevailing before and after this conflict. There is no doubt that the party of Cardinal Pierleoni (Anaclet II.) obtained some advantage by the more faithful observance of the order of ceremonial, but that this advantage was compensated for by the far superior moral qualifications of his opponent.

The reader of ecclesiastical history and law will be surprised at the great amount of literature which has been examined, expounded, and criticised by the author, as he will be satisfied with the systematic and conscientious use he has made of his conclusions. Nor will an English scholar easily miss any reference in Eadmer, Malmesbury, or the

later English historians to Pierleoni, who had visited France and England as legate before he contested the Holy See. To render the book complete, however, an index of names, and, if possible, a parallel register of the ceremonies observed, transposed, or dropped altogether in the course of the eleventh, twelfth, thirteenth, and fourteenth centuries, would have been welcome additions. R. Pauli.

The Athenian Confederation of Delos. [*Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes.* Von Ulrich Köhler.] Berlin: Dümmler.

This treatise appeared originally in 1869 in the yearly publication of the Royal Academy of Berlin, but in accordance with the convenient custom which prevails in Germany, it has been since printed in a separate form. The subject is one which has attracted little notice in this country, though the period of history to which it belongs occupies a most disproportionate space in the usual course of our school and university studies. Any fresh light on the growth and financial relations of the Confederacy of Delos, which gradually passed into the imperial system of Athens, is at least worthy of attention, but in this as in other cases there are few signs of interest among us in the substantial additions which have been made to the knowledge of Greek and Roman history by careful comparison of ancient inscriptions.

Indeed almost the only notice in our books of common reference of the efforts made by Pittakis, Rangabé, and Böckh to illustrate the meagre statements of the Greek writers on this subject is to be found in a note in the second edition of Grote's *History*, where he speaks of their "hypotheses as more ingenious than convincing." The present work goes far towards meeting the objections of such unfavourable critics. It is a re-arrangement of the fragments collected from time to time at Athens, and long known to contain some yearly lists of the confederate states, and certain entries of contributions made by them. The fragments are numerous and small, as for example eighty-nine of the pieces collected in the Royal Museum are now believed to belong to a single block of marble which contains the registers of only fifteen years, and is still imperfect. The difficulty of piecing them together, and of determining the chronological arrangement, was therefore very great, and the scepticism of Grote seemed to be long justified by the large use made of hypothesis and the conflicting opinions of the reconstructors. But a short fragment of the same series found a few years since furnishes really important data, and has enabled the last editor to re-arrange the whole on surer principles, and to explain with a high degree of probability some points that were before obscure.

The difficulties which had been felt hitherto in drawing conclusions from the evidence before us were mainly due to the frequent changes in the lists of the subject allies, to the variety and pettiness of the contributions mentioned, and to the extreme uncertainty of the chronological arrangement.

(1) The changes in the lists of names are too great to be attributed merely to the gathering of fresh members to the league, or the falling away of old allies, and the whole number given, which is only 257, is much less than we had reason to expect.

But a suggestion of Böckh has been since confirmed, that many federal leagues were named as units in the list, that petty neighbouring communities were thrown together as co-tributaries, and colonies included often under the name of the parent states. This would lead to varying entries, when the relative importance of the members shifted, or the local federations were broken up either by political causes, or as in later times with the financial object of raising a larger revenue. The lists serve to show that the geographical range of Athenian power was very early as wide as at the outbreak of the Peloponnesian war, and that little was done towards systematic organization of the empire, beyond the common classification of the allies under the five heads of Karian, Ionic, Insular, Hellespontine, and Thrakian, which seems to have served later as the basis of a division of military duties, but not to have been carried out further in civil administration.

(2) The contribution of each state is in general surprisingly small. Böckh assumed that each entry represented not the whole tribute assessed, but that small fraction of it (according to him $\frac{1}{120}$) which was paid over as an offering to the goddess Athene. Unwarrantable as the assumption seemed to Grote, the recently found inscription expressly states that a mina in every talent or $\frac{1}{60}$ of the revenue from the allies was paid over by the auditors of the public accounts to Athene, in whose temple the public treasury was kept.

The lists of contributing states and the percentage of their tribute were made out yearly by the thirty auditors, and engraven by them on marble blocks or tablets in the Akropolis, where the fragments were actually found.

(3) Most of the conclusions hitherto drawn from the comparison of the different lists were rendered questionable by the uncertainty of the starting point, but the last-found fragment, which contains the name of the archon of the year 421 B.C., describes the assessment to which it belongs as the thirty-fourth of the series, and fixes the beginning of the system at 454 B.C., at which time the revenue was probably transferred from the hands of the federal commissioners (Hellenotamiæ) into those of the thirty Athenian auditors (Logistæ). The general order of the series can be now fairly determined either by the numbers which still remain in some of the lists, or by other data which they contain. In the order so made out it is observed that a change in the characters of the descriptions corresponds to a known period of transition in alphabetic forms, and there are traces of a revision of the assessment after periods of four years, which illustrates a solitary statement to that effect in the treatise *de Rep. Athen.* included among the works of Xenophon.

To take a few examples of the light reflected by these lists on contemporary events, we may notice that in the year 449 B.C. many of the Asiatic allies fell heavily into arrears of tribute. As at this time we read in Thukydides (i. 112) that the Athenian fleet was forced by a general famine to raise the siege of a town in Kyprus, and return home, we are enabled by the registers to estimate the effect of the dearth on the finances of the neighbouring states. In 440, again, extraordinary contributions are set down against the names of some of the Ionian and Hellespontine communities; the grounds of the claims are not specified, but they may be referred with little doubt to the strain on the resources of Athens caused by the revolt of Samos, to meet which unusual measures were needed.

Again, after some years, we find no more entries of the payment of arrears, and it would seem that some system was adopted to prevent their recurrence. It is likely that the cruisers νῆες αργυρολόγοι, of which we read in Thukydides, point to the regular action of the collectors, rather than to a course of irregular exactions. In either case their unpopularity is easily understood. Again the blow dealt to Athens by the revolt of Potidæa is brought more fully before our minds by the disappearance from the list of that year of many neighbouring states, which return no more. Curiously enough, however, Melos is put upon the list before she actually pays tribute, in spite of her refusal of the invitation

addressed to her (Thuk. iii. 91). The severity of her treatment in later time seems to show that she was regarded as a revolting member of the empire.

Another point is of interest from its relation to a question which has been much discussed. The fragments of the year 425 B.C. show a large increase of the contributions of the states named, and point to a doubling of the whole revenue. This, as is well known, is said to have taken place after the death of Perikles, but Grote declined to accept the statement on the ground that the silence of Thukydides on the subject is a fatal objection to it, and that the authority of the orators who report it is of slight weight. But the inscriptions leave little doubt that the tribute was really doubled at this time, though Alkibiades must have been then too young to have had the influence attributed to him by Andokides.

In conclusion we may observe that the last editor of the fragments has shown a sobriety in the use of hypothesis which is not common in the treatment of like matters, has written some interesting chapters on their relation to contemporary history, and has drawn out with laborious care an index in which we may trace at a glance the fluctuations in the burdens borne by the several states, and gather some geographical data of importance. W. Capes.

Prolegomena to Ancient History. By J. P. Mahaffy. Longmans, 1871.

Under a somewhat ambitious title Mr. Mahaffy has devoted a volume of clear and sparkling essays to discussing the nature and value of our evidence for human culture antecedent to that of Greece. In the first chapter Thukydides and Herodotus are contrasted as representative writers, and the practical narrowness of the former, with its exclusion of gods and women from history, is condemned. The second chapter criticises the comparative mythologers; but the criticism is beside the mark, as the new science undertakes to explain the mythical element, not its accidental setting in history and geography. Then follow two chapters, one on the decipherment of the Egyptian hieroglyphics, and the other on the interpretation of the cuneiform inscriptions. The latter would be very useful were it only more complete and accurate. The worst error is the confusion made between the Accadian of Babylonia and the third Achæmenian, which I prefer to call Elamite, as inscriptions in the same language and differing only in age and dialect are found at Susa and Mal-Amir. Elamite is not the abnormally composite language that Mr. Mahaffy thinks, but Ugrian both in grammar and vocabulary; and it is widely removed from the Accadian, though belonging to the same Turanian or Ugro-Mongolian family of speech. The Accadian, the original language of the cuneiform system of writing, was invented not by Siberian nomads, but by the civilised pre-Semitic population of Babylonia. The Accadian ideographs were adopted and modified by the Assyrians, and it was from this new syllabary that the Elamites selected their own, getting rid at the same time of the Assyrian polyphones. The law that the same sign in Assyrian "never represents two simple syllables" is imaginary. The syllabaria, again, were found not at Babylon, but in the library of Assur-banipal at Nineveh. They have afforded a startling verification of Assyrian decipherment, which is further corroborated by contract-tablets and duck-weights which reproduce in Phœnician the names and in some cases the chief facts of the cuneiform legend. This will correct the statements in p. 212.

The second part of the volume gives a good review of old Egyptian literature. We must be allowed to doubt de Rougé's identification of certain names in the Karnak inscription with Akhæans, Sardinians (!), Tyrrhenians (!), and Sikels. Nor can we commend the zest for theological controversy that occasionally shows itself, especially as the author displays but little acquaintance with Biblical criticism. We have no wish, however, to part in a captious spirit from a book which, while erudite, is at once pleasant and suggestive, and which has thrown into a popular form the important results of modern research. A. H. Sayce.

Intelligence.

We learn that the first volume of Professor Mommsen's new work, *Römisches Staatsrecht*, is now completed, and will appear immediately. The book is intended to take the place of the second volume of the well-known *Handbuch der römischen Alterthümer* begun by Becker, and continued by Marquardt, of which Dr. Mommsen had been asked to prepare a new edition; but, although it bears an alternative title as the first part of a new issue of Marquardt's *Handbuch*, it is in reality —as might be expected from the writer—an entirely new and independent work. Many questions, the bearings of co-operation, alternate power, and veto springing out of the collegiate system of magistracy, receive a more elaborate treatment than they have met with before. The conclusions arrived at are set forth with clearness and precision in the text, while the grounds on which they rest are discussed in the notes, with copious references to authorities. The notes are especially valuable in this respect that they illustrate and justify many of those novel and startling views which Dr. Mommsen has embodied in his *History* without giving his reasons for them. The work is to consist of three volumes.

A meeting of the Hungarian Historical Society was held on the 7th December. Amidst other business four members presented a report of their researches in the archives of the Sztaray family at Homonna and Sztara, the first containing 4000, the second 11,872 documents. The most interesting were from the fourteenth and sixteenth centuries, referring to the insurrection of Bocksy and the Turkish rule in Upper Hungary. Several of these records are written in the Hungarian language, including the will of one of the former lords of Homonna, of the date of 1540. The report states that several documents were burnt during the administration of Bach.

A. Berliner, *Aus dem inneren Leben der deutschen Juden im Mittelalter.*—This is a sketch of the brighter side of Jewish existence in the middle ages—of the teaching of the children, the daily life, the feast times, the marriage ceremonies, the proficiency in science, in medicine, in the arts, and in trade. The relation of the down-trodden race to the better-minded among the Christians is well brought out. There was a distinct retrogression after the Crusades, begun when the fanatical spirit once aroused against the Mohammedans was easily turned against the Jews or against Christian heretics. A crusade naturally began with a massacre of the Jews; it is to the honour of some of the Rhine bishops that they interfered—unhappily none interfered in England. The Jews were well treated in the later times in Prussia, and especially at Berlin. They have repaid Germany by many contributions to her literature and her culture.

Contents of the Journals.

Revue des Deux Mondes, Dec. 1.—Gaston Boissier has an interesting article on the guilds and general societies of antiquity. The need of co-operation and association was as much felt among the Romans as among ourselves, and the mode of organization was much the same. The associations had their presidents (*magistri*, *quinquennales*), their treasurers (*quaestores*), their official list (*album*) of members, their entrance fees, and their monthly payments. The burial societies were especially important, and to these the earliest Christian associations belong. All had their common meetings (a quorum being necessary for any business), their dinners at regular times, their regulations as to expenses. M. Gaston Boissier laments the difficulties of getting Frenchmen to associate. We think we know a nation which is very like the Roman in the thing he mentions, with the addition of the charitable associations introduced by Christianity.

Revue des Questions Historiques, October.—E. Boutaric begins a defence of Clement V. for yielding up the Templars to Philip the Fair. A sketch of the results obtained from the cuneiform inscriptions follows; and the account of the "national flag of France" concludes with an account of the origin of the tricolor. A long analysis of Henri Martin's History of France is concluded, in which it is condemned, not on the evidence, but as being wrong in its first principles, *i. e.* its not following the papal view of church history. A good account follows of the "false Joan of Arc," a sort of parallel to the false Louis XVII.

and other well-known cases of imposture. The original narrative of the arrest of Condé in 1650 is then given; and the usual reviews and summaries follow.

Götting. gel. Anzeigen (Nov. 22) reviews Macray's Annals of the Bodleian, and Edwards' Lives of the Founders of the British Museum, the former being regarded as more adequately fulfilling its object.

Centralblatt (Dec. 2) reviews Waitz's "Caroline;" the lady was well known as the wife of A. W. Schlegel and of Schelling, and the book contains very many letters of value to literary history. There is also a notice of Bonvalot's Coutumes de la Haute-Alsace dites de Ferrette. One of the customs in part of Alsace was exactly our custom of *Borough English*, by which the inheritance went to the youngest son—a custom which also holds still in parts of the Black Forest. The rules also as to the disposal of property on marriage are valuable for comparative jurisprudence. Mussafia's Sulla Visione di Tundalo is noticed for its account of the manuscripts and translations of this curious medieval vision. There are some others in Hardy's Descriptive Catalogue of Materials relating to the History of Great Britain and Ireland.

New Publications.

Brunner, H. Die Entstehung der Schwurgerichte. Berlin: Weidmann'sche B.

Lipsius, R. A. Die Quellen der röm. Petrussage kritisch untersucht. Kiel: Schwer'sche B.

Maclean, Sir J. Parochial and Family History of Trigg Minor in Cornwall (Egloshayle). Part IV. Nichols and Sons.

Mayor, J. E. B. Cambridge in the Seventeenth Century. Part III. Macmillan.

Molesworth, W. N. History of England from the Year 1830. Chapman and Hall.

Rathgeber, Jul. Strassburg im 16. Jahrh. 1500–1598. Stuttgart: Steinkopf.

Ridolfi, Atanasio, des Florentiner Residenten, Depeschen vom Regensburger Reichstage, 1641, ed. Fl. Tortual. Regensburg: Coppenrath.

Thomas, E. The Revenue Resources of the Mughal Empire in India from A.D. 1593 to 1707. (Supplement to the Chronicles of the Pathán Kings of Delhi.) Trübner.

White. History of the Battle of Bannockburn. Edmonston and Douglas.

Zustände, die wirthschaftlichen, im Süden u. Osten Asiens. (Kaiserl. Expedition nach Siam, China u. Japan, Schluss.) Stuttgart: Maier.

Philology.

ON THE PRONUNCIATION OF LATIN.

VI.

Owing to my absence from England I was not able to follow the discussion on Latin pronunciation carried on chiefly in the pages of the *Academy*. After my return to Oxford, however, I carefully read all the papers that bear on the subject, and I now beg leave to offer the following remarks:—

I. *On the Pronunciation of C.*

No one, I think, could have attentively read my paper in the *Academy*, No. 18, without perceiving that I am in favour of pronouncing *c* before *e*, *i*, *y*, *ae*, *eu*, *oe*, as *k*. At our Oxford meeting I had given my vote for it, and my only object in writing the article in the *Academy* (Feb. 15, 1871, p. 145) was to remove, if possible, a stumbling block that might bar the way to all further improvement in the pronunciation of Latin. Men who were willing to yield on all other points seemed to me determined against pronouncing *Kikero*, *et ketera*, *skiskere*. Though nearly all scholars in Germany and France were convinced that *Kikero* was right, and *Zizero*, or *Sisero*, wrong, not one, as far as I knew, had ever ventured to adopt the right pronunciation in any university or school. As I looked upon a reform in the English pronunciation of the vowels as far more important than any improvements in the pronunciation of certain consonants, my chief object was to show that some compromise might be possible with reference to *c*, and that in allowing their weaker brethren some liberty in the pronunciation of this one letter before *i* and *e*, thorough-going reformers need not have felt ashamed as if sacrificing an important principle. Some kind of defence, I maintained, might be made for allowing *c* before *e* and *i* to be pronounced differently from *k*, because the evidence that *c* before *e* or *i* was pronounced exactly like *c* before *a*, *o*, *u*, is not so strong as the evidence that *i*, for instance, was never pronounced like *i* in English *ice*. To this opinion I hold as strongly as ever.* But I see with great satisfaction that public opinion in England, or I should rather say the opinion of those on whom the introduction of a correct pronunciation of Latin will mainly depend, the masters at Public Schools, has made such rapid progress that no compromise is required. I therefore gladly withdraw my plea, and I hope that England will have the credit in this as in other reforms, if not of having been the first to find out what is right, at all events of having been the first to do what is right.

The facts on which I founded my arguments were not new. They may be found in Schneider's *Elementarlehre der Lateinischen Sprache*, published in 1819, and in many books published both before and after his time. But there is one curious passage in Marius (not Maximus) Victorinus, which seems to have escaped attention, and which, though it does not change the issue of the question, deserves to be quoted as showing that in the fourth century (supposing our grammarian to have lived then) a distinction was observed in the pronunciation of *C* as compared with that of *K* and *Q*. Marius Victorinus (i. 6, 13) says: "K et Q supervacue numero litterarum inseri doctorum plerique contendunt, scilicet quod c littera harum officium possit implere: nam muta et otiosa parte, qua c incipit, pro qualitate conjunctae sibi vocis supremum exprimit sonum. Nonnihil tamen interest, utra earum prior sit c seu q sive k, quarum utramque exprimi faucibus, alteram distento, alteram producto rictu manifestum est." This passage is by no means easy, but it becomes intelligible if we remember that Marius Victorinus distinguishes in other letters also between their first portion, the inaudible appulsive contact, and the second portion, which is either explosive, as in P, K, T, or drawn back and soft, as in B, G, D. This second, or expulsive, portion of the consonants, as distinguished from the initial or appulsive portion, becomes audible by means of the following vowel. He says, for instance, speaking of the distinction between *tenues* and *mediae:* "Ex quibus B et P litterae conjunctione vocalium quasi syllabae, (nam muta portio penitus latet, neque enim labiis hiscere, ullumve meatum vocis exprimere nisus valet, nisi vocales exitum dederint, atque ora reserarint) dispari inter se oris officio exprimuntur: nam prima exploso e mediis labiis sono, sequens compresso ore, velut introrsum attracto vocis ictu, explicantur. C etiam et G, ut supra, sono proximae, oris molimine nisuque dissentiunt: nam c reducta introrsum lingua, hinc atque hinc molares urgens, haerentem inter os sonum vocis excludit: g vim prioris, pari linguae lapsu palatu suggerens, lenius reddit."

If we apply this view to C, Q, and K, and remember the common doctrine of Latin grammarians that K should properly be followed by *a*, C by *e*, and Q by *u*, the meaning of the passage quoted from Marius Victorinus becomes clear. He alludes first to the oft-repeated statement that K and Q are superfluous letters, because the letter C, with its initial mute and otiose portion, sends forth its final sound according to the quality of the vowel which is joined to it. So far all is clear, for everybody can see and feel, even if he cannot hear,

* I was glad to learn from Mr. Roby that Professor Raumer and others have arrived at the same conclusion.

the modification of the guttural check, according as it is followed by *a*, *e*, or *u*. The guttural contact is palpably shifted from place to place, as we say *ka*, *ke*, *ku*, a fact well known and well described by Terentianus Maurus in words not unlike those of Marius Victorinus.

"K perspicuum est littera quod vacare possit;
Et Q similis, namque eadem vis in utraque est;
Quia qui locus est primitus unde exoritur C,
Quascunque deinceps libeat jugare voces,
Mutare necesse est sonitum quidem supremum,
Refert nihilum, K prior an Q siet an C."*

I translate: "For, taking the place where C is first formed, whatever vowels you may please to join, you will have to modify the final sound of C, it matters not whether the preceding letter be (written as) K or Q or C."

The curious part is that with which Marius Victorinus concludes. He is not satisfied with the fact that the second or expulsive portion of the guttural check is modified by the following vowel, but he admits a different *rictus* for C on one side and for K and Q (taking these two as one) on the other. The only question is whether *tamen* is simply meant to carry on the argument, or to convey a real opposition to what precedes. I confess I incline to the former opinion, for otherwise Marius Victorinus would be the only grammarian who considered C(*e*), K(*a*), and Q(*u*) as really different letters, as far as their formation is concerned. However that may be, he has certainly the merit of having clearly pointed out the modification which every guttural must undergo through the influence of the vowel (palatal, guttural, or labial) by which it is followed,† and this from a grammarian of the fourth century, if that date stands, deserves to be mentioned.

II. *The Pronunciation of V.*

I now come to another point which, in successive numbers of the *Academy*, has been most fully and ably discussed by Professor R. Ellis, Mr. A. J. Ellis, Professor Munro, Mr. Roby, Mr. Nettleship, and Mr. Rhŷs, the proper pronunciation of the consonant *v*. Leaving out of consideration a number of arguments which have been adduced, and which, as far as I can see, can only be looked upon as compatible with either one or the other view of the pronunciation of *v*, without amounting to stringent proof on either side, the general result of the discussion seems to be this that in Latin *v*, as a consonant, must have been as close to the vowel *u* as a consonant can be.‡ So far all parties are agreed. But when the next step is taken, opinions diverge at once. We all admit that *v* must have been a sonant labial breathing (*tönendes Reibungsgeräusch*), but, without entering into purely physiological refinements, we must distinguish at least three broad varieties of the sonant labial breathing: I mean (1) the dento-labial breathing as heard in English *vine*, (2) the labial breathing as heard in German *Wein*, and (3) the peculiarly English labial breathing as heard in English *wine*. It has been usual to distinguish between a North and South German *w*, the former being dento-labial, the latter labial. The distinction is no doubt a true one, only it has become individual rather than local. Brücke marks the dento-labial by w^2, the labial by w^1. But neither w^1 nor w^2 is exactly the English *w*. The best proof of this is the fact that, though I have lived in England for a quarter of a century, I still am unable, as the best phonologists tell me, to pronounce the pure English *w*. For the German *w* (Brücke's w^1) the tongue is flat and actionless; for the English *w* it has to be raised into the position it assumes for *u*.* I also think that for the English *w* the lips are more rigidly rounded † than for the German pure labial *w*. "*Wilhelm*" pronounced by Englishmen has always a smack of the English *William*, and *vice versâ*.

If, then, the English *w* is a sound peculiar to English, and a sound which other people, even of Teutonic origin, are incapable of rendering with exactitude, I suppose it will not be maintained that this was the sound of the Roman *v*. I find, in fact, that the leading scholars in England who have pronounced against the dento-labial character of the Roman *v* are quite willing to admit that they only stand up for a pure labial breathing, not for the exact English *w*, and that they would willingly accept the so-called South German *w* as a compromise between English and German scholars.

If therefore the question were looked upon merely from a practical point of view, such a compromise might seem to be satisfactory. But more than this I cannot say. If we attempt a real reform in the pronunciation of Latin, we ought not to be satisfied with half-measures, but, while we are about it, adopt that pronunciation which rests on the best scientific foundation. I know that I am running counter to the opinions of many scholars, far more competent to pronounce an opinion on such a subject than I am, but I cannot conceal my conviction that, after weighing all the evidence which is ponderable, the balance seems to me decidedly in favour of the Roman *v* ‡ having been a dento-labial, having been in fact the English *v* in *vine*, and not *w* in *wine*, or even W in German *Wein*.

The arguments which weigh most with me are—(1) Admitting to the fullest extent that consonantal *v* must represent the nearest possible approach to the vowel *u*, I think that we must look at the phonetic system of each language before we pronounce what in each is the nearest possible approach to *u*. If languages possess both the labial and dento-labial *v*, I admit that the labial *v* would be the nearest approach; but if languages have not fixed these two categories of labial breathing, if they have fixed only the one or the other, then the case is totally different. Sanskrit, for instance, which in many respects possesses the most perfect system of sounds, has fixed on only one letter for the labial breathing, the *v*. The pronunciation of that letter seems to have varied, it was either purely labial or dento-labial, but it was either one or the other, it was not both. The Prātiśākhya of the Rig-Veda (rule 48) describes the *v* as simply labial, and so does the *K*aturādhyāyikā, sometimes called the Prātiśākhya of the Atharva-veda.§ The Vāgasaneyi-prātiśākhya, on the contrary, and the Taittirīya-prātiśākhya both describe the *v* as dento-labial, and distinguish it from the pure labials such as *p*, *ph*, *b*, *bh*, *m*. The most accurate description is that of the Taittirīya-prātiśākhya, which describes the *v* as formed by the two ends of the lips together with the teeth. A glance at the looking-glass will show the exactness of that description; for in pronouncing the dento-labial *v* the two ends of the lips at each side of the mouth are brought closely together, while at the same time the lower lip (the kara*n*a) is moved towards the edge

* See Roby, *Latin Grammar*, p. xlv.

† See *Lectures on the Science of Language*, vol. ii. p. 156; Brücke, *Grundzüge der Physiologie und Systematik der Sprachlaute*, p. 44.

‡ Priscianus (p. 544) speaking of *i* and *j*, *u* and *v*, says: "diversum sonum et diversam vim habent in metris. Tantum enim fere interest inter vocales et consonantes quantum inter animas et corpora."

* The English *w*, as Mr. Ellis tells us, is confused by the Germans with the vowel *oo*, and the true nature of its voiceless form *wh* misunderstood.

† See *Lectures on the Science of Language*, 6th edit., vol. ii. p. 168.

‡ I do not include the *u* after *q*, for here *u* is neither vowel nor consonant, but *qu* is the sign of a simple labialised guttural. See Ellis, *Academy*, p. 208; Roby, *Academy*, p. 254.

§ In a MS. just received from India the *K*aturādhyāyikā is called "ātharva*n*e sa*m*hitālaksha*n*agranthe *k*aturādhyāyikāvyākara*n*am," while another treatise received at the same time is entitled "ātharva*n*e sa*m*hitālaksha*n*agranthe prātiśākhyamūlasūtram."

of the teeth (the sthāna). In the Sthānaprayatna-viveka (see Pāṇini's *Grammar*, ed. Calc. p. 5) *v* is likewise classed separately as having for its organ dantosh*th*am, teeth and lips; and in one of Pāṇini's Sūtras, vii. 3, 72, dantya, dental, is used so as to include the labio-dental or dantosh*th*ya *v* (Calc. ed. dantyosh*th*a, Boehtlingk, dantyosh*th*ya). Whatever we may think, therefore, of the authority of the Prātiśākhyas, whether we ascribe their variations to historical or local causes, or to a lower and higher degree of accuracy in their phonetic observations, it is clear that with Pāṇini *v* was a dento-labial sonant breathing; yet, according to the same Pāṇini, every *u*, as soon as it is followed by a different vowel, is changed into this dento-labial *v*. However wide the gulf may seem to us between the vowel *u* and the dento-labial *v*, in a language which, like Sanskrit, possessed but one labial breathing, that labial breathing was the nearest possible approach to the vowel *u*. Let us apply this view to Latin, and all will become clear if we admit that *v* in Latin was pronounced as it is in Sanskrit, and as, with few exceptions, it continued to be pronounced in all Romance languages, namely, as a dento-labial, and that Latin, like Sanskrit, possessed but this one labial breathing.

(2) Those who hold that *v* in Latin was pronounced like *w* are forced to frame a hypothesis that, at some time or other, but certainly before the Romans came into permanent contact with their Teutonic neighbours, they changed their old pronunciation of the *v* from the labial to the dento-labial, and that this new pronunciation was uniformly adopted in Wallachian, Italian, French, Spanish, and Portuguese. This hypothesis is rendered necessary by two facts: (1) by the uniform preservation of the dento-labial sound in all the Romance and even in the Teutonic languages (cf. Vogt, Veilchen, Fiedel); (2) by the effort which the Romance nations had to make in rendering the true labial German *w*, which struck their ear as so different from their own *v*, that they represented it initially* not by *v*, but by *gu*; *i.e.* by raising the tongue a little too high they produced slight guttural contact before the *w*. It is well known that Paulus Diaconus states of the Lombards that they too pronounced *Wodan* like *Gwodan*. Such a hypothesis is not impossible, but it is extremely artificial, and receives no confirmation except from the facts which it is meant to explain. If we watch the history of *v* in Latin, we see that in later Latin† *v* appears as *b* in inscriptions, and the confusion between *v* and *b* became so great that Adamantius Martyrius had to write a treatise on the correct use of *v* and *b*, exactly as in Sanskrit we meet with treatises intended to fix the correct use of these two letters. Again, in its transition from Latin to Italian and French, *v* either remains as *v* or becomes *b*, as in *berbice*, *brebis*, from *vervex*, *Gubbio* from *Iguvium*; nay it becomes even *f*, as in *fois*, *bœuf*, *serf*. The fact that *v* occasionally becomes evanescent, both initially and medially, is of some importance on the other side; but these cases are few, and they are in accordance with the general character of the Romance languages, which in an unaccented syllable suppress not only *v*, but *b* and *p*. If we have Ital. *rio* for *rivo*, Fr. *viande* for *vivenda*, we have also Ital. *parola* for *parabola*, Fr. *sur* for *super*. Besides it would be necessary to restrict all these cases of disappearance as in *amai* for *amavi* to a very early period in the history of the Latin language if we maintained that *v* could not have so disappeared after it ceased to be pronounced as *w*. In Latin words such as *amaram* for *amaveram*, *cautum* for *cavitum*, the process was not *ama(v)eram*, but *amav(e)ram*, not *ca(v)itum*, but *cav(i)tum*, for *caitum* would not have become *cautum*. I arrive therefore at the conclusion that the hypothesis of Latin having possessed but one dento-labial breathing is more adequate and more in accordance with fact than the hypothesis that the Romans possessed, first of all, a pure labial breathing, then changed it in Italy and all the provinces into a dento-labial breathing, and lastly forgot their old labial breathing so completely that they were incapable of rendering the pure labial breathing when they heard it again from the mouths of the Germans, and were driven to adopt the combination *gu*.

I have intentionally said nothing of the arguments which Prof. Munro deduces from the Welsh writing the *v* in Latin loan-words by *gw*, because we know too little of the ancient history of the Welsh language. I learn from Mr. Rhŷs that Welsh possesses the sounds both of English *v* and *w* (not the South German *w*), and that at a certain period in the history of the Welsh language every word beginning with *v*, both foreign and native, was written with *gw*, which in sandhi would become *w*. If original *v* has not become *w* or *gw*, or suffered contraction or omission, it must in Welsh take the guise of a mutation of *b* or *m*. The Welsh writing *Gwener* for *Venus* can no more be used for determining the original sound of *v* in Latin than the fact that the High-German said *Strazpuruc* for *Strataburgum*, or that the Saxons of the present day speak of a *Fenus* and a *Filla*. We must know the phonetic difficulties of the Welsh language in reproducing Latin sounds before we can draw any conclusions from such words as *gwener*. For the same reason I can only draw one conclusion from the Greek transliteration and transcription of Latin words, viz. that the Greeks had no sound exactly corresponding to Latin *v*, that they either transliterated *u* (whether vowel or consonant) by *ου*, or represented the sound of the consonantal *v* by the nearest possible symbol in their alphabet, by the *β*.

(3) I have not appealed to phonetic changes in Latin itself where *v* seems hardened to *b*, because these changes admit of a different explanation: I mean *bellum* for *duellum*, *bis* for *dvis*, *bonus* for *duonus*, or *bubulcus* for *bovulcus*, and *ferbui* from *ferveo*. But I cannot help thinking that there is one phonetic peculiarity in certain Latin words which can only be explained if we assign to *v* a dental or dento-labial character. The Latin *in* is changed into *im* if followed by labials; hence *in-columis*, *in-gero*, *in-tactus*, *in-decorus*, *in-securus*; but *im-par*, *im-berbis*, *im-motus*. F we know was dento-labial in Latin (e queis F litteram imum labium superis imprimentes dentibus, reflexa ad palati fastigium lingua, leni spiramine proferemus), and therefore we have *in-firmus*. The same with *v*, *in-victus*. *Com* in Latin is changed to *con* before gutturals and dentals; it remains *com* before labials. We have *con-cutio*, *con-gero*, *con-tentus*, *con-dono*, *con-fido*, but *com-pos*, *com-buro*, *com-motus*. Why was it *con-viva* like *con-fido*, but not *com-viva* like *com-bibo*, unless, like *f*, *v* in Latin was pronounced not with the lips alone, but with lips and teeth?

My argument in favour of a dento-labial *v* has run to a greater length than I expected, and yet I have passed over many points that might have strengthened my position. I now leave the decision with those to whose judgment in this matter I shall most willingly bow, to Professor Munro of Cambridge and Professor E. Palmer of Oxford. They have been invited by the schoolmasters of England "to issue a joint scheme of Latin pronunciation, to ensure uniformity

* A few Italian dialects and the people of Lothringen pronounce *vèpe* instead of *guèpe*, &c. See Diez, *Grammatik*, vol. i. p. 304. Why in a few Romance words *gu* seems to represent Latin *v*, I have tried to explain in an article in Kuhn's *Zeitschrift*, 1856, p. 15.

† Corssen asserts that *b* for *v* can be traced in inscriptions from the end of the first century. Professor Munro, however, shows that it was not till towards the end of the second century that a large confusion of *b* and consonant *u* crept into the utterance of many words. He holds at the same time that *amavi* was changed to *amai* before *v* got its dento-labial sound. See also Roby, *Latin Grammar*, § 72, p. xxxvi, note.

in any changes contemplated," and I can promise them that, whatever my own convictions or predilections may be, I shall gladly sacrifice them all for the sake of uniformity as soon as their joint award shall be given.

Oxford, December 6, 1871. MAX MÜLLER.

Intelligence.

We have already adverted to the curious inscriptions found at Hamáth, which promises to be among the most important palæographical results of recent investigations in Syria. Facsimiles of the only four which have, until lately, been discovered, will be laid before the Anthropological Society by Captain Burton in the early part of next year. Mr. Tyrwhitt Drake, well-known to the friends of the Palestine Fund, reports that another specimen has recently been found at Aleppo.

Of still more interest to Orientalists is the news brought by Captain Burton from Palmyra, among the ruins of which ancient city he was enabled, by the temporary Ottoman occupation, to spend five busy days. We refer for the details to a paper read by Captain Burton before the Anthropological Society on Nov. 20, and epitomized in the *Pall Mall Gazette* for Nov. 21. A collection of skulls and other bones, and tesseræ with and without (undeciphered) inscriptions in the Palmyrene character, were produced, the bones, according to Dr. Carter Blake, bearing evidence of belonging to men over 6 feet in height. Mr. Tyrwhitt Blake intends to continue the excavations. We learn, from a paper read by Captain Burton before the Geographical Society on Nov. 27, that he has collected more than one hundred and twenty Greek inscriptions in Hauran, three of which are Palmyrene, relating to the Christian population of the country between the third and seventh centuries.

Messrs. Bell and Daldy have just published a second edition of Mr. Singleton's translation of Virgil (in blank-verse), which possesses a certain interest of its own on account of the numerous illustrations drawn from English poets. Many of these are indeed exceedingly happy, and in some instances give a better commentary than more lengthy notes; but it is only natural that in a collection specially devoted to illustrations of this kind we should also find a considerable number which had better been left aside, and are altogether useless, There are also some good notes scattered up and down the pages of this volume.

Messrs. Ebeling and Plahn have started a new series of editions of Greek and Latin classics with German notes and introductions, which will perhaps find it hard to compete with the well-known Weidmann and Teubner collections, but seems to merit support in the publications hitherto issued, among which we may mention an excellent edition of the *Iliad* by Professor La Roche, and a neat edition of Euripides' *Phoenessae* by Dr. Gottfried Kinkel, the son of the poet, and a former pupil of University College School, London.

Contents of the Journals.

Zeitschrift für deutsche Philologie, von Höpfner und Zacher, vol. iii. p. 4.—Zum Beowulf, by Max Rieger. [Emendations of the text, the author being opposed to the too conservative criticism of Grein and Heyne, but agreeing with Bugge's views.]—Zur Julii Valerii Epitome, by Mähly. [Emendations of this Latin text, as edited by J. Zacher. This article would be more appropriate elsewhere.]—Ueber Gerhard von Vienne, by E. F. Meyer. [A new attempt to find a Teutonic origin for the Roland saga. The author has not changed his opinion in consequence of G. Paris' criticism of his programme on a similar subject, and we think he is right.]—Herder's Volkslieder und Johann von Müller's Stimmen der Völker in Liedern, by Suphahn. [Shows that all the existing editions of Herder's popular songs are based on the edition made by Müller in 1807, who altered the text of the original anonymous edition of 1778 and 1779. The edition given by Falk (1825) preserves, however, the original readings; the texts printed in the appendix being alone altered. A new edition is to be desired.]—Goethiana, by Reinhold Köhler. [Short notes on several sources from which Goethe drew his subjects.]—Reviews: (*a*) Rudolf von Raumer, Geschichte der Germanischen Philologie, by K. Weinhold [favourable]; (*b*) Jacob Grimm, Kleinere Schriften, by O. Jänicke; (*c*) August Werner, Herder als Theologe, by B. Suphahn.—Nachträgliche Bemerkungen zur Abhandlung über die Eddalieder, by E. Jessen.—Title and index of vol. iii.

Kuhn's Beiträge zur vergleichenden Sprachforschung, vii. Bd. 1stes Heft.—The Old Irish Verb, by Whitley Stokes. Conclusion. [Contains many corrections of Ebel.]—The accusative plural in the British languages, by the same.—The difference between the transitive and intransitive nominative, by Pott. [Lignu-*m* comburitu-*r* = *den* Holz verbrennt *sich* (!).]—'Azdā, by Fr. Spiegel. [Connects it with Sanskr. addhā.]—Reviews: Vullers' Persian Grammar (2nd ed.), by Spiegel [favourable]; Kurschats' German Lithuanian Dictionary, by Joh. Schmidt [favourable]; Chodzko's Grammaire paléoslave, by the same [Accuses author of ignorance of "le paléoslave proprement dit." In refusing to regard the insertion of *l* between labials and *j* as anything but a Russism, Chodzko is, however, not so far wrong, as the most important MSS., *e.g.* the Suprasler Codex, has zemja^{n}, &c., for the modern zemlja^{n}, &c.]; De Courtenay's Old Polish language to the 14th century, by the same [favourable and corrective].—Miscellanies: (1) Lat. piget, piger, peccare, pejor, pessimus, and Lith. piktas, pykti, peikti, paikas. (2) ἔφ-εσι-ς, Lat. sitis, O. Slav. choti, by A. Fick. [If it is meant that *pĕcare* was known to pronunciation of classical Latin, the Welsh and Irish evidence is fatal to this: for -ecc- and -ēc- become in Welsh -ech- and -wyg-, and in Irish -ecc or -ec and -iach respectively. This rule is, at least so far as the consonants are concerned, absolute.]

Selected Articles.

Contributions to the higher science of language, by H. Ewald. II. [On the reduplication of Semitic roots.] In Notices of the Royal Society of Göttingen, Nov. 29.

Thorbecke's edition of Hariri's Durrat-al-Gawwâs, rev. by Prof. Nöldeke, in Götting. gel. Anzeigen, Nov. 29.

Destur Peshutan's Pahlavi Grammar, rev. by Prof. Haug, in Trübner's Record, Nov. 30. [Written in Gujarati for the use of Parsi students, the introduction being also given in an abridged English form. The author treats Pahlavi as an Iranian language, but admits that a knowledge of Syriac, Chaldee, and Arabic is indispensable for the understanding of the Semitic portion of it. A glossary of Semitic words is added.]

Schmidt on Indo-Germanic vocalization, rev. in Centralblatt, Dec. 9.

New Publications.

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BENFEY, Th. Ist in der Indogerm. Grundsprache ein nominales Suffix *ia* oder statt dessen *ya* anzusetzen? (Reprint fr. Transactions of the Göttingen Scientific Society.) Göttingen: Dieterich'sche B.

BENFEY, Th. Ueber die Entstehung u. die Formen des Indogerm. Optativ (Potential) so wie über das Futurum auf Sanskritisch syâmi u. s. w. (Society's Reprint.) Göttingen: Dieterich'sche B.

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ERRATA IN No. 37.

Page 532, col. 1, last line, and col. 2, line 2, for "Vizen" read "Vizeu."
" 547, " 2, line 11, for "Syriac" read "Syria."
" " " 2, line 30, for [illegible] read [illegible]

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THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 39.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, January 15, *and advertisements should be sent in by January* 10.
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The present Number begins the Third Volume of THE ACADEMY. The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

General Literature.

Newman's Essays, Critical and Historical. Pickering, 1871.

IT is fortunate that the distinguished author has been induced to give these essays in an accessible form to the world at a time when they may still be useful in enabling contemporaries to understand him as far as it is possible to understand such an enigmatical figure at all. At present there is a tendency to regard him as a sort of second Pascal, a sincere and passionate sophist or a dialectician inspired by despairing love according as the individual reader happens to agree with his conclusions or to disagree. Without entering into a premature discussion of the relative rank of the two thinkers, it may be well to point out the more obvious traits that separate him both from Pascal and from another writer to whom he owes more if he do not resemble him more—we mean from Bishop Butler. Both Pascal and Butler stand of course in living relation to their age, but the argument of both is independent of their historical position. Dr. Newman will soon require as long an historical commentary as any Anglican divine of the seventeenth century. Again, though he shares with Pascal the irresistible tendency to extreme alternatives, he is as far as possible from Pascal's eager, impatient, diseased impetuosity; his mind moves cautiously and slowly, with perfect self-possession under all kinds of self-imposed moral and intellectual restraints. Then Pascal delights to throw everything into lurid picturesque antitheses. Dr. Newman prefers sober massive adumbrations of truth; he is only a dogmatist because he is penetrated with the importance of viewing religion as something thoroughly objective, as dealing with an order of definite spiritual facts, which exist in and for themselves before they exist for us. But this kind of dogmatism is not incompatible with such an abiding recognition of the inadequacy of language and thought as inclines him to resent the necessity of attempting precision at all, and to speak more than once as if the definitions extorted from the Church were one of the worst effects of heresy. Pascal and Butler are essentially sceptics: Butler seems to have no intellectual interests beyond the narrow circle of moral and spiritual probabilities to which he labours to bring every thought into captivity; Pascal uses his mastery of one form of positive knowledge to disparage that and all the rest. Newman, on the contrary, has a sincere respect for history and literature because he understands them; even his tendency to apply transcendental solvents to the results of physical science is increasingly justified by the spontaneous progress of science, and of itself would hardly amount to scepticism. Perhaps it is this comprehensive justice rather than the undeniable difference of circumstances which accounts for the difference between him and his predecessors in their treatment of opponents. Pascal avowedly treats the world as a world of madmen who will think him mad; Butler does not affect to disguise his contempt for the frivolity of the persons of freethinkers any more than his concern at the gravity of their arguments. Newman, on the contrary, has no instinctive contempt for a thoroughgoing adversary at all; he feels that he is confronted by a complete, substantial, intelligible view with plenty to say for itself, by a view which he can enter into, nay, which he might easily share but for considerations which he feels in the last analysis are personal, though he necessarily believes that they are also normal. Or, to put the same thing in another way, Newman is tolerant of the worldly man's philosophy of the world, because to him the world is a good and beautiful thing in itself, although it was never the best thing and is now shamefully marred; Pascal, like Bossuet, can only see *le vide et le néant au fond des choses;* Butler can only see a theatre for moral action; Pascal is a Christian Nihilist, Butler is a Christian Stoic, Newman is a Christian Platonist.

Of course the characteristics of such a many-sided writer manifest themselves in different degrees in different works; in the present volumes the reader is struck principally by the thorough, not to say cruel, mortifications under which the writer's intellect has maintained its vigour, and by the way in which that intellect is, so to speak, encrusted with all kinds of historical accidents. For this last reason we are glad that the essays were republished while they are still intelligible: Dr. Newman is probably mistaken in thinking that there is any danger of their being reprinted "to serve the cause for which they were written;" at least it is hardly possible to imagine an Anglicanism of the future which anything like an honest reprint could serve; but it is also certain that a more disinterested curiosity would sooner or later insist on a complete edition of his work, and we have to thank him for meeting a demand which his modesty does not permit him to anticipate.

Writers who devote themselves to ecclesiastical subjects make many sacrifices, and not the least is that they subject themselves to the necessity of being useful: they have to refute everybody who for the moment is dangerous; they have to esteem all unobjectionable people who are doing good service; they have to answer every question which occupies the public, if possible in the very terms in which the public states it. For instance, in the admirable essay on Private Judgment, Dr. Newman has really given the *coup de grâce* to that interesting fetish, by showing that the majority of mankind never dream of exercising anything that can be called by the name, even when they set themselves seriously to choose or change a religion, and that if they attempted to exercise it the attempt would only bring out their utter incapacity. The work has been done, and it has not needed to be done again: those who maintain that assent ought upon the whole to follow the balance of producible evidence have been permanently driven back upon the uncomfortable and demoralising doctrine that the majority of mankind ought definitely to recognise their utter incompetence for rational assured belief, and make up their minds to get on as well as they can with feelings and practices, opinions and interests. If this had been all, it might have been ungracious to regret that the writer had done no more. But such rough iconoclasm was too unedifying to be really effectual, it was necessary to find pre-

cedents and promises in Scripture for the exercise of something that might be called private judgment in the sense of being individual, and to argue in the very spirit of Puritanism that whatever these did not cover was *ipso facto* illegitimate: while the whole is crowned by developing Butler's paradox that the contents of a revelation can never be criticised into the solemn conclusion that the only proper subject for private judgment is to be found in the two questions, What is the Church, and where is it? Of course, when the essay was written these things were more important than any historical enquiry into the origin of the enormous influence of the phrase and of the circumstances when it was least unmeaning, but the importance of such things does not last so long. There are too many illustrations of the same misfortune in the two volumes. No writer of Dr. Newman's eminence, except an ecclesiastical writer, would have condescended* to take a man like Mr. Abbott seriously, only an ecclesiastical writer could have recommended a book so full of tedious shallowness, of ingenious dulness, as Palmer on the Church, without being blind to the defects which make the work an abomination to the natural man. But there are other peculiarities of the writer's position which illustrate ecclesiastical history on a side which is not repulsive. In these essays Anglicanism presents itself probably for the last time as a genuine product of the Church of England: not as a sort of dialectical necessity as the only hypothesis which meets the intellectual, historical, and moral conditions under which Englishmen can permanently maintain a religion, but as the sum of duties incumbent upon the Church of England man as such, hardly more disputable than tithe-paying or church-going, though some of them might be less obvious. Of course this involved a hearty acceptance of the positive side of the Protestant tradition, which had been renewed by the unexhausted influence of Methodism within and without the Establishment. Accordingly, in the very remarkable review of Milman's *History of Christianity* we find the doctrine of the Forgiveness of Sins put forward as *the* distinguishing essential feature of the Gospel dispensation. No doubt, as Dr. Newman points out, Milman's determination to conceive his subject in a purely external historical way led to the suppression of some of its most important aspects, of which this is certainly one. On the other hand, there is a whole school of Fathers with whom the forgiveness of sins, if not quite so completely thrown into the background as with Milman, is very far from being the centre of Christianity: it may almost be said in general that to converts from Judaism (and from forms of Christianity which may be said to Judaise) forgiveness is the important point, and deliverance and a new life to converts from heathenism (including the Neopaganism of almost all civilisation since the Renaissance). The fact is that it is much easier to be judicial when in possession of a complete system guaranteed by tradition and external authority than when a thinker has to construct one for himself out of a mass of incoherent texts and precedents by the aid of two or three principles with nothing to co-ordinate them. And this is the reason of Newman's severity to Erskine and Abbott. Their principle that nothing is admissible as dogma which cannot be translated into devotion might almost seem legitimate as the converse of the famous canon "Lex orandi lex credendi;" but in their hands this principle was a solvent of traditional orthodoxy, so they and their principle are branded as rationalists, whereas in truth they are no more rationalist than their critic when he makes forgiveness of sins the key to Christianity; the fact is, all three are Protestants. Another very remarkable feature of the essay on Milman is the way in which the reviewer meets the attempt of that author to get rid of three-fourths of the doctrines and practices of the post-Apostolic Church by pointing out analogies (mostly fallacious) outside of Christianity. He sees that the analogies are fallacious, but he does not stop to prove it; he is willing to grant that they are genuine, that the Church really adopted these ideas from without, he only contests Milman's inference. Milman argues, "If so, it is so much the worse for the Church." Newman answers, "No, so much the better for the ideas which the Church has consecrated." This way of looking at things gives ecclesiastical authority all the advantages and all the disadvantages of flexibility.

The essay on the Catholicity of the Church of England is certainly one which believers in its doctrine would wish to have forgotten. Doctrines present themselves now full-grown, and Anglicanism among the rest: they walk the world unveiled, seeking believers where they can find them, alluring them by their sweetness, fascinating them by their stringency, subjugating them by their authority, rejoicing if they meet with any already half-converted by his habits or his desires, but willing to accept any convert as he comes, and to transform him afterwards. Newman, on the contrary, insists upon a preparation of the heart as a preliminary to the legitimate assent of the intellect such as no school of religionists ever ventured to demand except the earlier and better Jansenists, and even they undertook to reward by a certainty. Dr. Newman in 1840 knew the Fathers much too well to attempt to establish the Anglican position as certainly orthodox. And yet he was so much under the dominion of his inherited position as to take some kind of comfort in the thought that the claims of Rome were equally uncertain. He actually looked forward to bringing over his countrymen to the practical reception of a system morally and intellectually most exacting, and at the same time neither satisfying nor stimulating, although he could offer them nothing more than a presumption that their service was after all acceptable, and did not dream of denying that it was more than possible that, when they had done all, they would be still in heresy and schism. Pascal and Butler had contemplated the possibility of the believer being wrong, but even Pascal imagined no worse consequence of the error than that the Christian might find he had lost this world for nothing; to Butler, who thought it established that one ought to practise the virtues of Epictetus upon any hypothesis, the probability that his rudimentary Christianity was true could only be clear gain. The epilogue to this depressing production is a series of admirable reasons for dismissing the "dreary" question about Parker's consecration from the controversy between Rome and Canterbury: it is remarkable that even in this context it seems not to have occurred to the writer to examine the controversy between Rome and Constantinople, which turns exclusively upon questions equally "dreary." It is hard to say to what extent the notes are intended to be taken as complete, whether they contain all that Dr. Newman is inclined to add or the least that he thinks sufficient to neutralise what now seem old mistakes. Even on the latter theory they give the impression of a strange repose, as if the gigantic struggles of the author had been crowned at last by the inestimable blessing of being able to believe without having to remember why. He does not appear careful to refute his former self: he is satisfied when he has shifted the burden of proof.

The other essays must be briefly dismissed. The first on poetry is, if an horribly irreverent word may be pardoned, "donnish," its Platonism consists in a confusion of moral excellence with the poetical ideal; it is chiefly valuable for the observation that Byron's reputation rests largely on his rhetoric. In the third, the "fall" of Lamennais is treated

* It is interesting to know that Mr. Abbott profited by the condescension, vol. i. p. 100.

without any of the sympathy which later revolts have excited among the representatives of Dr. Newman's old opinions. The fifth, on the theology of St. Ignatius, is an admirable piece of dialectical exposition: in the note the authority of the shorter Greek text is maintained against that of the Syriac by the usual conservative arguments; it was hardly to be expected that the writer should have followed the details of the controversy. For instance he does not mention the acute argument of Dr. Lightfoot from the variation in the superscriptions. The sixth, on the prospects of the Anglican Church, has been falsified by events. The author over-estimated the power of the school he founded, and he under-estimated the power of the traditional religion of England for both resistance and reaction. In the seventh, after summing up Dr. Caswall's statistics, Dr. Newman rebukes the Anglo-American Church for making a fetish of the Prayer-book, though he himself makes such a fetish of the parochial system as to be shocked to learn that the congregation always pay for their seats. In the eighth, the biographer of Lady Huntingdon and her surroundings are exposed with adequate severity: her ladyship is treated with incomprehensible generosity. The tenth summarises Dr. Todd's history of the origin of the superstition that the Pope is Antichrist, and reinforces his arguments by an ethical comparison of Bishop Newton and others, who made this superstition popular among Anglicans with some saints of the Counter-Reformation. The twelfth is a spirited review of Bowdler's *Hildebrand:* it has an appendix (from Father Ryder's reply to Mr. Ffoulkes) on the false Decretals, which does not contain a retractation of the statement in the text that St. Gregory VII. exceeded his legitimate powers when he deposed Henry IV., as much as Henry IV. did by deposing him. The admirable essay on Mr. Davison will leave, at least on those who did not know him, an impression that the writer was led to overrate his abilities by reverence for a singularly deep and earnest character. The fifteenth, on Keble, written for the *Dublin Review*, *àpropos* of the *Lyra Innocentium*, contains a wonderfully just and delicate appreciation of one from whom the writer had so recently parted. G. A. Simcox.

Travels in Baltic Lands. [*Utazás a Balt-Tenger Vidékein.*] By P. Hunfalvy. Pest: Rath.

M. Paul Hunfalvy is one of a small body of philologists in Hungary who have received from their less scientific countrymen the nickname of "Finn hussars," from their insisting on the claims of the Ugrian dialects to kinship with the Hungarian language. It would therefore be *à priori* probable, even if we were not expressly told so in the preface, that the attraction which drew him to the shores of the Baltic was a desire to make personal acquaintance with the closely related populations of Esthonia and Finnland, whose dialects he had studied so long. At the same time, St. Petersburg, Stockholm, and Copenhagen were, as he says, too important points to be left out of a picture of that part of the world. His visit was made in the year 1869, and he was thus enabled to take part in the jubilee of the emancipation of the Est peasants, and in the Fourth Prehistoric Congress, held at Copenhagen.

The book has the defect into which many travellers fall, of mixing up personal experiences with statistical and other information which it scarcely requires a journey to collect. Considerable portions of it are evidently adapted to the meanest understanding. For an author to be able to assume on the part of his readers complete ignorance of the subject treated of is, to some extent, an advantage. It has enabled M. Hunfalvy to treat such questions as the geography of Finnland and the mutual connection of the Ugrian languages with a completeness which but few English writers of books of travels could venture on. Anxious to give the Hungarian public as much solid information as possible, our author has occasionally overloaded his pages with indigestible statistics, occasionally dwelt at length on subjects which scarcely come within the scope of his book, *e.g.* the emancipation of the Russian serfs.

The Baltic Provinces of Russia are a part of Europe comparatively little known, and what is known of them is derived from German sources alone. M. Hunfalvy himself is by no means a witness biassed against the Germans. In the first place he belongs to that party among the Hungarians who think their country's safety and prosperity best secured by a strict alliance with the German element in Austria. Like the great majority of his countrymen, he, too, shares in that feeling, half terror, half hatred, with which Russia is regarded in Germany, not to speak of more western countries. And he is withal a philologist. Still, the picture he gives of the country is drawn from a point of view so different from the Teutonic that the proportions of the various objects are materially altered. Nor does our author ever forget his own countrymen, or leave unimproved an opportunity of calling their attention to their many shortcomings. As he justly remarks in his preface, it is not good for the Hungarians to be always casting longing eyes on the power and greatness of fully developed nations, as it is easier to learn from them the airs of sovereignty and superiority than the means and methods by which they made themselves powerful. On the other hand, smaller and obscurer peoples afford oftener an instructive example of conscientious labour and a rational accommodation to the force of circumstances. Further, for a Hungarian, in whose country several nationalities struggle for existence of which even the strongest is not perfectly assured, the study of similar phenomena in other countries is full of instruction. The instances of Esthonia and Finnland are the more instructive on account of the contrast each presents to the other. The Est nationality in Esthonia and Livonia was for centuries subject to the heavy yoke of servitude imposed on them by the feudal lords who represented the German conquerors of the country. The two provinces were continually exposed to Russian invasion while under the rule of the Teutonic Order, of Poland, and Sweden. Since 1819 the Est has been emancipated from servitude, but he is still subject to the many social disabilities which the feudal system leaves behind it. Finnland, on the other hand, appears in our author's pages as an illustration of the dictum, "Happy is the country that has no history." Once conquered by Sweden (1157–1293), and subjected to the same system of government as that country, she had no reason for attempting to revolt. The most disastrous period of her history was that of her gradual annexation by Russia (1714–1809). Here it is worth observing that the Finns speak of the final annexation of their country by Russia as the recovery by Finnland of the portions first conquered. The fortunate geographical position of Finnland, lying as it does outside the main stream of European political movements, renders the relations between Finnland and Russia almost as friendly and wholesome as those which formerly existed between Finnland and Sweden.

Our traveller opens his book with a short description of the impressions made on him by the singular mediæval aspect of Danzig. His journey by railway to Königsberg affords him an opportunity of giving a brief sketch of the history of the Teutonic Order as well as a fellow-passenger's opinion of the Poles, whose history he considers an instructive warning to the Hungarians. In

Königsberg he is, of course, struck with the stamp the Hohenzollerns have left upon Prussia, and then hurries by the railway to Riga, the first point of his journey where he comes in contact with the Ests. But the elaborate German mediæval constitution, both of the city and the province, detains us for several pages. From Riga the author proceeds by sea to Reval, then by travelling all night arrives in Dorpat in time to witness the jubilee of Est freedom. Everywhere he finds traces of the subordinate position of the Est, and the prejudices entertained on the subject by the German *bourgeoisie.* Many of the citizens of Dorpat had expressed no little anxiety with regard to the behaviour of the *kuule.* This Est word, the imperative of the verb "to hear," is in Esthonia used by the Germans to designate the peasant. Before the Emancipation Act of 1819, peasant lands could only be let to Ests or Letts; the few Swedes and Russians in the three provinces being placed in this respect in the same category as the privileged Germans. On his way back to Reval by a different route, M. Hunfalvy traverses the country to which have attached themselves the mythological names of the Kalevipoeg, an inferior version of the Kalevala preserved by the Ests. From Reval he proceeds by steamer to St. Petersburg, to which capital he pays a flying visit, still keeping in the society of Ests and Finns, and from thence by like conveyance to Viborg, and from Viborg to Helsingfors. The farthest point in the interior of Finnland to which he penetrated was through Tevastehus to Tammerfors, and from thence to Abo on his way to Stockholm. His journey through Finnland was for the most part a succession of visits to fellow-philologists, of some of whom he had already made personal acquaintance during their visits to Hungary. Under such circumstances it is perhaps not to be wondered at that his pictures of the countries through which he hurried are somewhat too rose-coloured. Even of the Russians, his hostility to whom he does not disguise, he speaks with respect when he comes personally in contact with them. As to the Swedes and Danes he observes that the standard of comfort among them is superior not only to what he was accustomed to in his own country but even to that of Germany; and at the Prehistoric Congress he was struck by the superiority in stature and appearance of the Danes over their guests.

On two occasions he was gratified by a spontaneous and unexpected recognition on the part of Finns of their relationship to the Hungarians. In one case it was a small farmer in the south-western corner of Finnland who entertained him on the strength of their kinship, which fact he had learnt through the medium of a Finnish periodical. In the other instance a colonel in the Russian army, who had taken part in the war against Hungary in 1849, told him that once during the campaign he particularly wanted to get some butter, but the Hungarian peasant-woman in the lonely *puszta* understood neither Russian nor German. In his eagerness he addressed her in Swedish and French, forgetting that these languages would be still more foreign to her. At last in his impatience he exclaimed in Finnish, *Anna minulle voita*, "Give me butter." Word for word the Hungarian translation would be, *Adj nekem vajat.* The similarity in sound of the two accusative cases at the end of the sentence was sufficient to enable the peasant-woman to understand and comply with his request.

The most interesting portion of the book contains an account of the preservation and discovery of the old poetry of the Ugrian peoples. After Lönnrot had written for two whole days from the dictation of a peasant in Russian Finnland, who was eighty years of age, the old man exclaimed, "Ah, Sir, not one of my sons will become a singer as I did after my father; they prefer the vile new-fangled songs with which I would not soil my mouth. Of the old songs which I learned in my youth I have forgotten the greater part, but if you had come in the days when my father was a fisherman in the lake of Lapukka, you would not have been able in two weeks to write down what he knew." Tears welled into the old man's eyes as he thus spoke, and Lönnrot himself could hardly control his emotion. As for the songs of the Voguls, the Hungarian traveller Reguly arrived just in time to collect the last of them. When Ahlqvist visited that country only ten years later, they were already forgotten. With regard to those of the Ests, M. Hunfalvy himself quotes from one of their own songs:—"As for the lays of old time, a thousand have been scattered to the winds, a thousand buried in the snow, a thousand have gone down into the tomb, and the fourth thousand slavery hath destroyed; as for those which the *munk* (knight of the Teutonic Order) swept away, the prayer of the priest overwhelmed, a thousand tongues were not able to recount them."

Whatever may be the fate reserved for the Ugrian peoples and their literatures, the sympathy felt for them by their Hungarian kinsmen (a result of philological culture which M. Hunfalvy's book seems intended to popularise) is a pleasant incident of the development of "nationalitarian" consciousness. Arthur J. Patterson.

The Drama of Kings. By Robert Buchanan. Strahan and Co., 1871.

In the decline of Greek art there arose an interesting school of painters who were called ῥυπαρογράφοι; their Parisian successors are known as realists. They painted still life with a predilection for rags and dunghills, and women whose hearts were better than their reputations and their circumstances. A few years ago the large and estimable class who are always on the watch for the coming poet believed that Mr. Buchanan was about to inaugurate a similar school of poetry, and rejoiced that the costermongers had found their Wordsworth. Of course the ideal calm and dignity of Wordsworth's dalesmen was neither possible nor desired; but London life abounds with situations which no one had dared to treat, and which, if treated with courageous sympathy, could not fail to be effective. Mr. Buchanan knew how to present the outside of a heartrending tragedy of the gutter or the garret with frank minute fidelity, and how to ventriloquise from inside of it with eloquence which was sometimes prolix and generally shrill, but always too inventive not to be telling. His admirers naturally expected that having struck a fruitful vein he would continue to work it; but they were mistaken, and really they ought to have known better. His *Undertones* had shown that he already possessed the inclination for transcendentalism of subject, though he had not yet learnt elevation of handling, and had to fill up a well conceived classical outline with stuff that a schoolboy might write for a music-hall. In the *Legends of Inverburn* he endeavoured without much success to relieve the homely texture of the idylls by the juxtaposition of weird mediæval grace; but the attempt itself was significant. The *Book of Orm* with all its elaborate indolent incompleteness of execution, and its multitude of metrical experiments, which owed more to the printer than to the poet, showed that the attempt was not unwarranted: the writer's ingenuity was as unmistakable, though not so conspicuous, as his fervour; he showed he could imagine as well as insist. One poem, *The Lamb of God*, even recalls the *naïve* audacity of Blake, though it has little of his swift fiery child-like subtlety. The *Drama of Kings* will confirm the impression which must have been left upon more than one reader of the *Book*

of Orm. Mr. Buchanan is essentially a spasmodic poet. His affinities are with *Festus* and *A Life Drama* and *Balder* and *The Roman.* He is free from the vagueness, the perplexity, the obscurity of his predecessors; he always writes as if he knew what he had to say, though Mr. Bailey's surviving admirers would probably maintain that that gentleman had something profounder to say if he could only say it; as compared with other poets Mr. Buchanan is long, as compared with his predecessors he is not tedious. The curious thing about him is that in his growing exaltation he should have almost exactly reversed the stages through which Mr. Alexander Smith subsided into a *littérateur.* But with these minor peculiarities he has all the essential characteristics of the school, its profusion of forcible conceits, the far-fetched paradoxes of its rhetoric, which serve to adorn and disguise its commonplace conceptions, and with these the disinterestedness, the genuine elevation, which comes of being habitually exercised in great matters which are too high for a man, and above all the perpetual excitement, the fever of composition, which is as nearly related to inspiration as prurience to passion. The delirium of this fever has its disadvantages and its compensations: it inflames the mental vision till it is incapable of appreciating the delicate harmonies and the noble repose of the ideal, or the real either for that matter; it flushes everything beautiful or no with a radiance that sometimes for the reader and always for the author supplies the place of beauty. Mr. Buchanan tells the adept in his note on mystic realism that he has hardly patience to read a book or look at a picture, and we who are not adept might have believed it even if we had not been told. At the same time it would be a mistake to suppose that in his more ambitious works he is remarkable for his independence of writers who had gone before him. It would be unreasonable to ask an *improvisatore* to be scrupulous in avoiding plagiarism. Only those who are calm enough to enter into the ideas of others are calm enough to foster their own till they are fit to appear full-fledged without the aid of borrowed plumage. Mr. Buchanan is quite considerable enough to have a manner of his own, at present he seems to be falling more and more into the least admirable manner of the author of *Songs before Sunrise.*

He is quite right in asking us to read through each play of his trilogy, or, if possible, the whole, at a sitting. This brings out the principal artistic merit of the volume—the skill with which the writer can strike into a new key at the beginning of a chorus, and relieve the passion, too often the coarseness, of the preceding scene. Besides, what was written eagerly ought at any rate to be read rapidly, so that the reader may be carried quickly over the roughness and vulgarities and prolixities that disfigure the rendering of a series of moods, which seem as if they might be elevated, if not subtle, but for the pervading lack of nobleness and intensity of expression, a lack not to be compensated by any amount of vigour, or ingenuity, or metrical fluency. The volume begins with a dedication to Auguste Comte: it is a hymn on the martyrdom of Paris, sweet, stately, solemn, and at least three times too long for its ideas. Then a proem full of empty double rhymes, a luxury the writer should leave to Mr. Swinburne, who can get at it without giving more than it is worth. Then a prelude in Heaven which serves its purpose well enough, being grandiose and inoffensive. A prologue spoken by Time, who announces himself at the end as Death, comes next: it is upon the whole impressive—it reminded me of Tennyson's *Tithonus,* but the impression remained. The first play of the trilogy shows Napoleon at Erfurt; the insolent *bonhommie* which he liked to affect is caught well enough. The admirers of Louisa of Prussia will be disconcerted to find her celebrated appeal to Napoleon at Tilsit turned into a parody of a Shakespearian scolding-match, in which all the sovereigns at Erfurt take part. The anachronism is nothing, perhaps the aggravation of Napoleon's brutality is not much, but the writer has vulgarised his heroine. The dramatic climax of the play is that Napoleon quarrels with the pope, and is cursed by a cardinal, whereupon the chorus of spirits debate with really lyrical ingenuity whether they shall echo the curse. Napoleon soliloquises at great length on—

"What men call Liberty, and Gods call Peace."

The thought of this soliloquy is admirably resumed in a choric interlude called the Titan, which is much the best thing in the volume: it is well conceived as a whole, and though the beginning may be rather overloaded, it grows up to perfect simple sweetness at last: it is, of course, too long to quote entire, and it would be cruelty to mutilate it. *O si sic omnia.*

The second part of the trilogy has less action than the first. Napoleon at Wilhelmshöhe hears news, and moralises and discusses the situation with a bishop, who states the cynical view of the strength of Catholicism with a certain imaginative *verve.* The ex-emperor is plausibly represented as a kind of pottering fatalist, who would be acute if he were not puzzle-headed and superstitious, who would be devout if he were not sceptical, and benevolent if querulous egotism had not made him heartless. It is superfluous to add that a great dramatist does not start with a string of adjectives, and try to animate them. The second choric interlude is on the refusal of English intervention. The first half is good political verse, musical, eloquent, passionate; the second a dull description of the perfect state, in the metre of Hood's *Bridge of Sighs.*

The beginning of the third play shows the advantage of remoteness of subject. Mr. Buchanan is quite right in thinking that the greatest art is never in revolt against the age which produces it or anxious to emancipate itself from its spirit; but he forgets that great art is generally the expression of a great epoch, and that artists of an epoch which is not great may do well to fly from what they cannot subdue, and what is hardly worth subduing. For himself he is resolved to idealise the present by foul means or fair; he will not look for a period in which women might meet and appeal to the chief of an invasion; he will introduce the sisters of the red cross wrangling with Bismarck, who, of course, forgets that he is speaking to ladies, and overwhelms them with foul and elaborate invective. If Mr. Buchanan did not think that a poem ought to be a pamphlet, and were not too earnest to study the appropriate, there are germs of fine things in the scene. A scene between the chorus and a deserter and several odes have something of the heroic extravagance of Victor Hugo. The chancellor's soliloquy and the scene between him and a deputy from Paris (Thiers and Favre rolled into one) recall the best heart-searchings of our esteemed contemporary the *Spectator.* There is nothing else to remark but Lucifer's statement in the epilude that he took the parts of Bismarck and the two Napoleons because no one else would.

In a second edition, if Lucifer must tag his speech with Greek, the title had better be δρᾶμα κοιράνων, and as Mr. Buchanan seems particular about acknowledgments, he had better remember that his dedication is in the metre of Mr. Browning's *Aben Ezra* (which had been already used for two hymns in the *Christian Year*), and that Shelley's *Hellas* is "a serious attempt to treat great contemporary events in a dramatic form," and is certainly not more unreal than the *Drama of Kings.* The main faults of the book are

incurable, but the writer is not too old to learn. If he will clear his head once for all of his inflated notion of what poetry in general and his own poetry in particular ought to be, and would feed his imagination on something wholesomer than humanitarian rant, he might come to write verse that will live, or, if it is too late for that, he might come to leave off writing verses. G. A. Simcox.

NOTE.

The Lord Chief Justice of England has undertaken to sum up, in a series of critical articles, the whole of the circumstantial evidence respecting the authorship of the *Letters of Junius*, including that of handwriting, as lately brought forward by the Hon. E. Twisleton and Mr. Chabot. The first article of the series will be published in our next number, January 15.

Art and Archæology.

Raphael of Urbino and his Father, Giovanni Santi.
By J. D. Passavant. Macmillan, 1872.

The coming of the New Year is now always heralded by the appearance amongst us of the richly illustrated gift-book, but it is very rarely that the New Year brings us a work of that class so excellent in its kind as the present volume. The only fault to be found with it is that the character of the contents is not sufficiently indicated by the title. The title leads us to expect a translation of Passavant's work, *Rafael von Urbino und sein Vater Giovanni Santi*, a book which, though possessed of independent literary merits, is pre-eminently a work of learning and research, for both in the French and German editions passages of general interest are buried out of sight beneath the conglomeration of professional criticisms and catalogues necessary to fit the work to take its place as a permanent authority and book of reference for students. Such professional criticisms and catalogues have been by the present translator and editor carefully suppressed, and the volume entitled *Raphael of Urbino* is not a translation, nor even an abridgment, of Passavant's book: it is not and does not assume to be intended for the use of students; the title can mislead but for a moment, and the briefest inspection reveals a magnificent *Prachtwerk* of a very high order of merit, especially calculated for the pleasure and profit of intelligent amateurs.

Twenty good engravings by some of the best artists, from some of the finest works of Raphael, have been admirably reproduced by the Woodbury autotype process. These engravings form the distinguishing feature of the book. The text indeed in all works of this class must necessarily be subordinate to the illustrations, and is usually vastly inferior to them. This last, however, is not the case in the present instance, as the photographs are accompanied by selections from the standard work of Passavant. Every passage of interest to the general reader is to be found in these pages. The preface to the German edition is given entire, and is succeeded by four chapters which contain substantially all that is known of Raphael's parentage and of his short and brilliant life with its varied relations and changing circumstances. The valuable chronologically arranged catalogue of his paintings follows, then comes a table of the same arranged according to subject, and the book is completed by a careful alphabetical index to its contents. From the popular character of the work it will be readily inferred that Raphael is regarded almost wholly as a painter, for unfinished work, even by the greatest of all popular painters, has but a limited public; the catalogues therefore of his sketches and drawings, which would have weighted the volume to no purpose, have been omitted.

The translation, which has been very conscientiously done, shows even signs of something more than mere painstaking exactness, and though each word seems to have been carefully chosen, the language is markedly free and simple. Nay more, it preserves too something of a certain quaint charm of diction which exists, it is true, in the original, but which would only have been perceived and caught by a person of cultivated taste. Amongst the illustrations which have been selected so as to exemplify the different stages in the development of Raphael's genius, three may be specially mentioned as less well known to the public, and as being also particularly successful in point of reproduction, viz.: the Madonna of the Alba family, in the Hermitage, from the engraving by Desnoyers; the Christ on the Cross, in the possession of Earl Dudley, from the engraving by L. Grüner; the Coronation of the Virgin, in the Vatican, from the engraving by Stölzel, in which we find almost the full wonder of strange compound of early mysticism with the admirable science of later days. The outside of the book is not attractive, but the type and paper, as in all works printed at the Chiswick Press, are remarkably excellent.

E. F. S. Pattison.

MR. HOLMES' CONCERTS AT ST. GEORGE'S HALL.

The five chamber concerts under the direction of Mr. Henry Holmes, the last of which was given on Wednesday evening, the 20th ult., at St. George's Hall, have proved some of the most attractive of the many attractive concerts which have of late made Michaelmas Term—to Londoners once musically a blank—the most interesting of the year. The programmes have shown research and judgment. A place has been found in every one for some specimen of a composer comparatively unknown or as yet unaccepted, or for some comparatively unknown specimen of a well-known and accepted composer; while the remainder has generally been made up of compositions concerning the merits of which learned and unlearned have long ceased to differ, even among themselves. Thus, at the first concert, opened by a thoroughly characteristic and therefore beautiful specimen of Haydn's quartets, and closed by another of Mendelssohn's, we had a third—for pianoforte and bowed instruments—by Brahms, to many the most interesting of living and producing musicians. In like proportion, like compositions by Gade, Schubert, Schumann, Cipriani Potter, W. Sterndale Bennett, and Walter Macfarren have been heard after and before others by Haydn, Mozart, Beethoven, and Mendelssohn; these being intermixed with shorter, if not always lesser, solos, vocal as well as instrumental, performed by competent singers or one or other of Mr. Holmes' *collaborateurs*. These are Messrs. Foulkes (2nd violin), Burnett (viola), and Signor Pezze, assisted, when a second viola is needed, by Mr. W. H. Hann. Over and above the individual excellencies of these *virtuosi*—the fable of the bundle of sticks has no application to musical performance—they have been brought together by a community of sentiment, and have, by long association, attained to a power of expressing it which would inevitably be missed in the continued utterances even of greater artists who did not stand in the same relations to one another. The performance of Beethoven's quartet in C sharp minor, op. 131, at the last concert, might be confidently cited as having exhibited conception, finish, and sustaining power that it would be impossible to surpass. The interest of these concerts has been greatly increased by the appearance at two of them of Mr. W. H. Holmes, a pianist known and esteemed as he deserves to be among "experts," but whose public performances have of late been too few. The enthusiasm with which he was received, especially at the last concert, will, it may be hoped, tempt him on to the platform a little more frequently in future. It is understood that Mr. Henry Holmes and his party have made arrangements for another series of concerts after Christmas. John Hullah.

ART NOTES.

As French society reconstitutes itself, day by day, fresh gaps are perceived. The *Chronique des Arts* on the 10th December consecrates a notice to the memory of M. Émile Bellier de la Chavignerie, who died on the 6th February last, at the age of 49. His genius was distinguished by the rare union of zeal for laborious research with natural appreciative power in matters of art. He first became well known to the public by his charming biographies of Miger and Lantara. Only a few numbers of his *Dictionnaire général des Artistes de l'École française* have been published; and it is much to be regretted that his premature death should have put a stop to the completion of a task for which he had prepared himself by the arduous labours of twenty years. He entered an ambulance at the commencement of the siege of Paris, and through his untiring evertions for the sick and wounded, to whom he devoted himself, he contracted an illness which proved fatal.

Bernard-Romain Julien, born at Bayonne in 1802, died in his native town on the 3rd of last month. M. Julien was a pupil of Gros, but he very early abandoned painting for the lithographic pen, which has made him famous. In 1840 he published his first *Étude à Deux Crayons*, and achieved a popularity which never after abandoned him.

The *Moniteur universel* tells an extraordinary tale as to the preservation of the riches of Fontainebleau from the enemy. At the approach of the Prussians, M. Boyer, the *conservateur* of the *château*, hid every valuable in the labyrinth of cellars which exists beneath it. Prince Frederick Charles and all his staff were engaged for three months trying to find the treasure, without success; so they beat M. Boyer, stripped off his clothes, and put him in prison. As the article ends with suggesting that M. Boyer should be handsomely recompensed for running the risk of his life in the public service, we may hope that some one, in his zeal for the pecuniary interest of the honest *conservateur*, has embellished M. Boyer's statements. The *Moniteur* quotes as its authority no less a person than M. Pfnor, the well-known writer on the ancient *châteaux* of France.

The great room which precedes in the Bibliothèque Nationale the gallery in which is located the department "des Estampes," has been re-opened. Of old the walls of this room were covered by examples of the chef-d'œuvres of all the different schools. M. Henri Delaborde has now decided to have nothing but French work, in order to prove to the French, who are, he thinks, too inclined to think little of their nationality, that their own school is equal to all others.

In the *Gazette des Beaux-Arts* M. Firmin Didot calls attention to the curious similarity of style and subject existing between a picture now at Compiègne and a mark of the printer, Nicolas du Chemin, which is generally considered to have been designed by Jean Cousin.

In the annual report made by the abbé Cochet to the prefectoral administration of the Seine-Inférieure mention is made of the discovery of a Merovingian burying-place. Some of the tombs had been already violated, but still an abundant harvest remained to be reaped. There were found—38 vases of which 36 were pottery, 2 glass; a great quantity of coloured glass beads, forming a bracelet and two necklaces; iron was abundant, 14 lances, 8 axes, &c.; bronze yielded a vase, fibulas, 5 Roman coins, of which one was of Hadrian and 3 of Tetricus; gold was also very abundant; amongst various articles of less importance there occurred a pin for the hair set with lapis-lazuli, and 2 magnificent fibulæ, decorated with garnets and filagree. The crowning treasure was a unique silver coin of Theodebert 1st king of Austrasia (534–548); it is an imperial coin, adapted for the barbarian king. We see a Merovingian prince thus substituting himself in the Arles workshop for the Cæsars of Rome and Byzantium.

The ruins of the magnificent cathedral of the ancient town of Parthenion have come to light. A new road is in course of construction in the Crimea, which passes at the foot of the Aïon Dag, through a little eminence which has hitherto attracted no attention. In cutting through this elevation the workmen came upon walls. M. Stronkoff commenced excavations at once; the high altar has been laid bare, and a marble slab, which bears an inscription to the effect that the cathedral was built in the fifteenth century, during the episcopate of Theodore, in honour of the holy apostles.

Mr. W. Smith, vice-president of the trustees of the National Portrait Gallery, has empowered Mr. Redgrave to make a selection from his collection of water-colour paintings of as many rare examples as would illustrate the early period of the art. The works selected he has generously presented to the nation, and they will shortly be exhibited to the public at South Kensington.

Mr. Millais, R.A., has at this moment on the easel another large autumn landscape; and yet another, with figures, the subject of which is a ferry on the Tay. Mr. Leslie, A.R.A., has been painting a ferry on the Thames. The evening shadows over the river landscape are full of sentiment, and help the imagination to divine the story of the coming boat, in which a gentleman with two horses is ferried over, whilst a girl dressed in her riding-habit awaits him in eager expectation on the bank. A second picture by Mr. Leslie treats "Azaleas." Mr. Calderon, R.A., has been engaged on a portrait. Mr. Watts, R.A., has been modelling a life-size figure, "Psyche." Miss Durant is engaged on a portrait bust of a daughter of Mr. Frederick Lehmann.

M. Charles Blanc, director of the fine arts, has just received the sanction of the government for his scheme of forming at Paris a collection of copies which is to represent all the most important pictures of foreign galleries.

Several of the most important portions of the Louvre have been re-opened, viz., the Musée des Antiques; the hall of the Roman emperors; the small room of Diana with the doe, which unites that part of the Musée des Antiques which is in the old Louvre with the ground-floor of the Louvre of Louis XIV.; and also the nine rooms of the Musée Napoléon, in which the Campana collection is preserved.

The opening of the Salon for the exhibition of paintings is fixed for the 1st of May. Some remarkable alterations have been made in the conditions for the admission of works. First, there are to be no *exempts;* next, there are to be two classes of medals, and one grand medal to be conferred on the most important of the four sections; then, the jury is to be composed of members of the Institut, to whom the actual holders of medals will add a certain number of artists; finally, the entry will be gratuitous.

The bronze statue of the late Lord Holland, the work of Messrs. Watts and Boehm, will shortly be erected in the centre of the south side of Holland Park. Part of the park wall has already been removed.

The auction of the duplicates of the etchings and engravings of the Berlin Museum has been so far a great success. Dürer's "Hieronymus in his Cell" fetched 70 thalers. Tiny leaves of Altorfer hardly an inch square went for more than 26; the "Adam and Eve" of Burgmair for 70; the "Adam and Eve" of Marc Antonio for 70; this, too, was a damaged example.

An exhibition of pictures representing the principal episodes of the history and siege of Paris has just been opened, 11, rue Le Peletier.

The committee formed for the erection at Macon of the statue to Lamartine has selected the Place de la Barre for the site.

It has also been decided that the statue shall be cast in bronze, although marble, "qui a les étincelles, les rayonnements et la pureté du génie de Lamartine," would have been preferable, did not its beauty suffer so soon from the influences of climate.

Baron Seymour Kirkup's library was brought to the hammer last week in London. The Baron was the hero of the discovery of the portrait of Dante, painted by Giotto on the wall of the Podestà at Florence (see *Academy*, vol. ii. pp. 59, 60). One of the most interesting items of the sale was a volume of the *Amoroso Convivio*, on the inside of the cover of which was a small but accurate drawing of the fresco of Dante, before it had been destroyed by modern restoration. The book fetched 5*l*.

The exhibition of Old Masters at the Royal Academy this winter promises again to be of great note. The Queen has lent twelve pictures, amongst which is a Holbein and a Vandyck. The Duke of Buccleuch, Sir Richard Wallace, and Mr. Baring have also liberally permitted selections to be made from their collections.

Selected Articles.

Hans Lützelburger, Le Graveur des Simulacres de la Mort d'Holbein. Édouard His. Gazette des Beaux-Arts, December, 1, 1871.

Ein Manuscript über die Statuen im Belvedere, C. Justi. Preussische Jahrbücher, December 1871. [The manuscript from which this article derives much of its interest was preserved in the library of the Colombaria Society at Florence. It appears to have been the joint work of Mengs and Winckelmann, and is especially noteworthy as throwing light on how much Winckelmann owed at first to the special knowledge of men like Mengs and Stosch.]

Die Basilica Julia am Forum zu Rom, A. Klugmann. Im Neuen Reich, No. 50, 1871. [A careful and exact report of the excavations and restorations now going on under the direction of Signor Rosa.]

Gött. gel. Anzeigen (Dec. 6) reviews Michaelis' important book on the Parthenon, which contains all the materials, and carefully distinguishes between what is certainly known and what is merely probable or possible. The reliefs on the east side represent the battles of the Giants; on the west those of the Amazons. The north side seems to contain Trojan scenes. The reviewers think it probable that the south side was devoted to the Argonauts. A careful analysis of the whole book is given.

Nachrichten, Nov. 29.—Sauppe discusses the inscriptions lately found in the temple at Selinas, which he thinks is a temple of Zeus Agoraios. Demeter is called Μαλοφόρος, Persephone Πασικράτεια, Ares perhaps Φόβος. The β in the word has the curious shape which accounts for φοβος and φονος being confused. The inscriptions seem to belong to the beginning of the fifth century B.C.

Literarisches Centralblatt (Dec. 16) notices Ilg's edition of Cennius Cennini's Book of Art (he was a painter of the Florentine school in the 14th century), and Allihn's Studies on Albert Dürer, at some length. The former is part of a collection of books on the history of art; and the reviewer recommends a similar collection for architecture, *e.g.* as to the first development of the Gothic in England and France, Suger's chronicle of his administration, and Gervasi's book on the burning and restoration of Canterbury. The latter tries to ascertain Dürer's meaning from the ideas of his time and the literature to which he had access, and is a good instance of the historical method.

New Books.

Almanac Breiz-Izel. (Almanac of Lower Brittany for the People, 1872.) Brest: Gadreau. (Paris: Franck.)

Archiv für Litteraturgeschichte, herausg. von Dr. Richard Gosche. Bde. 1 und 2. Leipzig: Teubner.

Arnold, Georg. Das Werk von Georg Christoph Wilder Jun., Maler und Kupferätzer in Nürnberg. Nürnberg: Korn.

Browning, R. Prince Hohenstiel-Schwangau, Saviour of Society. Smith, Elder, and Co.

Bruyn, Abraham de, et Colyn, Michel. Recueil de Costumes civils, militaires et religieux du XVIme siècle, d'après. Reproduction photo-lithographique des éditions de 1577 et 1581. 40 planches, 4°, en portefeuille. Bruxelles: Van Trigt.

Cahier, Charles, et Martin, Arthur, des RR. PP. Mélanges d'Archéologie, d'Histoire et de Littérature. Collection de Mémoires sur l'orfèvrerie et les émaux des trésors d'Aix-la-Chapelle, de Cologne etc., sur les miniatures et les anciens ivoires sculptés de Bamberg, Ratisbonne, Munich, Paris, Londres etc. Paris: Poussielgue Frères.

Cahier, le Père Charles. Les Caractéristiques des Saints dans l'Art populaire.

Church, A., and Brodribb, W. J. Pliny. (Ancient Classics for English Readers.) Blackwood.

Desbassyns de Richemont, le Comte. Les nouvelles études sur les catacombes romaines. Histoires—Peintures—Symboles. Paris: Poussielgue.

Dippel, Jos. Handbuch der Aesthetik und der Geschichte der bildenden Künste. Regensburg: Manz.

Dumont, A. Inscriptions céramiques de la Grèce. Paris: Imprimerie Nationale.

Elsaessische Sonnette. Bâle.

Galichon, Émile. Études critiques sur l'administration des Beaux-Arts en France de 1860 à 1870.

Gervinus, G. Geschichte der Florentin. (New ed.) Vienna: Braumüller.

Gervinus, G. Hinterlassene Schriften. Vienna: Braumüller.

Goethe. Hermann und Dorothea. Mit 8 Bildern von A. v. Bamberg, photographirt von Hanfstängel, und Initialen von Caspar Scheurers. Berlin: G. Grote.

Hahn, J. S. von. Sagwissenschaftliche Studien. 1. Lfg. Jena: Mauke.

Hettner, H. Litteraturgeschichte des achtzehnten Jahrhunderts. 1ster Theil: Englische Litteratur von 1660–1770. 3te verb. Aufl. Braunschweig: Vieweg.

Histoire de l'ornement russe du Xme au XVIme siècle d'après les manuscrits. Paris: Morel.

Konewka, P. Falstaff u. seine Gesellen. Text v. Herm. Kurz. Strassburg: Schauenburg.

Kunstschätze Deutschlands. Mit biograph. Notizen v. A. Woltmann u. B. Meyer. 1. Bd. Leipzig: Payne.

Lang, A. Ballads and Lyrics of Old France, with other poems. Longmans.

Lieder des Hasses. Genève.

Poole, F. Queen Charlotte Islands, a Narrative of Discovery and Adventure in the North Pacific. Ed. by J. W. Lyndon. With Map, &c. Hurst and Blackett.

Reuss, Rod. La Sorcellerie au 16ième et au 17ième siècle, particulièrement en Alsace, d'après des documents en partie inédits. Paris: Lib. Cherbuliez.

Taillandier, Saint-René. La Serbie—Kara-George et Milosch. Paris: Didier.

Toeppen, M. Elbinger Antiquitäten. Danzig: Vertling.

Viollet-le-Duc. Dictionnaire raisonné du mobilier français de l'époque carlovingienne à la renaissance. Tome 2ième. Paris: Morel.

Wey, Francis. Rome: Description et Souvenirs. Contenant 400 gravures en bois, d'après les dessins de MM. Anastasi, Bayard, Delaunay, Henri Regnault, Ulmann, Viollet-le-Duc etc. et un plan de Rome gravé sur acier. Paris: Hachette.

Wilken, Doc. Dr. E. Geschichte der geistlichen Spiele in Deutschland. Göttingen: Vandenhoeck und Ruprecht.

Winckelmann, F. F. Geschichte der Kunst des Alterthums, nebst einer Auswahl seiner kleineren Schriften. Mit einer Biographie Winckelmanns und einer Einleitung versehen von Dr. Julius Lessing. Berlin: Heimann.

Theology.

The Religion of Israel. [*De Godsdienst van Israel.*] By Dr. A. Kuenen. Part I. Haarlem: Kruseman, 1869.

A strictly historical description of the Israelitish religion is one of the fruits of modern critical theology. It was quite impossible, as long as the contents of the Old Testament were regarded almost exclusively as revelation. For revealed truth is inflexible, and can only be properly represented in the form of a dogmatic system, whereas religious ideas are bound up with the intellectual life of nations, and like it are subject to change; in other words, they have a

historical character. But although a strictly scientific method, as applied to the religion of Israel, is of modern origin, it is noteworthy that even the elder orthodox critics were able to distinguish something akin to a law of development. Who, indeed, could fail to observe that the outlines of prophetic religion were more distinct, and its affinities more evangelical, than those of Mosaic religion? The Biblical idea of the education of the human race was sufficient of itself to break up and paralyze the notion that the contents of Revelation must necessarily be of permanent validity.

Yet it must be owned that even those writers who have attempted to treat the religion of Israel historically have hitherto been very much inclined to presuppose the traditional authorship of the books of the Old Testament, and to assume that they are all of equal value as authorities for the ages to which they refer, rather than for those in which they were composed. And even if they admitted that the Hebrew writers had infused many ideas of their own time, the additions were regarded as unimportant. On the other hand, the critical basis (where such existed) of the earlier historical descriptions of Israelitish religion was easily shown to be untenable, as in the case of Vatke's *Biblische Theologie*, a work which did not deserve to fall so soon into oblivion.

The work we are about to review, from the pen of one of the ablest Dutch scholars, goes a step farther. Since it is the object of all science to make the nearest possible approximation to actual facts, we are bound, says Dr. Kuenen, as students of the religion of Israel, to investigate above all that portion of its contents which may be known with absolute certainty. This description, however, will not answer to Mosaism, though all other accounts of the Israelitish religion, not excepting those which follow an undogmatic method, begin with this period. It is extremely difficult to ascertain how much of the Pentateuch and its legislation really belongs to Moses, much more so than to sketch the broad outlines of the external events. For the very notion of a gradual modification, a Becoming, of religious ideas, is remote from those primitive times; we have no right, therefore, to apply a modern standard of historical fidelity to the early Hebrew chronicles. Consequently we must begin our investigation of the religion of Israel with the period which is comparatively well known to us, that of prophecy. Here, at any rate, we have access to numerous records, composed for the most part by the very men in whom religious enthusiasm reached its highest point, and who were animated by the religious idea in its greatest clearness.

And this is a point of view which cannot be reasonably impugned, especially when it is carried out with such learning and acuteness, such distinctness and moderation of tone, as in the work before us. Dr. Kuenen's method, therefore, is rather that of investigation than of description. The latter indeed corresponds better to the idea of a history, which seems to require a chronological thread, and the author will doubtless adopt this method as soon as we have reached a more definite knowledge of the earliest times of the Mosaic religion. But whichever method be preferable at the present moment, it is certain that we must decide at once whether we regard the books of the Old Testament as the absolutely faithful reflection of an immediate revelation, or as human writings, which exhibit the religious belief of the nation. The former is the older as it is still the popular opinion, and in its earliest stage, before it had received a logical precision, was not directly opposed to the latter. The author is quite right in insisting on the later view as the only possible basis of an impartial and purely scientific enquiry. Orthodoxy itself is obliged to exercise some criticism on the contents of the Old Testament, since it regards Christianity as a more perfect religion than Judaism. It is obliged to distinguish between the belief of inspired and prophetic men and that of the people, and so to place the discourses of the friends of Job in quite another relation to the fountain of revelation than the words of Isaiah, though even in these it cannot yet discover the broad daylight of the Gospel, unless it is prepared to abolish the distinction of the divine covenants altogether. All these results are attained with greater thoroughness and completeness by the modern scientific method.

There is, however, another assumption on which our author in his introduction lays greater stress. He thinks we must regard the religion of Israel not as the principal religion outside Christianity, but only as one of the principal religions. It is difficult to see why this assumption should be of great importance for his particular task, which is simply to describe the Israelitish religion, not to compare it with others. Besides the antithesis is not precise enough. For if Israel had the principal religion, there may still be several other religions, which occupy an eminent position among their sisters. Before I have compared Judaism with these principal religions, I can say it belongs to the class of these principal religions. But if we are to estimate the comparative value of these religions, we cannot content ourselves with saying, This or that religion is one of the principal ones; but we must place it either above or beneath Buddhism, or Parsism, or Brahmanism. This is the function of the comparative history of religion, which has been so well described by Max Müller in his *Chips*. But our verdict, whatever it may be, can exercise no influence on our description of the religions themselves. It is another question whether the Israelitish religion alone is to be referred to a divine revelation, or other religions also. The former view is commonly regarded as that of the church, the mythology represented in the Greek and Roman poets being supposed to be the single source of the heathen religion; a view which conflicts with that of many of the fathers, who perceived traces of Christianity even in the heathen religions. As for the latter view, Dr. Kuenen rightly observes that it ought not to be based on the assertion of those who profess these religions. It rather depends—partly on the religious and moral *value* of a religion, which is determined by the contents of the latter—partly on a philosophical consideration of the origin and development of the various religions. For "revelation" points only to the highest *cause* of religion. The rejection of such a comparison of religions could only spring from the opinion that one religion alone was suitable for every race, but this error of the ancient world has been contradicted by history itself; not only Christianity, but also Islam and Buddhism, have passed from one great race to another; the alterations produced in a religion by such transitions are not fundamental. Another consequence of Dr. Kuenen's assumption is that he absolutely rejects the primary idea of "Jahvism," viz. that the Israelites were the chosen people of Jahveh. This position may be justified in two respects —1, in so far as the idea of election is merely an expression of national pride; and, 2, in so far as limited geographical knowledge made it impossible even for the prophets in their pictures of the future to bring the peculiar religious development of Israel into relation with the divine government by any other means. We must, however, guard against confusing the idea of election as originally conceived and expounded by the prophets with the fantastic notion of the Pharisees. With the prophets it denotes an act of divine grace, and involves more duties than privileges. We should also not forget that the limits of the religious community were ever much wider and more elastic than those of the

nation. Considered more closely, the idea of election seems to be the sound, though imperfect, expression of a vivid presentiment that the most distinguished rank in the religious development of humanity is assigned to this people—a presentiment which has also received the full sanction of history.

Following the method mentioned above, the author, in chap. i., describes the religion of Israel, as it appears in the great prophets of the eighth century. Jahveh is here the One God, who has chosen Israel, whom the nation has to obey, who declares his will distinctly through the prophets, and whose most conspicuous property is righteousness; in fact, we have before us the very essence of religion in all its grandeur and beauty. But this is not the only result to be gathered from the writings of the prophets. We learn, too, that the popular creed differed in many respects from that of the prophets. Jahveh was often forced to share his honours with other divinities; he himself was not yet recognised as the highest spiritual power; the popular conception brought him into too close a relation to natural elements, especially fire.

This mistaken and impure faith, which was often shared even by "prophets," is referred to repeatedly and in the clearest terms in the Old Testament. Dr. Kuenen has given an excellent picture of both kinds of the faith in Jahveh, although we should have liked to see many *momenta* in the purer creed (viz. the divine activity and the hope of salvation) drawn out at greater length. This slight deficiency, however, is almost justified by the fact that descriptions of the religion of Israel are still too often loaded with Christian and other foreign elements, which a strict historian and interpreter is compelled to disallow. In the second chapter, the author takes a retrospective view of the earlier eras. First, he gives us a historical survey of the history of Israel from the Exodus to the rise of the two kingdoms of Israel and Judah. Full and careful use is everywhere made of the latest researches. But little historical matter is found by the author in Genesis. This critical position approaches most nearly to Ewald's, combined with that of Graf, Bunsen, &c. He dates the Exodus B.C. 1320. In many points of detail we naturally differ from him, but we need not trouble the reader with all these, as the entire section refers to matters which must be presupposed, or, at most, sketched in outline, rather than proved, or drawn out at length, in a history of the Israelitish *religion*. One point only shall be mentioned. No doubt the purely genealogical view of history is "unhistorical" (p. 113); no doubt, too, geographical vicinity has often been converted into a proof of national kinship. But the numerous plurals and names of nations in Gen. x. prove clearly enough that the genealogists often intended to refer to nations and not to individuals, and the mere fact that the Philistines and Horites find no place in the framework shows that such writers were not by any means devoid of discrimination. On the other hand, we must beware of maintaining the converse; otherwise we shall have to deny any real affinity whatever, and forget that a nation is composed of families, and that a tribe might easily take its name from its first chief, or from the ruling family. There is no alternative but to subject each separate link in the genealogies to a searching examination, and it seems to us a mistake to allege the nature of the framework as in itself conclusive against an ethnological connection. Even the well-known capriciousness of late Arabic writers in the construction of genealogies (comp. Sprenger's *Life of Muhammad*) gives no better right to pass such a verdict. We hasten to add that this warning applies only to a very small extent to Dr. Kuenen, whose calm and temperate criticism is largely displayed in his treatment of this subject, but rather to other recent historians.

The third chapter discusses the formation of those communities of religious men incorrectly termed "the schools of the prophets," an important share in which, though scarcely one to be estimated precisely, belongs to Samuel. The author brings out very well the importance — often overlooked — of these communities; they continued long afterwards in both kingdoms, even in the time of the great prophets (Isaiah viii. 16), and were in many ways the chief support of the pure religion of Jahveh. Dr. Kuenen investigates with equal clearness "the Canaanitish origin of prophetism," which hitherto has not been adequately observed. It is true that the forms of Hebrew prophecy adduced for the purpose of comparison are the elementary ones. Not only did prophecy, through being spiritualised, receive quite other ideal contents than before, but its whole character was changed. No wonder that the Hebrew prophets, whose writings we possess, are infinitely remote from that primitive stage, and only the false prophets betray the origin of prophecy with comparative clearness.

The most difficult and at the same time most interesting question is discussed in the fourth chapter: What was the *earlier* development of the religion of Israel? Two views are possible, according to the author (p. 218, &c.). Either the impure elements in that religion were the consequences of a national *defection* from the pure and spiritual worship of Jahveh, or else they represent the original, out of which the more spiritual form developed itself by degrees through the agency of the prophets. Dr. Kuenen decides for the latter alternative. This view is supported by unmistakable expressions in the Old Testament, *e.g.* Josh. xxiv. 2, 14; Ezek. xx. 5; Amos v. 25, 26. And there is really no passage to be found where the whole people are said to have been faithful for any length of time to the pure worship of Jahveh. As the author very justly points out, Elijah and Elisha do not seem ever to have come forward against the calf-worship in the kingdom of Israel. Sensuous and spiritual elements are found side by side in the conception as well as in the cultus of Jahveh. The prophets indeed degraded the former into symbols, but they were once integral parts of the popular belief. Dr. Kuenen well illustrates this view by several usages in the worship of Jahveh, which reveal the early connection between Jahveh and fire in the popular mind, the bloody nature of his sacrificial ritual, and the absence of any specific distinction between him and nature-divinities like Molech and Kemosh. The view thus carried out in detail is in essential agreement with the opinion long current among critics, that impurities in the idea of Jahveh could not but tend to assimilate it to the type of the neighbouring divinities. It has also been generally recognised that a large number of the Pentateuch laws by no means institute new rites, but only modify or devise new motives for customs already in existence. Here, of course, we are restricted to conjectures, but to such as can be raised to a high degree of probability. Our author certainly deserves great credit for his description of the primitive popular belief. We think, however, that the distinction between the sensuous conception of Jahveh and the polytheistic requires to be drawn out still more sharply; we must not infer polytheism when we have barely proved the existence of other deities, not their worship. And even in the latter case we must still enquire whether these deities were co-ordinate with or subordinate to Jahveh. The discovery that monotheism and polytheism are by no means contradictory, but that the most various combinations and transitional stages occur, is the key to the comprehension of all the forms of historical religion, especially on Semitic soil.

But *how* did the sublime religion of the prophets develop out of this ancient popular faith? Was the latter the only germ out of which the former proceeded? Why, for instance, did not the religion of the Moabites, with which, perhaps, that popular faith had many points in common, develop in the same way? Was this great result produced, or, so to speak, distilled, in Israel by a kind of internal fermentation, which separated the spiritual from the sensual? Not a few are inclined so to imagine the process. It sometimes appears as if Dr. Kuenen were of the same opinion. But it is only appearance. New ideas, not involved in the popular belief, must have been introduced—ideas of sufficient power to effect a complete transformation in the several elements of the religion of Jahveh. And the representatives of these ideas were prophets. To what period, then, are we to assign the undisputed prevalence of that mixed popular belief? Dr. Kuenen recognises in Moses himself a prophet who introduced such new ideas. The period we are in search of must therefore fall before Moses, *i.e.* before the national life of Israel can strictly be said to have begun. But the tradition that Moses stood in a close relation to older and yet higher, and not merely Egyptian, conceptions of religion —is it a complete delusion? If it is not so, we shall arrive at those obscure times in which the Israelitish nation was gradually developed. And we shall be unable to deny the possibility of prophetic action even in those early times in the Semitic group from which the people of Israel sprang. A further question which arises is this: How far did the conviction of these ancient prophets deviate from the popular belief which they sought to transform? The answer is difficult, as we have no contemporary evidence for this primitive period. It is only too natural that scholars should differ on a point in which so much depends on conjecture. In the case of Moses, Dr. Kuenen admits unreservedly the fact of such a deviation, but he thinks that it did not go so far as the negation of image-worship and the assertion of the absolute uniqueness of Jahveh. If, however, we estimate the difference between Moses and the people at too low a rate, we shall hardly be able to explain the intense veneration for the former embodied in the tradition. The narrative of the golden calf is not so much a piece of historical evidence as the symbolical expression of the view that the priests took comparatively a slender share in this religious movement.

The picture of the early religion of Israel drawn by Dr. Kuenen appears at first sight to differ considerably from the ordinary one, though the former, as we have seen, corresponds pretty closely in its main outlines to the results as yet gained by criticism. The dispute is to a large extent about mere words. By the "religion of Israel" we may mean either the old popular belief marked with the stamp of heathenism, or the purer conception of the prophets. Which has the best claim to the title? In our opinion, the latter alone. The crude notions of the mass of the Jews have as little right to be called by this name as the religious ideas of the Neapolitan peasantry to be accepted as the standard of Roman Catholicism. Besides, there is no specific distinction between the popular belief of the Jews and that of their neighbours, while the expression "religion of Israel" is absolutely unmeaning, unless it sums up that which was peculiar and distinctive; in other words, the essential elements of the prophetic ideas. History itself imposes this condition. The Jewish nation, when arrived at maturity, have, through their representatives, only preserved those writings as records of their true religion which exhibit the higher and purer faith. No literary record stands only on the foundation of the old popular belief. Even the "Mosaic" laws were not generally recognised until Deuteronomy—a genuine prophetic work—had been appended as a key and corrective. As for the purely religious point of view, it is at any rate justifiable in explaining the origin of the prophetic movement, since it is a mere evasion to reply that its leaders were religious geniuses; the continuity, consistency, and strangely transforming influence of the prophetic spirit cannot be accounted for by phrases of this sort. Of course this religious theory, true as it is, or rather because it is true, ought never to be allowed to check the course of historical enquiry; it can only be properly applied to illustrate the ultimate causes of historically developed facts. To speak of "revelation" at this point is allowed, or rather demanded, by science itself.

We know but little for certain as to the religion of primitive times, and the author is disposed to confine the true prophetic influences of the period within very narrow limits. It is probable enough that there were still many soothsayers of the class of a Balaam in addition to the prophets, and this is confirmed by the historical and prophetical books. Dr. Kuenen proceeds to describe the times of the judges and the kings, with the object of arriving at the average belief of the people themselves. His description is not incorrect; on the contrary, this part of his book contains some interesting contributions to criticism. It is not a declension from Jahveh, as the religious theory of the Book of Judges regards it, which characterizes the time of the judges; but the worship of the *local* deities by the side of Jahveh. The latter was recognised as the god of the nation and the country, but the lesser deities, the Baalim, stood in a more intimate relation. The more religious Israelites indeed had a special reverence for Jahveh, but made no attempt to disturb the other divinities; in short, even they did not regard Jahveh as the one only God, beside whom the gods of the heathen were things of nought (*Elilim*). This is proved in the cases of David and Solomon, Asa and Jehoshaphat. The exclusive recognition of Jahveh was first attained in the northern kingdom, when Jahveh was in danger of being supplanted by Baal as the one supreme God. This attempted revolution fortunately provoked a reaction, and the victory over the supreme Baal involved a victory over the lower Baalim. Not indeed at once, but gradually. These results have a rather monotonous aspect, in so far as the extent of Jahveh's power, rather than the mode of his operations, sometimes almost seems to form the only contents of the higher religion. The author does not go so far as to regard this notion (Jahveh *by the side of* other deities) as the only test of the value of this religion, as it is essentially an act of the understanding; still he is on the verge of doing so. The notion is in his view a sign of a "barbarous" age. Dr. Kuenen involves himself in some difficulty by placing the transition from a more than semi-heathenish form of religion to the pure conception of the prophets Amos, Hosea, and Isaiah as late as the ninth century. We are afraid this giant-stride is not sufficiently explained. He estimates the popular belief of the southern kingdom in no essential respect more highly than that of the north, although there was no struggle between Jahveh and Baal in the south analogous to that in the north, while the prophets of Judah even dwell with emphasis on the unique character of Jahveh. Another striking fact is that in the prophetic expositions of the latter doctrine there is scarcely any vestige of a conflict with Baal, although on Dr. Kuenen's hypothesis we might expect some such involuntary allusions. We may infer therefore that the importance attached to Jahveh in the popular religion of Judah is rather underrated by our author. It is equally improbable that a purer idea of the nature of God was preserved by tradition in a few families alone. The worship on the "high places" was certainly not altogether so "innocent" as many have supposed. Dr. Kuenen indeed accepts the judgment of the Book of Kings,

and regards the "high places" as entirely idolatrous. Were this, however, exclusively the case, the earlier prophets would certainly have been much louder in their denunciations. Besides, the command to worship Jahveh only in Jerusalem points to the existence of numerous sanctuaries consecrated to Jahveh, but too much withdrawn from the sacerdotal control. In short, the author has looked sharply after the dark side of Israelitish religion, but in so doing has missed much of the light. He follows the religious criticism of the historical books; indeed, his judgment turns out even more severe than theirs. On the other hand, he bestows much too little attention on the Psalms and the Proverbs. He deems scarcely any statements but such as are unfavourable to the state of religion historically "certain." But though it is impossible to fix the precise dates of the Psalms, it is highly improbable that no song of the collection falls earlier than the ninth century. And if even a part be earlier, it must be employed as a historical authority. The author's view that the more ancient portions of the Pentateuch were not in existence before the eighth century is equally improbable, and opposed to that of most critics. At any rate he cannot avoid the task of analyzing these records, with the view of detecting still more ancient records, and employing them in his description of early religion.

The foregoing criticisms are obviously directed not so much against the results of Dr. Kuenen's enquiry as against its completeness. They are not intended to depreciate in the least the great importance of his work for the scientific study of the Old Testament. No doubt he has dealt a severe blow to the custom of writing Jewish history from a dogmatic point of view. Truth, however, has sustained no real injury. Many, very many, of his details are still questionable; it could not however be otherwise, considering the abundance of the material. Each chapter is followed by valuable notes, which often contain long and important excursuses, *e.g.* that on the chronology (chap. ii.), and the argument in proof of the genuine Israelitish character of the name and doctrine of Jahveh. We hope for an early opportunity of noticing the second volume; the present concludes with the Babylonian exile. L. Diestel.

DISCOVERY OF A PSALMIST.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In the prayer-book of the Jews alphabetical hymns are of very frequent occurrence. It is an invariable rule with them to express the name of the author in the verses following the end of the alphabet. If the ת- or א- verse (in case the alphabet is used in the inverse order) is followed by anything else, we are sure to find שמעון, or שלמה, or יצחק, or some other name, marked by the acrostic.

If we apply this rule to Psalms xxv. and xxxiv., where the ת verse is followed by a single verse, which does not belong to the alphabetical arrangement, we are entitled to say that the author of Psalm xxv. was one פדהאל, the author of Psalm xxxiv. one פדהיה, as of course the ו of פודה, Psalm. xxxiv. 23, did not originally form part of the text. Phadael is undoubtedly the person mentioned in Nehem. viii. 4 as a contemporary of Ezra, and who held a high rank in the Jewish community at that time. Phadaias might have been a brother of Phadael. The orthography פדהאל is as עשהאל, פדהצור. The name Phadael itself is written פדהאל, Num. xxxiv. 28.

So for the first time the true name of a psalmist has come to light.

Göttingen, Dec. 6, 1871. Paul de Lagarde.

Intelligence.

Two of the most difficult German authors, Ewald and Dorner, have been singularly fortunate in their translators. The standing-point of the *History of Israel*, the third volume of which, in two parts, has just appeared in a delightful English dress, received a careful appreciation in the *Academy* (vol. i. pp. 201–203). A similar attempt to "orientate" the reader of the *History of Protestant Theology* is unnecessary, in spite of the misconceptions which in England have gathered round the name of Dorner, because the main difficulty in understanding that author is caused by the obscurity of his style, which is reduced to a minimum in this very readable version of his most intelligible work. On the other hand, the principal obstacle to a just estimate of Ewald is, not the cumbrousness of his style, but his natural incapacity for discussion, a defect which cannot be remedied by any translation of his works, however skilfully executed. Without pledging ourselves by any means to agreement with all Dorner's views, we strongly recommend his *History* to those who are beginning the scientific study of theology. The third book, in particular, on the theology of the nineteenth century, deserves the closest attention of the student, who may be surprised to find how much critical and speculative liberality enters into the composition of a German "orthodox" leader. It is characteristic of the wide information of the author that he concludes his work with sketches of contemporary foreign theology. These are of very unequal merit, but none the less welcome, as indications of a broader conception of the history of theology than is perhaps common in Germany. The sketches of Dutch, Scotch, and English—or rather Anglican—theology are the least satisfactory. The best passage on the latter is the criticism on Dean Mansel (vol. ii. pp. 494, 495); the worst, that on *Essays and Reviews* (p. 496), where the author, strangely enough, deserts the very principles of exegesis which he has previously recognised. A severe article by Prof. Diestel in the *Jahrbücher für deutsche Theologie* is still the best thing which has been written on that celebrated work. In the earlier English theology and philosophy, as well as, of course, in those of his own country, the author is evidently at home, and even those who differ, as most occasionally will, from his interpretation of facts, will appreciate the moderate tone in which it is stated.

Contents of the Journals.

Archiv f. wiss. Erforschung d. Alten Test., Bd. ii. Hft. ii.—M. J. De Saulcy before the tribunal of truth and science, by T. Tobler.—Philonic studies, by C. Siegfried. [Seeks to show that Philo participated in a traditionary knowledge of Hebrew.]—The 70 shepherds of the book of Enoch and their interpretations, with especial reference to the Barkochba hypothesis, by O. Gebhardt. [Concludes that the Ethiopic version is too inaccurate to be a safe guide in obscure passages.]—The Targum on Proverbs dependent on the Peshita, by Th. Nöldeke.—Job xxx. 11, by Ad. Merx.

Monatschrift für Gesch. u. Wiss. d. Judenthums.—Dr. Grätz has published a series of striking articles on the Scriptures subsequent to the return from the exile. Daniel is treated in the August, September, and October numbers, the canonicity of Esther in that for November, and the 119th Psalm—which is ascribed to Onias, founder of the temple at Leontopolis—in that for December.

Centralblatt, Dec. 16.—Merx's Job, rev. by E. S. [Rejects the author's principles of text-correction, but agrees with him in taking the half-verse as the metrical base.]—Kleinert on Deuteronomy, by the same.

Jahrbücher für deutsche Theologie, vol. xvi. No. 4.—See especially reviews of Scholten's Aeltestes Evangelium, Meyer on the Gospel of John, Krenkel's Paulus, by Weizsäcker, and of Martensen's Christliche Ethik, by Palmer.

New Publications.

Begni, G. L' Ecclesiaste secondo il testo ebraico. Doppia traduzione con proemio e note. Florence: Cellini. [Said to be the work of a good Orientalist, who is extensively acquainted with modern and even Protestant works on the subject.]

Colenso, J. W. The Pentateuch and Book of Joshua Critically Examined. Part VI. Longmans.

Ffoulkes, E. S. The Athanasian Creed, By Whom Written and By Whom Published. Hayes.

Grätz, H. Schir ha-Schirim, od. das Salomonische Hohelied. Vienna: Braumüller.

Origenis Hexaplorum quae supersunt. Concinnavit etc. F. Field. Tom. I. Fasc. I. Clarendon Press.

Rauwenhoff, L. W. E. Geschiedenis van het Protestantisme. Parts 1–3. Haarlem.

Testamentum Novum Graece [Tischendorf]. Ed. VIII. Fasc. 9. Leipzig: Giesecke und Devrient.

Physical Science.

Blood Crystals. [*Blutkrystalle.* Von W. Preyer. Mit 3 gefärbten Tafeln.] Jena: Mauke.

THIS is one of those monographs, unfortunately too rare in our own country, which are so useful to those engaged in special enquiries, as giving in a continuous and condensed form all the more important facts and opinions up to the date of publication. It must not, however, be supposed that it is a mere literary compilation. On the contrary, it is the production of one who has himself contributed much to the subject by his own investigations, and contains a considerable amount of original material. Though the title of the work is *Blood Crystals*, it is, strictly speaking, an account of what is known respecting the physical and chemical characters of the red colouring matter of the blood (hæmoglobin), and of various products derived from or closely connected with it. From whatever point of view we look on this substance, it must be regarded as one of the most important and remarkable presented to us for investigation. Though it may be obtained in perfectly well-defined crystals by methods described by the author, yet it has the characters, not of a crystalloid, but of a colloid substance, and will not diffuse through membranes. The chemical composition is also most remarkable. Besides the usual carbon, hydrogen, nitrogen, and oxygen, it contains iron and sulphur as essential constituents, and has the extraordinarily complex constitution expressed by the formula $C_{600}H_{960}N_{154}Fe_1S_3O_{179}$, the atomic weight being no less than 13332 (H = 1, O = 16). Such being the case, it is no wonder that the products of its decomposition already known should be very numerous, and that very much still remains to be learned. The optical characters of hæmoglobin are remarkable, and very characteristic. As far as they are concerned, no difference can be detected between that met with in different animals. It is the same, not only in all the Vertebrata, but also in some Crustacea, Mollusca, and Annelida. It however appears to be satisfactorily proved that there is some essential difference even between the hæmoglobin of different species of Mammalia. The crystals belong to two distinct systems (rhombic and hexagonal), and differ further in the secondary forms, and in solubility. Whether this depends on the hæmoglobin itself or on the presence of some other substance, it is manifestly an extremely interesting question, not only in connection with physiology, but also in its practical application in the examination of blood-stains. The value of this test is however much impaired by the necessity of our examining fresh and unaltered blood; and the author concludes that it cannot be relied on as a means for distinguishing human from other blood; but at the same time the facts are so striking that perhaps it would be premature to abandon all hope of being able to make use of such a test in certain cases.

One of the most remarkable peculiarities of hæmoglobin, and that which enables it to play such an important part in the animal economy, is the property it possesses of combining loosely with oxygen when exposed to the air, and readily giving it up to oxidizable substances. According to the author the constitution of the oxidized modification may be expressed by $\left.\begin{matrix}O\\O\end{matrix}\right\}Hb$. These two atoms of oxygen can be removed by the air-pump, and the crystals of the deoxidized modification (Hb) are of the same form as that of the oxidized, but of a different colour, and give an entirely different spectrum. This loosely combined oxygen may also be replaced by other gases, according to a special law, not that of actual chemical substitution. Thus in the case of carbonic oxide, CO replaces O_2, and not simply O. Other similar substitutions occur, the principal of which are given by the author in the following manner, though the constitution of some is so far somewhat hypothetical: NO,Hb ; $\left.\begin{matrix}CyH\\O\end{matrix}\right\}Hb$, which can be reduced by deoxidization to CyH,Hb ; $\left.\begin{matrix}S\\O\end{matrix}\right\}Hb$, which may in a similar manner be reduced to SHb. The compounds $\left.\begin{matrix}S\\S\end{matrix}\right\}Hb$ and $\left.\begin{matrix}H_2\\S\end{matrix}\right\}Hb$ are also very probable. This substitution of O with other gases in great measure explains their poisonous action. According to the author deoxidized hæmoglobin can be restored to the oxidized modification by no other means than exposure to oxygen in a gaseous state.

The products of the decomposition of hæmoglobin are very numerous, and present many facts of great interest. One of these is the only pure albuminous substance hitherto prepared. Though that is such a complex body, yet hæmoglobin is so much more so that it splits up into coloured compounds, and this colourless albumen. When exposed dry to the air, blood or pure crystalline hæmoglobin gives rise to a new substance of albuminous nature, for which the name *methæmoglobin* has been most generally adopted; and, since this compound is of great interest in connection with blood-stains that have been exposed for a while to the air, I have myself made it the object of very special study, and this leads me to differ from the author in certain particulars. He appears to me to have overlooked the changes produced in the spectrum by the presence of alkalis and acids. According to my experiments, when the solution contains as much of some weak acid as the methæmoglobin will bear without decomposition, the absorption-band in the red is so much increased in relative intensity that it may almost be said to exist alone. When nearly neutral, the spectrum shows four bands, as described by the author; but on adding excess of ammonia, two of these, which are nearly in the same position as those of oxidized hæmoglobin, are made much darker, that in the red is removed, and an entirely new band developed in the orange, so as to give the author's spectrum, plate ii. fig. 8. This he describes as that of a product of the oxidization of oxidized hæmoglobin, with which view I entirely agree; but that it is only the alkaline modification of methæmoglobin is proved by our being able to change it into the ordinary four-banded spectrum, backwards and forwards over and over again, just as we can restore the blue colour to litmus reddened by an acid. The nature of methæmoglobin is, in my opinion, well shown by the following experiment. To a solution of oxidized hæmoglobin, giving the spectrum distinctly, carbonate of ammonia and a slight excess of ammonia are added, and then a very small quantity of a solution of permanganate of potash, until the spectrum is seen to have three much less dark absorption-bands of nearly equal intensity. On adding a little citric acid to neutralise all the free ammonia and cause slight effervescence, so that the solution may contain free carbonic acid, but no free citric, the four-banded spectrum may be recognised, and then the addition of a very minute quantity of the double sulphate of protoxide of iron and ammonia gradually changes this directly into the original spectrum of oxidized hæmoglobin, without the intermediate production of the deoxidized modification. I therefore contend that methæmoglobin is derived from oxidized hæmoglobin by the introduction of a small quantity of oxygen, in such a manner that it may be removed by deoxidizing reagents, and the hæmoglobin restored to its original state.

The chief coloured products of the decomposition of hæmoglobin described in detail by the author are hæmin,

hæmatoin, and hæmatin. He also notices more briefly some less understood colouring matters met with in living animals, which may perhaps be derived from the colouring matter of the blood, and various artificial products obtained by Hoppe-Seyler. The number of products that could be obtained from such a complex substance is no doubt great, and I could myself add five or six which give entirely different and well-marked spectra.

Hæmatin contains no albuminous substance, is free from sulphur, but contains iron as an essential ingredient. According to Hoppe-Seyler its composition is $C_{68}H_{70}N_8Fe_2O_{10}$. Hæmin contains chlorine as well as iron, and its composition is $C_{68}H_{72}N_8Fe_2Cl_2O_{10}$. Hæmatoin is free from iron, and its composition $C_{68}H_{74}N_8O_{12}$, being thus hæmatin $-Fe_2+2$ aq.

According to the author, what has hitherto been considered to be the spectrum characteristic of acid hæmatin is really that of hæmatoin. He contends that when a free acid is in the solution the hæmatin is deprived of its combined iron, and is changed for the time into hæmatoin, but that on adding an alkali the iron re-combines, and hæmatin is reproduced. What he thus names *hæmatoin*, he thinks is probably identical with the iron-free hæmatin formed by the action of concentrated sulphuric acid on hæmoglobin, &c. (Thudichum's *cruentine*). These views are very simple and ingenious, but I must confess that my experiments lead me to believe that there are really several distinct substances, and that the facts are much more complex—at all events too complex to be described now.

The chapter on the detection of blood by the spectrum method is, in my opinion, not on a level with our present knowledge, but fully confirms the views of those who argue that no other known substance gives the same spectra as those of blood. The methods described by the author would enable an experimenter to recognise a moderately small quantity of fresh blood on an inert fabric, but they would probably fail if the stain had been exposed for a few days to the impure air of a large town, and certainly if the quantity were very minute, if particular mordants had been used in dyeing the fabric, or if it had been soiled by dirt or perspiration, and still more so if it were on leather and had been partially removed by water.

In the last chapter the author discusses certain points connected with the physiological action of the red colouring of the blood. He shows that nearly all the oxygen of the blood which is available for oxidizing purposes is that loosely combined with the hæmoglobin, and argues that the difference between the arterial and venous blood in the fœtus proves that oxygen may pass from the red globules through the membranes of the capillaries; in this case, of course, through those of the placenta. He also shows that almost the whole of the iron in the blood is that contained as an essential constituent in the hæmoglobin. In conclusion, the work contains a list of about two hundred memoirs connected with the subject, with full and complete references.

Though I have thus somewhat freely criticised certain portions, yet I must express my great admiration of the work as a whole, and recommend it strongly to the attention of those interested in such an important subject as physiological chemistry. H. C. Sorby.

Scientific Notes.

Physiology.

The Tone of the Voluntary Muscles.—Georg Heidenhain contributes an essay (*Pflüger's Archiv für die gesammte Physiologie*, Band iv. Heft. x.) on the influence of the posterior roots of the spinal cord on the excitability of the anterior. These experiments deal essentially with the nature and cause of the tone of the voluntary muscles. Harless conceived that the stimulus to maintain this tone was constantly being transmitted by the sensory fibres of the muscle in a direction contrary to that in which they ordinarily convey impressions; whilst Cyon maintained that the motor nerves were constantly being excited by peripheric irritations, which stimulated the sensory nerves, and were conducted by them in the ordinary mode through the posterior to the anterior roots. Heidenhain is opposed to both views, and believes that no influence of the kind is exerted. The tone of the muscles, it would appear from Schwalbe's and Heidenhain's experiments, is simply their natural condition of healthy nutrition, independent of the nervous supply; for if, as the former has shown, the sciatic of a frog be so suddenly utterly destroyed that no convulsion of the gastrocnemius occurs, it will be found that this muscle does not undergo the slightest elongation.

Tension of the Gases of the Blood of the Capillaries.—Siegfried Wolffberg (in the same part of *Pflüger's Archiv*) discusses the tension of the gases of the blood in the capillaries of the lungs, gives the results of many experiments, and arrives at the following conclusions:—(*a*) The tension of the oxygen of the blood entering the capillaries of the lungs amounts on the average to 27 millimetres of mercury. (*b*) The tension of the carbonic acid in the capillaries of the lungs is on the average equal to 24 millimetres of mercury. (*c*) The expired air contains on the average 2·8 per cent. carbonic acid and 16·6 oxygen. (*d*) The tension of the carbonic acid of the blood of the pulmonary artery is equivalent to an atmosphere containing from 3·6 to 5·1 per cent. of carbonic acid.

The Metamorphosis of Tissue.—Dr. Paalzow has a paper in the same Part on the influence of irritation of the skin on metamorphosis of tissue. He shows that when tracheotomized rabbits were immersed in water charged with carbonic acid, and kept at an even temperature, no increase in the amount of carbonic acid expired occurred; but when mustard was added, there was a considerable increase in the amount of oxygen inspired, and of carbonic acid expired, showing augmented metamorphosis of tissue.

In *Pflüger's Archiv*, Band iv. Heft x., moreover, Gustav Strassburg describes the action of acids on the oxygen of the hæmoglobin of the blood, and shows that their action is to diminish the quantity of oxygen with which it is combined. The same author gives a modification of Pettenkofer's test for the detection of the biliary acids in the urine, by means of which he can detect 3-100000ths of a grain. It consists in dipping a piece of filtering paper in the urine, to which cane sugar has been previously added, drying it, and then dropping some concentrated sulphuric acid upon it. A beautiful violet tint appears.

Prof. A. Heynsius and Dr. J. F. F. Campbell communicate at considerable length their researches on the products of the oxidation of the biliary colouring matters, and their absorption bands when examined with the spectroscope. In an introductory chapter they give a very complete *résumé* of Städeler's and Jaffé's observations, as well as the more recent ones of Maly, Thudichum, Bogomoloff, and others.

Pflüger's Archiv, Band iv. Heft xii., contains only three papers, the last of which however is of considerable length. In the first, Heidenhain endeavours to refute the theory recently advanced by Cyon in regard to the centric origin of the vascular nerves. In the second, the same author, Heidenhain, gives the details of his experiments on the much discussed question of the relative temperature of the right and left sides of the heart. He agrees with Bernard and G. Liebig that there is always or almost always a difference between the two; the right being 0°·1 to 0°·3 or in extreme cases as much as 0°·6 Cent. higher than the left. The last paper is by M. Eichhorst on the absorption of albuminates in the large intestine. The essay is a valuable one; and the author gives the results of his observations as follows. The Succus entericus both of the large and small intestine is destitute of any peptic ferment. It has no action even on fibrin. The Succus entericus of the small intestine contains a diastatic ferment; but this is absent in the secretion of the large intestine. This last has no other function than that of lubricating the lower part of the bowels. The secretion of the small intestine can prevent solutions of gelatine from solidifying; this he thinks is due to the action of a special ferment. When introduced into the large intestine, the following substances are capable of being absorbed: a–b–c peptones, pieces of meat, albuminous substances of milk, dissolved myosin and Lieberkuhnian alkali-albuminate, ordinary albumen of egg mingled with salt, solution of gelatine, and Liebig's extract of meat. On the other hand, pure ovalbumen, solution of syntonin, ser-albumen, undissolved fibrin, syntonin, and myosin are not absorbed.

Pflüger's Archiv, Band v. Heft i., contains eight papers:—1. The action of the constant current on the pneumogastric nerve, by F. C. Donders. Chiefly dealing with the electrotonic conditions of the vagus established by currents of various strength. 2. The chemistry of respiration, a dissociation-process; by the same author. 3. The white corpuscles of the blood, and the alterations they undergo from the action of quinine; by G. Kerner; who shows that they are rendered motionless, round, and darkly granulated by this agent. 4. Movements in nerve fibres on excitation, with intermittent electrical currents. In this paper Dr. Th. Engelmann calls attention to certain contractions indi-

cated by wrinklings of the sheath of the nerve, but not accompanied by shortening of its length, if a fibre be removed from an animal and submitted to the action of induction shocks whilst lying in a weak solution of common salt. The current passing on breaking the connection is the most effective. No wrinklings are visible in naked axis cylinders. He attributes the changes observed to the thermic action of the current, and to consequent changes in the succulency (Quellungszustandes) of the sheath. 5. Fick gives the results of a series of experiments he has made during the past summer on the effects of heating and cooling the blood passing to the vasomotor and cardiac nerve centres, and states that to his great surprise he has obtained only negative results, though when such changes were produced in the blood passing to the respiratory centres, very marked effects were observed. 6. The next essay, by the last-named author, is on the function of the peptones in the blood. He regards them as compounds capable of easy disintegration, and as supplying by their non-nitrogenous portions the combustible materials for the muscles and other organs, their nitrogenous constituents being speedily eliminated from the body. 7. Friedrich Schultze gives the results of his analysis of the air contained in the swimming bladder of carp and tench. The smallest amount of oxygen was 1·1 per cent., of carbonic acid 1·4 per cent.; the highest of oxygen 13·2, of carbonic acid 5·4: the rest being nitrogen. 8. The last essay is one by Fr. Goltz, showing that the nerve centres have a direct and immediate influence on the process of absorption.

Geology.

The Fossil Plants of the Devonian and Upper Silurian Formations of Canada.—It has been been pointed out by Hall and Dana that during the earlier part of the Upper Silurian period North America was covered by a great internal ocean, partially separated from the Atlantic by a belt of sandbanks or islands, representing the older portions of the Appalachian range, and bounded on the north by Laurentian and in part by Lower Silurian deposits. At the close of the Upper Silurian the area of land in North Eastern America was at a minimum. At the beginning of the Devonian a slow and gradual emergence, unaccompanied by any faults or other physical disturbances, appears to have commenced. Contemporaneously with the very beginning of these changes appeared the Erian (by which is meant the Devonian peculiar to Canada) or Devonian flora. Already, before the close of the Upper Silurian, the first patches of emerging land must have become clothed with Psilophyton, and by the time of the Middle Devonian the flora had, at least on the Atlantic coast, culminated. At the time when the Erian or Devonian flora attained to its greatest extension, there must have been in Canada a considerable extent of Laurentian and Lower Silurian land; and the Erian flora appears to have enjoyed climatic and atmospheric conditions similar to those of the Carboniferous period, but with a smaller continental area and greater proportionate irregularity of surface. At the close of the Devonian period great physical disturbances occurred in the regions lying east of the Appalachians. In the west these disturbances were delayed till after the Carboniferous period had begun, but even in the west the Devonian flora disappears at the beginning of the Carboniferous period. Generically the flora of the Erian is in the main identical with that of the Carboniferous, and the most important and characteristic Carboniferous genera are also among those best represented in the older flora. On the other hand, while some Carboniferous genera have not yet been recognised in the Devonian, the latter possesses some peculiar generic forms of its own, which are especially abundant in the lower part of the system. As examples of such genera may be named Psilophyton, Prototaxites, Leptophleum, and Arthrostigma. Perhaps the most remarkable of all the generic differences of the Carboniferous and Erian flora is the occurrence in the latter of the exogenous genus Syringoxylon, a type otherwise altogether unknown in the Palæozoic age. As regards its species the Devonian flora is almost altogether distinct from the Carboniferous. A comparison of the fossil plants of the Devonian rocks of Canada and of Europe is very difficult, since the Devonian formation is limited in Europe to so small an area. It is known that during the Carboniferous epoch the Appalachian range constituted a more important physical barrier than the Atlantic, and that the flora of the Atlantic slope of America was much more closely allied to that of Europe than that of the great internal plain of the American continent. The genus Psilophyton of the Erian of Canada was not found in Europe until 1870, when Dr. T. W. Dawson visited England and recognised (*Rep. Geolog. Survey of Canada*, 1871) in several specimens of Devonian rocks from Germany and England the American Psilophyton. On comparing the Erian with other floras, the author concludes that no plants other than Lycopodiaceæ or allied forms have been detected below the Lower Devonian. Should it prove certain that Acrogenous plants allied to Lycopodiaceæ, and perhaps such prototypes of Gymnosperms as Eophyton, extended back to the Primordial period, we might look for the actual origin of land vegetation in the Laurentian. These views respecting a primitive Silurian and Laurentian flora are strengthened by the fact that the plants of the Lower and Middle Devonian have the aspect of the remains of a decaying flora verging on extinction, while those of the Upper Devonian give us a great number of new forms allied to those of the Carboniferous.

Congeria Beds in the Rhone Valley.—C. Mayer discovered a short time ago (*Verhandl. der k. k. geol. Reichsanstalt, Vienna*, No. 15, 1871) beds of yellowish and grey sandy marl near the town of Bollène in the Département de la Drôme, which yielded, besides four species of Congeria, four Cardiæ, a Melanopsis, and *the* two Neritinæ, *N. picta* and *N. Grateloupi*. The deposit, which consists almost entirely of these shells, resembles more the character of the Crimean Cardiæ beds than the typical Congeria beds of Austria and Hungary. The beds rest on a coarse marly sandstone, which may be the marine equivalent of the Cerithium beds of Eastern Europe and the Limnæus beds of Switzerland.

Cetotherium Remains in Southern Russia.—These occur here in three horizons (Th. Fuchs, *ibid.*). *C. Rathkei* is found in a compact yellowish-grey limestone, with casts of *Ervilia podolica* (Sarmatian beds). The dolphins of Stavropol are embedded in a loose porous limestone of oolitic character, together with Foraminifera, doubtful casts of a small Cardium (*C. obsoletum*), and other fossils. The Foraminifera are the same as those found in the uppermost beds of the Sarmatian deposits, below the Congeria beds in the Vienna basin. Other Cetotherium species come from a yellow ferruginous sand of the vicinity of the fortress of Anapa, associated with *Cardium carassatellatum*, Desh., *C. edentulatum*, Desh., and *Mytilus* (*Congeria*) *rostriformis*, Desh., thus resembling the Cardiæ beds of the Crimea. The occurrence of marine Mammalia, not only in the older Sarmatian beds, but also in the brackish Congeria strata, is of the highest importance, as it confirms the views, long held, that the Congeria beds of Europe assume marine characters, the farther east we travel.

Chemistry.

The Diamonds found in Xanthophyllite.—It was announced in the *Academy* for 1st July, 1871, that v. Jeremejew had met with minute crystals of diamond in great abundance in a microscopic examination of the above-named rock. He recognised their forms, hexakistetrahedra, with somewhat rounded faces. G. Rose (*Ber. Deut. Gesell. zu Berlin*, No. 17, 1871, 903) now states that v. Helmersen has succeeded, by treating the xanthophyllite with acids, in isolating the diamonds in the form of a fine powder, which burnt away, leaving no residue, and abraded and rendered dull the smooth and brilliant faces of the hardest minerals, such as corundum. The greenish grey, less transparent varieties of xanthophyllite contain the diamonds in greater abundance than the yellow transparent plates of this rock.

Ilsemannite.—In the *Jahrbuch für Mineralogie*, 1871, 566, H. Höfer gives this name to a new mineral occurring in some heavy spar from Bleiberg. Between the crystals of this mineral occurs a bluish-black or black cryptocrystalline mass, which becomes more blue by exposure to the air, is soluble in water, and proves to be molybdate of oxide of molybdenum. On boiling a specimen with water, a dark greenish-blue solution is found, which after the lapse of some hours becomes deep blue, resembling the colour of a solution of sulphate of copper and ammonia. By the evaporation of this liquid and the separation of a quantity of gypsum which is present, a salt is finally obtained which dissolves in water with a magnificent dark blue colour. Ilsemannite appears to be the $MoO_2 + 4MoO_3$ of Berzelius, and it is supposed to be a product of the decomposition of wulfenite.

Dissociation of Ammonium Carbamate.—In conducting an experimental enquiry into the phenomena of dissociation, A. Naumann (*Ann. der Chemie*, October, 1871) found the above salt,

$$N_2H_6CO_2 \text{ or } \left.\begin{matrix} NH_2(CO)'' \\ NH_4 \end{matrix}\right\}O,$$

adapted to the purposes of this research through the ease with which it is rendered gaseous, and the absence of all corrosive action of the products of its decomposition—carbonic acid and ammonia—on the mercury made use of for the apparatus. He noticed that ammonium carbamate is not volatile without decomposition, being split up, on its taking the gaseous form, into carbonic acid and ammonia. In the case of the products of the decomposition of this body there exists a dissociation tension (usually only attained after some time has elapsed, and greatly delayed under certain circumstances) constant for each temperature as tension of equilibrium where, however varied the conditions may otherwise be, in the same time exactly as many molecules of ammonium carbamate are decomposed as are reproduced from the products of decomposition. The curve of this tension from ammonium carbamate is continuous: as the temperature rises, the increments of tension for equal increase of temperature becoming augmented, as in the tension curves of vapours of solid and liquid bodies. The dissociation and reproduction of ammonium carbamate takes place but slowly, the tension of equilibrium of any given temperature being arrived at only after the lapse of hours or even days, according to the relation borne by the surface of the solid ammonium carbamate to the capacity of the vacuum. The velocities of

dissociation and reproduction diminish the more nearly the actual tension approaches the tension of equilibrium. The velocities of dissociation, under otherwise similar conditions, in which are to be included equal removal from the tension of equilibrium, appear to be greater at higher temperatures than at lower. An explanation of the lengthened times of dissociation and of reproduction of ammonium carbamate may perhaps be to some extent sought in the necessary rearrangement of the atoms during decomposition and reproduction, not however in the solid state of aggregation of the body as such, for the duration of evaporation and condensation of solid bodies is but brief.

The Meteorites of the Mexican Desert.—With the object of fixing with greater precision the geographical position of the meteoric masses that have been from time to time met with on the Bolson de Mapini, Dr. J. Lawrence Smith has communicated a paper to the *Am. Jour. Science*, for November, 1871, 335. There were already known the Cohahuila meteorite of 1854 (1), the Cohahuila meteorite of 1868 (2), the Chihuahua iron of 1854 (3), still at the *Hacienda de Concepcion*, and weighing about 4000 pounds, and the Tucson iron (4), found in 1854 on the north of the Rio Grande, and having the form of a ring; this mass weighs from two to three thousand pounds. A fifth mass (5) has since been heard of on the western border of the Mexican Desert, that has received the name of the *San Gregario meteoric iron*. It measures 6 feet 6 inches in length, is 5 feet 6 inches high, and 4 feet thick at the base; on one part of its surface 1821 has been cut with a chisel. Its weight is calculated to be about five tons. An examination of a fragment showed it to be one of the softer meteoric irons; it has a specific gravity of 7·84, and consists of 95 per cent. of iron and 5 per cent. of nickel, inclusive of a little cobalt. Still more recently news has arrived of the discovery, in the central portion of the desert, of a huge meteorite (6) larger than any yet found in this locality. Dr. Lawrence Smith's paper is illustrated with a little map indicating their relative positions. He believes they are the result of two falls. The Tucson iron has characters that distinguish it from the remaining five. The latter, he considers, fell at an epoch probably far remote, moving from northwest to southwest during their descent: 1 and 2 fell first, 85 miles apart. The distances between the larger masses are,—from 2 to 6, 135 miles; from 6 to 5, 165 miles; and from 5 to 3, about 90 miles.

The Separation of Magnesia from the Alkalies.—After an examination of the numerous methods for effecting the separation of these bodies for the purposes of quantitative analysis, T. Scheerer recommends the following process (*Jour. prakt. Chem.*, 1871, No. 10, 476). The liquid containing the chlorides which may contain ammonia salts is to be evaporated nearly to dryness in a platinum dish, then treated with an excess of powdered ammonium oxalate, thoroughly dried and gently ignited. Care is to be taken that the whole of the contents of the vessel is exposed to the high temperature. On boiling the mass with water and passing it through a filter, the magnesia is collected on the paper as insoluble magnesium carbonate, and the potassium and sodium carbonates are to be found in the filtrate. Ammonium oxalate is only converted into ammonium carbonate at a temperature higher than that at which the latter salt volatilises. If therefore ammonium carbonate be employed in the place of ammonium oxalate, the separation does not take place.

Preparation of Absolute Alcohol.—Of the many substances that have been used to remove the last traces of water from alcohol, such as potassium carbonate, anhydrous copper sulphate, anhydrous potassium ferrocyanide, caustic lime, caustic baryta, &c., Mendelejeff, after many trials, gave the preference to lime. He states that after drying alcohol of 0·792 specific gravity with an excess of burnt lime for two days, an anhydrous product is obtained. Erlenmeyer (*Ann. der Chem.*, November, 1871, 250), who finds however that those portions of the distillate only which pass over when the operation is advanced halfway are actually free from water, suggests the following modification. He keeps the alcohol in contact with the lime for about half an hour or an hour in the water-bath at the boiling temperature, providing the vessel with a cooling tube that shall carry all the condensed spirit back into the flask. In this way the whole of the distillate is anhydrous. If the alcohol contain more than 5 per cent. of water two or more treatments are necessary.

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Philology.

*THE PRONUNCIATION OF LATIN.**

VII.

After the Latin pronunciation controversy had slept for six months, it was not without a qualm that I saw it once more reopened in the last number of the *Academy*, and by no less an authority than Prof. Max Müller. It was with real satisfaction, therefore, that I found he has now given his sanction, practical as well as theoretical, to the uniform hard sounding of *c*. As, however, with regard to the much-vexed consonant *u*, which occupies by far the larger part of his article, he is good enough to say that he now leaves the decision with my Oxford colleague and myself, I feel it due to him to show as briefly as I can why I do not acquiesce in his arguments for a *v* sound, but still advocate one much nearer our *w*.

He begins by saying that "the general result of the discussion seems to be that in Latin *v*, as a consonant, must have been as close to the vowel *u* as a consonant can be. So far all parties are agreed." The *w* advocates certainly: but are all parties agreed? He himself admits afterwards that, if a language possesses both the labial and dento-labial *v*, the former would be the nearest approach. An unsophisticated Italian tongue seems incapable of pronouncing the English, or the South-German *w*, or the French *ou* of *oui* or *ouais;* but Italian ears seem now to be, and for more than twelve centuries to have been, most susceptible to the difference in sound between these and their own *v*, finding *gu* to be a much nearer approximation. Whereas the ancient Romans appear without the least misgiving to have in all cases reproduced the German *w* by their own consonant *u*. Why should we suppose their ears less acute than those of their modern descendants? and why, if their *v* was sounded exactly like the modern Romance *v*, could not the old Romans have used some combination of *g* and vowel *u* to express the old German *w?* For, assuming the Latin *v* to have closely resembled the ancient German *w*, it is surely a most striking coincidence that, as Mr. Rhŷs has shown, the ancient Welsh, having no initial *w*, would appear to have heard in the old Roman *vallum* and *vagina* something very like *gwallum* and *gwagina*.

Such considerations seem to me to go far towards supporting the "hypothesis that, at some time or other, but certainly before the Romans came into permanent contact with their Teutonic neighbours, they changed their old pronunciation of the *v* from the labial to the dento-labial." Now, so far as I can gather, one of Mr. M. Müller's two main arguments for the dento-labial is that such an hypothesis, though not impossible, is extremely artificial. But are not such hypotheses forced upon us by the phenomena of most

* We are compelled to postpone to our next an important and elaborate paper of Mr. Alexander J. Ellis on the same subject.—Ed.

languages with whose history we are acquainted? Unless I quite misapprehend what he tells us of Sanskrit, he deems it most probable, or at least not improbable, that exactly the same thing has happened with its labial breathing; that, once a labial, it has become a dento-labial. A very similar phenomenon, too, is the modern Greek *av* and *af*, *ev* and *ef* pronunciation of the old diphthongs αυ and ευ.

But it is better to appeal for support to Latin itself: here again, as in so many other respects, the fortunes of *u* would seem to be closely linked with those of its brother, consonant *i*. All of us, I believe, are agreed as to *its* Latin sound; and in the Romance languages it has undergone changes parallel to those of *w* to *v*, though its nature has allowed of a somewhat greater variety, as seen in English *j* or Italian *gi* and *ge*, French *j*, the Spanish aspirate, &c. Nay, even in Greek words, when initial ι had acquired a consonantal *y* sound, Romance-speaking people have found it necessary to change it, too, systematically, and we have *Jésus*, *Jean*, *Jérome*, *Gesù*, *Giovanni*, *Girolamo*. Does not the insertion too of this *v* in *Giovanni*, *Genova*, and the vulgar *Pavolo* for *Paolo*, and the like, tell a tale of its own in support of our hypothesis?

His second chief argument he thus states in his last paragraph:—"I cannot help thinking that there is one phonetic peculiarity in certain Latin words which can only be explained if we assign to *v* a dental or dento-labial character. The Latin *in* is changed into *im* if followed by labials. . . . *F* we know was dento-labial in Latin, and therefore we have *infirmus*. The same with *v*, *invictus*. *Com* in Latin is changed to *con* before gutturals and dentals; it remains *com* before labials. . . . Why was it *conviva* like *confido*, but not *comviva* like *combibo*, unless, like *f*, *v* in Latin was pronounced not with the lips alone, but with lips and teeth?" Let me state briefly why this argument too carries with it no conviction to my mind.

It is true that in the best ages *in* often, not always, became *im* before *b*, *p*, and *m*; that *com* generally, by no means always, remained unchanged before these letters; that before consonant *u com* generally, not always, became *con*: not always, I say; for in one of the most precious of Latin inscriptions, the letter of the consuls about the Bacchanalia, written B.C. 186 (*C. I. L.* i. 196), we read in l. 13: "neve . . . coniourase neve comvovise neve conspondise neve conpromesise:" here we have *m* before consonant *u*, *n* before *p*; and in the best times *conbibo*, *conpleo*, *conminuo* might always be used. But I can admit of no analogy whatever in classical times between *f* and consonant *u*: there was an absolute incompatibility between *f* on the one hand and either *ph* (φ) or consonant *u* on the other; and the fact that Latin *f* and *ph* finally coalesced in the Romance *f* is proof of a change as great and systematic as that of *w* to *v*.

But we know from many quarters, from Cicero and Quintilian, that there was a strong affinity between *s* and *f*; and I have always believed that the same phonetic laws which constrained the Latins to say *conspiro* compelled them also to say *confido*. If, then, we are to seek for some such analogy, since it is allowed on all hands that there was a strong affinity between the guttural *g* and consonant *u*, I should be disposed to believe that they preferred *conviva* to *comviva*, because they always said *congero*, *concurro*, not because they said *conduro*, *contero*.

But here, too, I would much rather appeal to that never-failing analogy between *u* and *i*. They were semi-vowels, and their vowel nature was ever present to the minds of the ancients. *In* was always unchanged before all vowels alike; it was also unchanged before consonants *u* and *i*. *Com* and *con* were perplexing: at first they would seem to have acquiesced in *com*, as in the archaic *comvovise* and *comvalem*, perhaps for the same reasons that we find *comes*, *comedo*, *comitia*. Next, in the case of both *u* and *i* we find *co*, as is usual before vowels: *coventionid* (= *contione*), *covenimus*, and *coicere*, *coingi*. Finally, they seem to have acquiesced in *con* before consonant *u* and *i* alike.

Doubtless all advocates of *w* will be "quite willing to admit that they only stand up for a pure labial breathing, not for the exact English *w*." Let it be English, or South German *w*, or the French *ou* of *oui*; only not English or Romance *v*. The English *w*, as phonologists say, may be peculiar to the English; but when Mr. Max Müller observes, "though I have lived in England for a quarter of a century, I still am unable, as the best phonologists tell me, to pronounce the pure English *w*," he will not have forgotten that a few weeks ago the untutored ears of half a dozen of the best philologers in Oxford were unable to perceive the slightest difference between his English *w* and their own. Gladly, then, will I, for one, accept as a compromise his version of English *w* for the sound of consonant *u*.

H. A. J. MUNRO.

An-Nadîm's Index of Arabic Literature. [*Kitâb al-Fihrist*, mit Anmerkungen herausgeg. von Gustav Flügel. Nach dessen Tode besorgt von Joh. Roediger und Aug. Müller. Zwei Bände.' Mit Unterstützung der Deutschen Morgenl. Gesellschaft. Erster Band: den Text enthaltend.] Leipzig: Vogel.

A WORK of the greatest importance for literary history appeared towards the end of the tenth century A.D. under the modest title *al-Fihrist* or *The Index*. It was from the pen of *Ibn Abî Ya'kûb an-Nadîm*, and consisted mainly of a bibliographical description of Arabic literature with short biographical notices. The first four centuries of the Hijra were much more fruitful in most departments of this literature than those which followed, and the works produced had a proportionate degree of importance. Our author, living in the centre of the literary movement, unrolls to us, chiefly by a simple enumeration of the titles of books, the picture of an activity on a large scale. It is enough to refer to the comprehensive works of Arabic philologists (using the word in its largest sense), on which this work gives us accurate information. And we infer from an-Nadîm that the activity of Arabic *savants* was not less marked in other departments. The works of this period which are still preserved form but a small part of what was once extant, and a melancholy feeling often comes over us in reading this book, as if we were walking over a field of ruins. It is true that many, or rather most, of the works enumerated in the *Fihrist* can hardly be regretted. What better lot could befal most of the innumerable poems of those centuries than that their loss should make it impossible for us fully to estimate their worthlessness! And then we must remember that but few persons in the East have themselves thought and observed, and that by far the greater number of Arabic works are compilations and epitomes; this was already the case in the time of an-Nadîm, and the very want of originality on the part of later authors was the means of preserving the principal contents of lost works. And yet, in spite of this, there were sources of valuable information without number among the books which an-Nadîm still had before him, and which are now lost. This is especially true of the historical works. Many of the works, for instance, of Ibn-al-Kalbî, uncritical as he may have been, would have possessed the greatest value for us; I need only mention his book on Hîra, its Christian inhabitants, and their churches and convents (p. 97, l. 12 *sq.*). And thus at every step we find in the *Fihrist* the titles of works which we cannot but deeply regret to have lost.

I have already indicated that an-Nadîm is not so much a historian of literature, strictly speaking, as a bibliographer.

This appears particularly in his treatment of the poets. He mentions the philologists who collected the works of the several ancient poets, or groups of poets, and states the extent of the works of later poets, but leaves us in utter ignorance of their respective peculiarities; to describe these did not enter into his plan.

It is one great merit of the author that he does not confine himself to scientific and elegant works, but refers as much as possible to the popular literature as well. We get a glimpse of stories like the *Thousand and One Nights* (a work which he confesses that he fails to relish, p. 304), and of a strange medley of magic, jugglery, erotica, &c.

Besides the proper Arabic literature an-Nadîm takes note of everything which was translated into Arabic. We thus obtain some very valuable notices as to the earlier Persian literature, and even on Indian works, though the deformation of the titles and names of the authors makes the latter very enigmatical. He dilates particularly on the works translated from the Greek, and though his notices on Greek philosophers and others will scarcely yield any fresh information on the writers themselves, they may at least illustrate the propagation of literary legends and traditions. At any rate a careful monograph on the chapters containing them cannot fail to be of use to the classical philologist. Among the translated works we find very valuable by the side of utterly worthless matter—*e.g.* by the side of Aristotle and Plato the work "On Rivers," which is represented as proceeding from "another Plutarch" (p. 254, l. 17 *sq.*). The author is careful to give the names and the method of procedure of the several translators. On one occasion he mentions from his own knowledge that some chests were found in Ispâhân, containing papers which were declared by experts in Baghdad to be Greek army-lists (p. 241). These seem to have belonged to the time of the Seleucidæ.

As a copyist by profession, an-Nadîm takes great interest in all kinds of writing. Thus he opens his work with a very interesting section on the language and writing of various nations. What he there says of the various kinds of Arabic writing would be much more important if a larger number of good specimens of them were extant. The negligence of the copyists has pretty well deprived us of the benefit we must have derived from transcription of foreign alphabets. When we are already acquainted with an alphabet, *e.g.* the Hebrew (p. 15), we can still detect the several letters under their distorted forms, but only in such cases. Hence I have unluckily failed in unriddling the Manichæan alphabet, in which we doubtless have to seek one of the many varieties of the Aramaic writing. I do not even venture to assert positively that the apparent similarity of the six letters on the lowest line (Ṣâd, Mîm, Ḥâ, Kêf, Qâf, Hê, the Arabic names of which are written out at length between the letters) to the corresponding Mandæan ones is reliable. But there is much important matter on other subjects in these chapters; see, for example, the passages on the so-called Huzwaresh (*Zuwârishn*, p. 14, l. 13), and on the varieties of Syrian writing, where the first mention known to me of the name *Estrangelâ* occurs (p. 12, l. 12). Several of an-Nadîm's statements on the Aramaic language are given on the authority of "the commentator" Theodore (of Mopsuhestia) (pp. 12, 14), so that he must have derived this information from Nestorian sources. In fact, most of the Syrians who had intercourse with learned men in Baghdad seem to have been Nestorians. Thus, too, the canon of the Scriptures in the *Fihrist* (p. 23 *sq.*) is the Nestorian, though it is true that the titles of some books have fallen out of the list by mistake. An-Nadîm had also literary relations with the Jews. From this source he gives us a catalogue of the works of Sa'dia (p. 23).

The cultivated Arab world was at that time tolerably free from fanaticism; and the theological liberality of our author is proved by his whole work, but especially by his excellent notices on the various religious parties, which, strictly speaking, do not fit into the *cadre* of the work, though perhaps they form its most valuable part. Not only does the book supply accurate information on semi-pagan sects like the Ismaelites, &c. (which nevertheless stand in a rather close relation with Mohammedanism), but also on such as stand in direct opposition to the weightiest principles of Islam. The most valuable of these notices, viz. on the heathen in Harrân, and on the Manichæans, had already been published from the *Fihrist*, the former by Chwolsohn, the latter by Flügel. Besides this, we learn from the *Fihrist* that there still existed a number of Gnostic sects, the mere remnants of widely spread religious parties, and doubtless already much altered from their original form. The only sect which has survived to this day are the Mandæans.

The *Fihrist* is better arranged than is usual with Arabic writers, and even though there is much in the division of the matter which may surprise us, it is not at all impossible to find one's way to some extent in the book. But the use of this so-called Index, composed, as it is, of groups of subjects, will be greatly facilitated by the expected alphabetical index.

An-Nadîm goes very carefully to work. He is in the habit of naming his authorities, but prefers, wherever he can, to derive his *data* from ocular evidence. Being a learned copyist and bookseller, he gained access to many works in all kinds of literature, besides which he was a lover of literary *curiosa*. He draws a vivid picture (p. 40 *sq.*) of an old collector of books and autographs, who once allowed him to inspect his treasures, which at other times he guarded as jealously as a miser, and which were destroyed after his death, no doubt in accordance with his wishes. It is interesting to know that the collector was afraid of the Hamdânids. That princely house was well known for its attachment to literature, and might not be disinclined to add such rarities to their own collection.

An-Nadîm's style is enough to show that he was not a professional scholar. It is certainly surprising that one so well acquainted with literature should commit so many offences against Arabic grammar. For example, he uses *sîyamâ* without *lâ*, and even says *awwalah*, "prima," for *ûlâ*. The editors have, therefore, done wisely in not correcting the numerous grammatical errors, even though there can be no doubt that their number has been increased by the copyists. Besides, these errors are more owing to a certain negligence than to ignorance, for the author shows in some places that he is able to form an opinion on purity and impurity of style.

According to his own statement several times repeated, the *Fihrist* was written in the year 377 of the Hijra (beginning May 3, A.D. 987). The collection of materials must naturally go back into a much earlier time. The MSS. however present many vacant spaces, the greater part of which are due to the author himself, who was desirous of filling these up gradually by inserting the number of the year, &c., but could not carry this into effect. We may therefore readily admit to Flügel that the author worked at his book from time to time even after that date. But it is equally clear that at least a few additions have been made by another hand. Cases like that in p. 146, l. 4, "it comes on the next leaf, the author has ordered it to be so," speak for themselves; and it seems highly improbable that, after the words, "He survives to the year 377," an-Nadîm himself should have added, "He died in the year 378" (p. 132, l. 7, *sqq.*); for in that case he would certainly have crossed out the former passage. But at any rate the additions by another hand are not very numerous.

Dr. Flügel had been occupied for many years with an edition of the *Fihrist*. Indeed, as the editor of *Hâjî Khalîfa*, he must have felt specially called to bring out this great work; yet, alas! it was only vouchsafed to him to see the first sheets of it in print. After his death, Dr. J. Roediger, a son of the celebrated Orientalist, undertook the continuation of the work, with Flügel's materials, assisted by the counsel of Fleischer. The MSS. are very defective; not one of them is complete, and some portions of the text exist only in a single codex. In addition to this, all the MSS. abound in errors, and many diacritical points are everywhere wanting or misplaced. It should be recognised that the editor has done all that can be fairly expected from an *editor princeps*, and we may hope that in course of time the manuscript material may be augmented. At any rate it will be necessary for several reasons to work through the several sections in the style of a monograph, and this will gradually tend to the improvement of the text, so that a new edition after the lapse of thirty or fifty years will certainly be able to show important corrections. I may allow myself to take the opportunity of indicating some few unimportant corrections, suggested by the perusal of the work. P. 24, l. 1, read *Ḥazza* (near Arbela), well known to have been an ancient metropolitan see. P. 43, l. 3 *sq.*, the letters R and Z should evidently change places. P. 91, l. 26, *Yazîda 'bni* should be inserted before '*Abdi'lmaliki*, for the narrative does not suit Walîd I., in whose time the empire of the Omaiyades stood at the summit of its power, but to the dissolute Walîd II.; cf. de Goeje and de Jong, *Fragm. histor. arab.* i. 127. The year of the death of the grammarian Al-Kisâî is given differently in three places, p. 30, l. 1; p. 65, l. 29; p. 204, l. 1. The year 189 mentioned in the last passage is alone correct. For though it is of course possible, it is not very probable, that an-Nadîm himself made a mistake twice over. P. 354, l. 19, we ought certainly to read *Serjîs*; it is the well-known Syriac translator Sergius of Rêsh 'ainâ. P. 111, *ult.*, I should read, not *wallawmu*, but *wallo'mu*; the "blame" might clearly be unjustified, and in that case would not hurt long, but an "abject disposition" is indestructible.

Dr. Roediger himself recognises it as a defect that the variants are placed, not under, but after the text. Of course, he could not alter the arrangement, as it had been adopted in the sheets edited by Flügel. I am rather disposed to think that the really existing variants are not fully entered in the list; in a work of this kind it is desirable to exhibit the readings as completely as possible. And I cannot help considering it a strange want of consideration for the reader that no variants at all are given for perhaps the most important passage in the whole book, that relating to Mani and the Manichæans, and a mere reference made to Flügel's book on this passage. We most urgently beg the editor to make good this omission in the second volume, for it is surely too much to expect that every reader who wishes to use that section should procure Flügel's book, when he actually has the best part of its contents in his hands. I could have wished too that Dr. Roediger had not thought it a duty to print Flügel's posthumous preface without even the least change of expression. A passage like this, "Und würde von entschiedenem Nutzen sein, wäre es nur irgendwie brauchbar" (p. xvii, above), would certainly have been altered by Flügel himself.

The preparation of the notes and an index has been undertaken by Dr. Müller. These will form the second volume, which is to appear in the spring. If I might add one more criticism, it would be this, that the book is too dear, at any rate from a German point of view. As the German Oriental Society has borne a considerable share of the expenses, the publisher might surely have affixed a much lower price. At the same time I cordially admit that the getting-up of the book is excellent. And before parting from the work, I sincerely congratulate Dr. Roediger that he has presented so invaluable a gift to Oriental learning.

TH. NÖLDEKE.

THE DERIVATION OF "BARK."

TO THE EDITOR OF *THE ACADEMY.*

SIR,—The origin of our verb *bark* has long been a disputed point, English etymologists regarding the word as imitative of the sound it denotes, while German philology has nothing more to offer than the comparison with the Old Norse *barki* (throat). Both views are unsatisfactory, and I have a simpler explanation to propose, which will obviate the unpleasant necessity of adopting the imitation theory, and will not take us off English ground.

Bearing in mind the frequent shifting of *r* in Old English, and its modification of preceding *e* into *eo*, the following series of changes will offer no difficulty:—*brecan*, *bercan*, *beorcan*; in short, *beorcan* is nothing else but a variation of *brecan*: *break* and *bark* are the same words.

The change of meaning is well illustrated by the Latin *fragor* compared with *frango*. So, also, in Old English, *gebræc* is used exclusively in reference to sound; and in one passage of Cynewulf's *Crist* (Grein, l. 951) *brecan* itself is employed most unmistakably in the sense of "fremere"—he is describing the Day of Doom:—

"on seofon healfa swōgaȝ windas
blāwaȝ brecende bearhtma mǣste."

Grein erroneously separates the word in this sense from the other examples of *brecan* = *frango*, comparing the Old Norse *braka*, which would postulate an Old English *bracian* with present participle *bracigende*.

From the roaring of the wind to the growling and barking of a dog is a short if not a very dignified step.

HENRY SWEET.

P.S.—I have just heard from Mr. Skeat that he has arrived independently at the same conclusion as I have about the original identity of *beorcan* and *brecan*, a fact which considerably strengthens the theory.

Intelligence and Notes.

Under the title *Sprache und Sprachen Assyriens*, Dr. F. Hitzig has published his long-promised investigation of the language of Assyria and Babylonia, which he takes to be a hybrid tongue, Sanskrit in the main, but containing Turkish, Egyptian, and even Semitic elements. This result is obtained from an enquiry (occupying 70 pages) into the Assyrian and Babylonian proper names preserved in Greek and Hebrew authors. The names of Nineveh and Babylon are pure Sanskrit; the first means "the fish-formed," the second, "city of the sun"! Assyria, on the other hand, is pure Turkish, and means "the country beyond;" Euphrates, half Turkish, half Hebrew, and means "the overstepping water"! Belus is doubtfully, Nebo confidently, derived from the Sanskrit, Mylitta from the Semitic! A law which is assumed to govern the conversion of sounds in Perso-Median and Hebrew is founded on the pretended identity of the Nod of Gen. iv. 16, Mâda = Media (p. 15), and the same law is immediately afterwards (p. 21) used to establish the convertibility of *M* and *N* in Sanskrit and Assyrian! Vocal changes supposed to take place in the two latter languages are gravely illustrated by those which occur in Turkish! As to the Assyrian characters, the author's theory is that they are exclusively phonetic, even if, as Assyriologists affirm, polyphonous, but in no case strictly ideographic. We are astonished, however, to learn from Dr. Hitzig himself that he has only analyzed *three lines* of an Assyrian text, a rather slender basis for such positive opinions. It would be well in future not to discuss the Assyrian inscriptions in public till he has acquired a somewhat more thorough knowledge of the cuneiform character. He interprets the name commonly spelt Sennacherib, "captain of the host" (p. 78), reading the ideographic signs phonetically, as *Aniskurekit*, which name he composes of Arabic (!) عسكر, "army," and Sanskrit (!) *x'it*, "commander." Unfortunately the last syllable must be read not *kit* but *su* (סוּ). Dr. Hitzig has simply confounded the two rather similar signs! Further comment is superfluous.

M. Schwab has brought out the first part of a "translation of the Talmud," under the title of *Traité des Berakboth, ou première partie du Talmud de Jérusalem et du Talmud de Babylone* (Maisonneuve). We are unable at present to state how far the ambitious programme of the translator has been realised.

M. Constantine N. Sathas is at present at Venice superintending the printing of his new work in three volumes, which will be entitled Μεσαιωνικὴ Βιβλιοθήκη. It will contain a series of inedited chronicles and historical documents concerning the Byzantine empire, the French and Italian principalities and dukedoms in Greece, and the earlier times of the Turkish dominion. The first volume embraces treatises by Michael Attaliata, Nicetas Choniates, and Theodore Metochita; the second is more especially devoted to the mediæval kingdom of Cyprus, and the third contains the compositions relating to the Turkish period. The whole work will consist of about 100 sheets, and will probably be the most important contribution to the history of mediæval Greece that has appeared since the publication of the Bonn *Corpus Scriptorum Historiae Byzantinae.*

M. Émile Legrand, whose collection of early compositions in modern Greek we noticed in a preceding number (vol. i. pp. 245, 246), is still busy in adding new reprints to his series. We regret that for some reason or other his publications do not always reach us, but are glad to observe that in his edition of the paraenetic poem of Stephanos Sachlekes, which has just reached us, and which is, by the way, the first edition of this extremely curious work, the editor has taken our advice in adding explanatory notes on the more difficult and antiquated words; and from one of his notes we learn that in a second edition of the Βοσκοποῦλα (Paris, 1870, Imprimerie nationale), which we have never seen, the editor has also added annotations. Some of the notes in the present volume betray, however, a somewhat shaky knowledge of the laws of word-formation: *e.g.* v. 99, *συναντοῦνται* is said to be derived from the *root* *συνάντημα*, and besides this, M. Legrand ought to have remembered that *συναντῶμαι* is very good ancient Greek.

Messrs. Bell and Daldy are just about to publish an edition of the *Trinummus* of Plautus with English notes by Dr. Wilhelm Wagner, whose edition of the *Aulularia* (five years ago) was very favourably received by English scholars, and has since become a text-book at Eton and other public schools.

In the *Transactions of the Berlin Academy of Sciences* (Oct. 16) Prof. Jacob Bernays publishes a short essay on the dialogue entitled "Asclepius," printed in our editions of Apuleius. That the dialogue is an indifferent translation of a Greek original, and in no sense the work of a master of style like Apuleius, is pretty certain; but it is not equally clear whether we are to assign the original to the beginning of the Byzantine period or to some earlier date. The result, however, of this model of delicate and finished criticism which Prof. Bernays now gives us is (1) that we may set aside sundry passages (in cc. 24–26) as interpolations due to the time when the Christians had become in their turn persecutors; and (2) that there is nothing in the rest of the dialogue which may not be attributed to some Neoplatonic adherent of Polytheism living at the commencement of the third century A.D.

Among the forthcoming books announced by Messrs. Teubner are a second and enlarged edition of Teuffel's *Roman Literature;* an *Historical Syntax of the Latin Language*, by Dr. A. Dräger; a new critical edition of Cicero's *Letters*, by A. S. Wesenberg; a selection of the miscellaneous writings of the late Friedrich Haase of Breslau; and *Studien zur Geschichte der griechischen Lehre vom Staat*, by Dr. H. Henkel.

A continuation of Engelmann's well-known *Bibliotheca Scriptorum Classicorum* is an acknowledged desideratum among scholars, but Herr C. H. Herrmann of Halle, who undertakes to supply the want by a catalogue of recent publications (from 1858 to 1869), seems to have brought little more than good intentions as qualifications for the task. In a review of the book in the new number of the *Philologischer Anzeiger*, our esteemed contributor, Dr. Martin Hertz, points out a number of errors which would certainly cause most serious inconvenience to any English student who took the work as a guide to the modern literature of philology.

We understand that the proprietors of Ellendt's *Lexicon Sophocleum* have instituted a "Nachdrucksprocess" against the firm of Teubner, as publishers of the similar work by Prof. W. Dindorf.

Contents of the Journals.

Zeitschrift für die österreichischen Gymnasien, xxii. pt. 9.—M. Petschenig emends certain passages in the Scholia to Horace, and shows incidentally that Hauthal's edition leaves much to be desired.—J. Oberdick gives us some Notes on Aeschylus, principally on the use of resolved feet in iambic lines. The article is a careful *résumé* of the facts, but the results of the enquiry do not strike us as new, and some of the textual changes suggested—for instance, that in *Sept. c. Theb.* 576, *καὶ τὸν σὸν αὖθις αὐτάδελφον πρὸς μόρον*—can hardly be deemed improvements.—Dr. K. Schenkl reviews Jordan's essay "de suasoriis ad Caesarem Senem de re publica inscriptis," very favourably, maintaining, however, against Jordan—(1) that these suasoriae are earlier than Quintilian's time; and (2) that they are not the work of one and the same writer.

Journal Asiatique, No. 64.—Grammaire pâlie de Kaccâyana, sûtras et commentaire, publié avec traduction et notes; suite. (M. E. Senart.) [See *Academy*, vol. ii. p. 468.]—Réclamation de M. Stan. Julien.

Centralblatt, Dec. 16.—Ahlwardt's Catalogue of Arabic MSS. at Berlin (poetry, belles-lettres, literary history, philosophy), rev. by Th. N.

New Publications.

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Bock, Dr. Conr. De Baccharum Euripideae prologo et parodo. Commentatio philologica. Particula prior. Colberg. (Belgard: Post.)

Brachet, A. Dictionnaire des doublets. Paris: Lib. Franck.

Ciceronis, M. Tullii, de officiis ad. Marcum filium libri tres. Erklärt v. Otto Heine. 4. verb. Aufl. Berlin: Weidmann.

Clason, Octav. De Taciti annalium aetate quaestiones geographicae ad mare rubrum et Aegyptum maxime pertinentes. Rostock: Kuhn.

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Dinges, Dr. Henr. De divina rerum humanarum apud Aeschylum moderatione. Pars I. Bensheim: Lehrmittelanstalt.

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Féer, Léon. Études bouddhiques. Paris: Lib. Franck.

Grammatici latini ex recensione Henr. Keilii. Vol. VI. Fasc. I. Marius Victorinus—Maximus Victorinus—Caesius Bassus—Atilius Fortunatianus ex recensione Henr. Keilii. Leipzig: Teubner.

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Hübner, Aemil. Inscriptiones Hispaniae christianae. Adjecta est tabula geographica in lapide inc. Berlin: G. Reimer.

Ibn-el-Athiri. Chronicon. Ed. C. J. Thornberg. Vol. vi. annos 155–227 continens. Leiden: Brill.

Ibn-el-Athiri. Supplementum variarum lectionum ad vol. xi. et xii.

Joly, A. Benoit de Saint More et le roman de Troie ou les métamorphoses d'Homère et de l'épopée gréco-latine au moyen-âge. Tom. 2. Paris: Lib. Franck.

Linnig, Frz. Germanismus u. Romanismus od. üb. den Einfluss d. german. Elements auf die roman. Völker im Anfang des Mittelalters. Paderborn: Schöningh.

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Maspero, G. Des formes de la conjugaison en égyptien antique, en demotique et en copte. (Bibliothèque de l'école des hautes études. VIième fasc.) Paris: Lib. Franck.

Mayr, Dr. Aurel. Resultate der Silbenzählung aus den 4 ersten Gâthâs. [Academy reprint.] Wien: Gerold.

Mosheh ben Shesheth. A Commentary upon the Books of Jeremiah and Ezekiel, by Mosheh ben Shesheth, edited from a Bodleian MS., with translation and notes by S. R. Driver. Williams and Norgate.

Quicherat, L. Nonii Marcelli peripatetici Tubursicensis de compendiosâ doctrina ad filium, coll. 5 pervet. codd. nondum adhib. etc. Parisiis: ap. Hachette.

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Sophocles: the Plays and Fragments. Ed. with English Notes and Introduction by Lewis Campbell. Vol. I.: Oedipus Colonaeus, Oedipus Tyr., and Antigone. Oxford: Clarendon Press.

Stratmann. Dictionary of the Old English Language, compiled from writings of the 12th to 15th centuries. Part I. New ed. Trübner.

Vigfusson, G. Cleasby's Icelandic English Dictionary: enlarged and completed. Part II. Oxford: Clarendon Press.

Wedgwood, H. Dictionary of English Etymology. 2nd ed. Thoroughly revised and corrected by the author, and extended to the classical roots of the language. With an introduction on the formation of language. [Five Monthly Parts, December to April.] Parts I. and II. Trübner.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 40.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Thursday, February 1, and advertisements should be sent in by January 27.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

Literature.

NORSE MYTHOLOGY.

La Fascination de Gulfi (Gylfa ginning). Traité de Mythologie scandinave, composé par Snorri, fils de Sturla, traduit du texte norrain en français et expliqué dans une introduction et un commentaire critique perpétuel par Frédéric-Guillaume Bergmann. Deuxième édition, augmentée de notes additionnelles et d'un répertoire général alphabétique. Strasbourg et Paris : Treuttel et Würtz.

Le Message de Skirnir et les Dits de Grimnir (Skirnisför-Grimnismâl). Poëmes tirés de l'Edda de Saemund, publiés avec des notes philologiques, une traduction et un commentaire perpétuel par F.-G. Bergmann, ex-doyen de la Faculté des Lettres de Strasbourg. Strasbourg et Paris : Veuve Berger-Levrault et Fils.

Die Edda, die ältere und jüngere, nebst den mythischen Erzählungen der Skalda übersetzt und mit Erläuterungen begleitet von Karl Simrock. Vierte, vermehrte u. verbesserte Aufl. Stuttgart : Cotta.

THE general knowledge of the subject and character of the *Edda* possessed by all educated persons seldom extends to a direct and familiar acquaintance with the two works which bear that name; this, at least, is the case in England and France, and if the remark applies in a less degree to Germany, this is chiefly owing to Simrock's successful exertions in the work which has just reached its fourth edition. I say successful, for Bergmann's labours were much less fortunate, in spite of his indefatigable zeal, in spreading a knowledge of Northern antiquities in France, though his first attempt in that direction was made as long ago as 1838 (*Poëmes islandais, &c.*). There are several ways of explaining his want of success: the old Norse poetry and mythology does not appeal so closely to the French mind and taste as to the German, or rather the Teutonic. The national interest in the subject is also wanting which enabled Simrock to begin his introduction with the words: "That the gods of the North were ours also has long been certain; the brother stocks, German and Norse, had in all essentials a common belief as well as common speech, laws, and customs; Odhin is Wuotan, Thor, Donar; Asen and Ansen, Alfen and Elfen, Sigurd and Siegfried, are only other forms of the same mythical names." Finally, the extent and thoroughness of Bergmann's erudition has probably had a deterrent effect upon the majority of readers, and caused his works to make their way but slowly, as in the case of the *Fascination de Gulfi*, which has been ten years in reaching a second edition. He is anxious to trace every peculiarity home to its origin, and to make every difficulty so clear to his own mind that, where reliable evidence is wanting, he takes refuge in conjectures, in the course of which the phrases "sans doute" and "probablement" occur much too frequently, and substitutes, with a daring worthy of Niebuhr, his unsupported hypotheses for established facts. He is as much at home with the language and antiquities of the Pelasgi, the Scyths, and the Getae as with that of the ancient Scandinavians; and the general reader, at least in France, does not care to follow his minute explanations of every detail in so wide-reaching a plan. To the, alas! small class of more conscientious students, Bergmann's works may be warmly recommended.

The first of the works before us contains, to begin with, a summary survey of the rise and development of religions and mythologies in general, and then a circumstantial account of the Norse mythology and its history, of the customs and usages therewith related, and of the sources from whence our knowledge of it is derived—that is to say, the so-called *Elder* and *Younger Edda*. *Edda* means properly "Great-grandmother," and, according to Bergmann, the collection known as the *Younger Edda* received the name from the Skald Olafr (*d.* 1259) who applied it in the sense of "annosa narratrix," because *Gylfa ginning*, which stands at the head of the collection, relates the old Northern myths. Bergmann gives a full account of all the literary works of Snorri Sturluson (*d.* 1241), the author of this portion and of the *Bragaroedur*, and of the methods and aim kept in view by him; and he takes occasion, by the way, to convey information on a variety of subjects which would scarcely be looked for in such a place—as, for instance, the literary contests of early times, of which the *Wartburg-krieg*, so well known in German literary history, was one; the origin of the narrative framework to groups of tales used by Boccaccio and Chaucer; the titles of books amongst the ancients, in the East and in the middle ages; the glacial period; the distinction between the expressions "scientifique" and "littéraire;" the etymology of the Mediæval Latin *sunnis*, &c. &c. All these things are interesting and instructive, and though the remark "sed nunc non erat his locus" might suggest itself, they are really a symptom of his desire to exhaust every topic which is related, however remotely, to his principal theme. Thus he shows that "Great-grandmother," though it may seem a strange name for a mythological treatise, is well grounded, and has parallels in every literature; the foundation of the *Gylfa ginning* is a literary contest, which at the same time serves as a framework; then there is an obvious reference to the glacial period in one part of the Norse cosmogony and theogony; the author argues that Snorri's intention and method was "scientific" rather than "literary;" and, finally, the name of the goddess *Syn* is connected etymologically with *sunnis*, and this again with two quite distinct families of words, &c. &c. In the etymology and interpretation of the names of persons and localities, Bergmann has done his uttermost for the reader's instruction, and as he generally gives the grounds on which they are based, it becomes possible to attach an idea to every name. At the same time, there are serious objections to his practice of always making use of the equivalent he has invented for each proper name. It is tiresome to have to read always *Enclos-mitoyen* for *Midgardr*, *Troupiers-uniques* for *Einheriar*, *Halle des Occis* for *Valhöll* (Valhalla), *Loki de l'Enclos-extérieur* for *Utgard-loki*, *Meunier* for *Miölnir*, *Large-Éclat* for *Breidablick*, &c. &c. A better plan would have been to retain the old names, and give their meanings in a separate alphabetical table. A serious reader need not, however, be discouraged by these peculiarities from availing himself of the author's varied stores of learning. Besides the subjects already alluded to, there is a particularly good explanation of the origin of the custom of swearing brotherhood in arms under a strip of turf (p. 351), and of the reason why

the gods begin again after the renewal of the world to play at the same game as they had played before when they were young.

Some of Bergmann's explanations differ from the common traditional ones. According to him the god Thor generally goes on foot, because in the seventh century A.D., when the Scandinavian population began to be divided into peasants and nobles, Thor became the patron of the former, and followed their custom in this respect, whilst Odin, the god of the warlike aristocracy, seldom appears except riding on his steed Sleipnir. Again, the ordinary view of Freyja's car drawn by cats is that the cats refer to her position as goddess of love, as the corresponding Egyptian goddess Bubastis is represented with a cat's head. Bergmann on the contrary thinks that the cat, a domestic animal whose favourite resting-place is on the hearth, belongs to Freyja as the household goddess, whose name in fact means ruler or mistress in the sense of a wife or mother of a family. The points on which he differs from his predecessors are too many for enumeration, and I will only add that, while constantly referring to the religion of the ancient Getae and Scyths (according to him the fathers and grandfathers of the Scandinavians) as he conceives it to have existed, he pays no attention to other religions excepting those of the Slavonians and Indians, both of which have, according to Bergmann, features in common with the Norse mythology. Here we may take leave of Bergmann's *Gylfa ginning*, which, together with *Bragaroedur*, forms, as we have observed, the chief part of the *Younger Edda* of Snorri Sturluson. The remainder, consisting of a Norse *Ars Poetica*, was added after Snorri's death (1241), and the whole collection, in Bergmann's opinion, first received the name of *Edda* after the middle of the thirteenth century. This *Younger Edda* is in prose, whereas the so-called *Elder Edda* contains a collection of mythological and epic songs, of which some may have been in existence before the time of Snorri and known to him, though the work did not take its present shape till the beginning of the fourteenth century according to Bergmann (the middle of the thirteenth according to other authorities), and was not called *Edda* and ascribed to Saemund the Wise (*d.* 1133) until the sixteenth century. On this point, however, Bergmann is at variance with himself, for in the *Fascination*, p. 41, he says: "Le nom de *Edda* était inconnu à Saemund et à Snorri; le premier n'a jamais composé le Recueil de poëmes qu'on lui attribue et qu'on appelle aujourd'hui l'*Edda de Saemund;* le second n'a jamais eu entre les mains un tel recueil, composé par Saemund." Yet in his other work, *Le Message de Skirnir*, he speaks of the "homme érudit (probablement Saemund le savant) qui à la fin du onzième siècle a formé et composé par écrit la collection des chants appelés poëmes de l'*Edda de Saemund.*" In both these passages Bergmann gives a reference to an earlier work, *Les Chants de Sôl* (*Solar Liôd*), poëme tiré de l'*Edda de Saemund*, publié avec une traduction et un commentaire, Strasbourg et Paris, 1858, p. 18, where he says: "Quant à la formation du recueil de l'*Edda de Saemund*, de fortes raisons nous empêchent de l'attribuer à Saemund." It would therefore seem that the passage in *Le Message de Skirnir* is a slip of the pen or the memory; but in the *Chants de Sôl* Bergmann adduces arguments, which I am inclined to regard as conclusive, to prove that Saemund was really the author of the *Solar Liôd*, and Simrock agrees with him so far as to admit that this is probable. It is to be regretted that the date of the other songs in the *Elder Edda* cannot be determined with the same precision; but unfortunately with the exception of *Skirnisför* and *Grimnismâl* (for which see below) this is far from being the case, though we must suppose at least a portion of the poems, especially the mythological ones, to stretch back into the period of heathenism. Bergmann usually gives the reasons which have determined him in his choice of dates, so that in these questions the reader is always enabled to form an independent judgment. When he omits this precaution, his views have less chance of acceptance, as for instance when he says that in about the third century B.C. the Scandinavians invented new divinities who were no longer zoomorphic but anthropomorphic (*Fascin. de Gul.* p. 201; cf. p. 219); that the Sviones and Gauts, Getic tribes, settled in Scandinavia in the fourth century B.C. (p. 263); that in the sixth century B.C. Targitavus, the anthropomorphic sun-god of the Scythians, was looked upon as the protector of the family and the nation (p. 265), &c.

The second of the works before us takes its subject from the *Elder Edda*, and is in some sense a continuation of the one which first made Bergmann favourably known in the learned world, namely, *Les Poëmes islandais* (*Voluspa*, *Vafthrudnismal*, *Lokasenna*), tirés de l'*Edda de Saemund* et publiés avec une traduction, des notes et un glossaire par F.-G. Bergmann, Paris, 1838. Since then considerable progress has been made in investigations of this kind, the results of which have been utilised in the *Message de Skirnir*, &c.; and the introductions and commentary supply a compressed summary of the author's previous researches into Northern mythology, for which the nature of the two poems gives a suitable opportunity. The translation is in prose, and like that of *Gylfa ginning*, word for word, so that any one desirous of studying the language of the ancient North apart from its mythology will find it a useful assistant. I will only mention two passages in the introduction to *Skirnisför*, which are of comparative general interest. Bergmann derives the German name for February, *Hornung*, from *horn*, which, he thinks, in German idiom, means hard ice (Old Icelandic *hiarn*, frozen snow), so that January, when the frosts are most severe, would be called the *great horn*, and February the *little* or *younger horn*. The Greek ἥρως, "hero," as well as the Latin *verres*, he derives from the Sanskrit *varahâs*, "boar," because the warlike nature of this animal makes his name a suitable designation for a famous warrior; he does not, as he might, quote the example of William de la Mark, the famous *Sanglier des Ardennes*, in support of his suggestion. From the introduction to *Grimnismâl*, I will only quote Bergmann's division of the mythological poems of the North into three distinct periods, of which the first extends approximately from the fourth to the seventh century A.D., and bears a lyric-epic character. The poet, who was always anonymous, generally gave a short prose introduction before plunging *medias in res.* The second period, which reached into the eighth century, produced no new myths, as the Scandinavian mythology had attained its highest point in the seventh century, but it preserved those already existing, and handed them down both in writing and tradition. The character and form of these still anonymous poems is dramatic-didactic, that is to say, dialogue alternates with narrative; and there is a didactic or literary purpose which demands a poetical framework in addition to the prose introduction. In the third period, which begins in the eighth century, political and religious changes took place which modified the character of the poetry, and introduced Scalds of known name, who only made use of the heathen mythology occasionally, and for purposes of illustration. *Skirnisför* and *Grimnismâl* belong to the second of these periods. Bergmann's translation and explanation of the latter poem differs very considerably from those in favour with his predecessors; this is especially the case with regard to strophe 45, pp. 257 and 305.

We have only now to notice Simrock's work, which differs from those already discussed inasmuch as it gives a com-

plete translation of the 37 songs of the *Elder Edda*, and from the *Younger*, both *Gylfa ginning*, *Bragarœdur*, and the mythical tales of the Skalda which are united to the *Younger Edda* in our own manuscripts as well as in published editions. The translation aims at preserving the alliterative metre of the poetic *Edda*, so it has naturally less verbal accuracy than that of Bergmann; the notes and introductions to the *Elder Edda* are comparatively scanty, those on *Grimnismâl* and *Skirnisför* together occupying only eight pages against 110 of Bergmann, and the *Younger Edda* has no notes, as it is supposed to be sufficiently explained by what goes before. The explanation of this difference no doubt is that Simrock presupposes in his readers a considerable acquaintance with the *Edda* and its subjects, and though his preface reproaches Germans with their indifference to these studies, the number of editions reached both by this work and his *Deutsche Mythologie* shows that he really finds a large and intelligent public. Still any one wishing to acquire a knowledge of Norse mythology cannot do better than *begin* with Bergmann, whose merits as a thorough master of Scandinavian language and antiquities have received honourable recognition in Sweden and Denmark; and if the student then wished to proceed further, he would be able under Simrock's guidance to complete his knowledge of both *Eddas*, especially the Elder. Before leaving Simrock (whose work I may discuss at greater length elsewhere), I will allow myself two observations. In the *Fafnismâl* (Simrock, p. 200) it is related that Sigurd could understand the voice of birds as soon as he had tasted the heart's blood of Fafnir, transformed into a dragon. This seems to point to an old Oriental superstition, for in Philostr. *Vita Apollon.* 1, 20, we read: *ἔστι γὰρ τῶν Ἀραβίων ἤδη κοινὸν καὶ τὸ ὀρνίθων ἀκούειν μαντευομένων ὁπόσα οἱ χρησμοί. ξυμβάλλονται δὲ τῶν ἀλόγων, σιτούμενοι τῶν δρακόντων οἱ μὲν καρδίαν, φασὶν, οἱ δὲ ἧπαρ*; and the same is said of the inhabitants of the Indian town Paraka (*ib.* iii. 9): *λέγονται δὲ καὶ τῶν ζώων ξυνιέναι φθεγγομένων τε καὶ βουλομένων* (var. *βουλευομένων*), *σιτούμενοι δράκοντος οἱ μὲν καρδίαν οἱ δὲ ἧπαρ.* On the first passage Olearius says: "Gemina et ex Arabico scriptore Damir habes apud Bochart. *Hieroz.* p. i. l. 1, c. 3, fin." My second remark refers to the famous Danish king Hrolf Kraki (the German *Knirps*, mannikin, dandiprat, not *Krähe*, *kraka*, "crow," as Simrock translates it on p. 353). Of this Hrolf the Skalda relates (Simr. p. 353) that he was once being pursued by king Adils and his Swedes, and escaped with his followers by scattering gold along the road, which his pursuers stopped to pick up. This trait is paralleled in *Buddhaghosha's Parables* (by Capt. Rogers and M. Müller, p. 43), where the fugitive king Udena uses the same stratagem against the hostile king Kanddapaggota; and again in a Teleutic legend (W. Radloff, *Proben der Volkslitter. der Türkischen Stämme Südsibiriens*, Petersb. 1866, vol. i. p. 210), where the following story is told of Schydar Ubang: "He sold all his horses, cows, sheep, and other possessions for copper money, with which he loaded 300 camels. He crossed the waters of the Irtish, and on the further side he poured out all the copper on the ground. The white king's (*i.e.* the Czar's) three generals and 300 soldiers who were bringing 30 waggons of munitions with them, gathered up the copper money and loaded it upon the 30 waggons. Schydar Ubang said: 'Take the money strewn upon the ground, but do not pursue me.' Thus he deceived them with money, and went back and betook himself to the Chinese." See also Frontin. *Strateg.* 2, 13, 1: "Galli pugnaturi cum Attalo, aurum omne et argentum, certis custodibus tradiderunt, a quibus, si acie fusi essent, spargeretur, quo faciliùs praeda hostem impeditum effugerent." 2. "Tryphon, Syriae rex, victus, per totum iter fugiens pecuniam sparsit, eique sectandae Antiochi equites immoratos effugit." Of course these different stories of scattering gold and money may have arisen independently of each other.

In conclusion, I can only recommend the above three works once again most warmly to all classes of readers, and must not omit to quote the last words of Bergmann's preface to *La Fascination de Gulfi*:—"Cet ouvrage se vend au profit de la Bibliothèque de Strasbourg, qui, entièrement brulée, est à reconstituer." Bergmann was one of the most distinguished professors and dean of the faculty of letters in the former university of Strasburg, whence his interest in the restoration of its library. FELIX LIEBRECHT.

Sing-Song: a Nursery-rhyme Book. By Christina G. Rossetti. With 120 Illustrations by Arthur Hughes. Routledge.
The Princess and the Goblin. By George Macdonald. Strahan.
Through the Looking-glass, and what Alice saw there. By the Author of *Alice's Adventure in Wonderland.* Macmillan.
More Nonsense; Pictures, Rhymes, Botany, &c. By Edward Lear. Bush.

IT is pleasant to see children's literature get better as it does year by year in England. This season in particular has produced a crop of books that are delightful for them—for the children—but more delightful still, perhaps, for some among their elders; since no child, in the most enchanted eagerness of its single-minded attention and fancy, knows so full or so subtly mingled a pleasure in the best of these things as the properly constituted grown-up reader. The adult spirit here finds the reward of its affliction of self-consciousness. While the attention, the fancy, can let themselves go, and be as those of a child, following the fun or movement of the tale with all the old mirth, the old breathlessness, there lingers, beneath such abeyance of criticism, a more complex self looking on somewhere in the background, aware of the revival of ancient spells, and pleased to feel them work:—you have your own enjoyment to enjoy as well as its object, you have a hundred causes of pathetic entertainment side by side with the old absorption.

The volume written by Miss Rossetti, and illustrated by Mr. Hughes (not, by the way, a matter of story-telling but of song-singing), is one of the most exquisite of its class ever seen, in which the poet and artist have continually had parallel felicities of inspiration—each little rhyme having its separate and carefully engraved head-piece. In the form of the poetry the book answers literally to its title, and consists of nothing but short rhymes as simple in sound as those immemorially sung in nurseries—one only, of exceptional length, containing as many as nine verses—and having always a music suited to baby ears, though sometimes a depth of pathos or suggestion far enough transcending baby apprehension. But both in pictures and poetry, provided they have the simple turn, and the appeal to everyday experience and curiosity, which makes them attractive to children at first sight and hearing, the ulterior, intenser quality of many of these must in an unrealised way constitute added value, we should say, even for children. The pieces range, indeed, as to matter, from the extreme of infant punning and catchy triviality to the extreme, in an imaginative sense, of delicate penetration and pregnancy, with an almost equal grace of manner in either case; here is an example of the latter:—

> "What are heavy? sea-sand and sorrow:
> What are brief? to-day and to-morrow:
> What are frail? spring blossoms and youth:
> What are deep? the ocean and truth."

And this is illustrated with one of the best of Mr. Hughes' landscape cuts—a still, flat sea flooded with moonlight, under

a black sky, with a child's sand-castle going to pieces at its edge. There are some dealing with death—a motherless baby, a ring of three dancers from which one is caught away—in just the right mood of tender thought and plaintive wonder, striking the mere note of loss, unexplained disappearance, the falling of an unknown shadow, with the loveliest feeling; and many about out-door things, birds and flowers, animated with an intimate fanciful charity, or having sometimes a little ethical conclusion, of which the lesson cannot fail to find its way home. In tuning the simplest fancies or hints of fragmentary idea, Miss Rossetti cannot lose the habit or instinct of an artist; and the style and cadence of these tiny verses are as finished and individual, sometimes as beautiful in regard of their theme, as they can be, and not much recalling any precedent, except in a few cases that of Blake. We would direct the reader to pp. 6, 13, 21, 38, 40, 120, for perfect scraps of art in their way. Mr. Hughes' illustrations, many of them lovely and full of imagination as we have said, and always seconding the suggestion of the verse, are not quite equal, and the sentiment is sometimes in advance of the design: but what can be more delightful than the child feeding birds at the winter window on p. 8, or its *vis-à-vis* supping porridge in the ingle, or the lambs and ducklings of pp. 27 and 29, or the landscapes of pp. 35 and 79, or the pathetic dance of p. 73, or the pancake-making (79), or, indeed, a full half of them all.

Mr. George Macdonald is a poet also, and in his *Light Princess* had already achieved a humorous and imaginative success in that most difficult of all tasks, the invention of contemporary mythology for children. We should say that with this writer, more than most, it was hit or miss; other pieces in the volume containing *The Light Princess* we should count misses. Here, again, and on a larger scale than before, the hit is palpable and delightful. *The Princess and the Goblin* does not perhaps contain any invention so felicitous as that of the child to whom an evil fairy had denied the physical property of gravity; but it is a thoroughly beautiful and enjoyable story, and its machinery of princess and nurse, heroic miner-boy, evil subterranean goblins, and beneficent supernatural grandmother in her tower, thoroughly calculated to take hold of the imagination of readers of all ages. The suppressed personage within our grown-up reader will be knowing enough to observe, from his background, that there is allegory in all this; aware of the religious and ethical pre-occupations of the writer's genius, he will guess what the beneficent grandmother is meant more or less explicitly to stand for—will, if he chooses, be able to note how it is even the moral and religious foundation that has stimulated the writer's invention and developed the turns and incidents of the story. But all this really does not at all spoil this charming fable, as it has so many others; the narrative and scenic parts of it are conceived with a vividness of their own, alongside of the ethical part of the conception; the characters are delightfully dramatic, and there is nothing strained in the tone of purity and elevation which is given to them. Against unction, when unction passes into such bright imaginative devices as these, and only gives a peculiar ring and fervour to their pathos or their humour, the most uncompromising opponent of moral story-writing can have nothing to protest. Mr. Macdonald in this story is long, detailed; but he has the art of having been there (so to speak); and the attention never flags during all the adventures of the little Irene with her mystic friend in the tower, and the brave Curdie with his goblin enemies in the mine. The sympathetic talent of Mr. Hughes in this volume again has been employed in furtherance of the writer's fancy, and his designs (though not so fully in his choicest manner, perhaps, as those we last spoke of) are very delicate and ingenious.

We pass from poetical enchantment to prose fun in passing from the work of Mr. Macdonald to that of Mr. "Lewis Carroll"—from the transformation scene to the harlequinade, if one may venture that imperfect parallel. *Through the Looking-glass* is a sequel to *Alice in Wonderland*, and has the misfortune of all sequels—that it is not a commencement. An author who continues himself loses the effect, although not the merit, of his originality; and in its originality lay half the charm of the old "Alice." No reader will have the sense of freshness and the unforeseen, amid the burlesque combinations which the little lady encounters in her new dreamland, which he had amid those of the old; hence the inevitable injustice of a comparison. But, making allowance for the sense of repetition, we think the invention here shows no falling-off in ingenuity or in the peculiar humour, which mixes up untransformed fragments of familiar experience with the bewilderment of the polite child amid people of irregular manners and a topsy-turvy order of existence. There is perhaps a little too much complication in the machinery of chess-board geography prevailing in Looking-glass Land, and a somewhat meaningless eccentricity in some of the transformations; but the ingenuity which traces out the remotest consequences of its data cannot be too much praised,—as the property of space in Looking-glass Land by which to walk towards a thing is to move away from it, and the inverse disposition of the letters in the amazing nonsense-poem of "Jabberwocky." The introduction and conclusion of the adventure are particularly well devised and written. Every reader will be charmed to meet his old friends the Hare and the Hatter (still engaged upon his tea and bread and butter) dignified with the Anglo-Saxon orthography Haigha and Hatta (Alice has evidently been having lessons in English history); and amused at the forms under which the child's matter-of-fact dream realises the ideas of Tweedle-dum and Tweedle-dee, Humpty Dumpty, and all the provoking brotherhood of mythic personages who insist on taking all words literally, and regarding every question as a riddle. If this prose extravaganza, this matter-of-fact absurdity, has a certain ugliness at times which seems to run near the edge of the vulgar, that is its only weak point. The clever and mannered humour of Mr. Tenniel's designs illustrates their theme to perfection.

A stout, jovial book of *More Nonsense*, by Mr. Edward Lear, transcends criticism as usual. We may just indicate the interest of the preface, in which the author explains the genesis of this class of composition; we may point out the great felicity of some of the new botanical figures and names—"Nastycreechia Krorluppia," "Stunnia Dinnerbellia," and the rest; we may protest, with deference, against the absence of the charms of rhyme in the alliterative pieces at the end of the volume; and then leave the reader to his unmolested entertainment. Sidney Colvin.

Prince Hohenstiel-Schwangau, Saviour of Society. By Robert Browning. London: Smith, Elder, and Co., 1871.

Mr. Browning has always had a predilection for the type of characters which the moralist finds it convenient to class as hypocrites. An artist who begins to analyse character quite disinterestedly is met very soon by the difficulty which character he is to analyse, the character which the man indulges or the character which he assumes; nor is it allowable to cut the knot and say that a man is what he allows himself to be, and is not what he assumes himself to be. The assumption seriously influences his conduct, and it is quite as essential to his comfort that the assumption should impose upon himself as that it should impose upon others;

if it come to the point, he would even prefer to allow himself in less rather than give up the assumption altogether. In fact, the study of human character, in general, might almost be resolved into an attempt to ascertain the true relations between what we claim to be and what we tend to be; and this problem is obviously best approached in the individuals in whom the contrast assumes the most piquant form. In the same way the ethical distinction between honest men and rogues is replaced by the æsthetical distinction between those who recognise and accept and those who rebel against the inevitable contrast between the ideal and the natural self. On the one side we have Mr. Sludge and Bishop Blougram and the bishop who orders his tomb in St. Praxede, and the other bishops who display their successful or unsuccessful diplomacy in the *Return of the Druses* and *The Soul's Tragedy;* on the other side, there is the noble Djebal, one of the loftiest of all tragic characters, and the pitiful Chiappino and poor Mr. Gigadibs. It is worth noticing that Djebal comes nearest to the common conception of a common imposter, just because his enthusiasm is too deep not to be practical, too sustained not to become unscrupulous, while the worthless Gigadibs is too shallow to be unsincere.

Of course the Saviour of Society belongs to the more intelligent if not to the more estimable class. The machinery of the poem is intricate, and it is difficult to believe that the whole of it was written upon a single plan. For 142 pages out of 148 the Saviour of Society, in exile, is explaining his career to a young lady; nearly 60 pages of the explanation are a history of his reign as it ought to have been, which is carried down to the end of the Italian war. Here the speaker discovers that it is five o'clock in the morning, opines that the young lady is asleep, moralises on the impossibility of a really sincere *apologia pro vita suâ.* In the last half-page we learn that he has not yet begun his second exile, has no young lady to talk to; but the whole reverie has arisen out of the possible consequences of an ultimatum, which he has still to decide upon sending. On the other hand, he says early in the poem:—

> "I could then, last July, bid courier take
> Message for me, post-haste, a thousand miles."

These lines and the whole context prove that the speaker was intended to be actually in exile, not merely anticipating what he would say when he was. It seems as if the poet had felt the ideal history of Prince Hohenstiel-Schwangau's reign was getting too long, and had altered his plan in order to cut it short with effect: in a way the effect is gained, but it is at the price of an inconsistency which makes the last six pages very obscure. Another matter for regret is that the history of Hohenstiel-Schwangau should be simply identical with the history of France. One can understand the author's motive for choosing to write of Hohenstiel-Schwangau; but the choice entailed obvious obligations. It would have been very indecorous for Johnson to make the senate of Lilliput debate an expedition to Canada, and it is little better to make Thiers an historian, and Victor Hugo a poet of Hohenstiel-Schwangau.

The Saviour of Society is, as might be expected, a very interesting personage, a little tedious to those who are beginning his acquaintance, but decidedly attractive and even fascinating when we come to know him well. He is represented as a kind of democratic man of order, a Sulla of the proletariat, incapable of founding anything, but capable of organizing and consolidating much.

His exposition begins by pointing out that even when he is playing with a sheet of blotting paper, he prefers drawing a line between two blots that are there already to making a third, which proves a predisposition on his part to avail himself of existing materials. Some sixty lines are allotted to bring this piece of information adequately home to the reader, and of the sixty quite the usual proportion are elliptical, and none are empty. It is an extreme result of the author's deliberate system of endeavouring to present the processes not merely the products of thought. With this predisposition he enters upon life determined to please himself and serve God by making the best according to his own judgment of the faculties of which he finds himself in possession. The example of the courier, cited above, who must reach his journey's end in time, but may select the stages, and halt or hurry at his own discretion, serves to illustrate the kind and the extent of the responsibility under which the speaker conceives himself to act. Others, he is willing to allow, may have something like what is ordinarily called conscience to direct the details of their conduct; he has to judge exclusively by the light of general principles, by the facts of life, by the signs of the times. He finds himself inclined and qualified to govern a world that has laboriously and gradually reached a complicated harmony, which, though most imperfect, is tolerable. He is filled with respect for this order and compassion for the multitude—

> "Men with the wives and women with the babes,"

who desire nothing better than to be allowed just to live and work under it. He determines to devote himself to the defence of the mediocre positive results of civilisation against the enthusiasts who would destroy them in the pursuit of incompatible ideals. If the average duration of life were a hundred years instead of twenty, he would risk the responsibility of carrying out one of the ideals he advocated himself in the days when he was only a voice like his critics. As it is, he consoles himself with the thought that the low interests which unite the many are more in one sense than the high interests which divide the few who had better do their best—

> "Without this fractious call on folks to crush
> The world together just to set you free."

The accusation of indolence and indecision is met by a capital story of the Laocoon, which, it seems, was once exhibited without sons or serpents, and taken almost universally for a figure of Somnolence. One critic only whom the Saviour of Society would choose for his biographer said—

> "This attitude
> Strives with some obstacle we do not see."

The faults of his reign are attributed to an excess of sagacity which led him to profit by the crime of his predecessors to occupy Rome, to avoid the chance of civil war by a *coup d'état* incompatible with ideal loyalty, to wean Hohenstiel-Schwangau from war by false pretences, to obtain territorial advantage by the Italian war, to temporise with the papacy, and, above all, to try to found a dynasty.

The exposition is less perplexed than in Mr. Browning's earlier works, perhaps less richly coloured; though it would be difficult to parallel the musical elevation of the following passage:—

> "Ay, still my fragments wander music-fraught,
> Sighs of the soul, mine once, mine now, and mine
> For ever! crumbled arch, crushed aqueduct,
> Alive with tremors in the shaggy growth
> Of wild-wood, crevice-sown, that triumphs there,
> Imparting exultation to the hills!
> Sweep of the swathe when only the winds walk
> And waft my words above the grassy sea
> Under the blinding blue that basks in Rome,—
> Hear ye not still—'Be Italy again'?
> And ye, what strikes the panic to your heart?
> Decrepit council-chambers,—where some lamp
> Drives the unbroken black three paces off
> From where the greybeards huddle in debate,
> Dim cowls and capes, and midmost glimmers one

Like tarnished gold, and what they say is doubt,
And what they think is fear, and what suspends
The breath in them is not the plaster patch
Time disengages from the painted wall
Where Rafael moulderingly bids adieu,
Nor tick of the insect turning tapestry
To dust, which a queen's finger traced of old;
But some word, resonant, redoubtable
Of who once felt upon his head a hand
Whereof the head now apprehends his foot."

G. A. Simcox.

NOTES ON LITERATURE AND ART.

The articles of Chief Justice Cockburn on Junius are unavoidably postponed for one or two numbers.

The *Westminster Review* for this month has a very interesting but incomplete article on Greek tragedy and Euripides. There is a good account of the conditions under which a great dramatic era is possible. It is shown how after a certain stage in dramatic art as in other art the execution tends inevitably to overpower the idea; and how Euripides coming at this stage made the most of the romantic and picturesque possibilities of Greek tragedy. Much is made of analogies from painting too suggestive not to be misleading. For instance, we are told that Correggio gave a disproportionate development to some elements of beauty which were subordinate in Raphael, and that Euripides gave a disproportionate development to elements of interest that were subordinate in Sophocles. But the pictures of Correggio, and for that matter the plays of Fletcher, are thoroughly complete and harmonious; for the most part the plays of Euripides are not. The point of the attacks on Euripides is missed. Those who say that Euripides debases tragedy are quite aware that he wrote splendid poetry: they would be quite ready to admit that the ethical elevation of Sophocles could not be maintained for ever. Their quarrel with Euripides is not that his creations are romantic rather than classic; but that their habitual background is a vulgar selfish sophistry.

M. Gaidoz, in the same place, publishes some interesting translations of the Breton poetry inspired by the events of the late war; which appears in most cases to have been written not by the people but certainly for it, since the *bourgeoisie* look down on their native idiom. The writer believes that the Breton peasants, like the Welsh, would learn to read readily if they had books in their own language, and it is curious that the Legitimists and Republicans have to bid against each other in *patois* for the country vote. The manifestoes of the former are said to be the best models of style, as many of the clergy have made a special study of Breton literature.

A shareholder in the "Société d'Acclimatation" sends to *Fraser* a short account of the fate of the Jardin and its inmates. Some few of the most valuable animals were sent out of Paris just before the commencement of the siege, and the remainder were reluctantly disposed of to the butchers, fetching, however, their full money value. The gardens themselves were devastated under the Commune, and the society is treating with the city of Paris for the repurchase of the land ceded to it, but it offers to superintend the reorganization of the work, and a fresh company is spoken of to carry this out on a larger scale than before.

Afzelius, the venerable collector of Swedish folk-songs, died on the 25th of September last at Euköping, where he had been pastor for forty-nine years. His great work, *Svenska Folkets Sagohäfder*, was completed in 1870, the last part containing the history of Charles XII., since when no true popular legends have come into being.

We have received a specimen number of a new series of the *Oesterreichische Wochenschrift für Wissenschaft und Kunst*, which formerly appeared for a few years as supplement to the *Wiener Zeitung*. There ought to be plenty of room for such a periodical, especially if it does not give too much space to the miscellaneous *feuilleton* element. In this number the principal papers are by A. Mussafia on F. Diez, *àpropos* of the 50th anniversary of his doctorate; and Fr. Lippmann, "Die Styltendenzen im Kunstgewerbe." The author thinks that the initiative unreality of modern art and architecture can only be superseded by a healthier and more independent tone of workmanship, on condition that the Renaissance is frankly accepted as its base and starting-point.

There is a Breton work now in the press, to be published next spring, by Mrs. Legoffic, Lannion, which will have some interest for the literary world at large. It is a mystery (*Trajedi*, as the Bretons call it), the subject of which is the well-known Purgatory of St. Patrick. The most striking peculiarity of this mystery is that a few scenes are nearly identical with some passages in a drama of Calderon, who has treated the same subject. It will be interesting to trace these resemblances to an original work. The mystery will be published without French translation, as it is intended for the Breton-reading public only. Bretons are very fond of reading—and of performing—mysteries; but when such a performance takes place in some Breton village, it is apt to pass unnoticed, even in France.

The discoveries made in the neighbourhood of Bologna must take the first place amongst the events of archæological interest which have occurred during the past year. A full account will be found in a paper, "*Sugli Scavi di Certosa*, read by the architect Signor Antonio Zannoni, at the inauguration of the museum of Bologna, Oct. 2, 1871, and which is now printed. Signor Zannoni has excavated an entire necropolis, near the Campo Santo of Certosa. It is supposed that the ancient town Felsina had here its burying-place. No less than 365 graves have been opened with various results. A peculiar interest attaches to these discoveries, because they throw light on the life and culture of Etruria *circumpadana*, a district in which, as compared with Etruria *media*, very little has been found. From the position and state of the bodies, and character of the contents of the tombs, it must be inferred that much the same habits and much the same point of taste prevailed as in middle Etruria. Amongst the stele-shaped monuments are many with reliefs, but none with inscriptions. The style in every instance shows Greek influence. Bronzes are numerous, and so are ornaments of bronze, of silver, of ivory, of gold, &c. Relatively to these, the discoveries at Marzabotto, a small railway station south of Bologna, are unimportant (see Gozzadini's *Di un antica necropoli a Marzabotto nel Bolognese*), though at any other moment they would excite much interest.

Dr. Heinrich Schlieman reports (*Allgemeine Zeitung*, Jan. 7) his excavations on the fields of Troy as stopped by the arrival of winter, but confidently asserts that early next spring he will be in a position to demonstrate the exact position of Troy, 35 feet below the present level (!).

In November last Hans Makart publicly exhibited in his atelier paintings on which he has for some time past been engaged. They were executed on the commission of Herr Nic. Dumba, and consist of a large square ceiling-picture and a number of large and small portions of a frieze, forming together the entire decoration of a room. On three sides there are tolerably considerable spaces, broken only by occasional doors, but on the fourth a succession of windows leaves only narrow strips of wall, and these are filled with allegorical single figures. The principal composition extends itself unchecked over the ceiling. The subject is *Die Vereinigung der praktischen mit den idealen Mächten des Lebens*. Agriculture and Industry, Art and Music, are brought before us by a vast number of figures, genii, and demigods, conceived partly in an allegoric, partly in a realistic sense. These are intermixed with all the sense-ensnaring decorative accompaniments special to Makart's genius. Festoons and fruits, costly vessels, and all sorts of beasts, are introduced in wild and various interchange. We are told that many of the subordinate incidents are very happy; for instance, a dance of children round a fruit-tree, the counting-house studies of the genius of trade, and a scene in the studio of a little portrait painter. But, however brilliant may be the display in this new work of an enviable wealth of individual types, and magnificence of colour *bravura*, there is no advance in the

qualities of sound drawing and modelling, or in refinement of artistic style. This is what the uncompromising admirers of Makart have announced to us from year to year, but as yet no trace of such an advance can be perceived.

The auction Gsell will take place in Vienna on March 15. The exhibition of the works about to come into the market is already going on. The catalogue, which is not yet complete, will contain from fifty to sixty illustrations. The gallery contains many pictures of the first rank, both by ancient and modern masters. For example, Franz Hals, Rembrandt, Metzu, Ruysdael, Cuyp, Teniers, v. d. Meer von Haarlem, Veronese, Tintoret, Tiepolo, Cranach, may be cited amongst the ancient; and the modern are represented by Waldmüller, Pettenkofen, Troyon, Meissonier, Decamps, Couture, and others. The collection of prints and etchings has a great repute; and, finally, there are numerous precious objects and antiques.

New Books.

Adler, F. Das Pantheon zu Rom. Gedruckt auf Kosten der archaeol. Gesellsch. Berlin: Besser'sche Buchhg.

Behn, Mrs. Aphra. Plays, Histories, and Novels of the Ingenious. 1724–35. Small paper. 6 vols. (2*l.* 12*s.* 6*d.* and 4*l.* 4*s.*) Pearson.

Burns, R. The Original MS. of Tam o' Shanter and The Lament of Mary Queen of Scots. Reproduced by the Photo-chromo-lith. Process. With an Introduction by Moy Thomas, and a Glossary. Adams and Francis.

Eastlake, C. L. History of the Gothic and Medieval Revival in England. Longmans.

Ferrazzi, G. J. Enciclopedia Dantesca. Vol. IV. Bibliografia. Venezia: Münster.

Martin, H. Études d'Archéologie celtique. Notes de voyages dans les pays celtiques et scandinaves. Paris: Didier.

Petzholdt, J. Bibliographia Dantea ab anno MDCCCLXV inchoata. Accedit Conspectus Tabularum Dio. Com. vel stilo vel calamo vel penicillo adhibitis illustrantium. Dresdae: Sumpt. Schönfeld.

Schulze, E. Beschreibung der Vasensammlung des Freiherrn Ferdinand von Leesen. Teubner.

Taine, H. History of English Literature. Vol. II. Translated by H. van Laun. Edmonston and Douglas.

Philosophy and Physical Science.

The Works of George Berkeley, D.D., formerly Bishop of Cloyne: including many of his Writings hitherto unpublished. With Prefaces, Annotations, his Life and Letters, and an Account of his Philosophy. By Alexander Campbell Fraser, M.A., Professor of Logic and Metaphysics in the University of Edinburgh. 4 vols. Oxford: Clarendon Press, 1871.

The merits of Professor Fraser's edition of Berkeley have been so generally recognised that in the present article, which from causes that could not be prevented is too late in its appearance, it is needless to notice them in detail. The only fault that we have to find with him is that he has in a certain sense over-edited his author, and tends to make him mean too much. In addition to valuable analyses and explanations prefixed to the several treatises, Professor Fraser accompanies them with a running criticism and elucidation at the foot of the page, and finally, in the volume containing Berkeley's life and letters, writes a general essay on his philosophy and on "his function" in relation specially to Hume and Kant. It is in this essay chiefly that he seems to us to carry too far the interpreter's licence of unfolding what his author "would have said," and partly by translating him into the language of later philosophy, partly by reading his earlier treatises in the light of certain flashes of Platonism that appear in the *Siris*, to obscure the edges of the very definite, though not far-reaching, theory which Berkeley completed in his youth, and which we only confuse by supplementing with the deeper, but insufficiently articulated, speculations of his later life. The limits, indeed, of Berkeleyanism proper are very clearly pointed out by Professor Fraser himself up and down in his notes, and in attempting to state them we do not suppose ourselves to be bringing before him anything which he has not himself fully considered, but merely to be supplying a corrective to the over-estimate of Berkeley which some readers might derive from his work.

Berkeley's strength and weakness as a speculator alike lay in his practical interest. Of a strange precocity in philosophy, unparalleled probably except in the case of Schelling, he yet had not the spirit for pursuing truth to the bottom of her well. In the Commonplace Book kept during his residence at Trinity College, Dublin (now first published by Professor Fraser, and which alone would make his fourth volume worth buying), we already find his theory ready-made, only lacking the perfect literary form of the treatises which he afterwards published. The question is as to the constructive value of this theory; of its validity for the destructive purpose, for which Berkeley intended it, no one who understood it has ever doubted. He found practical irreligion and immorality excusing itself by a theory of "materialism"—a theory which made the whole conscious experience of men dependent on "unperceiving matter." This, whatever it might be, was not an object which man could love or reverence, or to which he could think of himself as accountable. Berkeley, full of devout zeal for God and man, and not without a tincture of clerical party-spirit, felt that it must be got rid of. He saw that the "new way of ideas" with which his teacher Molyneux had familiarised him had only to be made consistent with itself, and the oppressive shadow must disappear. Ideas according to that "new way" (or, to speak less ambiguously, feelings) make up our experience, and they are not matter. Let us get rid, then, of the self-contradictory assumption that they are either copies of matter—copies of that of which the sole and simple differentia is that it is not an idea—or its effects—effects of that which we can only describe as the unknown opposite of the only efficient power with which we are acquainted—and what becomes of the philosopher's blind and dead substitute for the living and seeing God?

The object was a worthy one, and doubtless Berkeley has had his share in the most obvious service which philosophers render to their kind. He has done something to save reflecting men from the bondage which comes of misinterpreting formal ideas; but, as we think, not quite so much as Professor Fraser would have us believe. He took—as might be expected of a philosopher whose latest systematic treatise was published when he was 28—too short a cut to his end. He worked merely with the means which Locke put into his hands, and thus, while his destructive method was invincible, his untempered mortar would not really hold together the fabric of knowledge and rational religion which he sought to maintain.

It is true that his polemic, according to his own intention, was directed not against the supposition of the reality of substance *as such*, but against its reality as the antithesis of mind, or, in the language of the time, against "unthinking substance"—"body" or "matter." To show the untenability of such a supposition upon the principles of Locke was not difficult. The question is whether upon those principles anything survives but the succession of feelings severally "real" only in the moments of their presence to consciousness and as manifold in their diversity as are those moments; and whether Berkeley has any new principles to substitute for those of his master. If these questions are answered in the negative, it will follow that the title, which Professor Fraser (though with much abatement) seems to claim for him, of having in some sort anticipated

Kant, is not fairly earned; that in result, though not in intention, he merely did imperfectly what Hume did perfectly; that his polemic is valid not against "unthinking" substance and causality merely, but against substance and causality altogether; not merely against the reality of "outwardness" to the mind, but against the reality of outwardness as an intelligible relation between bodies; and that thus finally, to say nothing of its bearing on the belief in God and immortality which it was meant to uphold, his doctrine, fairly carried out, rendered the knowledge of nature no less than mathematical knowledge an unaccountable fiction.

It scarcely needs to be said that the governing notion of Locke's philosophy had been that of the antithesis between "facts" and "things of the mind"; and a moment's consideration will show the difficulties which this antithesis has in store for a philosophy which yet admits that it is only in the mind or in relation to consciousness—in one word, as "ideas"—that facts are to be found at all, while by the "mind" it understands an abstract generalisation from the many minds which severally are born and grow, sleep and wake, with each of us. The antithesis itself, like every other form in which the impulse after true knowledge finds expression, implies a distinction between the seeming and the real; or between that which exists for the consciousness of the individual and that which really exists. But outside itself consciousness cannot get. It is there that the real must at any rate manifest itself, if it is to be found at all. Yet the original antithesis between the mind and its unknown opposite still prevails, and in consequence that alone which, though indeed in the mind, is yet given to it by no act of its own is held to represent the real. This is the notion which dominates Locke. He strips from the formed content of consciousness all that the mind seems to have done for itself, and the abstract residuum, that of which the individual cannot help being conscious at each moment of his existence, is or "reports" the real, in opposition to the mind's creation. This is feeling; or, more strictly, it is the multitude of single feelings, "each perishing the moment it begins," from which all the definiteness that comes of the mind's own act in the way of composition and relation must be supposed absent. Thus carried out, the antithesis between fact and mental fiction becomes self-destructive. Detach all mental accretions, and there remains nothing in which one feeling differs from another but the degree of its liveliness. It is to this, as constituting the distinction of the real from the unreal, that Hume in his treatise on Human Nature finally comes, and Berkeley himself was quite aware that his erasure of Locke's inconsistencies left him no criterion of reality external to the feeling itself. The essential distinction between his result and Hume's reduces itself to this, that whereas with Hume that which in the language of later philosophy is called "objective order" becomes an unaccountable fiction of thought, and reality becomes merely a name for the liveliness (of indefinite degree) with which one feeling, if itself lively, recalls another; with Berkeley, on the other hand, reality means an order of sensations in a divine consciousness to which their succession in us, according as they are vivid and coherent or the reverse, does or does not correspond. It is this divine consciousness which with him takes the place which "qualities of matter" or "nature" held with Locke, as that which our ideas, if real and adequate, represent.

To have demonstrated such direct dependence of human experience upon God, Berkeley reckoned his great service to mankind, by which he had silenced the atheists for ever. The value of the service to his own generation is not in question. Each generation requires practically to be delivered from the "bondage of matter" according to the philosophical method with which it is familiar. But in order to estimate its value as a permanent contribution to speculative theism, we must ask two questions. Taking the three steps of Berkeley's short and easy method—sensible things are merely sensations, sensations imply a sentient subject, this subject must be one whose consciousness is absolutely permanent and continuous, *i.e.* God—is not the process, by which the first step is established, itself fatal to the third? And supposing this difficulty to be got over, is not the one subject, whose being is proven, simply the μέγα ζῷον of the crudest form of pantheism rather than the Christian God? To the first of these questions the answer must ultimately depend on the meaning to be attached to the "percipi" with which Berkeley identified the "esse"—a meaning which Professor Fraser in several places (*e.g.* on pages 373 and 387 of vol. iv.) seems to us unwarrantably to extend. From the introduction and earlier sections of the *Principles of Human Knowledge* it is quite clear that the "percipi" with him primarily meant present feeling and no more. A thing *is;* that is, I now feel: it *was*; that is, I did feel. This doctrine can legitimately lead to no result but Hume's. It is fatal alike to the reality and knowability of permanent subjects or "spirits," as much as of bodies and their relations. There is evidence from the Commonplace Book that Berkeley had at least an occasional forecast of this result, and in his published treatises we no doubt find him feeling his way towards a different account of the "percipi" according to the exigencies of his theistic theory. Thus we find him in section 89 of the *Principles of Human Knowledge* quietly introducing "spirits and relations" as being no less than "ideas," objects of human knowledge, in virtual contradiction of the opening section of the same treatise. But no trace appears of any such account of the "percipi," into which "esse" is resolved, as would justify us in interpreting it as the "intelligi." "Spirits and relations" are brought within the region of knowable reality when they are wanted, but there is no reasoned vindication of their position, and at so late a period in his life as the publication of the *Analyst* we find Berkeley reverting to his original sensationalism for a weapon against the mathematicians. The imaginary "real" outside consciousness he had effectively disposed of, but for any effective replacement of it by an intelligible and necessary element within consciousness we search his pages in vain. For his theistic purpose he had proved either too much or too little. The latter part of the *Siris* is mainly of interest as showing that the theistic instinct (if we may say so) survived his system, and was feeling after a philosophical apparatus wholly different from his original one. Such a statement as that "the principles of science are objects neither of sense nor imagination; intellect and reason being alone the sure guides to truth," is wholly irreconcilable with the doctrine of his earlier treatises. The worst of it is that, while it is merely "shot from a pistol," the earlier doctrine is fully worked out, and can alone be fairly treated as the Berkeleyan system. Professor Fraser is quite aware of the distinction, but in "developing Berkeley's thought" he seeks to introduce a consistency which we think unreal between his earlier and his later mind, and in so doing detracts from the "propædeutic" value of the study of Berkeley, which is in brief that it shows the necessity of Kant.

T. H. Green.

Intelligence and Notes.

Zoology.

Embryology of Arthropoda.—Dr. Dohrn's *Untersuchungen über Bau und Entwicklung der Arthropoden* (parts 1 and 2) attempts to follow out the line of genealogical investigation which is an offshoot of the

Darwinian theory, and has been so brilliantly initiated by Fritz Müller in his essay, *Für Darwin.* Furnished with the maxim, that "the ontogenetical development is a short and incomplete representation of the phyllogenetical development," Dr. Dohrn reviews the embryology of the different classes and families of the Arthropoda, to ascertain where they agree and where they differ. Thus he has examined the embryology of the Cumaceæ, the Pycnogonideæ, Praniga, Tanais, Palinurus, and Scyllarus, Limulus and some other Crustacea, of which he gives a detailed account, accompanied by numerous illustrations. Amongst these monographs those on the Pycnogonum, Palinurus, and Limulus are especially remarkable. As regards Pycnogonum, Dr. Dohrn states that the greater part of the family undergo an extensive metamorphosis; and he proves that the so-called "palpi" and "female feet" are both typical pairs of appendages, which are sometimes wanting in the adult, but are always developed in the larvæ. The number of these typical appendages being thus fourteen, Dr. Dohrn adduces it as a strong argument against those zoologists who, like Gerstäcker and others, place the Pycnogonidæ amongst the Arachnidæ on account of some superficial similarities of the adult. Dohrn adds to his account the description of the development of Phoxidilidium, which differs in a remarkable way from the other Pycnogonidæ, as there occurs no larval condition whatever. Instead of it there is a larval skin, representing the lost larval form. This larval form he refers to Nauplius. With regard to Palinurus and Scyllarus, Dohrn proves that in spite of Professor Claus and Mr. Spence Bate's doubts, Phyllosoma is the true larval form of these Macrura. He succeeded, by applying a constant stream of sea-water running over the eggs of both the Crustacea, to breed and hatch them. The larval forms produced were Phyllosomæ. Limulus has received much attention of late in connection with the alleged discovery of a trilobite with legs. Mr. Billings in Canada and Mr. Woodward in England, as well as Mr. Cope and Mr. Packard in America, have put forth opinions about these animals, and they seem to agree in grouping the Trilobites together with the Isopoda, and in excluding Pterygotus as well as Limulus from the Trilobites.* Dr. Dohrn treats these questions in an elaborate article in the *Jenaische Zeitschrift für Medicin und Naturwissenschaft*, a periodical known as being the organ of German Darwinism, receiving its contributions from Gegenbaur, Haeckel, Fritz Müller, Wilhelm Müller, and others of the Jena school. Dr. Dohrn arrives at the conclusion that Limulus, Pterygotus, and the Trilobites ought to form one great family, whose connection with the other Crustaceans is still doubtful. He refuses to admit any connection of Limulus with the Isopoda, as suggested by Mr. Woodward and Professor Huxley. The same periodical contains the first part of a memoir, by the same zoologist, entitled, "History of the Crustacean Tribe, based on Anatomical, Embryological, and Palæontological Facts." Dr. Dohrn here endeavours to give the outlines of the history of the crustacean tribe, beginning from the Nauplius, and tracing the diverging lines to the different crustacean families. As regards Insects, Dr. Dohrn only gives some hints in the preface of his second part. He says that he took up the subject of insect embryology at the same time with the Crustaceans, but he soon arrived at important discoveries bearing upon the old problem of the homology between Arthropoda and Vertebrata. We shall probably have to wait for the result of these researches till Dr. Dohrn has finished building the zoological station at Naples, with which he is at present almost exclusively occupied.

Micrococcus in Measles and Scarlet Fever.—An important paper, if the facts stated in it be corroborated by other and independent research, is contained in the last part of Hallier's *Zeitschrift für Parasitenkunde* (Band iii. Heft 2), written by Dr. Hofmann. This practitioner treats measles and scarlet fever by the hydropathic method, that namely of enveloping the patient with due precaution in wet linen cloths, and thus promoting a free perspiration, which lowers the temperature of the body and quickly cures the disease. Hallier and others maintain that these diseases are occasioned by the presence and development of certain fungi in the blood, which they state can be seen in it by the microscope in the form of minute cell-like bodies or spores, the so-called micrococcus. It occurred to M. Hofmann to collect the perspiration obtained from the patients enveloped in the wet bandages, and to send it to M. Hallier with a request that he would examine it for the micrococcus. M. Hallier replied that micrococcus was abundant, and at once proceeded to institute experiments with a view of determining whether the specific disease could be propagated by inoculation or other means. The results of their researches have not yet been published, but if successful, they will go far to show that these affections are really due to the presence of a fungus in the blood, for when it is present the disease exists, and when removed it ceases, whilst the fluid excreted from the skin of the sick, and known to contain the fungus, is capable of generating disease in the healthy.

* Mr. Woodward has carefully reviewed Dr. Dohrn's investigations in a paper communicated to the Geological Society on December 20, 1871, entitled "Further Remarks on the Relationship of the Xiphosura to the Eurypterida and to the Trilobita," in which he maintains that these orders should be still retained in the class Crustacea.

Inland Locality for Marine Insects.—At a recent meeting of the Norfolk and Norwich Naturalists' Society, Mr. Barrett read some further notes on the coast-insects found at Brandon, which he considered confirmatory of the opinion expressed by him in a former paper, that these species have occupied this district, now far inland, from the time when it was part of the sea-coast. Amongst other coast-species mentioned by Mr. Barrett was *Agrostis Tritici*, and of this species he remarked that, although it occurs sparingly in inland heaths, all the specimens are of a dull brown colour, while those found on the sea-coast are generally distinctly marked and richly coloured; all those taken by him at Brandon had precisely the deep style of colour and markings which characterize it on the sea-coast. *Agrostis cursoria*, although very abundant on the sea-coast, is not to be found at Brandon; and this Mr. Barrett considers a very strong proof that the other strictly littoral species enumerated have not reached their present situation by migrating across the intervening land from the present sea-coast. This species he thinks it not improbable was an immigrant from the eastward at a comparatively recent date, and that it has attained its greatest abundance on the spots where it first obtained a footing. It would not, therefore, have been an inhabitant of this portion of the post-glacial coast.

Application of Photography to Illustrations of Natural History.—Hitherto memoirs on natural history have been but seldom illustrated by the aid of photography (for instance, a memoir on fossil rhinoceroses by Dr. Kaup), the want of permanence of the common photographic prints having made them mere auxiliaries to lithography. Prof. Alexander Agassiz proposes now to apply the new Woodbury and Albert processes of carbon-printing to the illustrations of his forthcoming *Revision of the Echini.* There can be no doubt that photography offers the great advantages of rapidity of production and cheapness, but we doubt whether it will replace lithography to any great extent. Its use will be limited to rigid objects; and even then it will not always satisfy the demands of scientific enquiry. In numerous cases, as, for instance, in faint and incomplete traces on a fossil, or in anatomical preparations, we have to give the outlines of certain structures greater distinctness than they have in nature, in order to render important characters more apparent. When we examine the specimen of photographic printing (of *Echinocidaris punctulata*) issued by Professor Agassiz, we cannot help thinking that a skilful lithographer would have produced a drawing quite as accurate and faithful to nature, and certainlywith the sculpture much more clearly delineated. However, it is satisfactory to see this method put to the test, and we wish every success to this highly important undertaking of Professor Agassiz.

Observations on Parthenogenesis.—A most important article, entitled *Quelques Observations de Parthénogénèse chez les Lépidoptères*, has been published by H. Weijenbergh in *Archives néerlandaises*, vol. v. pp. 258–264. In August 1866 the author found a male and female of *Liparis dispar* in the act of fecundation, and obtained some 500 eggs, from which, in the year following, the caterpillars were reared. The perfect insects appeared in July. Every precaution was taken to keep the two sexes separate: this was easily effected, as they could be distinguished in the larval state. Of about sixty females two-thirds laid eggs without fecundation; but the number of eggs was much smaller than under normal conditions, none of the females depositing more than twenty. The author obtained altogether about 400 unimpregnated eggs, but only some fifty caterpillars were reared from them. In due time they passed through the metamorphosis, the number of females being fourteen. Strange to say, these virgin insects, born of virgin mothers, deposited again a number of eggs, from which again caterpillars were reared in April 1869, and perfect butterflies in July. Their eggs, however, appear not to have preserved vitality, having been found dried up in the spring of 1870. Thus, after the normal impregnation of a female, eggs were laid by three successive generations without fecundation. As far as is known at present, this extraordinary power of reproduction is possessed by a comparatively small number of Insects, the subject having been best studied in the common bee and in Aphides.

On the Period of Sexual Differentiation in the Ova of Insects.—Siebold and Bessel had proved that in Insects the differentiation of the sex takes place in impregnated eggs before the larvæ are hatched. In a highly interesting paper published in the 48. *Jahresbericht der Schlesischen Gesellschaft f. vaterländ. Cultur* (Breslau, 1871), p. 143, Dr. Gustav Joseph shows that the sexes are differentiated before the ova have come in contact with the *sperma virile.* He observed that with a little practice two different forms of ova can be distinguished in *Liparis dispar*, *Orgyia gonostigma* and *antiqua.* The ova of the one form are comparatively thicker, with the greatest transverse diameter nearly in the middle of the egg, and with the opposite poles scarcely differing in shape; these ova of this kind are less numerous than the other, and invariably contain females. Those of the latter form are comparatively slender, with the greatest diameter nearer to the upper pole, which is more obtuse than the lower; as has been stated, they constitute the majority, and male insects are hatched from them. Now, as these two kinds of ova are found in the oviducts of females reared from

caterpillars and kept apart from males, it is evident that the differentiation of the sexes is independent of the *sperma virile*, which has simply a vivifying function, and is even not absolutely necessary for the reproduction of life in insects endowed with the power of parthenogenesis.

Ceratodus.—Dr. Günther's *Description of Ceratodus, a Genus of Ganoid Fishes recently discovered in Rivers of Queensland, Australia*, has been issued. This paper contains a description of the whole anatomy with the exception of the nervous and circulatory systems, which will form the subject of a separate memoir. The author proves the close affinity of this fish to Lepidosiren and Dipterus (and, consequently, also to Ctenodus), and arrives at the conclusion that the ganoid and cartilaginous fishes should be united into a separate subclass, Palæichthyes, which approaches the batrachian type in many important parts of its organization. Thanks to the liberality of the Royal Society, the paper is illustrated by thirteen plates executed by Mr. G. H. Ford.

Passat-dust and Blood-showers.—Professor Ehrenberg, who has published from time to time the results of his examination of those microscopic bodies that are carried by the atmosphere and deposited either as passat-dust or as substances of a red colour, has collected all the observations on this subject made by him between the years 1847 and 1870. This important memoir, consisting of 150 pages, two tables, and two plates, will appear in the forthcoming volume of the *Transactions of the Berlin Academy* for 1871. He enumerates all the instances of these phenomena which have been placed on record; the earliest being a case of a dust-shower which fell for ten days in the Chinese province Honan, in the year 1154 B.C. As his examination was directed chiefly to organisms contained in the dust, the analysis was entirely microscopical, not chemical. The number of analyses made by himself is altogether seventy, and he was able to distinguish not less than 460 distinct forms of organic life, among which were 194 Polygastra, 145 Phytolitharia, and 25 Polythalamia.

King-Crabs and Trilobites.—Professor E. van Beneden (*Compt. rend. Soc. Entomol. Belg.* October 14, 1871) has studied the embryonic development of *Limulus polyphemus*, and has come to the conclusion—1. That the Limuli are not Crustaceans, as none of the characteristic phases of the development of Crustacea can be distinguished; and that, on the other hand, their development shows the closest resemblance to that of the Scorpions and other Arachnids. 2. That the affinity between the Limuli and Trilobites cannot be doubted, and that the analogy between them is the greater in proportion as we examine them at a less advanced period of their development. 3. That the Trilobites as well as the Eurypterida and Pœcilopoda must be separated from the class Crustacea, and form, with the Arachnids, a distinct division.

The Collection of Snakes in the British Museum.—From a statement made by Dr. Günther, in the January number of the *Annals and Magazine of Natural History*, it would appear that the national collection, which in the year 1858 contained 480 species of Snakes represented by 3990 examples, possesses now 920 species represented by 5500 examples. The number of typical specimens is 366, the total number of species of Snakes known at present being calculated at about 1100.

The *Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjöbenhavn* for 1871 (Nos. 1–10) contain only two zoological papers:—1. A contribution to the life-history of the Frogs and Toads of Denmark, by J. Sahlertz; and 2. Revised list of the Echinoderms inhabiting the coasts of Denmark, with information regarding their distribution on the Danish coasts, by Chr. Lütken.

The forty-eighth annual report of the *Schlesischen Gesellschaft für vaterländische Cultur* (Breslau, 1871) contains, beside notes on the skull of *Galeopithecus volans* by Prof. Grube, the following zoological papers:—On new species of the genus Sabella, by Prof. Grube; on the Amphicteneæ and Ampharetæ, by the same; on two new forms of Heteronereis and Pycnogonidæ, by the same. The report of the entomological section of the society contains some important papers, viz. by Dr. Gustav Joseph: on the time of sexual differentiation in the ova of certain species of Liparis; on dimorphism of the female of *Dytiscus dimidiatus* (Bergstr.), and on the group of species allied to *Dytiscus marginalis*; on the morphology and biology of *Glyptomerus cavicola*, a blind beetle inhabiting caves; on eyeless Arthropods in Silesia. By Hr. Letzner: Contribution to the knowledge of *Trogosita mauritanica* (L.). By Eug. Schwartz: Diagnoses of certain species of Cryptocephalus.

We hear that Mr. E. L. Layard, the well-known zoologist and author of *The Birds of the Cape Colony*, has been appointed H. B. M. Consul at Para. However satisfactory this appointment may be to Mr. Layard, it would have given us greater pleasure if a man of such scientific attainments had been located in a district whose fauna is less perfectly known than that of Para.

Botany.

Dispersion of Seeds by the Wind.—A Kerner, of Innsbruck, reprints a very interesting paper on this subject, from the *Zeitschrift des Deutschen Alpenvereins*. In order to ascertain the extent to which seeds are carried by currents of air, the author made a careful investigation of the flora of the glacier-moraines, and of the seeds found on the surface of the glaciers themselves, believing that these must indicate accurately the species whose seeds are dispersed by the agency of the wind. Of the former description he was able to identify, on five different moraines, 124 species of plants; and a careful examination of the substances gathered from the surface of the glacier showed seeds belonging to thirty-six species which could be recognised with certainty. The two lists agreed entirely in general character, and to a considerable extent also specifically, belonging, with scarcely an exception, to plants found on the declivities and mountain valleys in the immediate vicinity of the glacier—scarcely in a single instance even to inhabitants of the more southern Alps. M. Kerner's conclusion is that the distance to which seeds can be carried by the wind, even when provided with special apparatus for floating in the air, has generally been greatly overestimated; and this is very much in accordance with the view advanced by Mr. Bentham, in his anniversary address to the Linnean Society in 1869. Along with the seeds M. Kerner found, on the surface of the glacier, more or less perfect remains of a number of insects belonging to the orders Lepidoptera, Diptera, Hymenoptera, and Coleoptera, which, like the seeds, belonged almost exclusively to species which abound in the immediate neighbourhood of the glaciers. The species of plants which are especially inhabitants of the higher mountain regions may be divided into two classes. In the first the seed or fruit is provided with an appendage of various kinds, to enable it to be carried easily by the wind; the species possess generally a short space of life, are continually shifting their habitat, will grow where there is scarcely any soil, and especially love to establish themselves in the clefts or on the inaccessible sides of rocks; their floating apparatus appears designed rather to enable them to reach these habitats, where no other plants could establish themselves, than to be carried any great distance by the wind. The second kind are much more stationary, have a greater length of life, require a richer soil, are unprovided with any apparatus for flight, and can advance only very gradually; they are consequently much less abundant than the first kind. From the above observations, and the fact of the existence of detached localities for some of the mountain species in the Tyrolese Alps, very remote from their more abundant habitats farther south, M. Kerner draws the conclusion that at a period subsequent to the glacial epoch a warmer climate than the present overspread that part of Europe, when the species referred to extended over a wide area, of which the present isolated localities are the remains.

Mimicry in Plants.—In the January number of the *Popular Science Review*, Mr. A. W. Bennett brings forward some remarkable illustrations of this singular class of phenomena, which he divides under two heads—those which relate to the whole habit and mode of growth, and those which refer to the development of some particular organ or part. Of the former kind a very familiar instance occurs in the extraordinary resemblance between the succulent plants which form so prominent a feature of the flora of the sandy deserts of America and Africa, belonging to the widely dissociated genera *Cactus*, *Euphorbia*, and *Stapelia*; and instances of this kind the writer thinks may generally be accounted for by similarity of external conditions. Far more difficult is it to explain the cases of "mimicry" which come under the second head, in which species growing either in the same or in different localities imitate one another to a marvellous degree of closeness in the form and venation of the leaf, the external appearance of the seed-vessel, or in some other particular organ. It appears impossible to suggest any explanation of this phenomenon like that which has been brought forward in the case of similar close resemblances in the animal kingdom, viz. "protective resemblance," springing up by the operation of natural selection; and these singular facts seem to deserve closer attention than they have yet received.

New Fossil Conifers.—Mr. W. Carruthers has figured and described in the number of the *Geological Magazine* for December 1871 two new species of fossil coniferous fruits from the Gault beds of Folkestone. He states one species to be allied to the existing *Wellingtonia*, and shows that they point to the existence of a coniferous vegetation on the high lands of the Upper Cretaceous period, which had a *facies* similar to that now existing on the mountains in the west of North America between the thirtieth and fortieth parallel of latitude. No fossil referable to *Sequoia* (or *Wellingtonia*) has hitherto been found in strata older than the Gault, and here, on the first appearance of the genus, we find it associated with pines of the same group that now flourish by its side in the New World.

New Publications.

Büchner, P. T. Lehrbuch der anorganischen Chemie. 2. Abtheilung. Brunswick: Vieweg and Son.

Goebel, K. Ueber Kepler's astronomische Anschauungen. Halle: Buchhandlung des Waisenhauses.

Kolbe, H. Moden der modernen Chemie. Leipzig: Barth.
Ley, W. C. Laws of the Winds prevailing in Western Europe. Stamford.
Maxwell, J. C. Theory of Heat. Longmans.
Moleschott, J. Untersuchungen zur Naturlehre d. Menschen u. der Thiere. II. Bd. 1. Hft. Giessen: Roth.
Otto, R. Graham-Otto's Lehrbuch der Chemie. 4. Auflage. II. Band, 2. Abtheilung, 11. Lieferung. Brunswick: Vieweg.
Pfleiffer, L. Nomenclator Botanicus, ad finem 1858. Vol. I. Fasc. 1. Cassellis: Sumpt. Fischer.
Schaufuss, L. Nunquam Otiosus: Zoologische Mittheilungen. Zugl. Organ der Gesellsch. für Botanik und Zoologie zu Dresden. 1. Band. Dresden: Adler.
Schellen's Spectrum Analysis. Translated from the second German edition by J. and C. Lassell. Edited by W. Huggins. Longmans.
Todhunter, J. Researches in the Calculus of Variations. [The Adams Prize Essay, 1871.] Macmillan.
Zoological Record for 1870. Edited by A. Newton. Van Voorst.

History.

Correspondances intimes de l'Empereur Joseph II avec son Ami, le Comte de Cobenzl, et son premier Ministre, le Prince de Kaunitz. Par Sébastien Brunner. Mayence: Kirchheim.

M. Brunner, the previous editor of two volumes of documents illustrating the reign of Joseph II., has now drawn from the imperial archives of Vienna a selected portion of the emperor's correspondence, the main body of which dates from 1782 up to February 1790, a few days before Joseph's death, and consequently covers the period of the residence of Pius VI. in Vienna, the emperor's visits both to Rome and to the Crimea, the Hungarian tumults, the Turkish war, and the revolt of the Netherlands. The predominant spirit of the volume—so predominant indeed that it comes out in every page, and may be said to give some effect of unity and sequence to an incomplete set of letters—presents itself to the reader at first sight. And this may be defined as an intense and narrow absolutism which led Joseph to make two factors only—his own will and the material at hand for executing it—the basis of political calculation, and at the same time to consider both nations and individuals in relation to himself to be nothing more than the pieces on a chess-board. This sentiment inspires one of the earliest despatches—that to Cobenzl, then acting as his master's plenipotentiary at the congress of Teschen—in which Joseph, describing himself as "emperor and commander-in-chief of 300,000 men," frankly designates the whole staff of the imperial government as "my tools." And, turning to a letter written at the close of his reign, eleven years afterwards, we find a passage which strikingly presents the results of this thorough-going exercise of personal rule; speaking of his illness, he says that the firmest health must have given way under the burden of such troubles as his. "My whole situation," he adds, "the retrospect of the past, the sense of the present, the foresight of the future—all this is as bitter as possible." * More than once during the intervening correspondence the self-same spirit shows itself fatal to the true statesman's keen and instinctive perception of adverse influences, as, for instance, in a letter dated at a time when the party of reaction against the Josephine reforms was gaining strong support and fresh impetus from the visit of Pius VI. to Vienna in 1782. Joseph complacently sets forth how he contrives at once to show contempt for the pontiff's presence and to frustrate its object by forcing indifferent topics upon him during their interviews, to the exclusion of the serious matters at issue between them, and confidently prophesies that "in consequence" of this personal disrespect "the fable of the mountain and mouse will be exactly illustrated by the Holy Father's singular and pompous progress." Yet events refused to justify a prediction which, even at its utterance, was falsified through one broad fact, unnoted by imperial egotism—the presence of Pius had stirred the heart of the people. The universal enthusiasm, the kneeling crowds, the distant populations which thronged the capital to see the face and take the blessing of their supreme spiritual ruler; all such plain tokens of that most vital danger to nascent reform—the evocation of a deep-seated and wide-spread popular reaction—were thrown away upon the revolutionary despot. Equal inability to estimate the sources and strength of a popular movement marks the correspondence throughout the earlier stages of the Belgian revolution. The patriots are judged as wild schemers whose plans, if not carried out on the instant, will certainly be abandoned by men shrinking at the after-thought of personal consequences; the memorial of the States of Brabant (June 30, 1787) is contemptuously mentioned; "les impertinences et la mutinerie" are the terms used for an organised national resistance, and farther on its obstinate vitality is characteristically set down to the break made in Joseph's personal government during his visit to Cherson. His letter to Kaunitz (October 4, 1787), though it takes note of one ominous sign, conveys the impression that he believed the movement dying out. A few days afterwards he wrote word to Catharine that the Belgian troubles were "coming to an end as ridiculous as their beginning." In her reply the sharp-sighted czarina hinted pretty plainly her prevision that the end was by no means so near at hand. It was to come in reality, fraught with issues at that time unlooked for by Joseph, at the close of 1789. Tidings of the first congress of the new republic, and of its negotiations with foreign powers, reached him upon his death-bed. Writing from thence to Cobenzl (January 17, 1790), he declares that all along he has had no illusions, and that the event is just what he had foreseen; "that is to say, that there is not the least hope of dealing with these people except at the head of 80,000 men."

Apart from the discussion of the Netherland affairs, the letters included in this volume, unlike those between Joseph and Kaunitz, from which M. d'Arneth has largely quoted, are provokingly brief and sterile in notices of public events. On the other hand, they fully illustrate the emperor's mode of government, especially his vehement and laborious activity in all matters, whether small or great, and throw useful light on his personal relations with his ministers. Details of espionage, a system of postal tampering, secret agency, hints suggesting petty jealousies and backstairs intrigue—these and such-like matters bring out strongly the meannesses of enlightened despotism. For Joseph himself the worst result of his personal government must have been this—that it was actually fatal to the development of bold and capable statesmen; for, as the correspondence advances, it clearly shows how the ministers whose office he had degraded to that of mere clerks of the closet—the men who were, as he says, mere "tools" and "instruments"—had in truth become such things as he accounted them, and, being such, were powerless for independent action in a state emergency. When this comes in the shape of the Belgian revolt, we see him unable to trust his advisers at home; his military and civil chief commissioners in the disturbed provinces, d'Alton and Trautmannsdorf, are

* Dated December 5, 1789. Writing on the day following to Catharine of Russia, Joseph says:—"Ma situation, l'événement malheureux qui d'une façon aussi inconcevable m'a causé la perte des Pays-Bas, l'agression qui nous attend pour le printemps de la part du Roi de Prusse, tout cela est connu à votre Majesté impériale, et elle seule, qui connaît si bien l'amour pour l'État qui nous est confié, et les sentiments de l'honneur, pourra apprécier l'amertume mortelle de ma peine." —*Joseph II. und Katherina II., ihr Briefwechsel*, d'Arneth, p. 346.

divided in action, and waste irreparable time in personal jealousies, while Count Belgiojoso's helpless incapacity in the crisis is sufficiently marked by Kaunitz (p. 135).

Records which bring out the bad points of an absolute monarchy rarely set the sovereign himself in a flattering light; and accordingly M. Brunner's fresh evidence is by no means in keeping with Gross-Hoffinger's well-known panegyrical monograph of Joseph II. Indeed, it seems to reverse the picture, and we lose sight of his really noble qualities in view of the unpleasing traits presented of cynicism, arbitrary self-will, disregard for other men's feelings, tasteless parade of contempt for individuals—in one word, of habitual and manifold neglect of Montesquieu's maxim, that no prince should permit himself to put an affront on a subject. To his veteran chancellor he writes with some show of consideration; but the letters to his friend Cobenzl make a thoroughly disagreeable impression. Not only is their general tone harsh, rude, and imperious, but their style, slovenly to the last degree, gives the finishing stroke of disrespect for the person addressed. It may fairly be said that they stand in complete and grotesque contrast to the correspondence with Catharine, remarkable for its elaborate French, and still more elaborate flatteries. The closing letters, however, bear the impress of Joseph's truer and better nature, brought out by the touchstone of suffering and adversity. And his pathetic last farewell to Kaunitz reveals the royal patriot, of whom, notwithstanding all mistakes and shortcomings, it is justly written upon his grave that "Saluti publicae vixit non diu sed totus."

George Waring.

Romanian Studies. [*Romänische Studien:* Untersuchungen zur älteren Geschichte Romäniens. Von R. Roesler.] Leipzig: Duncker u. Humblot, 1871.

The volume before us contains a series of researches tending to throw light on one of the obscurest points in European ethnology, the origin and early history of the Wallachian or Romanian nation—at present increasing in numbers and influence, and of no small interest owing to its close connection with the Eastern question. Not only Wallachia and Moldavia, but parts of Transylvania, Eastern Hungary, Bessarabia, and Bukovina are inhabited by a population which, although separated from all other neo-Latin nations, speaks a language which is clearly of Roman origin. This fact, in itself interesting, leads us to look for the connections which must have subsisted between the Romanians of to-day and the ancient people from whom they derive their language. From 106 to 272 A.D. Dacia, the territory now in possession of the Wallachian population, was a province of the Roman empire, and at least partly cultivated by Roman colonists. The Romanians themselves think it a point of patriotism to maintain their descent in a direct line from these colonists, whom they believe never to have quitted the soil of Dacia. This opinion has been generally adopted in Hungary and Germany. Mr. Roesler's researches have led him to a contrary conclusion: the book before us goes to prove that the forefathers of the present Romanians did not live in Dacia, but in ancient Moesia and other parts of the Hæmus peninsula, whence they migrated across the Danube to their present seats not much earlier than the thirteenth century.

The two first chapters of Mr. Roesler's book (I. The Getae; II. The Dacii) may be called introductory, and give a survey of the ante-Roman state of things in Dacia, Thracia, and the adjacent regions. The way in which Mr. Roesler tries to solve the difficult problems connected with this part of ancient ethnology will greatly interest historians. The main interest of the book, however, lies in the third chapter, which treats of the habitation of the Romanians in the middle ages. It is certain that Dacia contained a Latin or Roman population from 106, the date of occupation, till 272, when Aurelian relinquished the province and ceded it to the then wandering Teutonic nations, Goths and others. But it is no less certain that the Roman colonists of Dacia who would otherwise have been exposed to constant attacks from the barbarians, were conducted to the southern banks of the Danube and settled in the eastern part of Moesia and the so-called Dardania, which consequently received the names of Dacia Nova, Dacia Ripensis, or simply Dacia, and, as might be expected, was not rarely mistaken for the former Dacia. Mr. Roesler thinks that the evacuation of Dacia was a complete one, as far as such a migration can be complete. Some few of the Roman colonists may have remained, but not in such numbers as to give a right to speak of a Roman population resident in Dacia after the province had been abandoned. His principal authority is Flav. Vopiscus, *v. Aurel.* 39: "cum vastatum Illyricum ac Moesiam deperditam videret, provinciam Transdanuvinam Daciam a Trajano constitutam *sublato exercitu et provincialibus* reliquit, desperans, eam posse retineri abductosque ex ea populos in Moesia collocavit appellavitque suam Daciam quae nunc duas Moesias dividit." In opposition to this statement Wallachian historians firmly assert that the major part, or at least a considerable portion, of the colonists remained in Dacia, either taking refuge in the mountainous parts of modern Transylvania, or living in some degree undisturbed among the barbarians. This assumption, though not backed by any authorities, is in itself consistent, but—and this is the strongest point of Mr. Roesler's argument—there is not a single fragment of historical evidence proving the existence of a Romanian people from the third to the thirteenth century. We look for a Romanian nation and find none, at least not there where it is supposed to have lived during that period. Yet the history of those countries, although far from being accurately known, is by no means so obliterated as to explain this marvellous fact. We know the different nations that occupied and for a time inhabited the soil of Dacia, one after the other—Vandals, Goths, Huns, &c., lastly Slavonian tribes and the Hungarians, but no mention is ever made of a Wallachian or Romanian population. Neither Constantine Porphyrogennetos, the best authority for the ethnology of the trans-Danubian countries, knows anything of them, nor are the "Vlachove" of Nestor, the Russian chronicler, the modern Wallachians, but the Franks of the Carlovingian empire. Nor when near the end of the eleventh century Transylvania became a Hungarian province are any traces to be found of the former Roman colonists supposed to have taken refuge in that country. On the contrary, the Hungarian kings thought it necessary to invite a large number of German colonists into their new province, a measure quite incomprehensible if there existed a population of Latin tongue in possession of the soil, and moreover, as Wallachian historians assert, far more advanced in civilisation than their neighbours. Further, when Bruno (about 1007) preached the Gospel in the then Petchenegian districts of modern Moldavia, he complains of the people as of the worst of heathens. "How would his heart have been gladdened if he had detected in the midst of the hostile Petchenegs a numerous Romanian population, entirely unknown to the west of Europe, a people who had shown courage enough to defend their Christianity against the heathens through many centuries." But Bruno knows of no such people, much less of an organized Christian church with priests and bishops, supposed by Wallachian authors to have been then in existence. No mention of a Romanian church is found

earlier than the fourteenth century. These arguments *ex silentio* could be considerably increased, and we think them sufficient to give Mr. Roesler a right to dispute the opinion hitherto prevalent about the origin of the modern Wallachians, and to conclude that their original seats are to be looked for elsewhere.

Besides, the positive side of the question can be as satisfactorily answered. At the present day we find a numerous Wallachian population (the so-called Zinzars, Kutzo-Wallachians or Macedo-Wallachians) south of the Danube; spread over Greece, Albania, Thessaly, Western Macedonia, and Thrace, speaking a language differing only dialectically from the Wallachian tongue of Wallachia properly so called. The population can be traced back as far as the sixth century. The name of Βλάχοι is for the first time found in Georg. Cedrenus (976) to denote the modern Macedo-Wallachians. Benjamin of Tudela found a Wallachian population in Thessaly. The second Bulgarian empire (1186) was founded by Wallachians and Bulgarians in common. "These Wallachians were the remnants of the former Roman population in Moesia, combined with those Roman colonists who, emigrating from Dacia, had inhabited the cis-Danubian territories before mentioned since the third century."

The result of these researches is: that from the sixth century up to the present day there is no lack of evidence to prove the existence of a people speaking a Latin tongue south of the Danube, while no authority can be cited to prove the existence of the same people north of this river. Everybody would be inclined to draw the conclusion that the Romanian population now resident in Wallachia, Transylvania, &c. came from the other side of the Danube. To make this conclusion a certainty, the strongest factor remains to be mentioned—the Romanian language. If the ancient colonists of Dacia had remained in uninterrupted possession of the soil, their language must necessarily show some traces of the many idioms that have passed over the same soil. But the modern Wallachian tongue of the Danubian Principalities contains no German (Gothic) words, while expressions borrowed from the Hungarian are comparatively few and modern. On the other hand, the language is full of Greek and Slavonic elements. How could a considerable number of Greek words invade a language spoken in Dacia? —a fact easily to be explained if the people formerly inhabited the Hæmus peninsula. Of still greater importance is the Slavonic part of the Wallachian vocabulary. The Wallachians are now in contact only with the Russian (Ruthenian) population of Hungary, Bukovina, and south-western Russia, and are separated from the Bulgarians by the Danube. But the above-mentioned Slavonic elements bear marks of a Bulgarian, not of a Russian origin. Until the seventeenth century, the Bulgarian language was the only one used by government and the church. We think it evident that all this can only be explained by adopting Mr. Roesler's theory.

We have dwelt somewhat at length on this third chapter, believing it to be the most interesting, and to contain the most striking evidence, and must treat the remaining chapters in a cursory way. The fourth chapter is intended to destroy the authority of the so-called Anonymous Notary of King Bela, constantly cited by Wallachian and Hungarian authors as a trustworthy witness to their earlier history. Mr. Roesler has added to the doubts which have often been urged against the veracity and trustworthiness of this chronicler; and we think it very improbable that any serious historian, not blinded by exaggerated patriotism, will accept the accounts of the Anonymous Notary when unsupported by other authorities. The fifth chapter treats of the ethnological position of the Bulgarians, which we pass over as not closely connected with the main question. Chapter vi. (The Earlier History of the Wallachian Voyvodship) and vii. (The Commencement of Moldavian History) may be called a continuation of the third chapter. The author tries to disentangle the history of the two countries from the fictions of old and recent Romanian historians, who have endeavoured to fill up the void between the third and thirteenth centuries with inventions of their own. A longer article would be necessary to give the reader an idea of the minute detail connected with these researches, and we must be content to remark that the same considerateness of judgment and a strictly historical method which pervades the whole volume make the views of Mr. Roesler in the highest degree acceptable, even to those who cannot follow him in comparing the original documents, if they deserve that name, of Wallachian history. Undoubtedly, Mr. Roesler's book will contribute not a little to clear and rectify the views both of historians and of the public at large concerning the Wallachian people.

One thing we may be allowed to add. It is to be expected that Romanian writers will be very indignant at the results of Mr. Roesler's researches. But they may be consoled. If it must be denied that the modern Wallachians are the direct descendants of the ancient Roman colonists of Dacia, still another fact is undeniable: they are a people surpassing their neighbours in fecundity and power of assimilation, who have attained their present number of seven or eight millions in a comparatively short period, and spread its population by colonising and Romanising to a marvellous extent. In such circumstances exalted patriotism may wish for a noble descent and a glorious history, but such are certainly of little value in the present and future development of the nation.

A. Leskien.

ÉCOLE LIBRE DES SCIENCES POLITIQUES.

The want of systematic instruction in the various branches of political science is one of the most serious defects in the higher education of France as it is in that of our own country. The existing courses on political economy and law lose much of their value by being dispersed over a number of centres, such as the École de Droit, the Collège de France, the Conservatoire des Arts et Métiers, the École des Chartes, &c., besides being deficient in many important subjects, and treating the rest in a piecemeal and arbitrary manner. To supply a new want which seems to have sprung up since the war, a number of publicists and others have combined to deliver in Paris, under the auspices of MM. Boutmy and Vinet, a systematic two-year course, beginning in the present month. The complete programme embraces ten subjects:—1. Geography and Ethnography. 2. Diplomatic History of Europe since the Peace of Westphalia. 3. Military History of Europe since Frederick the Great. 4. History of Political Economy since Adam Smith. 5. History of the Progress of Agriculture, Industry, and Commerce in Europe and America during the present century. 6. Financial History of Europe since the French Revolution. 7. Constitutional History of Europe and America since 1776. 8. History of European and American Legislation since the Civil Code. 9. History of Administration in Europe since the seventeenth century. 10. Moral and Social History since 1789.

Under the last head it is proposed to give something like an account of political theory, without which—and we may add a systematic examination of the structure and functions of the social organism, in the light of biological and psychological science—no course can be complete.

Among the professors who will commence at once are—MM. Gaidoz, Sorel, Dunoyer, Levasseur, Janet, and Leroy-Beaulieu. The students who desire a diploma at the end of their two-year course may present *theses* to be examined by MM. Passy, Franck, and Laboulaye.

Nothing can be more important than such an enterprise as this if efficiently and *strictly* carried out in a scientific spirit.

Editor.

Intelligence.

Prof. Wilkins, of Owens College, has published a Cambridge prize-essay on *Phœnicia and Israel* (Hodder and Stoughton), "which aims at gathering into a focus the scattered rays of light that we have from many quarters upon one of the most powerful influences that tended to mould the character of the Chosen People" (p. x.). The book is written in a clear and flowing style, and usefully supplies a gap in our historical literature. Its grand defect is that it is based on authorities which, however eminent, are now in many respects antiquated, or at any rate stand in need of a searching sceptical criticism. Something better was needed for a worthy treatment of the subject than a superficial *résumé*, acceptable as even this will be to many readers, of Movers, Ewald, Renan (not Rénan), and Lenormant; and it shows a surprising ignorance of the difference between the prophetic and the historic Scriptures to describe every attempt to restore the order of the former as "confident dogmatism" (p. 165).

Dr. Kiepert's new map of Epirus and Thessaly (price five shillings) has received well-deserved praise for its severely critical treatment of heterogeneous materials, ranging from the surveys of French engineers to sketches illustrative of the routes of travellers. The same able chartographer has brought out a new map of European Turkey (price nine shillings).

Contents of the Journals.

Bullettino dell' Instituto (Nov.) continues the account of the excavations in and about the Basilica Julia, and of those at Pompeii. One of the frescoes at Pompeii depicts the mission of Niptolemus, and the first sowing of corn.

Revue Archéologique (Nov.) gives "Amphiaraus" as a specimen article of the new Dictionnaire archéologique in preparation by Hachette and Co., the special characteristic of which is the very full employment of monuments, vases, &c., in illustration of the statements made by ancient authors.—An article on Philo's Contemplative Life goes over much the same ground as De Quincey's article on the Essenes, but comes to an opposite conclusion.—Three new inscriptions from Thera afford instances of the *heroa* so commonly dedicated by the leading families. The tombs in the necropolis of Marzabotto, in the Apennines, on the road from Bologna to Pistoia, are shown to contain some Gaulish relics mixed up with the Etruscan, the type being that of North Gaul. Did they belong to the Serones who immigrated into this district?—De Saulcy comments on some Palmyrene coins lately found. The Turkish government has garrisoned the place, and checked back the Bedouins, so that it is now possible to explore the country.—The year's work in the department of the Seine is described: of the Roman age, a theatre has been found at St.-André-sur-Cailly, and a grand mosaic at Lillebonne; of the Frank, some jewels of gold, and a coin of Theodebert I.; of later times, the statues of the Plantagenets in the cathedral of Rouen, and the tombs of the Bishop of Orkney and the Scotch nobles who were sent to negotiate Mary Stuart's marriage with the Dauphin, and died at Dieppe.

Gött. gel. Anzeigen, Dec. 6.—Earle's Philology of the English Tongue is reviewed by Pauli more favourably than has been the case in England. Dec. 13.—Scheurl's Letters are noticed by Geiger as illustrating the career of those Humanists who went with Luther a little way, and then recoiled. They also illustrate the state of things at Nuremberg.—Liebrecht analyses the second part of the Filologia e Letteratura Siciliana, which gives an account of many mystery plays, and of some of the chronicles about John of Procida and the Sicilian Vespers.——Dec. 27.—Contains one of Geiger's series of articles on the Humanists—in this case John Butzbach, a monk of Laach, and his History of a Scholar's Wanderings, which gives a curious picture of the poor scholars of the time. Mahaffy's Prolegomena to Ancient History are praised and the contents analysed, attention being drawn to the criticism on Thucydides' method of accounting for all historical facts on mere political grounds, passion and chance being almost excluded. Benfey's review of Bleek's Reineke Fuchs in Afrika, and Köhler's review of Zingerle's Tyrolese Children's Stories, add something to our materials for this new branch of comparative science.

Literarisches Centralblatt (Dec. 9) notices several books on the late war, and especially praises Forbes' book.—An account of some critical editions of Schiller's works follows. Dec. 16.—Scheffer-Boichorst's reconstruction of the Annals of Paderborn is praised and upheld against Waitz' objection of "being overbold."—A notice is given of Kiepert's new maps of Greece, and of the authorities on which they are based.—Ahlwardt's account of the Arabic MSS. at Berlin is praised, especially for the notices of the poets.—Some corrections are supplied for Keil's edition of Dosithei Ars Grammatica; and Kühnast's excellent book on the Syntax of Livy is well characterized.——Dec. 30.—Contains a notice of the thirtieth volume of the Fontes Rerum Austriacarum, which collects the Venetian ambassadors' despatches from Germany, of which Ranke has made so much use. The volume unfortunately only gives those which now exist at Vienna, thus excluding some of Ranke's chief authorities. Trieber's Enquiries into the History of the Spartan Constitution, which is really an enquiry into the sources of our knowledge about Sparta, is reviewed unfavourably in some detail by Bucheler.

Theologisches Literaturblatt (moderate Roman Catholic), Dec. 4, gives a summary of the "Old Testament literature" of the year, by Reusch.—Knittel reviews Maywald's book on the "Twofold Truth" (*i. e.* a regulative religion for the people, an inner philosophical meaning for the educated) as a theory of the middle ages.—A notice follows of Joel's book on the connection of Spinoza's ideas with those of previous Jewish teachers.—Loersch's Aachener Rechtsdenkmäler aus dem 13., 14. und 15. Jahrhundert is praised as illustrating the manifold development of the town constitutions of Germany in the middle ages, which must be investigated separately, general propositions about them being very fallacious. Dec. 18.—Reviews the last part of Winter's book on the Cistercians in North Germany, which shows the inevitable decline of the order. The reviewer naturally thinks the case against them somewhat overstated.

New Publications.

Arneth, Alfred Ritter von. Joseph II. u. Leopold von Toscana. Ihr Briefwechsel von 1781 bis 1790. 2 Bde. Wien: Braumüller.

Bedell, Life of Bishop, by his Son. Now first edited by J. E. B. Mayor. (Cambridge in the Seventeenth Century, Part III.) Cambridge: Deighton, Bell, and Co.

Beiträge zur Beantwortung der Frage nach der Nationalität des V. Copernicus. Breslau: Priebatsch.

Brunner, Sebast. Correspondances de Joseph II avec Cobenzl et Kaunitz. Mainz: Kirchheim.

Ebeling, F. W. Archivalische Beiträge zur Geschichte Frankreichs unter Carl IX. Leipzig: Wöller.

Foucart, P. Mémoire sur un décret inédit de la ligue arcadienne. Paris: Lib. Franck.

Freeman, E. The Norman Conquest. Vol. IV. The Reign of William the Conqueror. Clarendon Press.

Friedländer, L. Darstellungen aus der Sittengeschichte Roms in der Zeit von August bis zum Ausgang der Antonine. 3. Theil. Leipzig: Hirzel.

Hansetage, Die Recesse u. andere Akten der, von 1256 bis 1430. Bd. II. (Published by the Historical Comm.) Leipzig: Duncker u. Humblot.

Kossuth's, L., Briefe an F. M. L. Bein. 1849, März-Juni. Herg. v. A. Makray. Pest: Heckenast.

Lugebil, K. Zur Geschichte der Staatsverfassung von Athen. Untersuchungen. (Reprint from Jahrb. für classische Philologie.) Teubner.

Scriptores Rerum Silesiacarum. 7. Bd. Historia Wratislaviensis von P. Eschenloer. Breslau: Max.

Vivenot, Alfred Ritter von. Vertrauliche Briefe des Freiherrn von Thugut. 2 Bde. Wien: Braumüller.

Philology.

THE PRONUNCIATION OF LATIN.

VIII.

The Letter V.

1. Professor Max Müller's article on the Latin letter V, in the *Academy* for December 15, vol. ii. p. 566, induces me to add a few supplementary observations to my former remarks (*Academy*, April 15, p. 231), bearing especially on the confusion of the mixed dental and labial forms *f*, *v*, as used in English, with the pure labial forms, which I shall continue to write *f'*, *v'*, and of these latter consonants with what may be termed the mixed lingual and labial English forms *wh*, *w*.

2. In my *Early English Pronunciation*, p. 518, I note that "the letters *β*, *φ*," in modern Greek, "seem to be naturally pronounced by Prof. Valetta as *v'*, *f'*, but when he became particularly emphatic, he made them *v*, *f*," that is, his lower lip involuntarily struck the upper teeth. Again (*ib.* p. 549), I note with respect to Mr. Magnússon's Ice-

landic pronunciation, "V is *v* with so slight a contact of the lower lips with the upper teeth as to vary in effect at different times as *v'*, *v;*" and Mr. H. Sweet adds, referring to Mr. Hjaltalín's pronunciation, "I thought at first that V was *v'*, and I was only induced to consider it as a *v* by the distinct statement of Mr. Hjaltalín that it was a dental sound." Previously (*ib.* p. 542), I note of Mr. Magnússon's F that it is "properly *f*, with a very mild hiss, scarcely more than a single tooth being touched by the lower lip, so that it approaches *f'*. It has this sound only at the beginning of syllables, or before S, or when doubled. At the end of a word it falls into an equally mild *v*." Again (*ib.* p. 549), I remark "that V was not originally *v*," in Icelandic, "is clear to me from the combination HV, which is called *wh* in the southern and *kw'h* in the northern districts of Iceland," of course according to Mr. Magnússon's oral information, *kw'h* representing the simultaneous and not successive pronunciation of *k* and *wh*, or rather a sound bearing to *kw'*, the labialised *k*, the same relation as *kh* does to *k*. According to Mr. Melville Bell, for whose notation of Mr. Hjaltalín's pronunciation I am indebted to Mr. Sweet, he heard V, F as *v*, *f*, and both HV and KV as *k* + *wh*, which indicates a very unusual sequence, the ordinary recognised form being *kh* + *w*, which is in Scotch and Welsh rather *kw'h*. As a correction of my statement in the *Academy*, vol. ii. p. 231, col. 2, line 3, respecting Welsh pronunciation, I have lately been informed by a South Welshman who can pronounce *wh*, but is not always clear on *w*, that the Welsh CHW is not *wh* in South Wales, but *kw'h*, or, as he conceived it, *kh* + *oo*, as in the north.

3. Lepsius (*Standard Alphabet*, 2nd edition, 1863, p. 75) says: "We ought perhaps to notice here the particular pronunciation of W in Middle Germany, where this letter is no *labio-dental*, formed between the lower lip and the upper teeth, as V in England, France, Northern Germany, India, &c., nor the *semivowel* W of the English, Arabic, and many other languages, but a pure *labial* sound, formed between the upper and lower lip without any *oo*-position" (in order to avoid theories respecting Latin sounds I use the common English representation of vowels, and hence transliterate Lepsius and other writers, where necessary) "of the lips and tongue, and without any concurrence of the teeth. This is, however, a sound which *I never heard of in any language*" (my italics), "except the provincial German dialects, and for this reason it needs hardly a peculiar designation in our alphabet, where, if wanted, it might be written," with a dash under a *w*. Lepsius accordingly gives *f*, *v* in Japanese and Magyar, of which hereafter (see Nos. 7 and 8). Dr. Brücke, himself a Lower Saxon, from the northern seaboard, writing in Vienna (where every one says *f*, *v'* and not *v*), says (in his *Grundzüge der Physiologie und Systematik der Sprachlaute*, 1856, p. 111), respecting my having called *v'* the German W in a previous work, that I hold it "erroneously" (*irrthümlicher Weise*) for the usual German W, and (*ib.* p. 34) says that *v*, "the V of the French and English," is the usual German W, but that *v'* occurs where *qu* is written, as in *Quelle*, *Quirl*, *quälen*, sounded with *kv'* for *qu*. He also says (*ib.*, here translated), "We can also produce an *f'* by making the narrow passage through which the air has to rush in order to produce the characteristic fricative noise of a consonant, without employing the teeth, but merely by approximating the lips. This *f'* is somewhat softer (*milder*) than the usual *f*, and is used by many people where we write a V in German (*wird von manchen Leuten da angewendet, wo wir im Deutschen ein V schreiben*), whereas the majority do not distinguish F and V." That is, Dr. Brücke recognises, at least dialectically in Germany, *f* for F, *f'* for V, and both *v* and *v'* for W. As regards Dutch, Dr. Gehle, minister of the Dutch Reformed Church in Austin Friars, in the City, told me that the alphabetic names of the Dutch U, V, W are *ue* (as in German), *vai*, *v'ai*. He knew the English *w* quite well, and observed that all Dutch children in saying their alphabet made this distinction. Merkel (*Physiologie der menschlichen Sprache*, Leipzig, 1866, p. 209, here translated) professes that he cannot at all understand Lepsius' assertion just cited that *v'* is "provincial." "We Middle Germans," say he, "have certainly as much right to call the abnormal (or aberrant, *abweichende*) formation of W by North Germans, English, and French, provincial or dialectic, as conversely. Persons, too, that have lost their upper teeth have also, I hope, a voice in this matter." "Persons with no teeth at all can pronounce W = *v'* as distinctly as those with a full set." Merkel distinctly recognises *f'* in German, writing it V, asserting that it is used in whispers for *v'* or W, and (p. 210) that this is the form assumed by F in the High German PF, which combination, he thinks, was the original Greek *θ*, of which opinion perhaps the Japanese treatment of the aspirate (below, No. 7) may be found to give a confirmation. But after fully recognising *f*, Merkel comes to the following very curious result respecting *v* (as distinct from *v'*), which I recommend to the serious consideration of those who find *v* the only natural sound (*ib.* p. 212). "The sound *f* cannot be vocalised, that is, united with vibrations of the vocal chords, without change of position (*als solches*) The organs could not help (*müssten*) assuming in the attempt (*dabei*) an intermediate position between that of *f'* and that of *f*, and separating so far that no sensible (*erheblich*) noise can result. In this way, on vocalised breath passing, a sound is produced which is scarcely distinguishable from the usual *v'*, and for which the two lips are not exactly opposed (*nicht genau einander gegenüber stehen*), the lower lip being slightly retracted under the upper lip. It would be superfluous to have a distinct written symbol for this *v*, which, according to Brücke, is the usual one in German, French, and English." Accordingly he uses only V, F, W, V for *f'*, F for *f*, and W for *v'*, and also for this peculiar *v*, which is certainly unknown in England, whereas he is himself unable to pronounce (and notwithstanding his laborious physiological investigations apparently to conceive) the common English buzz *v*. All who wish to see how national habits cloud phonetic apperceptivity should read Merkel's observations on these letters (*ib.* pp. 208–213). Prof. Haldeman (*Analytic Orthography*, 1860, p. 102) truly says: "There is no certainty in the accounts of English V and German W occurring in exotic languages, for when either is mentioned, we have no proof that the observer knew the difference. For example, although the modern Greeks asserted in the most unqualified manner the identity of their *β* with English V, they were in error, and it has been but a few years since this question was settled. In a similar manner, the Spanish grammarians are still mystified about their B and V." Prof. Haldeman, it should be observed, strongly advocates the *w* sound of Latin V (*Elements of Latin Pronunciation*, Philadelphia, 1851, pp. 34–36).

4. The mention of Spanish B and V by Prof. Haldeman should be taken in connection with Prof. Max Müller's remark (*Acad.* Dec. 15, p. 567, col. 1, (2)), that *v* is "uniformly adopted in . . . *Spanish* . . . ." Now, Prince Louis Lucien Bonaparte, whose accurate phonetic knowledge of living languages is rather uncommon, and who has had much opportunity of studying Spanish sounds, supplementing my observations upon them (*E. E. P.* p. 802, note 2), tells me that Spanish B and V are two signs, each of which represent the same one of two sounds under the same circumstances, so that it is a matter of perfect indifference, so far as the written form is concerned, which letter

is used. When B or V is written where BB* occurs in Italian, a clear *b* is sounded. Where B or V is written after a consonant, a clear *b* is also sounded. But where B or V is written at the beginning of a word (and not following a word ending with a consonant, on account of the preceding rule), or after a vowel in the middle of a word, the sound is always *v'*. Compare *Ortografía de la Lengua castellana compuesta por la real Academia española* (Madrid, 1792), where, after acknowledging (p. 27) that B and V are commonly pronounced alike, it says that the proper mode of pronouncing V is "by striking the lower lip, *accompanied by the tongue*, against the upper teeth, as in case of F," an entirely theoretical direction, as is apparent from the long rules given for determining when B and when V should be written, and from the needless introduction of the tongue, as in case of my Hungarian (below, No. 8).

5. Prof. Max Müller learns from Mr. Rhŷs that Welsh possesses both *v* and *w* (*ib.* p. 567, col. 2; see also *Acad.* May 1, p. 256, col. 1). Welshmen who have learned English, more or less accurately pronounce *w*. My own impression is that in unalloyed Welsh *w* is unknown, having always remained a simple *oo*.† It is a point that requires clearing up by English ears and Welsh mouths. Ask Welshmen who cannot speak English to repeat: *Would ye yield the woman Wood wooed?* Even those long used to English find a difficulty with *woman*. The vowel *oo* is lingual and labial; the back of the tongue is raised nearly into the *k* or *g* position, the lips are closed nearly into the *w* position. English people naturally assume the *w* position when a vowel follows. That other nations do not, they may hear by attentive and often repeated (not casual) listening to such words as the Italian *uomo*, *uopo*, and the French *ouais*, *ouate*, *ouest*, *oui*, as contrasted with the English *wa(r)m*, *wa(r)p*, *way*, *wattle*, *west*, *we*. (The last scene in *Le Duc Job*, as performed by the Comédie Française in London last summer, offered an excellent study of *oui*.) To say *w* the lips approach nearer, spoiling the resonance by which alone the vowel quality *oo* is possible, and the greater effort necessary to produce a buzz, in which vocalised and unvocalised breath contend, drives out the lips all round the aperture, especially the parts of the lower lip on each side of the medial line, the breath being directed downwards by the position of the tongue. But on reassuming the clearly resonant position *oo*, after pronouncing *w*, we are able to say *w-oo*, a sound which is the despair of all Europeans who are not English. There is, however, another mode of making *oo* into a consonant. The lips may remain in the *oo* position, but the tongue be brought up to the *k* position, which being vocalised gives a *g*, modified however by the rounded lips into *gw'*, that is the simultaneous utterance of *g* and *oo*.* Now, in Welsh there are a very few words written with W followed by a vowel, such as: *wab*, a slap; *wedi*, then; *weithian*, now; *weithiau*, sometimes; *wel*, well; *wela*, look; *wi*, hey! *wihi*, whinny; *winc*, chaffinch; *wo*, wo! *wy*, of him; *wybr*, sky; *wyd*, thou art; *wyf*, I am; *wyl*, a flow; *wylo*, to wail; *wyn*, lambs; *wyneb*, face; *wyr*, a grandchild; *wyrain*, spreading; *wysg*, presence; *wyt*, thou art; *wyth*, eight, and their derivatives; in all of which I think rather *oo* than *w* will be heard when actually tested. But *gwa*, *gwe*, *gwe*, *gwi*, *gwu*,† *gwi* begin hundreds of words, while *gww* and *ww* are never found. Of course, *g* falls out, and *w* resumes its vowel power in initial mutations. I believe, therefore, that I am right in saying that no extra-Anglican European lip is now familiar with *w*. The diphthongal use of *oo*, *ee*, requires careful discrimination from the consonantal use of *w*, *y*. Almost all writers confound the final elements of the diphthongs in *my cow* with *y* and *w*. Yet these final elements are, in English, neither *y*, *w*, nor *ee*, *oo*, but that peculiar modification of *ee*, *oo*, heard in b*i*t, f*oo*t. The effect of a diphthong is produced by running one vowel on to another in a *glide*, or *variable sound*, resulting from continuing to utter vocalised breath while passing from one vowel position to the other. For the true effect of the diphthong one of the terminal vowel sounds must be shorter than the glide. In *my cow*, the first element, which is the same in both words, has the stress and is remarkably brief; the second element is often very long, and has no stress; the glide is intermediate in length. The prolonged second element bears no resemblance to a prolonged *y* or *w*. But the glide from the first to the second element is identical with that leading from the first element to *y* or *w*. The syllables *ăay*, *ăaw*, can be pronounced after some practice, quite distinct from the diphthongs themselves, ending with as pure a buzz as *ăaz*, or *as*. The initial short and stressless elements *ee*, *oo*, do not occur at the commencement of diphthongs in English, as, to my ears, they do in Welsh, and as they may once have done in Latin. If you say *ĕe* + glide + *āa*, *ŏo* + glide + *āa*, the effect to one accustomed to *y*, *w*, is *yaa*, *waa*, and at most, after two or three hearings, he may say, you pronounce *y*, *w*, imperfectly and rather thickly, rather French fashion, and not quite like an Englishman. The very brief *ee*, *oo*, differ so slightly from the very brief buzzes *y*, *w*, that, since the glides in the former and latter cases are identical, it requires considerable practice for the ear to discriminate them sharply. And yet, in point of fact, those who habitually begin with *ĕe*, *ŏo*, seldom learn to begin properly with *y*, *w*, and conversely. It is only by such testing instances as *yee*, *woo*, which cannot commence with *ĕe*, *ŏo*, that the fact is brought out. This being the case, those nations who use *ĕe*, *ŏo*, habitually give them consonantal syllabic value. This is remarkable in French. There is no doubt that in *Richelieu*, the *li* is *lĕe* short and not *ly*, yet the *e* in *Riche* is always pronounced, just as if its omission would have brought the three consonants *ch* + *l* + *y* together, an almost inadmissible combination in French speech. By omitting the glide, the diphthongs are resolved into two vowels, and the shortest element then generally gains in length. An accurate knowledge of diphthongal formation is indispensable in the present enquiry.

* Double consonants are not used in Spanish, except as digraphs to represent new sounds, as *rr*, *ll*, and *nn*, the last being now usually written in the contracted form *ñ*.

† Salesbury, 1567, asserts Welsh W to be always a vowel, and considers of course English W to be so also (see *E. E. P.* p. 761—the spelling is here modernised): "In English ye call it double *uu* and in Welsh we give it the name of a single *u*, but then sounding it after the Latin pronunciation, or else as you now sound your *oo*: . . . . being always either the further or the latter part of a diphthong in English, on this wise: *with awe*, and in Welsh as thus: *vvyth avven*." The following observation of Salesbury bears on the transformation of this *oo* into a consonant: "And though I find in some ancient writers 6 for *vv*, yet in other I find *vv* in words now usually written with *v* or *f* as *cithavv*, for *cithav* or *cithaf*. In which kind of words, because they of South Wales use yet to keep the pronunciation of it" (Salesbury was from Denbigh in North Wales), "saying *tavvly* where we say *tavlu* or *taflu*, I do rather use for the more indifferency to write *v* than *f*, even that they may the more aptly resolve it into their wonted vowel *vv*, and we may sound the same after our more consonant acceptation." The received notion of the pronunciation of Welsh F is *v*. It would be worth while ascertaining after this statement whether *v'* be not the real sound used by those who have not learned English. This is the more interesting as F appears as an initial mutation of B, and M, as in *eu buwch*, *dy fuwch*, *fy muwch*, their, thy, my cow, where the teeth seem out of place. Does the mutation PH in Welsh differ in sound from the radical FF, as in *ei phen*, her head; *ffen*, the flowing principle? and if so, how? as *f'*, *f*, or as *p,h*, *f*?

* This relation of *oo* to *gw'* explains the alliteration of G and W in Anglo-Saxon, noted as frequent by Dr. March (*Anglo-Saxon Grammar*, 1871, p. 224, end of art. 504).

† In Welsh, U is not *oo*, but a peculiar modification of *ee*.

6. In Arabic, so far as I can recollect from the instruction received from three natives many years ago, *w* is used. But I have had no recent opportunity of testing the point. It is a significant fact that written *woo* becomes spoken *oo* in Arabic. Turks are said to have *v* and not *w*, and to pronounce imported Arabic words, like *vizier*, with *v*. It is worth testing for *v'*. Arabic leads naturally to Hebrew, but the pronunciation of the latter is entirely theoretic, and there may have been original differences between the two, similar to those between Welsh and Gaelic, or Low and High German. The system of pointing introduced in later times leads to the supposition that at least at that period ב, ב, ו may have been *b*, *v'*, *w*, and ב, ב, *p*, *f'*. Arabic is said to have *f*. After some recent experience, I feel doubtful of all assertions respecting *f* as well as *v*. Certainly *f* is a comparatively rare sound, and *f'* may prove more common than is generally supposed. Although, on a casual hearing, especially of foreign words, an Englishman naturally assumes *f*, *v*, in place of *f'*, *v'*, even if the latter be really pronounced, nothing is easier than to test by the *eye*, and to put the question whether the teeth are touched or not by the lower lip. A wide examination of existing languages, dialectic European, and especial extra-European, is here advisable, as the following observations will show, which I have had an opportunity of making within the last few weeks.

7. Two young Japanese, one of whom speaks English well, were recently kind enough to go through the Japanese syllabary with me. The five Japanese vowels are, as nearly as possible, those heard in the English words *baa*, *beer*, *boor*, *bear*, *bore*, the last four being slight modifications (produced by the action of the R) of those heard in *beet*, *boot*, *bate*, *boat*, and we may therefore write them for the present purpose, *aa*, *ee*, *oo*, *ai*, *oa*. To each of these the same consonant is prefixed in the syllabary, and the compound effect is represented by a single sign. One set of five syllables is supposed to begin with *h*. The sounds *haa*, *hai*, *hoa* were heard truly as in English *hart*, *hair*, *hoar*. But in place of *hee* I heard a sound which at the time I took for *ky'h* (or *ch* in the German *ich*, *Mädchen*), but which I am on reflection inclined to suppose was *yh* (the English *h* in *hue*), or, very nearly, unvocalised breath forced through the *ee* position. German writers all confuse *ky'h* and *yh*, but they are really as distinct as *kw'h* and *wh*, and bear the same relation to unvoiced *ee* as the latter do to unvoiced *oo*. We should then have expected *kw'hoo* or *whoo* in place of *hoo*, but the real Japanese sound was distinctly *f'oo*. The speaker from whom I heard the sound had very projecting upper teeth, so that Englishmen would naturally suppose his lip could scarcely avoid them. But on the contrary, he had experienced great difficulty in acquiring the English *f*, and in distinct language repudiated any contact with the teeth. Yet Lepsius gives this sound as *f* (*ib.* p. 246), although Dr. Hepburn (*Japanese Dictionary*, 1867) recognises *f'*. In Aberdeen there is a well-known peculiarity of pronouncing *f* for *wh* in *faar'*, where, *faa*, who, &c. Is this really *f* or *f'*? In England where we ought to have had *whoo*, *whoom*, &c., we have reversed the Japanese habit, and substituted the simple *h*, as *hoo*, *hoom*. These two exactly contrary tendencies should be well weighed by those who would determine a sound by "natural" in place of "national" relations. The following shows another national tendency. Dr. March (*ib.* p. 5) says that Anglo-Saxon HW is like *wh* in New England. In a private letter to me he says: "A clear and distinct *h* before the *w* hardly attracts the attention of a New Englander," and Mr. Bristed confirms the remark. As however *h* + *w* presents many difficulties, I ventured to suppose that the real sound was our *wh*, and Dr. March obligingly tells me: "In my own pronunciation of *which*, I set the lips for *w*, then untoned breath is issued, then the parting of the lips and general movements of the organs which I have taken to be the *w* is made." That is, he says *wh* + *w* + *ich*, in place of the simple English *wh* + *ich*. This is also Professor Haldeman's analysis (*Anal. Orth.* p. 127, art. 602, line 2). It is similar to the usual German *s* + *z* + *ee* for *sie*, as compared with the English *z* + *eel* for *zeal*. In ordinary English we have the reverse at the end of a clause as *hiz* + *s*, *breedh* + *th*, *haav* + *f* for *his*, *breathe*, *halve*. But the value of this example depends on Dr. March's subsequent observation: "The surd breath issued before the opening movement of *w* is what we New Englanders call *h*." That is, before *oo* the Japanese consider *f'*, and before *w* the New Englanders consider *wh* to be the simple aspirate. Both have been generated by a following letter presenting effectively the same position of the organs. It can only be national as opposed to natural tendencies which generate *f'* in one case and *wh* in the other. In England we have certainly *f* in *laugh*, *draft*, *dwarf*, where there is nearly historical evidence that the process of derivation was *g*, *gh*, *gw'h*, *wh*, *f'*, *f*; compare also the Icelandic treatment of *g* (*E. E. P.* p. 312 and p. 543). The Japanese *p* series seemed to be post-aspirated in *p̣haa*, *p̣hee*, *p̣hoo*, the two latter not becoming *pyhee*, *pf'oo*, as might have been expected, and similarly *ḳhaa*, *ḳhee*, *ḳhoo*, not *ky'hee*, *kf'oo*; but this postaspiration may have been a personal peculiarity. Such undoubtedly was the pronunciation *baa*, *v'ee*, *v'oo*, *bai*, *boa*, which was corrected by the other speaker, whereupon the first said *bee*, *boo*, but he subsequently, and clearly habitually, fell into *v'ee*, *v'oo*. The *w* occurred only in *waa*, the simple vowels *ee*, *oo*, *ai*, *oa*, were substituted for *wee*, *woo*, *wai*, *woa*, showing probably a Japanese orthoepical difficulty. There seemed even to be some peculiarity about this *w* in one of the speakers. Again *yaa*, *yoo*, *yĭoa* were said, but *yee*, *yai* sank into *ee*, *ai*, also probably from orthoepical difficulty. The *t*, *d*, *s* series were also very peculiar for the vowels *ee*, *oo*. I heard *ṭhaa*, *tsy'ee* (where *sy'* indicates simultaneous pronunciation of *s* and *y*) *ṭhai*, *toa*; *daa*, *dzy'ee*, *dai*, *doa*; *saa*, *sy'ee*, *sai*, *soa*. But in place of *oo* in *too*, *doo*, *soo*, was uttered an exceedingly puzzling sound, which Hepburn writes *z* in *tsz*, *dz*, *sz*, but which may be imitated by *tsw*, *dzw*, *sw*, using the buzz of the *w* as a vowel. The sound was very short, and a labialised buzz was quite evident. The real sound remains in doubt. Lepsius (*ib.*) simply writes *oo*.

8. A young Hungarian, to whom I was explaining some English sounds, and who speaks English with great fluency, surprised me by finding difficulties with F and V. Csink (*Hungarian Grammar*, 1853, p. 2) assumes the English and Magyar F and V to be the same. I found that my pupil had no conception that he had to touch the teeth with his lower lip. When he endeavoured to imitate the sounds I gave him, he tried to make the hiss or buzz by using *f'*, *v'*, and putting his tongue against the teeth, producing remarkable compounds of *f'*, *th* and *v'*, *dh*. The direction to leave his tongue inactive and bring his lower lip against his upper teeth came to him as a revelation. I cross-examined him on the point, and he persisted that no Hungarian ever used his teeth for F and V. I requested him to ask some Hungarian friend of his in London. He did so, and reported that his friend also knew nothing of the action of the teeth. Yet Lepsius gives *f*, *v*, as the Magyar sounds (*ib.* p. 220). When my pupil complained of the great harshness of the English sounds, I could not help recollecting Quinctilian's "dulcius spirat" said of Greek φ, and his "tristis et horrida, quassa quodammodo" applied to Latin F (lib. 12, ch. 10).

9. I have not had the advantage of examining any Englishman who habitually and unintentionally confused V and

W, but it would be very desirable for those who can catch such an individual (existing palpably enough in the mind of writers and of low comedians) to determine whether they do not say *v'*, which would probably sound as *v* when used for *w*, and as *w* when used for *v*. It is a pity old Mr. Weller, who spelled his name with a *wee* (*Pickwick Papers*, 1st ed. p. 366) cannot be put under examination. Last June, however, Mr. Bristed, of Lenox, Massachusetts, favoured me with the following information: "The inhabitants of Charleston and all the southern and south-eastern part of this state pronounce initial W, whether at the beginning of a word or a syllable, like V. Like V to me; perhaps you should call it *v'* or German W, which I own myself unable to distinguish from V. This peculiarity is common to all classes, except those of the upper class who have lived in Europe or at the north. They are not aware of it. I cannot find any European origin for it. It is supposed to come from the negroes. Teachers from the middle of the state have told me that the boys from the central and northern districts pronounce W in the usual and correct way." The French *bivouac* as compared with the German *Beiwache*, contains all the elements of this confusion, *voo* having been substituted for *v'*.* The older French form *guet* from *Wacht* takes the other direction. Mr. Nicol, whose assistance I have elsewhere had to acknowledge (*E. E. P.* p. 724) is of opinion that the use of GU for the German W is evidence of a former pronunciation of German W as *w*, since *g* could apparently only have risen from the elevation of the back of the tongue, which is (at least generally) absent in *v'*. But if so, the use of *gu* in Italian establishes at least an ignorance of the sound of *w* in Italy, at a very early period. Perhaps I was wrong (*E. E. P.* p. 514, note) in thinking that "if the tongue is raised when sounding *v'* no ear would distinguish the result from *w*." At any rate I find that I can keep the back of my tongue firmly fixed in the *oo*-position, and yet distinguish *w*, *v'*, solely by keeping the lower lip tense for *v'* and pressed in on each side the medial line, so as to direct the breath upwards. I find also that when I blow out strongly, I hollow the cheek somewhat like a clarinet player, for *f'*, and round the cheek somewhat like a trumpet player for *wh*, the effect being of course greater in these voiceless forms. Mr. H. Sweet and Mr. Nicol, however, incline to think that a hollow cheek belongs to the *oo*-position. Hence if *w* was unknown in Italy when *gw'* was invented, we should be able to have German *v'* and Italo-Latin *v*, as Prof. Max Müller prefers.

10. Mr. Roby, who in his *Latin Grammar* prefers *w* for Latin V, after reading Prof. Max Müller's article in the *Academy* of 15th December, addressed to me a number of questions, some of which have been incidentally answered in the preceding paragraphs. Perhaps it may be of interest to the present enquiry to add brief replies to the remainder. The sound *wh* is only known to me as occurring in English and Icelandic. It is very probable that *w* may occur in Oriental languages (see above for Arabic, No. 6, and Japanese, No. 7), but it may be really a diphthongizing *oo* which has been taken for *w* (see above for Welsh, No. 5), and Lepsius probably does not accurately distinguish these sounds, which are almost universally confused, as he certainly did not distinguish *f'*, *v'* (see above for Japanese, No. 7, and Magyar, No. 8). A confusion of *w* with *v* does not seem probable to me. The English *w* can be distinctly pronounced so as to close a syllable, with a preceding accented short vowel (see No. 5). The German *v* and also *f'* regularly and easily close syllables in the pronunciation of my Hungarian pupil, without a vowel following. The Germans of course have no such ending, as they regularly terminate words with voiceless consonants, whatever letters be written. I believe that the modern Greeks generally pronounce ευ, αυ, before a voiced consonant or vowel as *ev'*, *aav'*, and otherwise as *ef'*, *aaf'*, as in αὐτὸς, but there is always a possibility of more or less dentality (as noted above, No. 2). The change of *oo* into dental *v*, as noted by Pânini, certainly shows his own pronunciation, but it was possibly as much a modernism in his time as our *f* in *laugh*, *draft*, *dwarf*, in our own. Prof. Max Müller (*suprà*, vol. ii. p. 566, col. 2) has given two authorities for a pure labial sound in Sanskrit. If both *v*, *v'* co-exist in Germany, *v* as Lower and *v'* as Upper German, why may not both have at one time co-existed in India? But *v* seems certainly a more recent form than *v'* in Germany. Why then should it not be so both in India and Italy? As to the falling out of a dental *v*, the English *e'en*, *e'er*, *ill*, Scotch *deil*, *gin*, for *even*, *ever*, *evil*, *divel* (old form), *given*, seem to show the possibility. The English *w* falls out in *I'll*, *I'ld*, *you'll*, *you'ld*, older *for'ard*, *back'ard*, usual *fro'ard*, *to'ard*, and *Green'ich*, *Dul'ich*, &c., but I cannot call to mind instances like the Latin. Actually in Magyar the verbal roots *szöv*, *löv*, *riv*, *növ*, *jöv*, lose their *v* = *v'* before the infinitive affix *ni*, and lengthen their vowel from *ö* to *ó'*, but *hív*, *szív*, *vív* either lose or retain the *v*. The Latin *pro(vo)rsus*, *ho(vo)rsum*, *ama(vi)sse*, &c. may perhaps be compared with this Magyar custom. The Germans whom I heard while residing in Germany always seemed to use the succession *k* + *v'* and not the labialised guttural *kw'* for initial *qu*. I believe the Magyars when they spoke Latin said *ekv'oos* for *equus*. I feel no tendency for *n* to become *m* before *v'* or *w*, or even *v*, because no English and German syllables occur which end with *–nv'*, *–nw*, *–nv*. But in Scotland *Banff* is called *Bahmf* (*ah* being rather spoken with the back of the tongue lower than for *aa*). In Latin the assimilation of prefixed prepositions, as *ad*, &c., shows that the final consonants must have been more closely connected than in English or German. This may account for i*m*pero, i*m*motus, co*m*motus, whereas English u*n*protected, u*n*moved, and German u*n*brauchbar, U*n*mensch, u*n*fehlbar, u*n*wohl, show no such tendency. The lengthening of the vowel in *ī*n-sanus, *ī*n-faustus (as noted by Cicero, but I cannot recover the reference at the moment), in *in* before *f*, *s*, perhaps indicates a difficulty in running the *n* on to *s* or *f*. As a substitute for *b*, I should consider *v'* more physiologically probable than either *w* or *v*, because the change of *b* to *v'* is a minimum, whereas for *v* the lower lip has to be violently retracted and brought hard against the lower teeth, and for *w* the back of the tongue has to be raised and the lips more rounded. If any one compares *pf'ooee* with *pfooee*, German *pfui*, he will feel the difference strongly. When we think we say *pwee*, for French *puis*, we really pronounce *pw'*, by preparing the tongue before releasing the lips. Actually *b*, *v'* interchange in dialectic German very frequently. I do not recall any instances of *b* and *w* interchanging. I consider *b* much more closely related to *v'* than to *w* or to *v*, and its relation to the two latter sounds is not direct, but indirect, through *v'*.

11. This is a mere collection of materials, to which it would be out of place to add an examination of the arguments for and against the pronunciation of Latin V as *w*. But in connection with the foregoing the following points should be considered. Latin V and Italian V are now *v* in Italy and in France, but either *b* or *v'*, not *v*, in Spain. I

* Compare the Greek ουβ for Latin V in Μηουβιάνος for *Mevianus* (Corssen, i. 311). Compare also the curious remark of Salesbury (quoted in my *E. E. P.* p. 762—the spelling is here modernised): "Although the Germans use a *vv*, yet in some words sound they it (to my hearing) as the further *u* were a vowel, and the latter o [a ?] consonant, where we the Britons sound both *uu* wholely together as one vowel, without any several distinction." Salesbury should mean *oov*, but may have meant *voo*.

cannot answer for the other Romance dialects. These sounds are not modern. The instances in Nos. 2 and 3 suggest that they were preceded by a mixed or geographically limited pronunciation as *v'* and *v*, of which the latter could have been derived from the former by emphasis (No. 2). In the time of Claudius a distinction between V followed by a vowel and followed by a consonant was felt, and a desire arose to mark it by a new sign. The former value was declared to be consonantal. Take *con-sonans* strictly, the name applies equally well to a consonant as now conceived (which implies an impediment in the way of strict vowel resonance) and to the stressless element of a diphthong connected with, or *sounding-with*, the element bearing the stress by means of the glide (see No. 5). When we find in especial that Sir Thomas Smith 1568, John Hart 1569, Bishop Wilkins 1668, all regarded English W as *ŏo* (to the extent of writing *oo-oo* for *woo*), and that the same opinion extensively prevails at the present day, while the rejection of *n* from the indefinite article preceding W, as in *a week*, not *an week* (even in the Authorised Version, 1611, which generally retains *an* before *h*), shows that no such hiatus was felt in this case as in *an oozy bed*, we must allow that the same indistinctness of conception possibly prevailed in the minds of still older orthoepists, as Marius Victorinus, Priscian, Quinctilian, &c. We have, therefore, no right to conclude that when they said V was a consonant they meant more than that V was the stressless element of a diphthong. The cases of V and of I are precisely similar. Now Priscian (as quoted in Corssen, i. 299) says: "*i* quidem modo pro simplici, modo pro duplici accipitur *consonante*," the first in *Juno*, *Juppiter*, the second in *maius*, *peius*, *eius*, "in quo loco antiqui solebant geminare eandem i litteram et *maiius*, *peiius*, *eiius*, scribere, quod non aliter pronuntiari posset, quam si cum superiore syllaba prior *i*, cum sequente altera proferretur, ut *pei-ius*, *ei-ius*, *mai-ius*, nam quamvis sit *consonans*, in eadem syllaba geminata iungi non posset: ergo non aliter quam *tellus*, *mannus* proferri debuit, unde *Pompeiii* quoque genitivum per tria *i* scribebant, quorum duo superiora loco *consonantium* accipiebant, ut si dicas *Pompelli*." Now we know that the first of these *i*'s was not a consonant in the modern sense, but only the stressless second element of a diphthong preceded by the glide. The inference is that the second was the stressless first element of a diphthong followed by the glide, and in point of fact we have precisely this effect, and not that of *yy*, in French *païen*, *faïence*, *nous louïons*, *vous suïez*, although French writers insist on the consonantal character of this *ï*, as also on that of *i* in *collection*, *cieux*, *matériel*, *aimions*, *vous chanteriez*, &c. (Thériat, *Le Phonographe*, 1857, pp. 29, 30).* In the case of *Pompeiii* the threefold *i* had really the same meaning as the Itailian *j* in *Pompej*, namely, the diphthong *ei* followed by *i* long. It is known that II and VV as the initials of syllables do not occur in older spelling. For the latter we have VO. Now on testing Welsh people with *would*, *woman*, *woo*, it will be found that they have a tendency either to say *oo* simply, or *ŏo* + glide + *oa*, or *ŏo* + glide + *o*. Many English say *wum-an*. It is therefore possible that I, V in Latin, so long as II, VV are not found as initials of syllables, were simply the vowels *ee*, *oo*, which formed occasionally the stressless elements of diphthongs preceded or followed by the glide as the position required, and hence became *con-sonantes*, in the meaning attached to the word by the Latin grammarians. It is also possible that after II, VV were used as initials of syllables, a consonantal form (in the modern sense) was given to I, V, at least in those positions. This consonantal power may have gained ground. The modern Italian *Giugno*, &c. seem to indicate a precedent *yh*. The mixture of ου, β, in Greek transcriptions may indicate a mixed pronunciation, or a mixed conception of the sound by foreigners, leading to a confusion in spelling in the same writer, or a mixture of the alphabetic name ου with the phonetic equivalent β then = *v'* or *v*, but not *b* or *w*, although it had also to be used for *b*. The general use of φ to transcribe F, although we are certain that the sounds were different, at least as much as *v'* and *v*, shows that we must not press Greek transcriptions too hard. The Greek combination ουου in Οὐουλτούρνος was simply impossible to a Greek, except as *oo* + *oo* or *ōo*. What was the possible consonantal sound (in the modern sense) which V received when the orthography VV initial became usual? Could it have been *w*? Could such a conception occur to the mind of any person to whom *w* was not a familiar combination, that is, among Europeans, to any but Englishmen? The passage from *oo* to *v'* consists in little more than dropping of the back of the tongue. The combination *v'oo* is very easy, as in German *Wuchs*, *Wund*, *Wunsch*, *Wurf*, *Wurm*, *Wurz*, *Wust*, *Wuth*. The combination *woo* is very difficult, even to Englishmen who are familiar with *w*, as in *woo*, *wood*, *woof*, *wool*, and is consequently rare, and often mispronounced. The inference seems to be that when initial II was called *yee*, initial VV was called *v'oo*. From *v'* the passage to *v* and the confusion with *b*, or with Greek β, was direct and easy. The final inference would seem to be that I, V should be considered as vowels, capable of becoming the stressless element of diphthongs, so long as II, VV initial are not found. That after these were found (and probably some time before they crept into writing, which always lags after speech) *y*, *v'* were employed when I, V were the *initial* (not the *final*) stressless elements of diphthongs. That in some words, and in particular in provincial pronunciation (as in Gaul and Spain, and partially in Italy, especially after Gothic irruption), *y* was pushed to *yh*, generating *dzh* in Gaul (subsequently *zh* or French *j*) and parts of Italy, and *gh* (or *kh* or the Spanish *j*) in Spain. That V either remained provincially as *v'* where B followed the same course (for example in Spain, as known to Romans even in classical times), or became dentalised into *v*, as being the firmer form and corresponding to the familiar *f*. But there seems to be no time during which English *w* can be interpolated. As a matter of practical convenience English speakers should abstain from *w* in Latin, because no continental nation can adopt a sound they cannot pronounce. As a question of date (which seems much overlooked, though synchronous pronunciation is the only one admissible), if the spelling VV is used, the pronunciation *v'* or *v* at pleasure may be employed, most of the Germans taking *v'*, and the rest of the world *v*. It may be noted that this overcomes the difficulty of contractions as *flvv-io-rvm rex* (*vv* giving long *v*), *par-ie-te*, compared with *flv-vi-o-rvm*,* *par-i-e-te*; and *mil-vos* with *mil-v-os*, the diphthongizing *i*, *v*, making position, compare the French *Richelieu* (No. 5, at end); and also of resolutions as

* The words of M. Jobert (*Colloquial French*, London, 1854, p. 42) form such an excellent commentary on Priscian's expressions that they deserve quotation: "The words chancelier, chapelier, coutelier, &c. do not appear *graphically* to contain a double consonant, but *phonetically* the *i*, in these words, fills the part of a consonant, in the same manner as the double *l* in the liquid syllables like those of piller, babiller, briller, &c.; these *l*'s being pronounced as in pi-ïé, babi-ïé, bri-ïé, the *i*'s of the former words are phonetically analogous in the last syllables, their articulation being chancel-ïé, coutel-ïé, chapel-ïé."

* Englishmen are so accustomed to pronounce *flŏov-* that they may think it impossible to pronounce *flŏo-* with a secondary accent, and without a subsequent consonant. But *ruha*, dress, in Magyar, is precisely in this condition, *ru* being short but accented, and not gliding on to *h*, and presents no difficulty at all to Hungarians.

sol-v-is-se for *sol-vis-se*, because the resolution would be an archaism preserved as Vergil's *picta-i* for *pictae*, or the frequent poetic English *-ed*. They are not to be explained from the habits of pronunciation prevalent at a later time.

ALEXANDER J. ELLIS.

P.S.—As will be seen by the foot-note to p. 16, the above article was sent to the *Academy* before I had seen Prof. Munro's remarks (*ib.*). I think it better not to occupy further space with any observations on the few matters there suggested which I had not considered in my own paper, except the personal reference to Prof. Max Müller's pronunciation, which I had purposely passed over. Prof. Munro says, Prof. Max Müller "will not have forgotten that a few weeks ago the untutored ears of half a dozen of the best philologers in Oxford were unable to perceive the slightest difference between his English *w* and their own." When last I had the pleasure of hearing Prof. Max Müller speak, he was able, by an effort of attention, to pronounce *w* and *v* correctly, but he habitually used *v'* for both, and this was more apparent in public than in private speaking. If I mistake not, the point was made a matter of enquiry at a private meeting on another subject between Prof. Max Müller, Mr. A. Melville Bell (the author of *Visible Speech*), and myself, on August 25, 1865. May I suggest that the "untutored ears" at Oxford would derive every possible information on the subject from the "tutored ears" and lips of Mr. Henry Sweet? A. J. E.

THE GERMAN UNIVERSITIES AFTER THE WAR.

It is only since the beginning of the winter term that these seats of learning can be said to have returned to their normal state. A large number of young men were in the field for nearly a year, but even those in the army of occupation obtained leave some five or six months ago to return to pursue their studies. It is very interesting to observe the effect the war has had upon the attendance as well as the spirit of the universities. With some few exceptions, they are overcrowded this winter, because many old students who would without interruption have finished their courses by this time, have matriculated again along with the freshmen of this year. Quiet and busy work has entirely replaced the anxious bustle of the camp; helmet and uniform are doffed; even a medal and its ribbon have given place to the academical caps and badges. The names of those who died for their country, engraved on marble slabs, are already hung up in the halls of their respective universities. The most remarkable fact, however, appears to be that nearly every one of the survivors, unless he has preferred to join the army for good as officer or surgeon, has resumed his academical course where he left off with the greatest eagerness. The rush into "Fachstudium" has never been stronger in Germany than at present. The old patriots of the Wars of Liberation who attended the universities soon after the peace of 1815 may deplore the total absence of that idealistic spirit which brightened or obscured the days of their youth; yet there can hardly be a better sign of a healthy national development than this decided predilection of the young generation for matter of fact. The increase or diminution of the number of students in the different places may also be taken as symptoms of some further changes. The contest between the great and small universities seems to be taking a new turn, which could hardly have been predicted a few years ago. The more expensive places, like Berlin, Bonn, and Heidelberg, are slowly going down, not always, however, from the same reasons. Berlin, which might be expected to be the great high-school of the new empire, has yielded the palm at last to Leipzig. This is to be ascribed not merely to the supposed mismanagement of the most unpopular minister of public instruction Prussia has ever had, but to the drawbacks, especially the high prices and rents; perhaps, too, the long distances unavoidable in a capital. Cities of a middle size are evidently taking the lead again. Bonn, on the other hand, besides the more luxurious style of life prevalent there, suffers at present from the interdict issued by the Archbishop of Cologne against almost all the professors of the Roman Catholic faculty because of their anti-infallibilist tendencies; and Heidelberg still lacks a garrison in which the students may pass their year of military service. Places like Halle, Göttingen, and Tübingen, where the influence of academical establishments is supreme, and which on the whole are well provided for, have received more than their usual complement. Even some of the smallest size, like Greifswald and Marburg, continue in a highly prosperous state, which is chiefly due to the recent popularity of their faculties of medicine; whereas another class, represented by Giessen, Kiel, and Rostock, seem doomed to die of exhaustion. With them, too, the causes of decline are multifarious. A small government like that of Hesse-Darmstadt has not the means of supporting any longer the establishment at Giessen on the scale demanded by the present development in every branch of learning and science; and the old wealthy institutions at Rostock and Kiel are shunned by the Mecklenburghers and Holsteiners themselves, since they have the free choice of any university they like, whereas young men from the other parts of Germany hardly ever come to the shores of the Baltic, where life is both more expensive and slower than anywhere else. Yet Greifswald and Königsberg are to a certain extent exceptions to this rule. Jena, about fifty-five years ago the most fermenting seat of the "Burschenschaft," though not threatened exactly by a lingering death, has at last, as it were, succumbed to a musing condition of still-life. It may be hoped that the approaching reconstitution of Strasburg may prove to be the same successful experiment as Bonn, where, immediately after its foundation, the professors of name* and celebrity as well as students from *all* parts of Germany began to flock. R. PAULI.

Intelligence.

Prof. W. D. Whitney, of New Haven, intends to publish in the next volume of the *Journal of the American Oriental Society* the results of a collation of a new MS. of the Atharva-Veda Prâtiçâkhya. His own edition of this Prâtiçâkhya, published in the *Journal* for 1862, was founded on the inaccurate and imperfect, but at that time unique, Berlin MS.

M. J. Derenbourg has been elected a member of the Institut (Académie des Inscriptions).

The *Transactions of the Royal Society of Saxony* for 1870 contain (pp. 227–295) the third part of Prof. Fleischer's Contributions to Arabic Grammar, viz. corrections, additions, and explanations to de Sacy's *Grammaire*.

New Publications.

BHATTA NÂRÂYANA, VENÎSAMHÂRA: Die Ehrenrettung der Königin. Ein Drama. Hrsg. v. J. Grill. Leipzig: Fues.

CURTIUS, G. Studien zur griechischen u. lateinischen Grammatik. 4. Bd. 2. Hft. Leipzig: Hirzel.

EPHEMERIS Epigraphica Corporis Inscriptionum Latinarum Supplementum. Edita jussu Instit. Archaeol. Romani. Fasc. I. pro i-iv. Berlin: Reimer.

FUCHS, E. Die Scholien d. Bar-Hebraeus zum 23. u. 29. Psalm. Halle: B. des Waisenhauses.

HISTORICI GRAECI MINORES. Ed. L. Dindorfius. Vol. II. Menander Protector et Agathias. Teubner.

INSCRIPTIONES HISPANIAE CHRISTIANAE. Ed. Aemilius Hübner, adjecta est Tabula Geographica. Berlin: Reimer.

MEUSEL, H. Pseudo-Callisthenes. Nach der Leidener Handschrift herausgegeben. (Reprint from Jahrb. für classische Philologie.) Teubner.

PONT, G. Origines du patois de la Tarentaide (ancienne Kentronie). Précis historiques, proverbes, chansons populaires. Paris: Maisonneuve.

STAMM'S Ulfilas, oder die uns erhaltenen Denkmäler der Gothischen Sprache. Text, Wörterbuch u. Grammatik. Neu herausg. von M. Heyne. 5te Aufl. Paderborn: Schöningh.

STRATMANN, F. H. A Dictionary of the Old English Language. Compiled from writings of the 12th, 13th, 14th, and 15th centuries. Part I. Second edition. Trübner.

ZINGERLE, A. Ovidius und sein Verhältniss zu den Vorgängern und Gleichzeit. Röm. Dichtern. 3. Hft. Innsbruck: Wagner'sche Buchhg.

* The German papers report that Professor Mommsen has accepted a chair at Strasburg. We have not yet had time to verify this.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 41.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Thursday, February 15, *and advertisements should be sent in by February* 10.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

General Literature.

Modern and Ancient Greece. [*Das Volksleben der Neugriechen und das hellenische Alterthum.* Von Bernhard Schmidt. Erster Theil.] Leipzig: Teubner, 1871.

EVER since Leo Allatius published his tract, *De quorundam Graecorum opinationibus*, in the middle of the seventeenth century, the attention of travellers has been drawn from time to time to the correspondence between the customs and superstitions of the inhabitants of the Greek peninsula in ancient and modern times. During the last fifty years the work of observing and collecting these had proceeded apace, and much valuable information is to be gathered from the works of such critics as Fauriel, Pashley, Ross, and Ulrichs, together with the numerous scattered notices to be found in the writings of the modern Greeks themselves. Latterly, a useful summary of these points has been made in C. Wachsmuth's pamphlet, *Das alte Griechenland im neuen*, which, for its size, contains a wonderful supply of valuable facts and suggestions on the subject. Still, much remained to be done in the way of bringing together additional material, and arranging it perspicuously with a view to comparison with antiquity; and consequently the present work has long been looked forward to as likely to supply this desideratum. It was also soon perceived that the discussion of this question was intimately connected with that of the origin of the modern Greeks, and that any well established resemblances in habits and beliefs would form a strong argument against the theory of Fallmerayer, that that people is of purely Slavonic race. Accordingly among Greeks it was expected that M. Schmidt's work would have a distinctly polemical object, and would professedly combat those whom they regarded as the foes of their nationality. The author, however, disclaims any purpose that is not purely antiquarian; but at the same time he has furnished one of the most convincing replies that has yet been given to the opposite view, not only from the general tenor of his work, but also from the arguments adduced in the preface, and especially in the collection he has made of the rarer words from ancient Greek, which are still to be found in isolated modern dialects—a source of proof on which he, with good reason, lays great stress, because, as they are unknown to the speech of the more educated classes, they show unmistakably that they must be indigenous, and not introduced from abroad.

Of the way in which M. Schmidt has executed his work we can speak in the highest terms of praise. Quite independently of its immediate object, the book is admirable as a collection of the superstitions of a country, and as such it will be of service to those who are gathering materials for the early history of mankind. But it is in comparing the ancient and modern superstitions that the writer's skill is especially shown. What is most required for this purpose is a complete mastery over the details of the subject, as it is often in minor traits that the most convincing resemblances are to be found; clearness of arrangement, to facilitate comparison; and impartiality of judgment, to convince the reader that he is not being led astray by points of accidental similarity, and yet not to ignore what a careful examination will show not to be the result of chance. All this will be found in the present work, together with a thorough knowledge of classical antiquity: to which we may add that M. Schmidt has himself resided in the country for three years, principally in the islands of Zante and Cephalonia, and has there made a collection of popular songs and stories, which will form an excellent supplement to the *Griechische und albanesische Märchen* of von Hahn. It is a satisfaction to hear that this is nearly ready for publication, for it is often quoted in this book, and it is somewhat tantalizing to be referred to an authority which has not yet seen the light. We are not certain whether the writer has in all cases sufficiently estimated the amount there is in common between customs and ideas which he finds in Greece and other systems of superstition: perhaps the perusal of such a book as Mr. Tylor's *Primitive Culture*—a work *sui generis* for its grasp of the general subject and power of grouping—might lead him to modify some of his conclusions; but this is almost unavoidable in a subject of this character, and as a general rule he has shown remarkable self-restraint in avoiding doubtful points. Finally, we should not omit to notice the exhaustive way in which information has been gathered from a great variety of modern Greek publications, many of which can never be accessible to students in Western Europe.

The work is to consist of three parts, the first two of which relate to the superstitions, the third to the customs of the country: the first part has now appeared. Most of the figures that appear in this were already well known—the Nereids, who represent the ancient nymphs; Gillo, Mormo, and the Lamia, familiar bugbears of antiquity; the Telonia or spirits of the air; στοιχεῖα or genii; the Fates, and Charon, the god of death, with many others. But the information that has been collected respecting them is given here much more fully than in any previous book, and not a few of the additional points are important from the resemblances they offer to ancient beliefs. Thus it is difficult to regard it as the result of chance that, while the classical Empusa was believed to have one foot of brass, the other like that of an ass, the modern Lamia has a brazen and an ass's foot. The story of the vulnerable heel of Achilles is reproduced in connection with certain giants, who are said to have been rendered safe from wounds by being dipped in a river by their mother, except in the ankle by which they were held. The Cyclopes reappear in a race of wild, lawless, one-eyed monsters, who are known as the μονόμματοι. We also meet with a being possessing the attributes and functions of Pan, and even the name of Panos or Panios was reported to the author as existing in Zante for the patron spirit of goats who dwells in the mountain gorges, though he judiciously hesitates to accept this as a fact without more certain evidence. Similarly, in offerings which on certain occasions are made to the Nereids, it is customary for the giver, after presenting them, to hasten away without looking back, as we know from Sophocles and Virgil was the case in ancient times. And as these spirits are regarded as exercising their malignant influence especially at midday, in the neighbourhood of springs, and under the shade of certain trees of which the plane was one, these circumstances are adduced as illustrating the passage in Plato's *Phaedrus*, where Socrates

speaks of the possibility of his becoming νυμφόληπτος, and the reader is reminded that all these conditions were present on that occasion.

Besides these details which are either new or have not been much noticed hitherto, there are also a number of mythological personages whom M. Schmidt has brought to light for the first time. Such are the Drymiae, who are only known in parts of Greece, and correspond to the ancient Dryads, though they have also a partial resemblance to the nymph Echo, as they are believed to be spiteful towards those who make reverberations in the mountains. Such is also the Sea-spirit, a compound of Nereus and Poseidon, who is represented as riding on dolphins with a trident in his hand, and having a fish's tail; and the Lame-spirit, the most dangerous and injurious of all the fiends. Here also we first learn of the existence of a Charontissa, or wife of Charon, a modern Proserpine, who rules by her husband's side in Hades, and performs the milder office of comforting the departed spirits when they first arrive in the realms below. It is also a point of some importance that while hitherto the Charon of the modern Greeks has only been known as the hunter of men's lives and the jailor of the dead, he is now discovered to be regarded in some places as the ferryman of the infernal river, and his boat is spoken of, and the passage-money which he demands. This last point had already been rendered probable by the term περατίκιν, applied to the custom of placing a piece of money in the mouth of the corpse, which until lately was commonly practised, and even now is found in some parts of the country.

Perhaps the most interesting section of the work that has appeared is the part which relates to God and the saints, and the way in which the attributes of heathen divinities have been transferred to them. In his collection of Popular Tales, the author promises to present us with a story in which the combat of Zeus with the giants is attributed to the Christian God. Not a little remarkable is it that the modern Cretans make use of the invocation Ζῶνε θεέ, and on the sides of Parnassus the exclamation "God of Crete" is used to express incredulity, which seems exactly to correspond to a statement of Origen, who said that the early Christians were accused of ridiculing the worshippers of Zeus, because the burial-place of the god was shown in Crete. In connection with Mt. Olympus, round which many modern superstitions centre, M. Schmidt might have noticed the remarkable fact that all the monasteries on that mountain are dedicated to the Holy Trinity, and this circumstance is very probably connected with its having been the special abode of the highest of the heathen deities. With regard to the summit of the mountain, which is described in the popular songs as "the triple peak of heaven," and is regarded as the dwelling-place of the Fates, he might have mentioned that a reference seems here to be made to the three highest points, which are known to the inhabitants of Olympus as "the Three Brethren" (τὰ τρία ἀδέλφια). The author remarks (p. 69) that he cannot find any certain evidence of votive offerings having been made in ancient times after some special deliverance, containing an emblematic reference to the origin of the vow: we would suggest that the figure of Arion on the dolphin at Taenarum was probably of such a character. Again, we do not think M. Schmidt, in tracing the connection between the ancient and modern religion, has sufficiently taken into account the great number of ancient shrines and holy places which are now entirely deserted, and have not been replaced by any Christian place of worship, offering thereby a marked contrast to what took place in Italy, and testifying to the same struggle in which the name Ἕλλην became identified with "pagan," and was replaced by that of Ῥωμαῖος. No doubt the Parthenon may have been purposely converted into a sanctuary of the Virgin Mother of Christ, and that of Theseus into a church of the Christian warrior St. George; and it may not be accident that a religious festival accompanied by dancing is celebrated on the top of Mt. Ithome at the present day, just as it was in ancient times in honour of Zeus; but these are rare exceptions, and in the great majority of instances there is reason to believe that the ancient temples were placed under a ban. We believe also that M. Schmidt is right in not connecting the *cultus* of the Prophet Elias as the patron of high places with the worship of Helios, because of the comparatively few mountains on which there were shrines of that god; and he very properly derives this function which the Greek Church has assigned to the Prophet, not, as has often been thought, from the sacrifice on Carmel, but from his ascent into heaven: this, we may remark, is confirmed by the Russian legends which identify him with the god of thunder. We might add many more subjects of interest which are illustrated by the work before us, but we hope we have said enough to persuade our readers to peruse it for themselves, and to those who do so we can promise an ample store of curious and valuable information.

H. F. Tozer.

The Gospel of a Poor Soul. [*Das Evangelium einer armen Seele.* Mit einem Vorwort von Hermann Lotze.] Leipzig: S. Hirzel, 1871.

Without being really important, this little book is extremely suggestive and extremely interesting, for it is hardly too much to say that in it what many consider the dominant religious movement of the day crystallises for the first time into something clear and tangible. There are many besides Dr. Arnold who wish to retain religion to light up morality, and hold that all beyond this is mischievous and misleading, and for these "the Poor Soul" who parades her self-pity with overmuch complacency has wrought out a coherent theology with a definite basis in the actual experience of the spiritual life. Much skill is shown in working out the system so as to account for as much as possible, and at the same time to avoid all possibility of collision with positive knowledge and the facts of the world. In this way it would be possible for any one who had once lost sight of the arbitrary character of the starting point to be consoled and elevated and strengthened by the theory throughout life, and very little disturbed by finding that he uniformly failed to convince others of its truth.

The Soul begins with the observation that people often pray and do not receive what they pray for, and that this sometimes happens even when it seems that they would be better for receiving it, and this observation awakens her first doubts which she endeavours to combat with the usual pious sedatives. Then she (according to F. W. Newman, the soul is never perfect till she is a woman, though this particular soul seems to have been originally meant for a man) experiences for the first time the insurrection of the animal nature. In the combat she discovers the necessity of holding fast to God, without Whom her resolution would, it seems, have given way, though without inflexible resolution it is useless to call upon God. This experience is the foundation of all that is to follow; it is the writer's only criterion for fixing the conception of God and for establishing its validity. The ecstasy which followed this first victory is put aside as purely subjective, and the soul proceeds to meditate on the three possible ends of human life, sensual pleasure, intellectual enjoyment, and active love, and chooses the last, which seems to be synonymous with spontaneous beneficence. The choice is quite independent of any consideration of the complex capacities of the human mind, or

of the conditions which control the course of human life. Its grounds are so ideal as to be hard to seize; although they are repeated many times in the course of a short book, it is hard to be sure that the following statement is fair. If we imagine the Soul in the full enjoyment of sensual or intellectual pleasure, she might still ask, Was it worth while to have been born for this? and the question would be unanswerable; but active love can always answer that it is worth while to have been born for others. If this be correct, it is obvious that the decision is taken in a mood which cannot be habitual. However, the Soul perceives that it was her resolve not to lose sight of this, the true end of life, that led her to cling to God, and as she has gained strength from Him for this, she concludes that He is, in His Essence, conscious, holy, hallowing Love, in the strength of Which we love. This, of course, is an effectual barrier against every pantheistic tendency, and according to the writer it has further consequences. There is much ingenuity in the discussion whether God can be the Creator of the world in general, or at any rate of the spirits who return His love, and nearly every creationist theory is examined in passing before both alternatives are dismissed. Though the argument proceeds rather in the dialectical than in the logical order, this does not really matter, for the object is simply to lay the ghosts of old prejudices; the truth is sufficiently established by the simple reflections that if God be the Creator either of the world or of the spirits conditioned by the world, He must be something other than pure Love, and that unless this conception can be maintained as exclusive, it would obviously require to be limited and qualified; but in experience the conception has been given without limitation. Here again the conclusiveness of the reasoning is open to discussion.

After this point the current of the Soul's thought is varied from time to time by colloquies with God. We will not say with a much more thorough-going mystic, St. John of the Cross, "all this that she says, Then I spake to God, then He spake to me, is pure nonsense;" at best it is a game of chess, played blindfold, the right hand against the left, for kisses, in the glass. Her God generally keeps up to the highest average manner of the colloquies in books of devotion; but we are reminded by His lengthy expositions, of the heathen who think to be heard for their much speaking; partly, no doubt, because books of devotion are read for edification, while the *Gospel of the Poor Soul* will be chiefly read for curiosity; partly, too, because books of devotion are occupied with the inculcation of a complicated series of thoughts, not of a single striking conception.

The belief in God as the Creator is referred to the fact that the false ends of life are more often pursued than the true, and therefore any popular piety will represent God as controlling the conditions of their attainment; the writer is specially anxious to maintain that the dogma of creation is neither a necessary nor an adequate guarantee of reverence.

As the Soul is capable of love, freedom is a condition, though a transient one, of her blessedness; as God is love, the absence of freedom is involved in the idea of His. His blessedness depends solely upon His readiness to help when opportunity offers: before the world had brought souls to consciousness, it was complete—it is not impaired by sin. Such, too, is the blessedness of the souls which sincerely choose love as the law of life, however late: they exist from eternity like everything else in the world in their germs and elements (a curious phrase, which must have a meaning, as it is repeated so often), but they only attain to consciousness through bodily life; having once attained to consciousness, God can maintain them in knowledge and love of Him if they have lived to Him (it is not stated that He can make them partakers of His power to help the living, or to translate the author's view into Christian language, the saints see God, they do not reign with Him): those who have not lived to Him are dead to Him for ever. This is His judgment and their only hell: they sink back into the unconscious "rudiments of the world." Only those capable of choosing deliberately between the three ends can reach everlasting life: this excludes children, idiots, and lunatics; but not savages, who are credited with a knowledge of the evil of selfishness, because they object to suffer from it. All positive religions are indifferent except so far as they help or hinder the recognition that God or the gods must be love, for with the disappearance of the dogma of Creation all the ordinary objections, religious and intellectual, to polytheism disappear. The speculative superiority of monotheism is rested on the uniformity of the divine action on the soul, which would be a better ground for inferring the essential similarity of all spirits who have once been made perfect in love. The writer's criticism of Christianity is, as might be expected, crude and perfunctory: as the method of his theology excludes a philosophy of nature or history, its value for him in no degree depends on the truth or falsehood of its supernatural claims, which are rejected on the ground that Christ foretold His second coming as immediate, that His miracles were intended as proofs of a commission from the Creator, and that the beneficent achievements of science do far more than isolated wonders to transform the material world into the Kingdom of God.

We have described this curious system at length because it is impossible to read the book without forming a high opinion of the moral and intellectual power that went to writing it; the influence of such books is in reality an affair rather of fortune than of merit: if a visitor from another planet, who had read the Bible, were to read the *Gospel of a Poor Soul*, the *Patience of Hope*, *The Soul*, and *Ecce Homo*, he would not share the decisive preference of the British public for the last—all would interest or fatigue him alike.

Of course the division of the three ends of life is arbitrary and inadequate: the majority of mankind (as the writer of the beautiful chapter on the natural man in youth, manhood, and old age should have known) go through life without being guided by any end at all; they are like donkeys moving round and round to turn a capstan; they are beaten if they stop, but if they keep moving, they may browse on the right hand or the left, it matters to nobody, not even in this world, to them. The few to whom an ideal end is a necessity, or a comfort, or a luxury, commonly conceive it in many ways; their own desires have wavered; they know that other men desire other things: if theists, they look to God to satisfy, in some transcendental way, all desires which they do not disapprove. It is a serious defect of the system that though the conscious soul is represented as a product of the world, it seems to have no duties to it and no interest in it. Those who, like the author, are reasonably disposed to elevate the postulates of the moral and spiritual life to the rank of speculative intellectual axioms will hardly be disposed to accept this God, Who can only help those whose will is fixed, to make shipwreck of earthly life rather than forsake Him instead of the traditional Father, Who is always more ready to hear than we to pray, Who is wont to give more than we desire or deserve, Who will not break the bruised reed or quench the smoking flax. Those who are satisfied to live according to their ordinary selves will readily make the not recondite observation that the influence of an ideal upon those who cling to it is no guarantee of its independent objective existence for others. G. A. Simcox.

LITERARY NOTES.

In Westermann's *Monatshefte* for January, Freiherr von Maltzan corrects the common erroneous impression that *café noir* is the orthodox Arabian beverage and *café au lait* a Western corruption. On the contrary, the Bedouins of South Arabia, the oldest coffee country in the world (except Abyssinia), have assured him that the full flavour and aroma of the coffee is only to be brought out by the addition of milk; and their connoisseurship is beyond dispute. Von Maltzan thinks the usage depends upon climate; the natives of the hottest lowlands do not drink what we call coffee at all, but an infusion of the pod or bush containing the beans, which is called *gischer*, and is less stimulating than coffee, while it has the same aroma. Its qualities are lost in transport, or it would be a valuable substitute for chicory and other adulterating ingredients.

The Punch of Munich, edited by Dr. Martin Schleich, has ceased to exist. It was once one of the most popular and widely circulated of comic illustrated journals. In its place appears every Saturday *Die Bremse*, edited by Dr. Sigl, editor of the *Vaterland*.

In *Im Neuen Reich* (January 5) Gustav Freytag addresses some advice "to young novelists," which, as he says, is not new, but might be serviceable to his countrymen (and women) if they would give it their attention. He complains that most writers invent their characters first, and that with little regard to nature and reality, and then frame a plot to bring out the idiosyncrasies of the being they have imagined. He adds that the art of inventing and telling a coherent story has at no time appeared to thrive in Germany, but hopes it is never too late to mend.—In the same paper (January 12) Mich. Bernays represents Uhland in the new character of a student of ancient German literature and legend, and explains by his devotion to these researches the poetical unproductiveness of the latter half of his long and peaceful life. Uhland was fastidious, and refused to publish fragmentary notices while he failed to complete an elaborate work to his own satisfaction. Seven volumes, to be followed by an eighth, testify to his industry; and though most of his facts have been anticipated now, they have not been presented in a more attractive form, nor in one which preserves better the proportions of the subject as a whole.

The *Rédaction* of the *Révue des deux Mondes* is going shortly to publish an index, which can scarcely fail to be an interesting contribution to literary history, as it will apparently include notices of the authorship and circumstances under which the more remarkable articles appeared during the forty-two years that the *Révue* has been identified with the best literary workmanship in France.

Art and Archæology.

Pictures by Daniel Maclise, R.A., with Descriptions and Biographical Sketch of the Painter by James Dafforne. Virtue and Co.

Pictures by C. R. Leslie, R.A., &c.

These two books are produced in the same manner, and are, indeed, intended to be companion volumes, so that we can with propriety notice them together. A series of engravings from the works of a deceased master in his art published in this style appears to be exactly the right way to celebrate our leading artists as they pass from the stage. An exhibition of their collected works, as after Etty's death at the Society of Arts, or two years ago those of Leslie at the Royal Academy, is very interesting to those who have the chance of visiting such exhibitions, and to the critic is inestimable, preparing for him the opportunity of deciding for ever after the relative position of the painter whose works are so collected. But for the public, the few months that such collection remains together soon pass without any record, while such volumes as these remain in some sense a monument to the artist. Viewed in this way, we should have the best examples given—the works that made the master's reputation; otherwise the monument will not be just to his fame. In the Leslie volume we think this is the case, as we have "Sancho and the Duchess," "Autolycus," "Perdita," and two of his best subjects from Molière; but Maclise is not so lucky, and he it was we hoped to find most worthily represented. The memoirs of both artists are exceedingly well related; but here, again, the man who celebrated the arms of Britain in the two greatest historical pictures of our epoch, perhaps the two greatest contemporary historical pictures in the history of art, does not find so large an acknowledgment at the hand of Mr. Dafforne as he deserved. The seventy or eighty portraits of the literary men of the day published in *Fraser's Magazine** are not mentioned, as they are not in Mr. O'Driscoll's volume, necessarily Mr. Dafforne's authority; and the two great pictures in the Houses of Parliament are but scantily treated. All the engravings given are of his smaller exhibition pictures, including, however, the play scene in *Hamlet*, now in our National Gallery. Wherever the female element predominated, Maclise failed. The meretricious beauty, which at this short distance of time we already see was common property to Etty, Leslie, Maclise, and their followers, and which, we think, was derived from the deadly artifice of Chalon, is more destructive to him than to the others. Where men only appear, or women but very little, as in the "Bohemian Gipsies," or the "Marriage of Strongbow," his romance is heroic and splendid; and where he worked under a living motive, as in the "Wellington and Blücher" at Westminster, he must be acknowledged without a rival.

W. B. Scott.

ART NOTES.

Mr. Crowe, the joint author with Signor Cavalcaselle of the *History of Italian Painting*, writes to us to complain that a writer in the current number of the *Edinburgh Review*—

"has attempted to create a distinction between the two persons whose names appear on the title-page of that work, against which they feel entitled to protest. The critic speaks of one of the authors as having had the mere labour of giving form and order to the materials of the other. He speaks of the latter as *the* author, and gives him qualifications denied to his partner. These statements convey an impression altogether contrary to the reality, and the *History of Italian Painting* is, as it purports to be, in every sense the work of two partners, *both* of whom are men of education and special knowledge of art, good draughtsmen, and travelled artists."

We may add that the article, though highly favourable to the book, contains a number of other inaccuracies, in the smaller matters of date, spelling, &c., which render the claim of the writer to differ on points of this nature with two such accomplished experts as Messrs. Crowe and Cavalcaselle singularly out of place.

On Wednesday evening, January 24, an exhibition, now open to the public, was inaugurated at South Kensington Museum, by a "private view," at which a good many hundred well-dressed people assisted. This exhibition consists of the mass of productions of ornamental art, gifts for the most part, collected by the Duke of Edinburgh in his voyage round the world in the *Galatea*, spoils of the chase and of the rifle at sea and on shore, and the more personal records of the prince's progress, in the shape of illuminated addresses, not only written on vellum and paper, but engraved on hinged silver like triptychs, fancy trowels, and so on. Besides all these, the two series of water-colour drawings by Messrs. Brierly and Chevalier, able draughtsmen who accompanied the prince, form an exceedingly interesting collection of illustrations of the natural scenery visited and adventures taking place during the varied expedition. Arms and dresses there are a good many, but the most deserving of record are the bronzes, enamels (*cloisonné*, said to be) from China and Japan. A large ornamental bronze incense-burner in three stages, from the latter country, presented by the Mikado,

* See *Academy*, vol. ii. p. 217.

is perhaps the most perfect work of the kind yet brought over. The gold embroidered textiles, carpets, kincobs, &c. given by the Maharajah of Jummoo, the City of Benares, &c. are also remarkable.

The First Commissioner of Works has received from the Berlin government an invitation to British architects to compete for the new Houses of Parliament in that city. Architects of other nations are also invited. The designs must be sent in at latest by the 15th of April. Completely worked-out building plans are, of course, not expected. It was mentioned in the *Beiblatt* to the *Zeitschrift für bildende Kunst* for December 1, 1871, that when the Reichstag accepted the report of the first commission appointed to consider this subject, the condition was added that the competition should be limited to Germans.

A necropolis of the Gallo-Roman epoch has been discovered at Bingen. Vases, urns, lamps, &c. abound.

All the collections of Prince Napoleon will be brought to the hammer at Christie's during the spring.

The *Chronique des Arts* for December 24, 1871, announces that new tombs have been brought to light at Athens, amongst others a funeral monument ornamented by a fine bas-relief representing two female figures larger than life, one seated, the other standing. Excavations have also been undertaken in the environs of the so-called portico of the Eponymi. The result appears to throw discredit on the theory in accordance with which the portico was named. The colossal statues found, of which three are yet preserved, make up but four in all. They supported, after the fashion of caryatidae, the entablature of an edifice of which both the name and purpose for the present must remain in doubt.

Mr. Watts, R.A., will send to the exhibition of the Royal Academy three portraits: two of brother artists, viz. Mr. Calderon and Mr. Val. Prinsep, and one of Miss Dalrymple. At present he is engaged chiefly on a large work which he intends to offer as his diploma picture, and which will also appear in May on the walls of Burlington House. It is decorative in character, the subject is the murder of Abel. The figure of Cain fills the centre, at his feet lies the prostrate body of Abel. The spirits who, rising to heaven, were embodying the aspirations of the sacrifice, changed by the act of Cain into avenging demons, sweep back from on high. The picture is yet in the first stages of progress, but there are signs of that desire to pass beyond the trivial and commonplace, and to get at a poetic and dignified side, which is invariably characteristic of Mr. Watts, even when his work is in other respects incomplete. In the present instance the crowning point of the composition is the figure of Cain, the strong man, whose power is appalled, by the weight of retribution. The subject, too, has been happily chosen, as, although to a certain extent susceptible of allegorical interpretation, it does not pass beyond the limits of that which is easily intelligible.

The bas-relief representing Henry IV. on horseback, which was torn down from the Hôtel de Ville of Paris by the Communists, has been found. This important work had been broken up, but all the fragments have been collected, and it will be possible to restore it perfectly.

A bust of the late Mr. Grote, by the sculptor Charles Bacon, has been placed in Westminster Abbey.

The Musée of Brussels has just acquired a fine portrait of an old man by the vigorous hand of Bernardo Strozzi, the chief of the Genoese school, commonly called Il Capucino. At the same time a superb example of Benjamin Cuyp, a portrait of a young woman, has been presented to the Musée of Lille by M. Louis Decamps, who has also enriched the collection by the gift of the only known picture by J.-B. Wackis, a Dutch painter of the seventeenth century, now so forgotten that his name is not even cited by those writers who have specially occupied themselves with the art of the Netherlands. The picture in question, the subject of which is a vase of flowers, is said to have very high merit. M. Decamps has quite recently presented to the same Musée six fine drawings by Calamatta, Flers, Troyon, Decamps, Raffet, and Charles Jacque.

A statue of Sir Bartle Frere will be sent by Mr. Woolner, A.R.A., to the forthcoming exhibition of the Royal Academy. The head is admirable, both in point of likeness and execution, the modern costume handled with skill and much success. Yet the general impression is scarcely satisfactory, the figure fails to seem informed by a clear grasp of the man as a whole. In short, Mr. Woolner still falls somewhat short of the very high standard he is always expected to reach. "Guinevere," commissioned by Mr. Kirkman-Hodgson as a companion statuette to the "Elaine," previously exhibited, will also be seen at the Academy. Mr. Woolner's reading of the character is voluptuous rather than passionate, the queen is what Diderot called a *belle indolante*.

The magnificent collection of modern pictures brought together by M. Paturle, and which have been since his death the property of his widow, will be sold towards the end of February at the Hôtel Drouot. At the same time and place the collection of M. Michel Tretaigne will be brought to the hammer. The well-known gallery of MM. Péreire is also about to be sold by auction. The works of Ary Scheffer, Delacroix, Ingres, Meissonier, are here mingled with capital examples of Ostade, Terburg, Ruysdaël, Hobbema, Franz Hals, and Rembrandt. The prospect of the immediate dispersion of this collection is exciting the art world of Paris.

The Administration des Beaux-Arts has recently purchased for the Luxembourg two paintings by Henri Regnault, both of which were exhibited last year in London, viz. "Le Décapité," and the equestrian portrait of General Prim.

The January number of the *Gazette des Beaux-Arts* contains a sketch of the life of Regnault, by Paul Mantz, accompanied by an excellent etching of his powerful and repulsive "Salome" exhibited at the Salon of 1870. The article entitled "Les Musées, les Arts et les Artistes pendant la Commune" is valuable as a piece of contemporary history. The documents are given in full. In a paper headed "Les Faïences de Philippe le Hardi," M. J. Houdoy announces the discovery of certain fragments of *carreaux émaillés* on the site of the south tower of the castle of Hesdin. This is important as corroborating a theory put forward by him in his *Histoire de la Céramique lilloise*, to the effect that faience was fabricated in Flanders and Artois as early as the close of the fourteenth century. Additional confirmation will also be found in the items of an inventory dated 1452, which he gives at full length.

In the *Times* of January 18, Mr. Robinson replies to the second letter of "C." (*Times*, January 12) on the subject of the "Uncatalogued Masterpiece." Firstly, the predominance of fair types in the personages does not argue a non-Peninsular origin; for the majority of the figures are actual portraits of the reigning king and his family, one of whom, a daughter, who became the wife of the Emperor Charles V., is painted by Titian in "La Gloria" as a woman of a delicate pale complexion, slight hectic blush, and with abundant golden hair. Secondly, "C." having described the weeds of the foreground as plants rare in the Peninsula, specifies one, "the wild columbine," which is common there. Thirdly, supposing that a monogram exists, it would be more likely to occur on work of Spanish or Portuguese origin than on a Flemish picture, as early Flemish artists were not in the habit of signing their paintings. Fourthly, even if the landscape background showed a northern country (which Mr. Robinson doubts), it should be remembered that early painters often showed a strong predilection for representing in their backgrounds the scenery of lands foreign to them. Fifthly, the red cow, which is noted by "C." as of a colour unusual in the Peninsula, finds a companion in a red bull which occurs in a fine illumination preceding the Office for the Dead, in a manuscript "Book of Hours," which belonged to Alfonso V., King of Arragon. The book, which is in the possession

of Mr. Robinson, was executed about 1442. In respect of the wheeled plough, who shall say that in Dom Emmanuel's time such a thing was unknown in Portugal?

The *Bullettino dell' Instituto*, &c. (December) contains an account by Lanciani of the recent excavations round the three columns of the Temple of Castor. The most curious thing is the discovery of the deep springs which once fed the Lacus Curtius, and which are noticed in several of the old MS. descriptions of earlier excavations to which Lanciani refers. There is some hope that further remains of the Fasti Capitolini may be found, which on one theory were attached to the walls of this temple—a temple in which the senate not unfrequently met. The depression of the *cella* below the level of the outer part of the temple is also commented on.

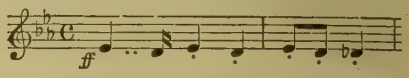
The *Revue archéologique* (December) contains an article by Maspero on the stele of excommunications found at Napata, the capital of Ethiopia; and an account of the Temple of Augustus at Ancyra in Phrygia, by the architect of the French exploring expedition to Galatia (the 24th and last part of their great work is just being published).—An ancient caricature of Ganymede on a Roman lamp now in the Louvre is described.—Ruelle announces that he has been able to take a complete list of the Greek MSS. in the chapter library at Toledo.

The *British and Foreign Evangelical Review* (Quarterly-Edinburgh), January 1872 ("On Ephesus and the Temple of Diana;" by Alexander S. Murray), reviews Guhl's *Ephesiaca* and Falkener's *Ephesus*, and gives an accurate and most readable history of Ephesus and its site from the earliest times to the present hour, concluding with an account of Mr. Wood's excavations now in progress on the site of the famous temple.

A portrait of Sir Philip Francis, by Lonsdale, has been lately added by the Trustees to the National Portrait Gallery in Exhibition Road, South Kensington. It is, apparently, the original of the well-known engraved portrait which fronts the title-page in Mr. Taylor's *Junius Identified*.

Dr. Curtius sends to the first number of the *Preussische Jahrbücher* (January 11) a short account of his visit to Asia Minor and Greece, together with some fresh inscriptions discovered by himself and his companions. He undertakes to make public, with as little delay as possible, the topographical and other results of his expedition.

As a musical event of considerable importance last Saturday we have to record the performance of Liszt's Concerto in E♭ at the Crystal Palace by Mr. Dannreuther. The enthusiastic reception of the work by the audience, equally due to its intrinsic value and to the excellent performance, showed once more the sympathetic feeling of the English public for the productions of the modern German school. This favourable result is even more conclusive than the success the same concerto met with at Mr. Bache's concert last season, where the Liszt worshippers had assembled in full force, while this time the work had to appeal to the miscellaneous elements of the public in general. Mr. Dannreuther's rendering was highly praiseworthy in most respects. He had grasped the poetic meaning of Liszt's music with rare felicity, and mastered the immense technical difficulties of the work to a considerable extent. We remember having heard the same work rendered by Tausig, the lately deceased king of his instrument. He was certainly superior to the London performer in the infallible correctness and appalling brilliancy of his play, but by no means as far as touch and expression are concerned. The double turn in the slargando movement was given by Mr. Dannreuther with the most delicate and graceful dolcissimo; and equal praise was due to the rendering of the theme of the adagio with its arpeggio-like accompaniment. The orchestral part was upon the whole, and considering the difficulties of the work, satisfactory. Here and there it seemed wanting in the delicacy and discretion so necessary and difficult to acquire with the complicated machinery of our modern orchestra. There also occurred some slight mistakes in the single instruments, one passage, for instance, of the horn being (if we may trust our memory, unassisted as it was by the score) missed entirely. In the first movement Mr. Manns ought to have illustrated the rhythmical accents with stronger touches. The theme—



which Liszt by the bye has also used in his setting of Lenau's ballad *Die drei Zigeuner*, is unmistakably of Hungarian or rather gipsy origin, and depends, like all the tunes of this nation, for its effect entirely on its force and originality of rhythm. Mr. Manns' conception seemed to us much too subdued in the contrasts of light and shade. About the work itself we have spoken on a former occasion (see *Academy*, vol. ii. p. 282). We repeat here that its merits rest less upon original invention than on the consistent carrying out of a poetical idea. In this respect it is very valuable as showing that even without a rich flow of melodious spontaneity, the mere dramatic force of the original conception, and its gradual rise to the climax of pathos, can engender works of the highest beauty in music.

We hope that the brilliant success of Liszt's work may encourage the authorities of the Saturday Concerts to further attempts at a more frequent introduction of modern German works into their programmes.

F. Hüffer.

New Publications.

Annie, "An Excellent Person." By E. S. Maine. Smith, Elder, and Co.

Elze, Carl. A Biography of Lord Byron, with a Critical Essay on his Place in Literature. Translated from the German with Notes. Murray.

Felsing, J. Der literarische Streit üb. die beiden Bilder in Dresden u. Darmstadt genannt Madonna d. Bürgermeisters Meyer. Leipzig: Vogel.

Fröhner, W. Deux Peintures de Vases grecs de la Nécropole de Kameiros. Fol. Paris: Baur et Detaille.

Schasler, Max. Æsthetik als Philosophie des Schönen u. der Kunst. 1. Bd. 4. Lfg. Berlin: Nicolai.

Scott, W. B. The British School of Sculpture: illustrated by 20 steel engravings and 50 woodcuts. Virtue and Co.

Sebastian Brands Narrenschiff in neuhochdeutscher Uebertragung von Karl Simrock. Mit den Holzschnitten der ersten Ausgaben u. dem Bildnisse Brands aus Reusners Icones. Berlin: Lipperheide.

Theology.

A Catena of Buddhist Scriptures from the Chinese. By Samuel Beal. Trübner and Co.

This volume is, with regard to Chinese Buddhism, what Mr. Spence Hardy's work, *A Manual of Buddhism*, is to Singhalese Buddhism; it corresponds also to what M. E. Schlagintweit has done for Thibetan Buddhism in his book entitled *Buddhism in Thibet*. In the work before us Mr. Beal speaks but little himself; explanation and discussion occupy but the smallest of spaces. His great object is to let the Chinese Buddhist authors speak; he hides himself, as it were, behind them; and his personal work consists (besides the important and essential work of translation) in the arrangement of the different parts, and in the art by means of which he has bound them together, and has collected into one whole fragments gathered here and there.

Several of the writings quoted in this work have already appeared scattered through different numbers of the *Journal of the Royal Asiatic Society*. The author has had the happy thought of collecting them, of linking them together, and of completing them by several new translations in such a

manner as to form of the whole, that which he rightly entitles: *A Catena of Buddhist Scriptures from the Chinese.* We will not ask whether Mr. Beal has always made the happiest selection among the Buddhist literature of China; it did not perhaps depend on him to make a perfectly free choice; and it must be a chance whether an author falls on the most interesting works when he draws from a collection which "includes 1440 distinct works comprising 5586 books." Mr. Beal gives us, besides, to understand that he has not had all the facilities desirable for making very deep researches. We accept what he offers us, without complaining too bitterly in the cases where we might clearly have wished for, or expected, other things.

After some introductory remarks (1–9) in which the author insists on the help which the study of Chinese Buddhism gives to that of Indian Buddhism, on the external relations of certain institutions of Christianity and Buddhism, and finally on the necessity of being acquainted with the Buddhist religion, to act efficaciously on the minds of those who profess it, and clearly to understand the part which it plays and the place which it occupies in the "Divine strategy employed in the education of the world" (p. 7), the author enters upon his subject. His book is divided into five parts:—I. Legends and Myths. II. Buddhism as a Religion. III. Scholastic Period. IV. Mystic Period. V. Decline and Fall. A general index and an index of proper names, the latter being composed exclusively of Chinese names with the Sanskrit equivalent or a short explanation in English, terminate the book. We will proceed to give a notice of the different parts, adding to this summary some remarks.

I. The first part rests on two Chinese works, the Fah-kai-on-lih-to, which Mr. Beal translates "The Buddhist Kosmos, illustrated," and the Shing-Tau-ki, or Memorials of the complete inspiration of Tathâgata, with an account of Buddha Çakyamuni. It is perhaps not very natural to place under one heading two works, one of which is the description of a fantastic world, while the other, notwithstanding the many legends it contains, depends on an historical fact. The remarks with which Mr. Beal prefaces this section prove that he has felt the difficulty; therefore we will not blame him for an arrangement which was perhaps inevitable. Mr. Beal also observes that these two works belong to the Swâbhâvika school, the ruling one in China, which teaches the eternity of matter and leads to Pantheism. Both these books are comparatively modern, and, moreover, they are very evidently reproductions. This is specially true of the first, the author of which is well known to be Jin-ch'au: he himself gives the date of his work (A.D. 1127); he treats of a subject which has nothing primitive about it; for it was not in the early times of Buddhism that its followers thought of creating a world as complicated as it is imaginary; and lastly, his book bristles with quotations borrowed from a great number of different works, which only render it the more valuable. It is curious to notice, at the opening of this book, the efforts which the author makes to demonstrate the superiority of India, and in particular the special right of the peninsula to the title of "middle country," by which the Chinese are wont to designate their own land (p. 16). But we cannot pause on all the details of the work of Jin-ch'au, on all the inventions by which the imagination of the Hindoo plays across the Unknown in time and space; we will not attempt to enumerate here the thirty-two stages of the Heavens, nor the eight burning and the eight cold Hells, nor the fields of Buddha, nor the Kalpas, or almost immeasurable periods of time. We will draw attention to a few points only.

In the midst of all these vagaries we find several times mentioned the *Karma** (particularly at pages 34, 40, 86). This is explained by the close and necessary connection which Buddhism establishes between moral actions and the external condition of beings. From the moment that an almost infinite variety of worlds is admitted, these worlds must be peopled according to the consequences of the *Karma.* Buddhism entirely subordinates the physical to the moral world, and the whole system of the Buddhist world was perhaps only invented to correspond to the development of the doctrine of the *Karma.*

There is another point we must notice which is still more important, because it concerns the usefulness of Mr. Beal's work with regard to Buddhist studies considered as a whole. The Chinese author borrows continually from works of which he quotes the titles, sometimes in the Sanskrit form (which proves that he is sure of their identification), sometimes in the Chinese form, but giving either the English translation or the more or less certain Sanskrit equivalent. Now what is important, according to our views, would be to know whether the works of which he speaks correspond with known and existing works in Sanskrit, Thibetan, or Pâli.

On this point Mr. Beal gives us no sufficient enlightenment. It may have been impossible for him to do otherwise, at least in the greater number of cases; for special researches would have been necessary for the purpose: we simply state the fact. When we find quoted the Avatamsaka-sûtra, we identify it at first sight with the Thibetan work in the Bka'-'gyur, which bears that title; it remains to be proved whether the two works coincide. When Mr. Beal quotes the Karunika-mahâ-râja-sûtra, and gives the Chinese title Jin-wang-king, we cannot doubt the exactness of its Sanskrit translation (although the word mahâ is not represented in the Chinese); but knowing that there are in the literatures of Nepaul and of Thibet two Sûtras, entitled *Karunâ*—and Mahâ-karunâ-pundarîka-sûtra, we see that the title of the Chinese work is not the exact equivalent of that of the two others, and we are led to ask ourselves whether we have to do with a third work, either no longer extant or not extant in other Buddhist literatures. With regard to the In-pen Sûtra, Mr. Beal gives us with hesitation the Sanskrit equivalent Mahâ-nidâna-sûtra, warning us in this manner that the identification needs confirmation. It is the same with the translation Piṇḍa-dhana, which he proposes for the work named Lau-tan (p. 47); but here it is probable that Mr. Beal has himself altered his own Sanskrit translation, and that we ought to read Piṇḍa-dâna, which means, "a gift of balls of rice"—alms.

The translation "The Sûtra of Creation" from the Chinese Hi-shai-king, for which Mr. Beal gives in his index Shrishti-Khanda with a note of interrogation (?), shows the same uncertainty. These examples will serve to show that there is much yet to be done to prove the relations which exist between the Buddhist books of China and those of India and Thibet. Mr. Beal has felt himself hampered by this difficulty, and has had neither the time nor the means to solve it. It is only by examining and comparing the different literatures that the truth will be discovered. A mere translation of titles, however learnedly made, can but produce uncertain results.

While on the subject of Sanskrit words in Mr. Beal's work, we must remark that they are often defective. The word which he writes Shrishti-Khanda ought to be written Srishti-Khanda (or better still, Sṛṣṭi-Khaṇḍa); we also often meet with râjah and its plural râjahs with an *h*, which

* It is known that this term, which signifies "act," designates the actions of intelligent beings considered in their moral value, and in the inevitable consequences, which the law of justice attaches to them.

nothing can justify; we may say the same of the *y* in Vijnyâna. We also remark variations in the orthography: why write sanscâra (p. 97) when in another place we read sanskâra, and when the *k* is usually substituted for *c*? We will not carry these remarks any further. It is not surprising that Mr. Beal, being a Chinese and not a Sanskrit scholar, should often wrongly spell Sanskrit words; the fault is attributable rather to Sanskrit scholars themselves. When they have agreed upon the system of transcription to be adopted for the language which they make their special study, they may perhaps have a right to blame those who do not make it their special study for denaturalising words through faulty orthography.

The second chapter of the first section is, as we have already said, upon the life of Çâkyamuni. The Chinese work which deserves best to be known upon this subject is the first edition of the Lalita Vistara; but it is not this which Mr. Beal offers us now. If he should at some future day be able to give us this, he will render an important service to Buddhist studies. In the mean time he puts before us the Shing-tau-ki, composed in the seventh century by Wong-Puh. "It is," says Mr. Beal, "probably a copy of the first records. It claims a semi-canonical authority as belonging to the traditional or Smriti class of works" (p. 130). It is true that this work has an ancient and primitive appearance; but its date is incontestably modern.

Mr. Beal has already given the translation of this book, and of a commentary upon it, in the 20th volume of the *Royal Asiatic Society* (part ii. 1863), and to this he refers the reader, as in the present work he omits the commentary. The simple translation of the work of Wong-Puh would be insufficient, and far too enigmatical, if it did not relate to a subject which has been already treated several times, from divers sources, and of which the *Asiatic Journal* offers, in the volume previously quoted, a more complete exposition.

The most original part of this chapter is the discussion by which it opens (pp. 126–130) upon the name Buddha Çakyamuni, which, according to Mr. Beal, might be of Scythian origin. The author lays much stress on the name Çakya, which bears no small resemblance to Çâka, the (Persian) name for the Scythians, and on several other particulars which he interprets skilfully. I believe that Mr. Beal is not the first to bring forward this interesting theory, which is well worthy of examination. It is plain that the etymology attributed by the Indians to the word Çâkya is purely fanciful (like many others), but if we are to believe that the Çâkyas came from Scythia, we must fix their arrival in India at an earlier period than 623 or 625 B.C., the date proposed by Mr. Beal; for Çâkyamuni, who died (according to the generally admitted Singhalese calculation) in 543, at the age of eighty, must have been *born* in 623; and it is difficult to believe that he belonged to a family newly arrived from Scythia. Indeed, and this is my strongest argument against Mr. Beal's theory, the founder of Buddhism, by his character, and the turn of his mind, appears to have been an Indian, a thorough Indian, a great deal too much of an Indian to have been a Scythian!

II. In the second section Mr. Beal commences by showing that Buddhism is really a religion, and he gives us to understand that Çâkyamuni must have gone back to anterior traditions for his doctrines; which is as much as implicitly to recognise several historic Buddhas: a serious question, which cannot be decided by simple suppositions. The passages quoted at the close of this exposition are—firstly, the versified and well-known adages which contain the doctrine of Buddhism; secondly, some passages relating to the four Truths; thirdly, passages relating to the Nirvâna; fourthly and fifthly, the Sûtra of forty-two sections and the Pratimôksha, two important works, the translation of which has already appeared in the *Journal of the Royal Asiatic Society* (19th vol. 1st series); sixthly, the daily manual of the Shaman, an interesting collection of the actions and sacramental words required daily from a Buddhist monk; seventhly, passages relating to the school of Tiant'ai. All is not equally new, nor of equal importance, although all is interesting in this collection: we will notice specially the parts not previously published.

With regard to the four Truths, Mr. Beal gives us a fragment of the Pari-nirvâna-sûtra. We here find a very complete and detailed exposition of the first Truth, illustrated in all its parts by those examples which the Hindoos lavish with a fertility and a sagacity peculiar to themselves, but which do not always bring with them conviction. As the proverb says, "Comparaison n'est pas raison." The other three Truths are scarcely mentioned by name. But we must notice another omission still more to be regretted. It is true that every writing on the subject of the four Truths is worthy of attention, and a quotation from the Chinese Pari-nirvâna is all the more interesting, because this work, or a work of the same title, exists in the other Buddhist literatures. But on the subject of the four Truths, these same literatures offer us a particular book, a Sûtra which is the first discourse pronounced by Çâkyamuni, and which is considered authentic, although each literature has its special version. Gogerly has given us the translation of the Pâli text (*Journal of the Ceylon Branch of the R. A. Soc.* No. 66). I may be allowed to remind the reader that I have myself translated or compared four versions of this primitive discourse (*Journal asiatique*, mai–juin, 1870). What does Chinese literature offer us on this point? Mr. Beal does not tell us, and yet it would be of the greatest importance to discover. There is no doubt that one at least of these writings exists in Chinese; possibly all may exist in the Buddhist literature of the Celestial Empire. They might not be easily discovered, but they are worth the trouble of seeking. We call Mr. Beal's attention to this point.

It is again the Pari-nirvâna-sûtra which furnishes Mr. Beal with materials on the question of the Nirvâna. The author begins by telling us that Chinese works generally define Nirvâna as the *condition* in which there is neither birth nor death (p. 172), a perfectly true definition, but somewhat vague, as the point precisely is to know in what this condition consists. Mr. Beal remarks in two other places (pp. 276 and 281) that Buddhism proceeds by elimination: it denies one attribute, then a second, then a third, and so on until one scarcely knows what remains; and that which remains, if indeed there remains anything, it takes care not to define clearly. The Buddhists appear to try to contradict every affirmation by a negation, and to neutralise one assertion by another. They employ to the uttermost the essentially Buddhist rule of the *juste milieu*, which in certain cases, and especially in metaphysics, consists in advancing nothing, and in ruining every argument employed by another. Who could define clearly the Buddhist "true self," or "I," of which Buddha affirms that it is permanent, full of joy, personal, and pure? (p. 180). These terms seem to assert in a positive manner, the persistence of personality and identity in the Nirvâna: but the reasoning which led to this conclusion is far from creating clear ideas; and one cannot rest on this assertion only, fully to understand the nature of the Nirvâna, of that "silent extinction" (Tsih-mieh, p. 172) which for some is a complete annihilation "vollständige Vernichtung" (Wassilief). One might conclude from the passages brought forward by Mr. Beal that

Chinese Buddhism rejects the annihilation-Nirvâna; but these writings do not include the whole of Chinese Buddhism; and it is very probable, if not certain, that the question has been solved in different ways by the Buddhists themselves. It is not easy to draw from contradictory assertions a certain and definite conclusion: *Adhuc sub judice lis est.*

With regard to the school of Tian-t'ai, which is a very important one in China, Mr. Beal gives us a description of the principal seat of this sect—an account of a visit to the central convent—also an analysis and partial translation of the principal work of its founder, Chi-kai (the end of the sixth century). This work, named Chi-kwan, or knowledge and meditation, presents the minute exactness which distinguishes Indian and especially Buddhist writers in the enumeration of all the parts of the subject treated, and in the determination of all the means it is necessary to use, most of which are remarkable only for their puerility.

III. With the third section we enter into the interminable sophistries of the Prajña-Pâramitâ, which forms in Thibetan literature so vast a compilation, yet which is capable of considerable abridgment, seeing that it may be entirely contained in the letter *A*.* Mr. Beal has already published in the *Journal of the R. As. Society* (New Series, vol. i. part i.) the translation of the Vajra-tchedika and of the Prajña-Pâramitâ-Hridaya; he confines himself in his new work to short quotations from the former, but reproduces entirely the latter, which recapitulates in a felicitous manner the spirit and method of the Prajña-Pâramitâ, by collecting the principal topics of Buddhism, and by applying to them an inexorable system of negation. But the most novel and important part of this section is the translation of a long fragment of the Çurañgama, which occupies 84 pages of the book, in small print, and reproduces about one-third of the original work. Mr. Beal seems to suppose that this Sûtra, which treats of the contemplation or ecstacy named Samadhi, may be the same as the Samâdhi-Râja: but there is nothing to authorise this supposition. The Samâdhi-Râja and the Çurañgama both treat to all appearance of the same subject, but are two distinct works. In Thibetan, they may be found in the same volume (the 9th) in the section Mdo of the Bka'-'gyur, the former at the beginning, the latter at the end of the volume, but neither the one nor the other forms part of the same section as the Prajnâ-Pâramitâ.

IV. In the fourth section (Mystic Period), the author, after a few words on the relations of mysticism with scholastic subtilities, sets forth the Buddhist mysticism, created by Aryadeva, a disciple of Nagardjuna, whose principal creations are Amitâbha and Avalokiteçvara. Amitâbha is the Dhyâni-Buddha (which one might call the mental reflection, the intellectual and mystic manifestation) of Çâkyamuni. Hence the honours paid to him in China and in Japan. The abode of this personage, as mystical and imaginary as himself, is Sukhavatî. Mr. Beal enumerates the different ideas attached to the name or to the person of Amitâbha. "Boundless light," such is the sense of this word. To this notion is joined that of omnipresence, which may be rendered by the name of Vairochana (although this word does not appear to bear that meaning, and we doubt the correctness of the translation which Mr. Beal gives of it, "the Omnipresent," p. 373);† that of Eternity, to which the Chinese appear specially to attach themselves, and which the name of Amitâbha appears to favour on account of the similarity between Amita, "immense," and Amrita, "immortal" (not Amirta, as we find in p. 373); and finally, that of Adi-Buddha, or the primordial Buddha. I admit that the Sanskrit term Adi-Buddha is, as Mr. Beal asserts, without sufficient proof, the equivalent of the Chinese yih-sin, "one form of existence" (p. 373), properly a single heart, or an only heart, the heart of unity. This word "heart" (one self), which is in the Sanskrit hridaya, shows in Amitâbha the inner self, and leads naturally to the idea of love and compassion, which are also some of the attributes of the Dhyani-Buddha. But as self is manifested by speech, speech is also one of the attributes of Amitâbha: only under this form, he takes a distinct name and personality, and becomes a sort of "Word" (Logos) by the name of Avalokiteçvara (p. 314). It is therefore natural that Mr. Beal should pass on to this personage after giving two fragments relating to Amitâbha.

Neither in the text nor in the index of Mr. Beal's work do we find the translation of the title of the works from which these fragments are taken. The first, entitled Tsing-tu-wan, appears to signify "Description of the pure earth," and the two first terms seem to correspond with the Sanskrit Çuddha-bhumî: we know no Indian work of this name, but the Chinese work being a popular book, according to Mr. Beal, may perhaps not be contained in the Buddhist canon. The second work, Wu-liang-shen-king, is a Sûtra. Mr. Beal informs us that Wu-liang-shen is the name of Amitâbha taken in the acceptation of "Eternal." This Sûtra may correspond with the Amitâbha-vyûha of the Thibetans, placed in the Kon-Tsegs of the Bka'-'gyur (*Asiatic Researches*, vol. xx. part ii.); but as Mr. Beal calls his translation "The Western Paradise" (p. 378), the original would seem rather to correspond with the Sukhavati-vyûha, and the opening passages seem to have reference to the details given by Csoma concerning the Thibetan work, which is the third in the 7th volume of the section (*Asiatic Researches*, vol. xx. part ii.). It is moreover possible that the Amitâbha and the Sukhavati-vyûha of the Bka'-'gyur are one and the same book.

The history of Avalokiteçvara is curious. It is this divinity who comes to life again perpetually at Lhassa in the person of the Thibetan Pope, the Dalaï-Lama. In China, he has become a female deity: Mr. Beal states this as a fact without giving any explanation. The name of Avalokiteçvara has also its history. The Thibetans render it by Sbyan-ras-gzigs-dvang-phyng, "The Lord who looks with his eyes." The Chinese call it Kwan-shai-yin. Kwan also signifies *to look*, like avalokita; but shai-yin, "world-voice," does not correspond with Içvara, the master, and some have thought that it was a corruption of Tsen-tsai, the self-existent (Içvara, p. 383). Mr. Beal refutes this opinion, and proves by various arguments, which appear to carry weight, that Kwan-shai-yin is correct, and is not the translation, as had been thought, of Avalokiteçvara, but of Samanta-mukha, another name or epithet of Avalokiteçvara, signifying "the universally manifested voice." I am not certain that Mr. Beal has fully solved the difficulties which the Chinese name of this divinity presents; but assuredly his discussion is worthy of serious consideration. With regard to Samanta-mukha, which is the title of the 24th chapter of the "Lotus of the good Law," Mr. Beal gives the translation from the Chinese version, which offers materials for a fruitful comparison with the corresponding portion of the

* The ninth work in the section named Sher-phyin (Prajnâ-Pâramitâ) in the Bka'-'gyur is reduced to the letter *A*, considered as the mother of all learning, because it represents writing and the beginning of all knowledge. (See *Asiatic Researches*, vol. xx. part ii.)

† *Vairochana* signifies "son of Virochana." *Virochana*, from *vi ruch*, signifies nothing but "to shine:" the preposition *vi* bears often the notion of dispersion. One might translate it, "of which the light spreads itself afar," beaming. *Virochana* is one of the names of fire, the sun, the moon, &c.

French translation by Burnouf. At the end of this extract, the learned Sinologue makes us acquainted with a much less well known writing, the liturgy of Kwan-yin, a very interesting summary of a popular Chinese form of worship.

V. The fifth section (Decline and Fall) is very short, and treats of the notions foreign to Buddhism, which have been added to it voluntarily or forcibly, particularly through the influence of the Indian forms of worship of Vishnu and of Çiva, especially of the latter. This question might be treated far more fully than it has been by Mr. Beal. He has attached himself especially to a very curious point in this decadence, the worship of serpents, to which Mr. James Fergusson has already called our attention. Mr. Beal takes this opportunity to give us an interesting extract, according to the Chinese version, of the Megha-mandala-varsha-vardhana, the Sûtra which is repeated to obtain rain, a blessing so often needed, especially in India. He also touches in a few words on a curious and interesting question, the influence which Christianity may have had upon Buddhism (p. 412). The introduction of Christianity into Central Asia by the Nestorian missions, the traces of which were long preserved, is certainly worthy of deep study. In his introductory remarks Mr. Beal had previously spoken of what the Christianity of the middle ages borrowed from Buddhism, and we know that Mr. Max Müller has already thrown light upon one of the points which prove the connection between two religions so similar in certain features, though fundamentally so dissimilar.

There exists in this connection, and in these mutual borrowings, a fruitful source of observations, and of historical information, which will be explored at some future period when our acquaintance with Buddhism is more extended.

Mr. Beal's book is neither entirely new, as regards its component parts (seeing that he has already published some of them), nor is it fully satisfactory with regard to Chinese Buddhist literature, of which he gives us but a very partial sketch; but, considering the abundance of details and the information of all kinds which it contains; the picture of Chinese Buddhism which it presents to us, taken from the very source; the proof it furnishes of the importance of this fraction of Buddhism, and of the vast literature which is the exponent of its doctrines, institutions, and history, the book before us is of great value. It will contribute to the popular knowledge of Buddhism, and at the same time it will give valuable assistance to scholars in their work of comparing the different branches of that religion, which, having its birthplace in India, has spread itself over the whole of Oriental and Central Asia. LÉON FEER.

Contents of the Journals and Notes.

British Quarterly, January.—The theological article of this number is a curious specimen of the use and abuse of Rabbinic lore. It professes to be a criticism on *The Speaker's Commentary*, but the only considerable defect which it discovers in the first volume of that work is the neglect of Jewish tradition. Bishop Browne, for instance, and Mr. Espin, have failed to account for an inverted Hebrew letter (*Nun*); the Bishop has also committed himself to a hasty statement about "the belief of all Jewish antiquity"; while Mr. Clark has shown himself to be ignorant of the difference of opinion among the Jews of Palestine and Babylon on the subject of the Decalogue. The reviewer altogether ignores "modern" criticism, and thinks that the occurrence of the name Jehovah in the Moabite inscription is a convincing attestation of the history of Balaam.

Theolog. Literaturblatt (organ of the Rom. Cath. faculty at Bonn).—Dr. Ruland gives a description (Dec. 18) of an important work just published, as the result of fifteen years' toil, by Prof. E. Ranke, the fragments of an ancient Latin version of the O. T. preserved in two palimpsests at Würzburg.—Prof. Langen reviews some recent books on the Apocalypse, and (Jan. 1) the works of Weiss on St. Mark, and Godet on St. Luke.—Herr von Reumont describes (Jan. 15) researches on the basilica of St. Andrew at Rome in two recent numbers of de Rossi's *Bullettino*, and Dr. Hartsen reviews Maudsley's *Body and Mind*.

Zeitsch. für wiss. Theologie, Vol. xv. No. 2.—Pfleiderer continues his exegetical studies of Pauline doctrines by an essay on Justification.—Hilgenfeld writes on the Christ-party and the Nicolaitans; the former, he thinks, stood in much the same connection with the first apostles as the latter with St. Paul.—Hitzig sums up the principal arguments against Lagarde's ingenious emendation of Isa. x. 4 in the *Academy*, Dec. 15, 1870.—Prätorius translates the book of Baruch from the Æthiopic.—Hilgenfeld continues his examination of Keim's *History of Jesus*.—Moriz Schmidt proposes an emendation of Theophilus ad Antolycum, ii. 6, p. 62 (Otto).—Siegfried reviews Cheyne's *The Book of Isaiah Chronologically Arranged*, and *Notes and Criticisms on the Hebrew Text of Isaiah*. He remarks of the former that, though the influence of Ewald is generally visible, the author has often struck out an original line of argument, and in some points of importance, which the reviewer might easily have added to, has rejected the authority of his master. The exegetical notes, a department wholly neglected by Ewald, are said to evidence wide reading and a sound critical judgment, and in general the style of the work is commended for its clearness and precision. *Notes and Criticisms* is also described as sound in method, skilful in combination, and here and there extremely acute. As to Isa. viii. 19–23, the reviewer suggests (very plausibly, in our opinion) that verses 21 and 22 should be transposed.—A. H. reviews Part I. of Ewald's work on the New Testament, and Haupt on Old Testament quotations in the Gospels; Rönsch, Lagarde's edition of Jerome's *Quaestiones* and *Onomastica Sacra*; A. H., Lucht on the two last chapters of the Epistle to the Romans.

Theologisch Tijdschrift, January.—Prof. S. Hoekstra gives us his thoughts on the nature and method of Theology.—Prof. Kuenen discusses an acute but over-subtle conjecture of Dr. Oort on the Beth-Ephrath of Mic. v. 1.—Among the books reviewed are *The Speaker's Commentary*, and the attempted refutations of that work by Colenso and Strange. It is intelligible that Dr. Kuenen should exaggerate the public importance of the Archbishop of York's undertaking, and equally so that he should administer a gentle reproof to such biassed investigations.

Canon Perowne, the commentator of the Psalms, has favoured us with a letter on the subject of Prof. de Lagarde's "Discovery of Psalmists." He points out that it would be a surprising coincidence if, when we have but two acrostic Psalms with a supernumerary verse, the author's name should in each case be formed from the same verb *pādāh*, compounded with one of the sacred names, and "waits for further light."

Dr. Quarry, author of an able apologetic work on "Genesis," referred to as an authority by Bishop Browne, has written to complain (1) of Bishop Colenso's reproof of the Bishop of Ely for his unquestioning acceptance of the results of Dr. Quarry's analysis, and (2) of his misrepresentation of Dr. Quarry's view of the argument from the repetition of the sacred names.

Mr. Finn has published a collection of papers on *The Orphan Colony of Jews in China* (Nisbet), together with a translation of the original letter received by Mr. Layton, British Consul at Amoy, in 1850, from the Jews in Kae-Fung-Foo. It would appear that this Jewish colony dates from the close of the eleventh century of our era, and was formed by an emigration from India. The Jews of the latter country came originally from Persia; and, in fact, the colophon of the Chinese copy of the Pentateuch is in Persian (p. 65). It is strange that no mention is made of the Day of Atonement in the Chinese letter to Mr. Layton (p. 49). In the appendix Mr. Finn gives the Hebrew letter addressed to the Chinese community, to which the letter above referred to was the reply. If these Chinese Jews had understood Hebrew, they would probably have suspected the true character of their questioners.

New Publications.

CREMER, H. Biblisch-theologisches Wörterbuch d. neutestam. Gräcität. Zweite sehr verm. u. verb. Aufl. Gotha: Perthes.

GRAU, R. F. Entwickelungsgeschichte d. neutestam. Schriftthums. Bd. II. Gütersloh: Bertelsmann.

HAUSRATH, A. Neutestam. Zeitgeschichte. Thl. 2. Heidelberg: Bassermann.

HEINZE, M. Die Lehre vom Logos in der griech. Philosophie. Oldenburg: Schmidt.

JESCHURUN. Zeitschrift für d. Wissenschaft d. Judenthums. Deutsche Abth. Breslau: Schletter.

PAR PALIMPSESTORUM WIRCEBURGENSIUM. Antiquiss. V. T. version. Lat. fragmenta e codd. rescr. eruit etc. Ern. Ranke. (Price 2*l.*) Vienna: Braumüller.

REINKE, L. Beiträge zur Erklärung des A. T., enthaltend elf Abhandlungen. Bd. 8. Giessen: Roth.

SCHOLTEN, J. H. De Apostel Johannes in Klein-Azië. Rotterdam: Van Baalen.

Philosophy and Physical Science.

Trilobites. Extrait du Supplément au Volume Ier du Système silurien du Centre de la Bohème. Par Joachim Barrande. Prague et Paris, 1871.

This work comprises the author's review of his studies on the development of Trilobites in general; a chapter on the vertical distribution of Trilobites in the Silurian formation of Bohemia; a comparison of the occurrence of the Trilobites and Cephalopods in the Silurian basin of Bohemia; while a fourth chapter expounds some new palæontological views founded on his observations. His conclusions, which are strongly anti-Darwinian, demand attention on account of the author's vast experience in palæontological questions.

Notwithstanding the considerable time and attention which the author has bestowed upon this subject, he has failed to discover any evidence of the gradual development of Trilobites. Neither the modifications of the head of the different genera nor of the thorax or pygidium offer sufficient characters, and in cases where there exist intermediate forms, the great difference in the geological age to which they belong must at once cause us to dismiss all thoughts of placing them side by side. Besides this, a portion at least of the Trilobites of the Primordial fauna do not belong to the lowest organized forms of this Crustacean group, whilst the dimensions of some of the Paradoxides are only surpassed in size by very few forms of the second fauna, which belong to the genus Asaphus. The first appearance of nearly all genera in the first and second fauna also is not in accordance with the hypothesis, that the generic characters are developed like the specific variations by gradual changes. The non-appearance of new genera is very surprising, at a time when the order was still in full development, in the middle of the Palæozoic epoch.

According to the theory of transformation, the animal in developing itself ought to reproduce the forms of its ancestors. But Trilobites show already in some of the oldest known forms a great number of segments, whilst it is known that the embryonic forms of Trilobites possess only few segments. M. Barrande does not believe in a retrograde movement in the development of the Trilobites after the Primordial fauna, considering the great irregularity (which he shows by means of numerous tables) in the vertical distribution of this class. He devotes a chapter to the relations which are proved, by the distribution of the genera and species of Trilobites in Bohemia, to exist between the Silurian formation of that country and other parts of Europe.

He shows there is not one known genus of Trilobites in any of the Silurian strata of Europe which is not also found in Bohemia. Six genera, amongst them Hydrocephalus and Sao, are only known from Bohemia. The North Silurian zone possesses a certain anteriority as compared with that of Bohemia, as some of the Trilobite types occur lower down in Scandinavia.

Comparing the Cephalopodous fauna with the Trilobite fauna of the Silurian basin of Bohemia, Barrande finds that, besides the earlier appearance of Trilobites (the Cephalopoda are wanting in the Primordial fauna), they are also numerically by far the stronger order. Only in the third fauna do the Cephalopoda become more important and numerous in comparison with Trilobites. These two great groups show great contrasts, but it may be doubted whether the appearance of one, and the diminution of the other group, as they are entirely independent of each other, are due to changes of the physical conditions during the Silurian epoch.

The author tries to explain the appearance of species in a stratum by four hypotheses: 1. The vertical propagation of species, which range from the oldest strata to younger horizons. 2. The filiation, which points to the development of new species out of older ones. 3. The immigration from other parts. And lastly, 4. *Renovation.* By renovation he understands the appearance of species which cannot be explained by any of the three former modes of appearances. This *generatio aequivoca* of Barrande is however entirely different from intermittence of species, which he treats in a separate chapter.

Barrande finally comes to the conclusion that most of the successive series of Trilobites met with in the Bohemian Silurian formation can only be explained on the theory of *renovation.* A very small number of species are regarded as having immigrated, but the numbers in the column of "propagation verticale" are considerable. But he holds that there is not *one* Bohemian trilobite, nor one cephalopod, which is derived by filiation (*i. e.* by descent with modification), arguing again from palæontological data, that far more forms of great geological longevity existed amongst the Trilobites than amongst the Cephalopoda. The fact that the percentage of immigrated Trilobites in Bohemia is twice as large as that of Cephalopoda, although the latter possessed far better organs of locomotion, he explains by supposing the action of strong currents in the seas of the Silurian epoch. The proportion of the genera of Cephalopoda to that of Trilobites in the Bohemian Silurian rocks is as 1 to 2.

The last chapter of the book is taken up by "palæontological theories examined in the light of facts." After an introduction, treating of the insufficiency of our knowledge of the "pre-primordial" epoch (in which he considers the Huronian system as the probable equivalent of the Upper Laurentian group), he speaks of the absence of all Foraminifera and the rare occurrence of Protozoa in the whole of the Primordial fauna; farther the absence of Corals, Conchifera, and Cephalopoda, and the absence of Heteropoda in all but the last phase of the Primordial fauna. The Brachiopoda only are well developed, although not nearly so numerous as the Trilobites. All intermediate forms between the Eozoon of the Lower Laurentian and the highly organized forms of the second Silurian fauna are therefore entirely absent. The few fossils of the Cambrian system, which ought much to be reduced in its vertical extension, and which may represent the "étage B" of Barrande, do not offer any support to the theory of filiation. Amongst these fossils are represented Brachiopoda (Lingula), Pteropoda, Bryozoa, Annelides, Starfishes, Echinoderms, Corals, Sponges, and plants. The absence of Trilobites in the Cambrian system is an important piece of negative evidence in respect of the sudden and numerous appearance of these Crustacea in the Primordial fauna. It is this sudden appearance of the Trilobites, repeated by the Cephalopoda at the beginning of the second, and by the Fishes at the end of the third fauna, which places the author in opposition to the Darwinian theory. C. L. Griesbach.

ENGLISH GOVERNMENT ECLIPSE EXPEDITION.

Jaffna, December 16, 1871.

The results obtained by the several parties of the Eclipse Expedition are not yet known, and I am unable to give more than a provisional sketch of the conclusions that have been arrived at.

The members of the expedition were spread over India and Ceylon, in order to render them as independent of weather as possible. Messrs. Lockyer, Abbay, and Davis, were on the extreme left, Captain Tupman, Mr. Moseley, and I, on the extreme right in Ceylon. M. Jannsen observed from Ootacamund.

The weather over the whole line of totality was excellent, and the telegrams received state that the observations made were very satisfactory.

Mr. Lockyer states that "five admirable photographs were obtained at Bekul." Also that "the polarization was atmospheric

with Savart undoubtedly, slightly radial with biquartz—1474 region very small. Respighi and myself have both obtained monochromatic images of the corona." These results are not quite in accordance with those obtained in Ceylon, but it is to be hoped that, when the reports are all received and published, the discordance may be found to be less than seems to be the case at present.

At Jaffna, Captain Fyers observed the reversion of the whole dark line spectrum just at the moment of totality, and afterwards four bright lines, C, D, 1474, and F. Captain Tupman devoted most of the time to sketching the corona, finding its structure to be most wonderfully intricate and peculiar, having bright rays both curved and inclined to the radial direction; also very deep rifts. He found the corona was visible for about 30ˢ after the end of totality, and during this period he proved the polarization to be radial, and to extend to a distance of 35′ from the moon's limb. Mr. Moseley saw no reversal of the dark line spectrum, but obtained several bright lines, and found that the 1474 line could be traced up to a height of 23′ from the moon's limb. He could find no lines on the dark moon. I myself obtained distinct proof of strong radial polarization, but did not observe at a distance of more than about 12′ from the moon's limb. Five extremely good photographs were obtained at Jaffna by Captain Hogg, R.E.

The sketches at Jaffna agree very well with the photographs, only differing from one another in the amount of detail introduced. A considerable change, however, is observed in the sketches made at Kokelay and Trincomalee.

The corona was most wonderfully bright, and the light during totality was quite sufficient to enable a person to read. It appeared to me of a light purple tint, and remained visible for several seconds after the end of totality. W. J. Lewis.

Postscript.—According to Mr. Lockyer's letter from Ootacamund (*Nature*, January 18, 1872) all the Indian observers, with the single exception of those at Manantoddy, had good weather. He describes the corona as a star-like decoration of the purest silvery whiteness, with its rays arrayed almost symmetrically, three above and three below, two dark spaces or rifts at the extremities of a horizontal diameter. The rays are composed of innumerable bright lines of varied length. From a streamer above the point where the sun had disappeared he obtained a vivid hydrogen spectrum, with line 1474 slightly extended beyond it, very faint throughout its length, and thickening downwards like F. The C line was very vivid, as was likewise the continuous spectrum, although there was no prominence on the slit; the spectrum was undoubtedly one of glowing gas. On using the simple train of prisms of Lockyer and Young, four exquisite rings became visible, with projections where the prominences were. C came first in brightness, then F, then G, and lastly 1474. On examining the corona with the 6-inch Greenwich refractor, it was found that the interlacing filamentous structure which is so marked could not be traced to distances less than from 5′ to 6′ from the sun; within this region no radial character is detected.

Prof. Respighi was stationed at Poodocottah (*Nature*, January 25, 1872). One of his objects was to search for Young's, or the bright line, stratum immediately before the beginning and at the end of totality. Thirty seconds before totality the dark lines had become more strongly marked than before, and within a few seconds of totality they disappeared entirely, the spectrum becoming continuous. Like Mr. Moseley, he failed to detect the reversal of the lines which Prof. Young observed in the 1870 eclipse. The professor thinks it not impossible that the bright atmospheric light diffused over the spectrum of the solar limb may have concealed them.

After the appearance of the chromosphere at the western edge there was suddenly projected on the spectrum of the sun's limb a stratum of bright lines separated by dark spaces. They were too transient to allow the observer to determine whether they were due to partial reversal or simple discontinuity. At the instant of totality the chromosphere of the edge last eclipsed was reproduced in the four lines C, D³, F, and G, with extraordinary intensity of light. The coloured zones of the corona then increased in prominence, one in the red corresponding with line C, another in the green was probably line 1474 of Kirchhoff's scale, and a third in the blue perhaps coincides with F.

By a mishap Mr. Lockyer was unable to look for the reversal of the lines.

THE AXIOMS OF GEOMETRY.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—Will you permit me to say a few words on the strictures which Mr. Stanley Jevons put forth in *Nature* for October 19, concerning my paper on the Axioms of Geometry (*Acad.* vol. i. p. 128). If I rightly understand the sense of the statements in which Mr. Jevons contests my conclusions, the point of difference between us is the following:—

Where I say that geometrical axioms are true or not true for beings living in a space of a certain description, I mean that they are true or not true in relation to those points, or lines, or surfaces, which can be constructed in these spaces, and which can become objects of real perception to those beings. To give a popular idea of the meaning of my statement, I assume that reasonable beings could live in space of two dimensions, which might be either a plane, or the surface of a sphere, or the saddle-shaped pseudo-spherical surface of which I gave a description. Beings living on a plane would have the same geometrical axioms as we find in our planimetry. Beings dwelling on a spherical surface would fail to appreciate the truth of all theorems based on the axiom that two shortest lines cannot intersect in more than one point; they could entertain no notion of parallel lines, since all the shortest lines of the space known to them would intersect, when produced, not in one only but, in two points. Beings on a pseudo-spherical surface would know of parallel lines, or lines which do not intersect; but they would find that through a given point an infinite number of lines, parallel to a given line, could be drawn. They, therefore, would consider the theorem, that through a given point can be drawn but one line parallel to a given shortest line, as untrue. The sum of the angles of a triangle bounded by shortest lines would be equal to two right angles for the first class of beings, greater for the second, and less than two right angles for the third class.

Mr. Jevons does not dispute most of my assertions. I shall confine myself to a few comments on his mode of expressing his objections. He says that the theorems of Euclidean geometry would not only be found to be *inapplicable* to spherical or pseudo-spherical spaces, but they would appear positively *erroneous* as soon as any one should try to apply the theorems respecting *straight lines* to the *shortest* or *geodetical lines* of finite length existing in those spaces. And, again, the beings living there ought to say Euclid's geometry is inapplicable to reality, because what he calls straight lines do not exist, at least not to any finite length.

As regards these points, there appears to exist no essential difference between my opponent and myself. But Mr. Jevons vindicates truth in another sense for the Euclidean geometry. Even if it should turn out to be inapplicable to the relations of the real points known to our imaginary beings, he thinks that, if they possessed human power of intellect, they ought to find out by reasoning the system of Euclidean geometry. They would, indeed, as Mr. Jevons justly remarks, if they studied the geometry of infinitely small figures, apply to them the same theorems which Euclid has laid down for figures of every magnitude.

Now, in the first place, it is evident that it is not the same thing whether Euclid's theorems be true only under very limited conditions, or for all space without exception. The geometry of infinitely small figures would be of great importance in discovering a system of geometry identical in form with that of Euclid, but truths applicable to figures of infinitely small dimensions only could not be considered as necessary truths or axioms of geometry in general.

But as we, living (at least as far as we know) in space fulfilling the postulates of Euclidean geometry, can develop analytically the system of pseudo-spherical geometry of any number of dimensions, so beings living in a pseudo-spherical space could invent analytically the system of Euclidean geometry as relating to an imaginary space not accessible to their experience; and, perhaps, they would find that the calculation of the geometrical quantities of their own space would become more simple or more symmetrical by introducing the system of variables belonging to a space of more dimensions, as we, sometimes, introduce a fourth co-ordinate into the equations of lines and surfaces in order to get homogeneous expressions, which we even differentiate with respect to this superadded variable. Our mathematicians, moreover, speak of imaginary lines and points of intersection (of two ellipsoids for instance), and their imaginary co-ordinates, as if such imaginary dimensions of space really existed; and they do this to preserve analogy and homogeneity in the analytical expressions. But for all this no mathematician

ever came to the conclusion that a fourth dimension of space exists, even though he find it convenient to write his equations as if it existed. And I cannot see why the mathematical intellects of a spherical or pseudo-spherical world should come to another conclusion, even if they should discover the simplification of their analytical geometry which they could derive from the introduction of the co-ordinates of a Euclidean space of more dimensions. Points and lines in such a space would have no more meaning to them than length in the direction of the fourth co-ordinate can have for us, although we introduce such a co-ordinate into our calculations.

I think, therefore, that Mr. Jevons does not distinguish sufficiently between the truth which corresponds to reality, and analytical truth which is derived from a hypothetical basis by a logical process consistent in itself and leading to no contradiction. For us the Euclidean geometry is true in reality: a theorem of the spherical or pseudo-spherical geometry could be called true in the second sense, when consistent with the whole system of such a geometry. For the intellects of a pseudo-spherical world, on the contrary, the Euclidean geometry would be fictitious and that of Lobatschewsky real.

H. HELMHOLTZ.

PROFESSOR TRENDELENBURG.

AN unusually large number of English students will receive with regret the news (which has just reached us) of Trendelenburg's death. He had attained a twofold eminence (as a philologist and Aristotelian commentator, and as an original thinker) very remarkable in the vigorous subdivision of intellectual labour which prevails in Germany at present. His metaphysical system has found many more critics than disciples: but the second of the two great impulses towards the apprehensive study of Greek thought which Germany has revived in the present century may be fairly attributed to him. Trendelenburg led, if he did not exactly create, the reaction from Hegel's Hegelianisation of the fathers of philosophy. In fact, his passionate advocacy of the real Aristotle as against Hegel's Aristotle gives the key to Trendelenburg's own metaphysic. Trendelenburg as much as Hegel refused to admit the gulf fixed by Kant between the laws of thought and the laws of being: but he equally declined to accept Hegel's novel dialectic as a substitute for both. The correspondence between the two which the Greek philosophy assumes must, he held, be accepted: but it must also be explained by the explicit enunciation of a connecting link between the mental and material worlds: such a link Trendelenburg found in motion (Bewegung). Many students of Aristotle who have not followed him in his metaphysical theory have joined in this reaction from Kantian formalism to the older view of logic—as Ueberweg. It is curious that Trendelenburg did not carry into his study of Kant the same perfect precision of knowledge which marks his Aristotelian commentaries: so that in his recent controversy with Kuno Fischer on Kant's conception of space the victory lies undeniably with the younger antagonist.*

H. SIDGWICK.

Scientific Notes.

Physiology.

The Influence of the Vaso-motor Nervous System.—The first number of *Pflüger's Archiv für die gesammte Physiologie* for 1872 contains a long article by Heidenhain on this subject, maintaining his own conclusions in opposition to those recently advanced by Riegel in the same periodical. To give a brief summary of the results of the first series of Heidenhain's observations, we find, firstly, that excitation of sensory nerves, or of the medulla oblongata, causes a fall in the temperature of the interior of the body. This effect is occasioned by certain alterations taking place in the circulation, such as extensive contraction of the small arteries causing increased opposition to the passage of the blood. But very soon the propelling force of the heart overcomes this resistance, and an acceleration of the blood-current is induced—rendered evident in the large vessels of the extremities and head—causing an increased flow of blood to take place within a given time through the cold peripheric parts of the body. A consequence of this is that a more rapid (in part at least) equalisation of temperature occurs between the latter regions and the warmer internal parts. Thus, while the temperature of the periphery of the body rises, and, consequently, the loss of heat by radiation, conduction, &c., is augmented, the temperature within the body must fall. These, in few words, are Heidenhain's views, almost every point of which has been contested by Riegel. Heidenhain, since reading Riegel's essay, has corroborated the fundamental fact, that irritation, whether direct or reflectorial, of the vaso-motor centres occasions depression of the temperature of the interior of the body, by experiments on fifteen dogs. The electrical stimulus applied, he remarks, must be of *sufficient strength;* and here, perhaps, lies the discrepancy between Riegel's observations and his own. Another source of possible error on Riegel's part may arise from the region chosen for the estimation of temperature, for though there can be no difficulty in introducing the thermometer into the carotid and left ventricle, the inferior vena cava is much more likely to be missed, while insertion in a lateral channel (as one of the renal or hepatic veins) would vitiate the experiment. Riegel, moreover, used the rectum as a place for estimating the variations of temperature, and this Heidenhain, for various reasons, takes exception to. He prefers the aorta. Then the period of digestion, the degree to which the animal was subjected to the influence of woorara, or was allowed to struggle during the necessary preparations, likewise influence the result. Heidenhain brings forward a considerable amount of additional corroborative evidence, showing that depression of temperature in the interior of the body stands in direct relation to the accompanying changes occurring in the circulation; that excitation of sensory nerves, or of the medulla oblongata, increases the rapidity of the blood-current; and that excitation of the vaso-motor centres, whether direct or reflectorial, really augments the flow of blood through the peripheric parts of the body. Very elaborate tables are appended to the paper.

Contractility of Muscle Plasma.—M. Lavdowsky, in an original communication to the *Centralblatt* (No. 49, 1871), gives the results of his researches on the protoplasm of the smooth muscle cells of the muscular tissue, and chiefly of the intestinal canal of the leech and some other annelids, which he states can easily be observed to possess contractile properties. He finds two forms of muscular elements in these animals: one forming fusiform cylinders, destitute of a membrane, and anastomosing with each other, chiefly found in the walls of the intestinal canal; the other characterized by the presence of a highly retractile and very firm layer, forming the peripheric part of the muscular elements, and found principally in the skin. Both forms of muscular elements are supplied with nerves. On the application of external mechanical irritation or of induction currents the wave-like contraction of involuntary muscular fibre is not observed, but in its place a primary elongation and attenuation of the muscle cylinders may be observed, followed, after a short period of repose, by contraction and thickening. The number of contractions in the fresh fibres, when isolated, varies from 5 to 8 in the minute, but in the living animal from 10 to 20, or even from 36 to 40.

Peripheral Distribution of Non-medullated Nerve Fibres.—Dr. Klein contributes a good paper on the distribution of the non-medullated nerves in the *membrana nictitans*, to the January number of the *Quarterly Journal of Microscopical Science*, now edited by Drs. Payne and R. Lankester. He points out the complex structure of this membrane, and the difficulty of preparing successful specimens with chloride of gold, in consequence of almost all the elements of this tissue combining with the gold as readily as the nerves themselves. He places the perfectly fresh membrane in a one-half per cent. solution of chloride of gold for an hour, next cautiously transfers it to pure water and a bright light during several days, and then brushes off the epithelium, and mounts the specimen in glycerine. He describes four orders of nerves: the finest, which he traces to the internal surface of the capillaries and to the cells of the epithelial investment, are extraordinarily fine and delicately varicose, and can scarcely be made out with any other aid than a Hartnack's No. 8, 9, or 10 immersion lens. He is unable to confirm Pflüger's views of the connection of their fine filaments with the cellular elements of glands. He describes in full pigment cells, and the changes they undergo under various conditions, and gives, lastly, an account of the nerves of the peritoneum.

Duration of the Electric Discharge of the Torpedo.—M. Marey (*Comptes rendus*, lxxiii. p. 958) has applied some of his ingenious mechanical apparatus to the determination of this question, and has ascertained that it amounts to 1-14th of a second. As this is also the duration of a muscular contraction, M. Marcy considers it to be a fresh argument in support of the essential agreement in the properties of the electrical organ and those of the muscles.

A paper appears in the *Journal of Anatomy and Physiology*, by Frank Champneys, B.A. of Brasenose College, "On the Muscles and Nerves of a Chimpanzee (*Troglodytes niger*) and a *Cynocephalus Anubis*." The whole of the muscular system has been worked through by Mr. Champneys in both animals with great care; but the description of the nerves is very imperfect, and is, in fact, almost limited to the branches of the cervical, branchial, and lumbar plexuses distributed to muscles. Looking at the account of the muscular system broadly, the first noticeable point is that the main masses of muscle exhibit nearly the same features in both animals, but especially in the chimpanzee, which

* See *Academy*, vol. ii. pp. 67-69.

characterize them in man. Thus we find that the pectorales (major and minor), the trapezius, hyoid muscles, scaleni, deltoid, rhomboidei, serratus magnus, latissimus dorsi, and the principal muscles of the arm and leg, have almost identical attachments with the corresponding ones of man, or at least with only such trifling variations as might be found in different human subjects. Some interesting peculiarities, however, here and there occur. Thus both the extensor ossis metacarpi pollicis, and its homologue in the leg, the tibialis anticus, consisted in the chimpanzee of two separate bellies, having the same two insertions as the single muscle in man. In Anubis, however, the former muscle is not double. There is no extensor primi internodii pollicis in either animal. Both possess an extensor indicis, which, moreover, in Anubis, give a tendon to the middle finger. Mr. Champneys cites other authorities in disproof of the old dictum that no ape can point. The attachments of the ten interossei of the chimpanzee are carefully noted. The paper is enriched with numerous notes, which show that Mr. Champneys has very carefully studied the work of his predecessors.

Geology.

The Metamorphic Rocks of the Western Alps.—Alpine geologists were formerly wont to term a number of the strata underlying the undoubted Triassic or Jurassic rocks of the Alps metamorphic rocks. It has been reserved for the present young and active generation of Alpine workers to demonstrate the fallacy of this view at all those localities where metamorphic action was said to be recognised. B. Gastaldi (in *Studii geologici sulle Alpi Occidentali, con Appendice mineralogica di G. Strüver, estratto dalle Memorie del R. Comitato Geologico d'Italia*, vol. i. 1871, Firenze) shows that in the Western Alps the Mesozoic and Palaeozoic formations rest in an unaltered condition on crystalline rocks. Among the latter he distinguishes — 1. The old gneiss or central gneiss. 2. The younger crystalline shales or "pietre verdi." The latter comprise, in addition to chloritic and serpentine rocks and calcareous mica-slate, the entire mass of the younger gneisses and mica-slate, the latter often alternating with hornblende rocks. They likewise include compact granite and syenite. Gastaldi hints at analogies existing between the "pietre verdi" and the Laurentian and Huronian gneiss-systems.

Notes on the Ak-tau and Kara-tau Mountains on the Eastern Shores of the Caspian.—The occurrence of Liassic coal on the Caspian shore is a further illustration of the wealth of fossil fuel which the Lias of Eastern Europe and Western Asia possesses. In addition to Lias, strata of Neocomian, of Gault, and of the Sénonien, very rich in fossil remains, are, according to G. v. Helmersen (*Bull. de l'Académie impériale des Sciences de St.-Pétersbourg*, tome viii. 283) met with in this district.

Marine Shells of the Desert of Kara-Kum.—In the sand of the desert of Kara-Kum, north of Syr-Darja in Turkestan, are found well-preserved specimens of *Cardium edule* and *Dreissena polymorpha*. Both species still live in the Lake of Aral, and in the Caspian, Black, and Mediterranean seas; so the above occurrence indicates a former eastern extension of the Aral lake. It is probable that the entire region enclosing the Aral lake, the Tscha river, and the deserts of Majun-Kum and Akkum, was covered by salt water up to the commencement of the present geological epoch (*Ibid.* tome vii. 756.)

Loess in South Africa.—Amongst the specimens collected by A. Hübner in South Africa were some freshwater fossils from a loess deposit near the Gokwe, a tributary of the Limpopo river. Dr. Oscar Böttger identifies them with *Pupa tetraodus* and *Cionella Gokweana*. Strange to say, these forms are in no way related to the recent South African forms, but are closely allied to living European freshwater shells. (*Ber. des Offenbacher Vereines für Naturkunde*, 1871, xi. 6.)

Fossil Fish from the Lower Carboniferous Limestone of Burdie-house.—In the *Geological Magazine* for December, 1871, Prof. Traquair describes a new species of fossil fish, *Phanerophleuron elegans*, from the Lower Carboniferous limestone of Burdie-house. The author observes some new points in the structure of the type species of this genus (*P. Andersoni*) from the Devonian yellow sandstone of Dura Den, the most important being that the dorsal fin in this fish is prolonged as a dorso-caudal to the extremity of the body, as is the case with *Lepidosiren* and *Ceratodus Forsteri*.

Coal in the Trap of Glenarbuck.—Thin seams of very poor coal are known to occur in beds of Trappean ash at Glenarbuck, near Bowling. Mr. Young, vice-president of the Geological Society of Glasgow, has recently described in the Journal of that society the discovery of thin beds of indurated shale, yielding remains of fish of Carboniferous genera, associated with and overlying one of the seams of coal in this glen. In the same neighbourhood another thin seam of coal crops out at a high level in beds of Trappean ash. The woody structure of the plants constituting the coal is still clearly distinguishable, the seam in one place yielding parts of the stem of a species of *Sigillaria*.

Fossil Man.—Director von Hautken communicates to the Geological Society of Hungary (*Földtani Közlöny*, 1871, vii. 92) the discovery in the loess deposits of Nagy Sáp, in the comitat of Gran in Hungary, of the remains of Man associated with post-tertiary remains of Mammalia. In the neighbourhood of Brüx in Bohemia an almost entire human skeleton, together with a stone hammer, have been found. The cranium closely resembles in its characteristics the well-known skull fragment from the Neanderthal. The skeleton was lying with the head raised in a sand bed of diluvial time, at a depth of two feet from the surface and overlying a bed of tertiary coal. A paper on this find by F. von Hauer occurs in the *Mitt. der anthropologischen Gesellschaft zu Wien*, December 12, 1871.

The Peat of Austria.—The German provinces of Austria, with Bohemia, possess peat bogs covering an area of not less than 50,000 square miles and containing about 160 million cubic fathoms of peat. In Hungary the more important moors have an area of more than 990 square miles. The Austrian peat beds have an average thickness of thirty-seven feet. (*Zeitschrift des österreichischen Ingenieur- und Architekten-Vereines*, 1871, xxii. part 14.)

The Western Shores of Lake Ladoga.—The investigation of the district surrounding this lake, undertaken some time ago by Inostranzef, has shown the western part of its shores to consist of rocks representing the lower group of the Laurentian system. They are chiefly grey gneiss, in which can be distinguished an older variety with white and a younger one with greenish oligoclase. Granite, with varieties of oligoclase, is found enclosed in it. Orthoclase gneiss and orthoclase granite are also met with. (*Notes on the Ak-tau and Kara-tau Mountains*, St. Petersburg, 1869.)

Chemistry.

The Greenland Meteoric Irons.—These remarkable masses, to which attention has already been directed in the *Academy* of 1st December, 1871, form the subject of a paper by Prof. Nordenskjöld (*Öfvers af Vet. Aks. Förhandlingar*, 1871, 873). The occurrence of meteoric iron in Greenland is no novelty. In 1847 Rink obtained a mass weighing 21 lbs. at Niakornak. Another lump, weighing 26 lbs., and found by Rudolph, formed part of the ballast of a Greenland brig lying in Fortune Bay, not far from Godhavn. When the Swedish Expedition visited the island of Disco, the people of Godhavn were directed to search for "heavy, rounded, rusty-brown stones," and these huge blocks were eventually discovered at Ovifak, west of Fortune Bay, and between Laxe Bay and Disco Fiord. The interesting fact of their being intimately associated with and in some instances actually embedded in basalt at Ovifak (blue mountain) has already been noticed. The chemical examination of three specimens of this find is as follows:—1. From one of the largest blocks, analysed by Nordenskjöld; 2. From a small and likewise detached mass, analysed by Nordström; and 3. Iron found *in* the basalt, analysed by Lindström.

	1.	2.	3.
Iron	84·49	86·34	93·24
Nickel	2·48	1·64	1·24
Cobalt	0·07	0·35	0·56
Copper	0·27	0·19	0·19
Alumina	Trace	0·24	—
Lime	—	0·48	—
Magnesia	0·04	0·29	Trace
Potash	Trace	0·07	0·08
Soda	—	0·14	0·12
Phosphorus	0·20	0·07	0·03
Sulphur	1·52	0·22	1·21
Chlorine	0·72	1·16	0·16
Silica (soluble)	Trace	0·66	0·59
Silica (insoluble)	0·05	4·37	—
Carbon, organic compounds, oxygen, &c.	10·16	3·71	C 2·30 H 0·07
	100·60	99·93	99·79

All three masses are nickeliferous; an unusually large though variable amount of carbon is present in each of them. They all contain chlorine, and exhibit the usual markings when etched, the iron of the basalt more especially. An exact analysis of the basalt itself cannot fail to throw light on this curious occurrence. The organic substance left in one instance, after the solution of the iron in copper chloride, amounted to 4·79 per cent., and had the following percentage composition:—

Carbon	63·64
Hydrogen	3·55
Oxygen (calculated)	32·81
	100·00

Bornite.—In continuation of his *Recherches sur les Minéraux belges*, de Koninck, of Liège, has published a paper on the bornite of Vieil-Salm (*Bull. de l'Acad. des Sciences de la Belgique*, 1871, No. 11, 290). It

occurs in quartz, associated with chlorite and a pale blue mineral which occasionally encrusts it, and appears to be a product of the oxidation of the bornite itself; it resembles in its chemical characters brochantite or langite. The bornite has a specific gravity of 4·97 to 5·04, with a hardness somewhat greater than that of calcite. The analytical numbers agreed best with those of the bornites of Woitski, White Sea, and Bristol, Connecticut, differing but slightly from those required by the formula $FeCu_5S_4$. In its analysis a new method was employed which proved superior to those in general use. The finely powdered mineral was treated in the cold with a mixture of nitric acid (sp. gr. = 1·40) and bromine; the action is rapid, and the solution of the mineral in a few moments complete.

A New Base derived from Strychnia.—When brought together, strychnia and monochloracetic acid combine, producing the chloride of a new base. Römer, who has described this reaction in the *Zeitschrift für Chemie*, 1871, part 14, heats three parts of the alkaloid and one of the acid for five hours at 180°, dissolves the product in water, separates any unchanged strychnia with ammonia, and finds the new substance deposit from the filtrate by evaporation. It is formed in this manner:

$$C_{21}H_{22}N_2O_2+C_2H_3ClO_2=C_{23}H_{25}N_2O_4Cl.$$

Its nitrate and oxalate are sparingly soluble in water; the chloride is readily dissolved by water and alcohol, but not by ether. Chromate of potash throws down from solutions of the base a yellow crystalline precipitate, and nitrate of silver deposits long colourless needles. In many respects the new body resembles glycocoll. It differs from brucia by 2H. The author expresses his intention to endeavour by means of nascent hydrogen to transform it into this alkaloid or an isomer.

Silicoproprionic Acid.—A very interesting paper by Friedel and Ladenburg on this acid and its corresponding ether is to be found in the *Annalen der Chemie*, clix. 259. Silicium chloride in contact with absolute alcohol forms the chloride of triethylsilicic acid, $SiCl(OC_2H_3)_3$, which, when submitted to the joint action of zinc-ethyl and sodium, is partially converted into ethyl orthosilicoproprionate, $SiC_2H_5(OC_2H_3)_3$. This ether, if decomposed by very concentrated solution of potash, neutralised with acid, and rendered alkaline with ammonia, yields a white flocculent precipitate having all the appearance of silica. This body, silicoproprionic acid, $SiC_2H_5O_2H$, is insoluble in water, soluble in warm potash, and, like silica, separates from such a solution imperfectly by the addition of hydrochloric acid, and completely on evaporation. It differs from silica in being insoluble in soda solution even when this liquid is boiled, and in taking fire when heated. The authors ask whether the silica found in the ashes of plants exists as such in the living plant, or perhaps partially as silicon- and carboniferous compounds. It has been noticed by Sachs that plants which usually contain a considerable proportion of silica continue to thrive when deprived of it.

Artificial Alizarine.—It has been shown by Liebermann that the majority of artificially prepared specimens of alizarine are impure, and usually contaminated with monoxyanthrachinon. A new method of separating pure alizarine from the products accompanying its synthesis, and often incorrectly bearing its name, has been proposed by G. Auerbach (*Ber. Deut. Chem. Gesell. zu Berlin*, 1872, No. 18, 979). The crude alizarine is dissolved in sodium hydrate, and so removed from anthrachinon, anthracene, &c. Carbonic acid is passed through the red solution, which throws down a reddish precipitate, consisting of sodium carbonate, alizarine, and sodium alizarate, while at the same time the walls of the vessel are covered with a yellow crust of alizarine. The precipitate, after frequent washing, furnishes, by decomposition with hydrochloric or sulphuric acid, alizarine in beautiful orange flocks that entirely dissolve in sodium hydrate to form a blue solution.

An Unwritten Chapter on the Metallurgy of Iron.—This is the title of a very interesting paper, by R. Mallet, in *The Engineer*, 15th December, 1871. His object is to show by one or two striking examples how extremely imperfect is our knowledge of ancient Oriental metallurgy. In past centuries the working of iron was carried on in India "upon a scale so stupendous as to rival the production of our largest steam-hammer forges in the Europe of to-day." By the principal gate of the ancient mosque of the Kutub, near Delhi, stands a wrought-iron pillar as large as the screw-shaft of one of our first-class steamships. Some notices of it have already appeared in the *Journal of the Asiatic Society of Bengal*. The shaft of this column is slightly spindle-shaped, and is surmounted by a capital of elaborate Indian design, carved by the chisel in the solid iron. The total height of the pillar above ground is twenty-two feet, that of the capital being three feet and a half. Its depth below the soil is greater than the height: excavations have been driven to a depth of twenty-six feet below the surface without reaching its foundation or the pillar being loosened, so that it is believed by Mr. Mallet that its entire length is not less than sixty feet. The diameter near the surface is 16·4 inches, that of the highest part 12·05 inches; it contains about eighty cubic feet of metal, and weighs upwards of seventeen tons. At its middle height is an inscription of six lines in Sanskrit, the character being that form of Nagari which has been assigned to the third or fourth century of the Christian era.

The Synthetical Production of Organic Bodies.—In the *American Chemist*, 1871, Nos. 4 and 5, has appeared a very instructive compilation by J. Eneu Loughlin, of the now very numerous cases of the synthesis of organic compounds. The list is very useful for reference, and for the most part complete. Under the heading *Guanidine* we find no mention of Erlenmeyer's elegant method.

New Publications.

ARENDT, C. Leitfaden für den ersten wissenschaftlichen Unterricht in der Naturgeschichte. 3. Auflage. Regensburg: Manz.

DESCHANEL, A. P. Elementary Treatise on Natural Philosophy. Part III.

HAGEN, C. Ueber das Gesetz, wonach die Geschwindigkeit d. strömenden Wassers in der Entfernung vom Boden sich vergrössert. Berlin: Dümmler.

LAUER, J. Spreng- und Zündversuche mit Dynamit und comprimirter Schiessbaumwolle. Wien: Seidel und Sohn.

NEUBAUER, C., und VOGEL, J. Anleitung zur qualitativen und quantitativen Analyse des Harns. Sechste Auflage. Wiesbaden: Kreidel.

PFEIFFER, L. Synonymia Botanica Locupletissima Generum, Sectionum vel Subgenerum ad finem anni 1858 promulgatorum. Cassel: Fischer.

RAMMELSBERG, C., und WEDDING. Die Metallurgie des Bleies. Braunschweig: Vieweg und Sohn.

REPORT of the Geological Explorations of the Fortieth Parallel. Vol. III. Mining Industry, by J. D. Hague. Washington: Government Printing Office.

ROTH, J. Die Lehre vom Metamorphismus und die Entstehung der krystallinischen Schiefer. Aus den Abh. der K. Akad. der Wiss. zu Berlin, 1871.

SCHORLEMMER, C. Lehrbuch der Kohlenstoffverbindungen oder der organischen Chemie. 2. Hälfte. Braunschweig: Vieweg und Sohn.

WATTS, H. Dictionary of Chemistry. Vol. VI. (Supplement.) Longmans.

Philology.

The Indo-Germanic Vowel System. [*Zur Geschichte des Indogermanischen Vocalismus.* Von Johannes Schmidt. Erste Abtheilung.] Weimar: Böhlau.

THE author of this work has given proof in his previous publications of solid attainments, an acute but judicious and circumspect treatment of philological subjects, and especially of a very respectable capacity for searching and methodical argument. All these merits are conspicuous in this his latest production, and the last of them in particular in a considerably higher degree. Looking therefore at its form alone, there is much to admire in the work before us, and we can sincerely recommend it to the attention of scholars. At the same time its contents are so valuable that from this point of view also it deserves a hearty recognition. We must not indeed conceal the fact, partly due perhaps to the incomplete state of the work, that we differ on many points from the author, and still hesitate to accept some of his results, but we are bound to add that others are proved to our entire satisfaction, and seem likely to influence the course of philological enquiry.

The fundamental idea of these researches is the same which is recognised theoretically by all philologists of the school of Bopp, though it is not always carried out in practice, that Indo-Germanic speech was already a complete language when the first of its known branches parted from it, and that therefore the branches which thus parted from it received and carried with them, not radical and derivative elements distinct from one another, but these in combination as complete words, or, to put it somewhat more plainly, complete words in which radical and derivative elements were closely united. Accordingly the enquiry as to the manner in which these words became different in the sepa-

rated languages ought not to be directed to those constituent elements by themselves, but to those combinations of sounds as wholes in which the elements appear united as words. "Our task," says the author (p. 9), "is to enquire what mode of forming the present [in reference to the verb λιπ, Latin *lic*, Gothic *lib*, Lithuanian *lik*] existed before the separation of languages, and what relation to this is borne by those which appear in the historic periods of the life of language. The same task is imposed on us by every word which appears with such correspondence in the various languages of our own linguistic family that we cannot help regarding it as a legacy from the primitive tongue," &c. At the conclusion of the same page we read: "It is the object of the following pages to contribute to the investigation of the history of language in this sense; they aim at bringing to light, as far as possible, the influential causes of all change of vowels (we will give this name to the transitions of a root from one series of vowels to another), at fixing the epoch of each in the history of our linguistic family, whether the change occurs in the roots when still independent, or when confined by suffixes."

In the prosecution of this object the author treats, first (pp. 11–28), of "The relation of the *a* and *i* series in Slavonic," and disproves in the most convincing manner the existence assumed by Schleicher of a series produced by *a* and *i* vowels in combination. Where Schleicher sees in the relation of *ĭ* (rĭci), *e* (reką), *o* (po-rokŭ), *i* (pro-ricati), *ě* (narĕkovati) a series of increments founded on *ĭ*, the author shows that the vowels which appear in this series are related to each other in such a way that the *e* in *reką*, which corresponds to an *a* in the original language, is the fundamental sound, of which the *ĭ* in *rĭci* is the weakening, the *ě* in *narĕkovati* the lengthening, while the *o* in *po-rokŭ* is its mutation (*Umlaut*); on the other hand, the *i* in *pro-ricati* comes from the lengthening of the *ĭ* in *rĭci*.

The remainder of the part before us relates to the influence exerted by nasals on preceding vowels. The author shows how the consequences of this are the lengthening, the increment, and the qualitative transformation of preceding vowels. His researches present manifold points of contact with the works of his predecessors, but he has the merit of having considered the phenomena in a larger connection, arranged them under more general points of view, and treated them with such skill that the results obtained are of wide reaching importance not only for the development of the Indo-Germanic vowel-system, but also for the so-called variation of roots in general. He pursues these three varieties of the transformation of vowels produced by nasals in the different divisions, groups, branches, and languages of the Indo-Germanic family, *e.g.* the lengthening of vowels, 1, in the Aryan group; 2, in the German; 3, in the Lithuanian; 4, in the old Bulgarian; 5, in the North European group in general; 6, in the Celtic; 7, in the Latin; 8, in the Greek; 9, in the Græco-Italian (the common foundation of Greek and Latin); 10, in the European division in general. One of the most important results is the explanation of transitions from the *a*-series into the *i*-series through the influence of a following nasal, *e.g.* that of the *a* in *grabh*, a word of the original language, into the *ei* of the corresponding Gothic *greip* through the intermediate *grimp*, which stands in the same relation to *grabh-nâ* of the original language (this is the theme of the present of *grabh*, and becomes *gribhṇâ* in Vedic Sanskrit) as, *e.g.* the Latin *jung* in *jungo* to the Greek ζευγ-νυ. But the importance of the book seems to us, as already indicated, to lie chiefly in the fact, that, through the researches it contains, it offers a strong opposition to the still widely spread opinion of a variation of roots in the Indo-Germanic family. The fact demonstrated by our author, that the difference of vowels, hitherto so obscure, in many radical elements which in other respects are alike, is the result of purely phonetic and mechanical influences, renders it in the highest degree probable that the same change was brought about by merely mechanical causes in the other cases, which have not yet been explained. This result will lead to attempts to discover these causes as well as the others, and we have no doubt that the attempts will be crowned by success.

We have already indicated that many of the author's results still appear to us questionable, in particular those which relate to increments of vowels produced by the influence of nasals. To enter into details would encroach too much on the limits of this journal, and would also in our opinion be inopportune, since it is possible that these difficulties will be removed in the course of the work. In fact, the sequel will alone enable us to form a definitive judgment, and we therefore look forward with hopeful interest to its appearance.

Th. Benfey.

Conington's Virgil, Vol. III., containing the Last Six Books of the *Aeneid*. Whitaker and Co., 1871.

In the introduction to the first volume of his *Virgil*, Mr. Conington defined the scope of his edition. It was to be a commentary rather than a work of original critical research. This plan has been observed throughout; the textual criticism is merely incidental; the characteristic of the book is close and searching interpretation.

But it would be very far from true to say that Mr. Conington had done nothing for the text. The text of Virgil in its present state is one to which a scholar with the peculiar gifts of Mr. Conington could render good service without doing original work as a collator. It is a text of the same kind and in much the same condition as that of Sophokles. The number of great difficulties upon which farther light from MSS. can be looked for is very small; and the solution of the minor questions which can still be profitably discussed depends mainly on an intimate sympathy with the poet's mind and diction. The language of Virgil, like that of Sophokles, never deserts the idiom of common life, yet is always above it, being controlled by a genius at once fastidious and sane—a genius always masterly in its boldness, because always conscious of the precise limits which good taste imposes on originality. Emendation of a poet becomes indefinitely more dangerous when he is also a subtle artist in words, with a distinctive theory of expression. If a few lines from Milton, Tennyson, or Rossetti, with a few small gaps left for the purpose, were proposed for conjectural emendation by students of English, the result would probably be a help towards estimating the felicity with which confident critics have sometimes restored Sophokles or Virgil. Mr. Conington had a consummate and perfectly trained tact in language; he was an exquisite Latin composer; the sympathetic insight which was one of his chief literary gifts had long been concentrated upon Virgil; and where he had nothing positive to suggest, he could generally decide at least what was not and could not be true. The great service which Mr. Conington has done to the text of Virgil has been in protecting it, with the help of this fine and sure instinct, from the ingenious conjectures of former editors. Ribbeck's critical edition, giving collations of all the uncial MSS. and of the chief cursives, supplied the apparatus used by Mr. Conington in the *Aeneid*. But in two papers on Ribbeck's *Prolegomena*, reprinted in this volume from the *Journal of Philology* (vol. i. Nos. 1 and 2), Mr. Conington has pointed out how often he was obliged to differ from Ribbeck and others in their treat-

ment of the text. It seems to us that, in every one of these instances, Mr. Conington's judgment has been sound. To take a few examples from the last six books: in *Aen.* vii. 430, Mr. Conington defends "arma" against Peerlkamp's "arva:" in viii. 211, "raptos" against Wakefield's "raptor:" in ix. 67, "quae via" against Ribbeck's "qua vi:" in ix. 146, "sed" against Ribbeck's "sic" (who would transpose vv. 146, 147 to a place after v. 72): in ix. 676, "armis" against Peerlkamp's "animis:" in xii. 55, "moritura" against Ribbeck's "monitura." In ix. 226, "Ductores Teucrum primi, delecta iuventus," he shows conclusively that Ribbeck and Peerlkamp are wrong in wishing to insert "et" before "delecta:" and in xi. 471 *f.* rightly condemns Ribbeck's transposition of "acceperit" and "adsciverit."

It is to be regretted that the plan of the *Bibliotheca Classica* prevented the separation of the critical notes from the commentary. If the critical notes which are scattered through the commentary could have been collected and printed together immediately under the text, it would have been a great improvement. Any thorough student of a classic necessarily goes through the same process as an editor. First, he enquires how the text ought to stand; then comes interpretation, then illustration. It is inconvenient to be obliged in the first instance to disembed the critical notes from the explanatory and illustrative notes.

As in the first two volumes, the commentary is admirable in its way. Mr. Conington has described his own method of working: "My custom has been to take every line as it came before me, and to ask myself whether I thoroughly understood it." He has spoken, too, of the delight which he found "in tracing, word by word, the delicate intricacies of expression, which stimulate curiosity while they baffle analysis." The result has been that the commentary is, beyond other commentaries, the mirror of the interpreter's mind in regard to his author: it does not merely explain how he understands the hard or doubtful things: it shows how every phrase, every shade of expression, affected him. There is just one wish, perhaps a little ungrateful, which such a commentary suggests; it makes one wish for a translation, being itself, to a great extent, the rather diffuse analysis of a mental translation. Mr. Nettleship may be congratulated on having maintained, in his notes to the tenth and twelfth Books, the peculiar merits of a commentary so distinctive in character and so difficult (one would have thought) for another hand to continue. There is one difference, indeed, to be noted. Mr. Conington, as his colleague has observed, was more attracted by the linguistic than by the real side of Virgil's writings; the grammatical and literary interest predominated, for him, over the antiquarian interest. The notes to Books X. and XII., as compared with those to the other Books, show attention more evenly divided between interpretation and illustration. At the end of the volume Mr. Nettleship gives, as an excursus on Book XII., an interesting paper "On the Lengthening of Short Final Syllables in Virgil"—a paper which appeared before Corssen had published the second volume of the second edition of his *Aussprache*, but which coincides with it in its main conclusions.

R. C. Jebb.

Manual of Old Bulgarian Grammar. [*Handbuch der altbulgarischen Sprache.* Grammatik. Texte. Glossar. Von A. Leskien, A. D. Professor der Slawischen Sprachen zu Leipzig.] Weimar: 1871.

Perhaps nothing indicates more clearly the rapid growth of philological studies in Germany of late years than the establishment by the university of Leipzig of a professorship of the Slavonic languages—the result of a purely scientific impulse unaided and unbefriended by extraneous circumstances, as the reader need not be told that no love is lost between the Germans and Slavonians of the present day. On the other hand, one cannot shut one's eyes to the fact that the university just mentioned is the only one that makes serious efforts to adapt itself to the growing wants and requirements of comparative philology. Leipzig evidently means to maintain this character, for it is said that even the Celtic languages are to find a much needed refuge in that seat of learning, where no less promising a scholar than Dr. Windisch, who already lectures on them, may be expected by and by to be settled there as their professional exponent. It is just to say that in the case of Slavonic the way had been amply prepared in Germany by the labours and researches of Schleicher, and it may be gratifying to some of the readers of the *Academy* to know that Leskien is regarded by those who know him as a living Schleicher: like him he has a complete acquaintance with the chief Aryan languages, and like him he makes the Slavonic group of the same his special study. Leaving out of consideration his extensive knowledge of the non-Aryan languages of Europe, his ready and practical familiarity with the Slavonic tongues of modern times and all that is believed and written respecting them by native scholars, the fact of his being a German seems to give him a decided advantage over persons whose mother-tongue is Slavonic; for the latter seldom seem equal to the task of defamiliarising themselves with the ordinary vehicle of their thoughts, and are every now and then liable to project on a language of respectable antiquity the peculiarities of modern dialects. Even such a scholar as Miklosich sometimes shows symptoms of this kind of weakness.

Before proceeding to the *Grammar of Old Bulgarian* it may be well to show what is meant by Old Bulgarian. Now there is a dispute as to the name by which the language to which belong the oldest Slavonic documents should be called —a dispute not very unlike the following, which I take the liberty of imagining on Romance ground. Let us suppose the name Latin had not been transmitted to posterity, whereas a quantity of MSS. in that language had been preserved and the language itself continued very much what it now is, namely, the church-language of western Europe. A Spanish scholar, let us say, comes forward and says—"It is all very well for you ecclesiastics to call the jargon you read and write, mixed up with the accent and idioms of your respective nations, by the name Church-Romance, but we want the language you thus murder to be known by a name which would tell us something respecting its pedigree and relation to languages now in use: I venture to call it Old Spanish." This of course would not fail to stimulate Italian scholars to claim Latin as Old Italian, while persons not wishing to take sides in the contest would, at the risk of being inaccurate, call it the Old Romance tongue. This is very much the case with Slavonic scholars. Miklosich calls Leskien's Old Bulgarian Old Slovenic, whereas Schleicher would have it that Old Bulgarian is the more appropriate name. On the other hand, the term Old Slavonic has a tendency to spread a notion that it is equally nearly related to all modern Slavonic languages, and accountable to a certain extent for all their peculiarities and idioms, which, of course, it is needless to say, is not the case. Perhaps the name "Church-Slavonic" may still be useful as denoting that form of Old Slavonic which forms the religious language of the Greek church in Slavonic countries, and as such is, in the mouths of moderns, Russianised and Serbianised by Russians and Serbians respectively.

To place in his pupils' hands specimens of Old Slavonic purged of these local incongruities and modernisations was Leskien's object when undertaking to compile the present volume. Indeed, so great was the difficulty of procuring such

text at Leipzig last year* that I considered myself very fortunate in being able to use this work as it began sheet after sheet to drop from the printer's hands. The critical process of arriving at something like unadulterated Old Slavonic is a difficult one, the details of which cannot help eliciting from Slavonic scholars a variety of opinions, which may in time lead to satisfactory results. One item of help is evidently a careful comparison of the chief local varieties of MSS., namely, those of Russia, Serbia, and Bulgaria. A part of the present chrestomathy has been so arranged as easily to show the contrast between these. The remaining items must be supplied by comparative philology, which establishes the general sequence of phonetic modifications nearly as irreversibly as geology does the order of the strata which compose the crust of the earth. A ready instance is that of the insertion of *l* between labials and *j*, where the sequence is easily shown to be, for instance, in the part. perf. passive of such a verb as *ostaviti*, the following—*ostavjenŭ*, *ostavljenŭ*, *ostavljenŭ*. This is, by the way, a point which imparts an incidental value to the Glagolitic fashion of writing, of which Leskien has given in his Chrestomathy a short specimen for the sake of acquainting the reader with the nature of the character.

As to the contents of Old Slavonic MSS. one must frankly admit, that they contain little that would gratify the student of literature, as the majority of them are mere translations from Greek, with a few from Latin, mainly of the Bible and certain legends about saints and martyrs; at times, indeed, the rendering is so literal as to make but suspicious Slavonic, not to mention a multitude of compound terms which probably would never have existed but for their Greek originals. In fact, one may say that the student of Old Slavonic must continually correct his results by an equation of errors based on the data of the Slavonic languages which are still in use.

The Chrestomathy is, as might be expected, accompanied by a copious glossary which makes it easily used. This completes Leskien's original plan: afterwards, however, he was induced to premise a succinct account of the phonology and inflections of the language. All that is done in a scholarly way, and none of the latest results of philological investigations, as far as they have a bearing on the matter in hand, have been overlooked. It is much to be regretted that the author did not think it necessary to supplement this part of the book by a discussion of the structure of words and sentences in Old Slavonic: let us hope that in some shape or other this will by and by be done by him. However, the book as it is, cannot but be highly convenient and perfectly indispensible to such students of Aryan philology as cannot afford to make the Slavonic languages their special study.

J. Rhŷs.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—Professor Lushington, of Glasgow, has requested me to state that the retention of the word ἐπιγύαλον, in Soph. *Oed. Col.* 1491, is not due to him but to Hermann, who suggested this in his edition of 1841.

Professor Lushington mentioned this to me, together with an original suggestion of his own, respecting the metrical arrangement of the passage, which he reads thus :—

ll. 1492, 3 :

ἐπιγύαλον ἐναλίῳ
Ποσειδανίῳ θεῷ τυχχάνεις,

answering to ll. 1479, 80 :

διαπρύσιος ὄτοβος ἵ-
λεως δαῖμον ἵλεως εἴ τι γᾷ.

Hence my mistake, which I trust you will give me the means of correcting, by inserting this in the next number of the *Academy*.

St. Andrews, January 17, 1872. Lewis Campbell.

* This was written in 1871.

Notes and Intelligence.

Popular Tales and Epic Poetry (*Volksmährchen und epische Dichtung*), a lecture, by Theodor von Bernhardi, is a popular introduction to the attractive branch of philology which deals with the origin of the narrative element in literature. The true "Mährchen"—our term "fairy tale" is too narrow, and "popular tale" is too vague—is in its essence a fragment. Even if the incidents are worked into a complete story, there is always a supernatural element which remains unexplained, not because it is supernatural, but because it comes from a whole world of mythology long since forgotten. It often contains, moreover, an element of primitive history—not, perhaps, the traces of actual events, but of custom or feeling or local association—which remains in it as something taken for granted but no longer understood. The *Germania* of Tacitus gives the key to many stories in Grimm. The position of women, their knowledge of writing and of medicine (both regarded as magical arts), the golden hair of the Teutonic races, the divinity of the hearth and its fire, the sacredness of the horse—such points can be shown to underlie many of these tales, even in the forms in which they are still told. It appears, however, that all "Mährchen" may be traced back to older "Sage:" that is to say, to traditions which are attached to a particular place or to the name of a historical person. Stories which are simple and childish in Grimm re-appear as heroic legend in the Icelandic cycle of the *Edda*, where they fall into their place in a general system both of mythological belief and of historical or quasi-historical events. The full explanation of "Sage" would consist in the separation of the historical from the mythological element: and this is seldom possible. So long as two things co-exist in unknown proportion, neither can be said to be completely determined. Much, however, may be done by comparing the different versions of a story, and thus freeing it from the admixture either of distinct legends or of later historical colouring. Herr von Bernhardi gives a good example in the Norwegian story of the two giants who find the husbandman ploughing, and know that their time is come to leave the country. In this, as he shows, we have the notion of an age of chaotic natural forces followed by that of gods and men. The same story is found again in Alsace: and there the giant, like the feudal lord, lives in his "rocky nest" supported by the husbandman's labour. Instead of primitive cosmogony we have as the *motif* the social contests of feudalism. The process by which ancient "Sage" becomes the matter of epic poetry is shown in two instances—the *Nibelungenlied* and the story of Lohengrin. The former has probably interwoven some great disaster of the Burgundian kings, and one or two historical names such as Attila and Theodorich, with the purely mythical stories of Siegfried and Brunhild. The latter is found in a Low German poem of the thirteenth century, in a form which makes Lohengrin a knight of the Sangraal, thus mixing his story with the Celtic legends of the Arthurian circle. There is a Flemish version, however, which knows nothing of the Sangraal, and turns on the Teutonic fancy of the swan-maidens. Herr von Bernhardi endeavours to show, in conclusion, that the greatness and enduring charm of epic poetry depends upon the relation in which it stands to the national tales and legends, and through them to the whole previous life of the nation. It follows that true epic poetry can only be produced in an "Urvolk:" that is to say, in a nation that has undergone no violent revolution in language or institutions. The *Nibelungenlied*, however, is rather to be considered as an interesting specimen of national poetry than as itself a poem of the highest order.

D. B. Monro.

We have received the first number of a new Hungarian periodical entitled *Magyar Nyelvör*, "Hungarian Speechwatch" (Germ. *Sprachwacht*). The function it proposes to discharge, the censorship of the current Hungarian language, is one of great importance in a country where the great majority of writers are even more under foreign (*i. e.* German) influence than is the public which they address. The programme of the *Nyelvör* enumerates as within the sphere of its operations :—(1) The history of the language, pointing out the wealth of words contained in old books, documents, &c., especially in words whose revival may increase the present resources of the language. (2) The collection of materials for a fuller and more exact knowledge of the language of the peasantry in its various dialects, including among such materials songs, proverbs, toasts, nursery rhymes, and the local names of hills, valleys, streams, &c. (3) The criticism of the language of current Hungarian literature, including newspapers, with especial reference to the invention of words at variance with the true genius of the language. (4) The determination of questions relating to the peculiarities of the language, its syntax, the distinction of synonyms, and such like. (5) Notices of such discoveries in the field of philological enquiry as bear on the Hungarian language. Besides this programme the first number contains a defence of the title by the editor, M. Szarvas, from the charge of Germanism brought against it by a contributor. Dr. Budenz contributes two articles. The first points out as a defect of Hungarian grammars that they do not distinguish between those etymological suffixes which can still be used to form new words and those which have, so to say, become barren and incapable of entering

into new combinations. Dr. Budenz' second article criticizes from a philologer's point of view a recent republication of a work of Unitarian controversy belonging to the sixteenth century. Among the remaining contents of the number we notice a contribution by M. Paul Hunfalvy on the old Magyar calendar, an analysis by the editor of the language of Petöfi's *János Vitéz*, and a choice anthology of bad Hungarian culled from the newspapers. The *Nyelvör* is to appear on the 15th of every month, with the exception of August and September. We wish it all success.

Readers of the *Rheinisches Museum* will rejoice to hear of the publication of a complete index to the first twenty-four volumes. The index seems very complete, and forms by itself a volume of 176 pages.

Vocabulista in Arabico, pubblicato per la prima volta sopra un Codice della Biblioteca Riccardiana di Firenze da C. Schiaparelli. (Firenze, 1871.)—This is an old Arabic vocabulary in two parts, Arabic-Latin and Latin-Arabic, discovered in the Riccardiana library at Florence, by Sig. Amari, and now edited for the first time by one of his pupils. The date of its compilation is uncertain, but Amari refers the manuscript (which is evidently not the original) to the end of the twelfth or beginning of the thirteenth century. Between the two glossaries is a controversial dialogue, in pointed Arabic, between a Moslem and the author of the *Pugio Fidei*, Raymond Martin. A notice of the work by Sig. Lasinio is given in the *Nuova Antologia* for October, from which we derive these facts. The editor appears to have performed his task well, and the result is a not unimportant addition to our scanty information respecting the Arabic dialect of Spain.

At a meeting of the Bombay branch of the Royal Asiatic Society held on the 9th November last, Dr. Bühler read a paper on Ṣrîharsha, the author of the *Naishadha-charita*, a work of which that scholar is preparing a new edition for the Bombay Sanskrit Series. The account given by Dr. Bühler of the writer is mostly taken from the *Prabandhakosha*, composed in A.D. 1348, by Râjaṣekhara, a Jain writer. Ṣrîharsha is there said to have been born at Kâṣî (Benares), and composed his work at the request of King Jayantachandra, the son of Govindachandra. From the reasons adduced by Dr. Bühler, it seems very probable that the patron of Ṣrîharsha was no other than Jayachandra, who reigned over Kanyakubja (Kanouj) and Benares in the latter half of the twelfth century (probably from A.D. 1168–1194).

Contents of the Journals.

Zeitsch. der deutsch. morgenländ. Gesellschaft, Vol. xxv. No. 3.—The explanation of the Avesta, by Fr. Spiegel. [A reply to Roth's remarkable paper in the last number.]—Poem of Jacob of Sarug on the palace which St. Thomas built in India, published by R. Schröter.—History of the translations from Indian into Arabic, and their influence on Arabic literature; with especial reference to the moon-stations (Naxatra), and treatises on lots; corrections, additions, and index to vols. xviii. and xxiv.; by M. Steinschneider.—A Nabathæan inscription from Ammonitis, deciphered by M. A. Levy. [See Quarterly Statement of the Palestine Fund, No. vi.]—"Authorship and Translation," how expressed in Hebrew, by Dr. Zunz.—The criticism of the Biblical Assyrian chronology, by Dr. Schrader. [The author explains his grounds for rejecting M. Oppert's attempt to bring the lists of Assyrian eponyms into harmony with the chronology of the Books of Kings.]—Unpublished strophes of various poets, continued, by Th. Aufrecht.—Additamenta on the inscription of Mesha, by C. Schlottmann; vi. Fixation of the text, a letter to Prof. Hitzig.—A Hebrew book from Calcutta, by Dr. Geiger. [A modern collection of liturgical songs.]—Contributions to the knowledge of the geographical and linguistic relations of S. Arabia, by H. v. Maltzan. [The author made the acquaintance in Cairo of a number of Arabs from the south, from whom he gained much information as to the dialect of Hadramaut, &c. The pronunciation of the latter bears a close resemblance to that of the dialect of the Fellahs. The *casus rectus* of the plural is still in occasional use, and is not quite expelled by the *casus obliquus*, as in almost all the other dialects. There seems, too, to be an extraordinary similarity between many expressions of the Algerian and the southern Arabic dialect. The accuracy of Wrede's geographical statements is confirmed.]—Explanations with Dr. Blau, by F. Prätorius.—Two Jewish physicians, by M. Steinschneider.—On the radical meaning of ירע, by G. M. Redslob.—Reviews:—Spiegel's *Eran. Alterthumskunde*, and Kuhn's *Kaccayanae Namakappa*, by A. W.—Bickell's *Conspectus*, by Geiger.—Wright's *Catalogue of Syriac MSS.*, part ii., by Nöldeke and Geiger.

Tijdschrift voor Indische Taal-, Land- en Volkenkunde, Batavia, serie vi. deel i. (1870).—Aflevering 1 and 2.—Hindoemonumenten in de bovenlanden van Palembang, als bron van geschiedkundig onderzoek, door E. P. Tombrink. [The inhabitants of Palembang, the north-eastern part of Sumatra, are said to be a mixture of Hindus, Javanese from Modjopahit, and Malayans from Menang-Kebau. From the monuments discovered, and of many of which plates are given along with this paper, the writer maintains that the Hindu settlers were principally worshippers of Siva, though not of the Linga. The remains mostly found on plateaux commanding extensive views are said to represent Siva, Durgâ, Ganesa, and Nandi, the bull. From their being of a much ruder character than those found in Java, he feels inclined to assign a much earlier date to them, and to assume that a direct immigration from the Indian continent to the east of Sumatra took place during the earlier centuries of our era. For the aboriginal inhabitants of these parts he looks to the Orang Koeboe, still subsisting in the jungles, and probably akin to the Dajaks of Borneo.]—De Landschappen Holontalo, Limoeto, Bone, Boalemo en Kattinggola, op Andagile, geographische, statistische, historische en ethnographische aanteekeningen door J. G. F. Riedel. [The districts here described form the central part of the northern neck of Celebes.]—Review, by A. B. Cohen Stuart, of Geschiedenis van Java, door J. Walbers. Erste deel. Oude Geschiedenis: Vor-Hindoe- en Hindoetijd; Middengeschiedenis, Mahomedaansche staten. Utrecht, 1868. [Very unfavourable.]—Verslag van eene Reis van den Assistent-Resident van Benkoelen naar het eiland Engano. [The inhabitants of this island, situated south of Sumatra, are described as differing greatly from both the Malays and Bataks, and to have more of the Nias race in their appearance.]——Aflevering 3.—Geschiedenis der Soenda-Landen. Hoe het land van Soenda onder het oppergebied van De Compagnie kwam. IIe periode. Derde tijdvak. Door J. Hageman.—Soendasche Spreekwoorden, door K. F. Holle. [Continuation; containing 160 proverbs in the Sunda dialect, with a literal translation and an explanation.]—Review, by A. B. Cohen Stuart, of Vervolg op Dr. J. F. C. Gericke's [and T. Roorda's] Javaansch-Nederduitsch Woordenboek, zamengesteld door P. Jansz, Evangelie-zendeling op Java. Samarang, 1869. [Very favourable.]——Aflevering 4 and 5.—Eenige opmerkingen op drie kleine geschriften, waarmede de heer Klinkert als schrijver is opgetreden, door H. van de Wall. [The papers of H. C. Klinkert, printed in the *Bijdragen tot de Taal-, Land- en Volkenkunde van Ned.-Indië* (1866 and 1868), and severely criticized and annotated upon in this article, are:—1. Jets over de Maleische school- en volksleesboeken; 2. Eenige Maleische spreekwoorden en spreekwijzen; 3. Opmerkingen op Dr. J. Pijnappels Geographie van Nederlandsch-Indië.]—Chronologische lijst van gedenk- en legpenningen, &c., door J. S. van Coevorden. [Continuation.]—Brieven van H. N. van der Took betreffende het Lampongsch. [These letters contain various contributions to the knowledge of the dialect of Lampong, the south-eastern extreme of Sumatra, consisting of lists of words, bits of poetry and prose, sayings, &c.]—Aanteekeningen over de hoofd-tempels in Kadoe en Djokdjokarta. Door R. H. T. Friederich. [The temples of Boro Boedo, Mendoet, Prambanan, Plawassan, and others at the foot of the Merapi (in Java), show Buddhism to have been the more favoured creed during the times when these monuments were erected (the inscriptions found vary in their dates between A. Saka 746 and 870), though the Saiva creed was still prevalent among the mass of the people, and some of the remains exhibit a curious amalgamation of Brahmanical and Buddhist mythology.]—Kitab Pakih Soenda, door J. J. van Limburg Brouwer. [A theological Sunda text, by an unknown writer, transcribed in Roman characters, with a Dutch translation.]—Snippers. Door K. F. Holle. [Continuation. Notes on the views and manners of the natives of the Indian Archipelago.]—Over de spelling van het Soendaneesch met Latijnsch letterschrift, door G. J. Grashuis. [Rigg's and Holle's methods of transcription are here compared, and the latter is adopted, with slight modifications, as the more useful.]

Bijdragen tot de Taal- en Volkenkunde van Nederlandsch-Indië, vijfde deel, 3e stuk ('s Gravenhage, 1871).—Stukken betrekkelijk de verdediging van Ternate door den Gouverneur Willem Jacob Cranssen, 1800–1801, en de overgave van het Gouvernement aan de Engelschen, &c.——Zesde deel, 1e stuk, 1871.—Reports of meetings, &c.—Transcriptie van Indische Plaatsnamen.—Korte opmerkingen over Balineesch en Kawi, door H. Kern. [Notes on the etymology and meaning of some Balanese and Javanese words.]—Varia. Door v. L. B. [On Dr. Socin's discovery of the Syriac text of Kalila and Dimna. On Kawi inscriptions. Notices (favourable) of Prof. H. S. Maine's Lectures on Village Communities in the East and West; and T. T. Cooper's Travels of a Pioneer of Commerce in Pigtail and Petticoats; or, an Overland Journey from China towards India.]

Journal Asiatique, No. 65.—Rapport sur les Travaux du Conseil de la Société asiatique pendant l'année 1870–1871, par M. E. Renan. [Opens with a tribute to the memory of deceased members of the society, especially MM. Caussin de Perceval and Devéria. Semitic and Egyptian studies have been less disturbed by political events than Indo-European. We notice that M. Renan discovers in the Himyaritic monument, published in the *Journal* by M. Ganneau, a resemblance to the Buddhist bas-reliefs representing the life of Sakyamuni.]

The Pandit, vol. vi. Nos. 64–67 (Benares, Sept.–Dec. 1871).—The Tarkapâda of Gâgâbhaṭṭa's Bhâṭṭachintâmaṇi, ed. Bâlaṣâstrî. [Concluded in Nos. 64 and 65.]—Amarachandra's Bâlabhârata. [The forty-fourth and conclusive sarga. (No. 64.)]—The Tattvamuktâvalî, a Vedântic treatise by Pûrṇânanda, ed. Vechanarâmaṣarmâ. [Comp. in No. 64.]—The Gopâlalîlâ, a poem by Râmachandra, ed. Vechana-

râma. [Sargas 1–8 (Nos. 65–67).] — The Viddhaṣâlâbhanjikâ, a drama by Bâlakavi, ed. Vâmanâchârya. [Acts 1–3, in Nos. 65–67 resp.]—The Aphorisms of the Yoga Philosophy of Patanjali. The Sanskrit text and an English translation of the Sûtras and Commentary. By G. D. [Continued from Book IV. Aph. 19–33.]—The Vaiṣeshika Aphorisms of Kaṇâda. The Sanskrit text and an English translation of the Sûtras and Commentary. By A. E. G. [Continued in No. 64 and 67, from Book I. Lesson 1, Aph. 2–15; Lesson 2, Aph. 1 and 2.]—Translation of the Siddhânta-Muktâvalî's explanation of verses 11 and 12 of the Bhâshâ-Parichchheda. By A. E. G.—Catalogue of Sanskrit MSS. [Continued.]

Revue Critique, Jan. 6.—H. Weil reviews Hense's *Heliodoreische Studien*, introducing some valuable remarks of his own on the subject of Heliodorus.—Ch. Thurot examines the second part af Lübbert's *Grammatische Studien* (treating of the construction of the Latin *quum*), and pronounces it a careful summary of the facts, though disagreeing with the writer's method and controverting his conclusions. But surely M. Thurot goes to the opposite extreme, and exaggerates the uncertainty of the subject, when he says, "le subjonctif est un luxe du langage."—— Jan. 13.—The philological articles in the number are a notice (anonymous) of a dissertation by Th. H. Martin (the well-known editor of the Timaeus) on certain optical instruments erroneously attributed to the ancients; and an elaborate and discriminating account (by Ch. Morel) of our chief modern histories of Roman literature, those of Bähr, Bernhardy, Hübner, and Teuffel: a French work by M. Paul Albert on the same subject is likewise briefly noticed.

Rheinisches Museum, vol. xxvii. pt. 1.—A. Rapp: The Maenads in the Greek worship, in art and poetry (Part I.).—E. Rohde: The sources of Iamblichus in his Life of Pythagoras (conclusion). [Points out his debt to Apollonius and Nicomachus, and indirectly to earlier writers.]—J. Steup: Reply to Teuffel's *Probus in Martial und Gellius*. —C. Wachsmuth: Scattered fragments of the *Eclogae* of Stobaeus in his *Florilegium*. [Contains most important suggestions for the restoration of the *Eclogae*.]—G. Krüger: On Horace. Defends his emendation *tu liques* in *Od.* i. 20, 10; and in *Sat.* i. 6, 14, proposes to take *notante iudice quo nosti populo* as = *quam notantem iudicem quem nosti populum*.] —F. Blass: On Antipho. [On the text in the MSS.]—W. Teuffel: The *Historia Apollonii regis Tyri*. [Shows amongst other things that the Sloane MS. has been underrated by Riese.]—F. Ritschl: The *Persae* of Aeschylus in Egypt: a new Simonideum. [Describes a newly discovered MS. and shows very conclusively that it is a modern fabrication. It is not very reassuring to find that possibly the famous Simonides is still living and engaged in literary work for the Russian government!] —F. Bücheler: *Inscriptiones latinae iambicae*. [Specimen of an edition of a Latin Anthologia epigraphica.] — J. H. Mordtmann: Greek inscriptions from Arabia. — F. Rühl: Pompeian inscriptions. — W. Helbig: Hiero II. and Philistis on a relief from Agrigentum.—M. J. Höfner: The contemporary history in Dio Cassius.—F. Rühl: On Zosimus. — K. Dziatzko: Hauton timorumenos or Heauton timorumenos? [Terence wrote in all probability *Heauton*.]—L. Müller: The Neapolitanus of Propertius. [Corrects a remark of Haupt.] — N. Wecklein: On Sophocles and Euripides.—C. Badham: *Philebi Platonici emendationes*.—M. Voigt, J. Vahlen, O. Ribbeck: On Plautus. —O. Ribbeck: On Lucilius and Coniecturae Sueianae.—L. Müller: On Catullus, &c.—E. Bährens: On Ovid and Calpurnius.—J. Vahlen: On Cicero.—F. Ritschl: Canticum and Diverbium in Plautus.

Zeitschrift für die österreichischen Gymnasien, xxi. 7 and 8.—J. La Roche: Die Trithemimeres im Homerischen Hexameter. [Carefully classified lists of instances of short syllables lengthened in the second arsis: the text is often corrected by the help of Professor La Roche's collations.]—F. Krones: Zengenverhör über Baumkircher's Thatenleben und Ende. [Holds that the current view of this Styrian hero is not historical at all, but traditional, and quite erroneous.]—Anthologia latina, fasc. i. recens. Alex. Riese (Teubner), rev. by Mähly. [Suggests a number of conjectures, more or less probable.] Georg Curtius: Erläuterungen zu meiner griechischen Schulgrammatik. Rev. by Hartel. [Neither Kühner nor Westphal has produced a satisfactory grammar for modern requirements. The reviewer makes many valuable remarks, especially on the importance of linguistic knowledge for Homeric prosody, often thought to be full of mere irregularities.]—Corn. Taciti Historiarum libri qui supersunt. Schulausgabe von Heräus. 2. Bd. Lib. iii.-v. (Teubner series, with German notes.) Rev. by Prammer. [Not so conveniently arranged for a school book as Dräger's *Annals*, in the same series. The notes on the history and geography are good; but the book shows a want of form, and is marred by many misprints.]—Meister: Ueber Dares von Phrygien, *de Excidio Trojae historia*. Programm. Rev. by Schmidt. [The writer, who is preparing an edition of Dares for the Teubner series of texts, gives us here the results of his examination of the MSS. They are greatly corrupted through the popularity of Dares in the middle ages, with the exception of one MS. B. at Bamberg. Meister also deals with the literary history of this curious composition.]—Blass: Ueber die Aussprache des Griechischen. Rev. by Hartel. [Justly praises this little work, which treats of the main points of the question, and establishes the claims of the Erasmian against the Reuchlinian pronunciation in a learned, original, and convincing manner.]

Philologischer Anzeiger, iii. 7.—R. Kühner: Ausführliche Grammatik der griechischen Sprache. 2. Aufl. [Re-written, incorporating the results of modern linguistic science, in a form that is of great practical value, if not always perfect in point of scientific statement.]—W. Büchner: Die Ebene von Troia. [Seems to proceed on a false method.] —M. Vermehren: Platonische Studien. [Discusses 118 passages, chiefly from the Symposium, Republic, Laws, and Phædo. The reviewer, D. Peipers, goes over the greater part of them.]—C. F. G. Meutzner: De interpolationis apud Demosthenem obviae vestigiis quibusdam. [Applies this way of getting rid of difficulties to passages especially of the Olynthiac and Philippic orations.]—A. Hug: Commentatio de pseudo-demosthenica oratione adversus Zenothemin. [Pronounces it a forgery by a person of little acquaintance with judicial or commercial affairs.]—Index lectt. in univ. Berolinensi per sem. hibern. 1871–72 habendarum. [Contains a dissertation by M. Haupt, giving specimens of dialogues, Greek and Latin, from a MS. of the ninth century, and promising a complete collection.]—G. Studemund: Emendationes Plautinae. [Results of the laborious care bestowed by Studemund on the Ambrosian codex.]—P. Willems: Les antiquités romaines envisagées au point de vue des institutions politiques. [Intended for students of jurisprudence.]—H. Th. Plüss: Die Entwicklung der Centurienverfassung in den beiden letzten Jahrh. der römischen Republik. [Places the reform in 241 B.C., and agrees with Niebuhr and Puchta against Mommsen, Lange, &c. in supposing 70 centuries. The writer's own theory of a complete change made in 179 B.C. in the nature of the classes is not borne out by Liv. xl. 51.]—G. Kramer: Carl Ritter, ein Lebensbild.——iii. 8.—Reviews several Homeric dissertations, of which those of E. Kammer ("obelising" the scene with Æneas, Il. 20, 79–352, and the Battle of the Gods, Il. 20, 32–72; 21, 391–518) and K. Weidenkaff (on the use of the genitive) seem the most important.—Fr. Heimsöth: De vitiorum in veterum scriptorum codd. obviorum generibus a Madvigio Hauniensi nuper definitis. Rev. by E. v. L. [Valuable criticism of Madvig's book.]—R. Petersdorf: Diodorus, Curtius, Arrianus quibus ex fontibus . . . hauserint. Rev. by E. S.—H. Kühlewein: Observationes de usu particularum in libris qui vulgo Hippocratis nomine circumferuntur. [Careful and methodical contribution.]—J. Caesar: Conjectanea critica. [Chiefly on Galen and Plutarch.]—H. Holzer: Der Hildesheimer antike Silberfund. Rev. by L. G. [Believes that it was originally the plate used at the table of Germanicus.]—K. Woermann: Ueber den landschaftlichen Natursinn der Griechen und Römer. Rev. by L. Schmidt. [Distinguishes well between sympathy with individual objects in the world of nature, shown in fables, similes, &c., and feeling for landscape proper; regards the latter as very much the growth of the Alexandrian period, but underrates too much the feeling shown, *e.g.* in the Phædrus of Plato, and by Aristophanes and Pindar.]—R. Sohm: Die altdeutsche Reichs- und Gerichtsverfassung. Bd. 1: Die fränkische Reichs- und Gerichtsverfassung. [An important and valuable work, intended to supplement the works of Waitz and Roth. Carries out the proof that the early condition of the German races was one of order and advanced constitutional development. Holds that the assembly of the *centena*, the *pagus* of Tacitus, was only judicial, and without political functions, the political unit being even then the *civitas*.]

New Publications.

Brasseur de Bourbourg. Bibliothèque mexico-guatémalienne, précédée d'un coup d'œil sur les études américaines dans leurs rapports avec les études classiques. Paris: Maisonneuve.

Catalogus Codicum Latinorum Bibliothecae Regiae Monacensis. Secundum A. Schmelleri indices composuerunt C. Helm, G. Laubmann, S. Meyer. Tom. 1 pars 2. München: Palm.

Fuchs, E. Die Scholien d. Bar-Hebraeus zum 23. u. 29. Psalm. Halle: Buchh. d. Waisenh.

Tabari. Chronique de Tabari, traduite sur la version persane de Belcami . . . par H. Zotenberg. T. 3. Paris.

Thiele, R. Prolegomena ad Hymnum in Venerem Homericum quartum. Halle: Buchhg. des Waisenhauses.

Velsen, F. A. von. Ueber den Codex Urbinas der Lisistrata u. der Thesmophoriazusen d. Aristophanes. Halle: B. des Waisenhauses.

Westphal, R. Elemente d. musikalischen Rhythmus mit besond. Rücksicht auf unsere Opernmusik. Jena: Costenoble.

ERRATUM IN No. 40.

P. 26, col. 1, line 37, for "in the same place" read "in the *Revue des deux Mondes*."

*** It is particularly requested that all applications for back numbers, extra copies, subscriptions, advertisements, &c. be addressed to the Publishers, *not* to the Editor.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 42.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Friday, March 1, *and advertisements should be sent in by February* 26.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

General Literature.

La Réforme intellectuelle et morale de la France. Par Ernest Renan. Paris: 1871.

BURKE says, speaking of himself:—

"He has never professed himself a friend or an enemy to republics or to monarchies in the abstract. He thought that the circumstances and habits of every country, which it is always perilous and productive of the greatest calamities to force, are to decide upon the form of its government. There is nothing in his nature, his temper, or his faculties, which should make him an enemy to any republic, modern or ancient. Far from it. He has studied the form and spirit of republics very early in life; he has studied them with great attention; and with a mind undisturbed by affection or prejudice. But the result in his mind from that investigation has been and is, that neither England nor France, without infinite detriment to them, as well in the event as in the experiment, could be brought into a republican form, but that everything republican which can be introduced with safety into either of them must be built upon a monarchy."

The name of Burke is not mentioned in M. Renan's book, but it is difficult to believe that Burke's publications of eighty years ago on the French Revolution, from which we have quoted the foregoing passage, were not in M. Renan's hands when he wrote his recent work. If it was so, it detracts nothing from M. Renan's originality; a man of his powers cannot but be original in the treatment of his subject, and to have read and agreed with Burke will not make him less so. But the similarity of the point of view strikes the reader in almost every page; and certainly it will be no bad effect of M. Renan's book if it sends us back to those masterpieces of thinking and eloquence, the *Reflections on the Revolution in France*, the *Letter to a Member of the National Assembly*, and the *Appeal from the New to the Old Whigs*. They are far too little read. They need to be received with discrimination and judgment, and to common liberalism they can never be acceptable; yet so rich is their instructiveness that a serious politician could hardly make a better resolve than to read them through once every year.

"You have industriously destroyed all the opinions and prejudices, and, as far as in you lay, all the instincts which support government." "You might, if you pleased, have profited by our example. You had the elements of a constitution very nearly as good as could be wished. You possessed in some parts the walls, and in all the foundations, of a noble and venerable castle. You might have repaired those walls, you might have built on those old foundations. You had all these advantages in your ancient States; but you chose to act as if you had never been moulded into civil society, and had everything to begin anew." "Rousseau was your canon of holy writ."

These sentences are Burke's, and never surely could he have desired a better testimony to his wisdom than for a man like M. Renan to say eighty years afterwards, with the France of the present moment before his eyes:

"If no more had been done at the Revolution than to call together the States-General, to regularise them, to make them annual, all would have been right. But the false policy of Rousseau won the day. It was resolved to make a constitution *à priori*. People failed to remark that England, the most constitutional of countries, has never had a written constitution, drawn out in black and white." (P. 7.)

That the rights of its history do more for a society than the rights of man, that the mere will of the majority is an insufficient basis for government, that France was made by the Capets, that she ought never to have broken with them entirely, that she would even now do well to restore them, the younger branch of them, if the elder is impracticable, that with the monarchy she ought to form again aristocratic institutions, a second chamber, and, to some extent, a hereditary nobility—this is the main thesis of the new part of M. Renan's volume. If this is not done, France, he thinks, cannot hope to vie with Prussia, which owes its victory to its aristocratic organisation and to the virtues of endurance and discipline which this organisation fosters. France's only hope of revenge must then be in the International. The superficial jacobinism, the vulgar republicanism, the materialism (for by all these names and more does M. Renan call it), which the French Revolution introduced, and which has brought France to her present ruin, has fatal attractions for the crowd everywhere; it has eaten far into the heart and life of England; it has overrun all the Continent except Prussia and Russia. Prussia too is very probably doomed to enter into this "way of all flesh," to be forced into "the whirl of the witches' sabbath of democracy;" and then Prussia's day, too, is over, and France is revenged. At the same time M. Renan suggests certain reforms in French education. These reforms may at any rate, he thinks, go forward, whatever else the future may have in store for us: whether a Capet at Rheims or the International at Potsdam.

All this makes the new part of M. Renan's volume. He has reprinted here, besides, his two letters to Dr. Strauss and several other publications occasioned by the late war; while the volume ends with an essay on Constitutional Monarchy in France, and another on the respective share of the family and the State in the work of education, which appeared before the war began. These two essays may rank with the best things M. Renan has written, and to read them again heightens our admiration of them. The new part of the book abounds with ingenious and striking thoughts, eloquently expressed; yet this part will not entirely satisfy the friends of M. Renan, nor does it quite answer, to say the truth, to the impression left on us by the summary of its contents which we read in the *Times* before the book appeared. It has not the usual consummate roundness of M. Renan's composition, the appearance of having been long and thoroughly prepared in the mind, and of now coming forth in perfect ripeness; there are, or we seem to see, marks here and there of haste, excitement, and chagrin. This was perhaps inevitable.

Our business is not with politics, foreign or domestic; yet on one or two of the political points where M. Renan does not quite satisfy us, we must touch. We will not ask whether France in general has not let the idea of dynastic attachment, as M. Renan calls it, and the remembrance of its historic self before 1789, so completely die out that it is vain to seek now to restore them, although, when Burke wrote, this might still have been possible. But we will observe that this restoration has, in any case, an enemy more serious and more respectable than that vulgar jacobinism, with no higher aim than to content the envy and the materialistic cravings of the masses, which M. Renan assails with such

scorn; it has against it the republicanism of men, for instance, like M. Quinet. This republicanism is a reasoned and serious faith, and it grows not out of a stupid insensibility to the historic life and institutions of a nation, nor out of a failure to perceive that in the world's progress, as M. Renan eloquently and profoundly urges, all cannot shine, all cannot be prosperous, some sacrificed lives there must be; but it grows out of the conviction that in what we call our civilisation this sacrifice is excessive. Our civilisation in the old and famous countries of Europe has truly been, as M. Renan says, in its origin an aristocratic work, the work of a few: its maintenance is the work of a few; "country, honour, duty, are things created and upheld by a small number of men amidst a multitude which, left to itself, lets them fall." Yes, because this multitude are in vice and misery outside them; and surely that they are so is in itself some condemnation of the "aristocratic work." We do not say that the historic life and continuity of a nation are therefore to be violently broken, or its traditional institutions abandoned; but we say that a case has been made out against our mere actual civilisation, and a new work given it to do, which were not so visible when Burke wrote, which would certainly have fixed the regards of Burke now, and which M. Renan too much leaves out of sight.

A mere looker-on may smile to read at p. 153, written before Alsace and Lorraine were ceded and when there was still hope of saving them, that France could not survive their loss, that she is like a building so compact that to pull out one or two large stones makes it tumble down, or like a living being with an organisation so highly centralised that to have an important limb cut off is death; and then to read at p. 58 and other passages, written since peace was made, that the immense resources of France are hardly at all altered or impaired, that she is *à peine entamée.* But of this kind of inconsistency a man of heart and imagination may well be guilty when his country is in question; Burke, assuredly, might have been guilty of it.

Our one serious point of difference with M. Renan, and where we confess he somewhat disappoints us, is in his discussion of the faults of France. The capital fault, the cherished defect of France, is—what does the reader think?—want of faith in science, *le manque de foi à la science.* In the same strain speaks Mdme. Sand in the charming *Letters* she has lately published: *Nous voulons penser et agir à la fois,* she says; and therefore we are beaten. Nay our amiability itself puts us at a disadvantage, she adds, in this bad actual world: *Nous ne sommes pas capables de nous préparer à la guerre pendant vingt ans; nous sommes si incapables de haïr!* It is the head, *la tête,* which is so greatly in fault; the heart, the sentiments are right; *le Français,* says M. Renan, *est bon, étourdi;* yes, *étourdi* he may be, harum-scarum; but he is *bon.* Burke, whom we have so much quoted, says of Charles II.:

> "The person given to us by Monk was a man without any sense of his duty as a prince, without any regard to the dignity of his crown, without any love to his people; dissolute, false, venal, and destitute of any positive good quality whatsoever, except a pleasant temper and the manners of a gentleman."

So far he, too, was *bon:* but his goodness had gaps which, though certainly he was also without the scientific temper, would make us hesitate to say that his chief fault was want of faith in science. Of France we may say the same. It seems to us much more true of England than of France that the national defect is want of faith in science. In France the great defect lies, surely, in a much simpler thing—want of faith in *conduct.* M. Renan's chief concern at the failure of the Reformation in France is for what *the head* lost; for the better schools, the reading, the instruction, which the Reformation would have brought with it. But M. Michelet put his finger on the real cause for concern, when he said that the Reformation failed in France because a *moral* reformation France would not have. That sense of personal responsibility which is the foundation of all true religion, which possessed Luther, which possessed also the great saints of Catholicism, but which Luther alone managed to convey to the popular mind, earning thereby—little as we owe him for the theological doctrines he imagined to be his great boon to us—a most true title to our regard; *that* was what the Huguenots had, what the mass of the French nation had not and did not care to have, and what they suffer to this day for not having. One of the gifts and graces which M. Renan finds in France is her enmity to pedantry and over-strictness in these matters: and in his letter to Dr. Strauss he says that, although he himself has been sufficiently near holy orders to think himself bound to a regular life, he should be sorry not to see around him a brilliant and dissipated society. No one feels more than we do the harm which the exaggeration of Hebraism has done in England; but this is Hellenism with a vengeance! Considering what the natural propensions of men are, such language appears to us out of place anywhere, and in France simply fatal. Moral conscience, self-control, seriousness, steadfastness, are not the whole of human life certainly, but they are by far the greatest part of it; without them—and this is the very burden of the Hebrew prophets and a fact of experience as old as the world—nations cannot stand. France does not enough see their importance; and the worst of it is that no man can make another see their importance unless he sees it naturally. For these things, just as for the more brilliant things of art and science, there is a bent, a turn. "He showed his ways unto Moses, his works unto the children of Israel,"—to them, and to the heavy Germanic nations whom they have moulded; not, apparently, to the children of Gomer and to Vercingetorix. But this opens a troubled prospect for the children of Gomer.

But perhaps we English, too, shall be as the children of Gomer; for M. Renan has a theory that according to "that great law by which the primitive race of an invaded country always ends by getting the upper hand, England is becoming every day more Celtic and less Germanic;" in the public opinion and policy of England for the last thirty years he sees the *esprit celtique, plus doux, plus sympathique, plus humain.* We imagine our Irish neighbours by no means share his opinion. A more truly Germanic, or, at least, Anglo-Saxon, performance than the abolition of the Irish Church through the power of the Dissenters' antipathy to church-establishments, then telling ourselves in our newspapers we had done it out of a pure love of reason and justice, and then calling solemnly upon the quick-witted Irish, who knew that the Dissenters would have let the Irish Church stand for ever sooner than give a shilling of its funds to the Catholics entitled to them, to believe our claptrap and be properly grateful to us at last, was never witnessed. What we call our Philistinism, to which M. Renan might perhaps apply his favourite epithets of *dur et rogue,* may well bring us into trouble; but hardly, we think, our *doux esprit celtique.*

It seems, indeed, as if, in all that relates to character and conduct strictly so called, M. Renan, whom at other times we follow with so much sympathy, saw things with other eyes than ours. In a parallel between the English Revolution of 1688 and the French Revolution of 1830, he asks himself why the first succeeded and the second failed; and he answers that it cannot have been owing to the difference between William of Orange and Louis-Philippe, because the

second had no faults as a ruler which the first did not show in fully as great a degree. When we read this, we are fairly lost in amazement. Surely the most important point in a ruler is *character;* and William III., whatever were his faults, had a character great and commanding; while Louis-Philippe had, or gave the world the impression of having, a character somewhat (to speak quite frankly) ignoble.

We would fain stop here in our enumeration of matters of difference; for to differ with M. Renan is far less natural to us than to agree with him. But it is impossible not to notice one or two assumptions respecting the French Revolution and the intellectual value of France to the world, because to these assumptions M. Renan, like almost all Frenchmen, seems to challenge the assent of mankind, at least of all mankind except France's *rogue et jaloux* enemy, Prussia. Greece and Judea, he says, have had to pay with the loss of their national existence the honour of having given lessons to all mankind; in like manner—

"France at this moment expiates her Revolution; she will perhaps one day reap its fruits in the grateful memory of emancipated nations."

Just in the same strain writes Mdme. Sand, in the *Letters* we have already quoted:

"Even though Germany should appear to conquer us, we shall remain the *peuple initiateur*, which receives a lesson and does not take one."

In prosperity the French are incorrigible, so that a time like the present offers the only opportunity for disabusing them of notions of this kind, so obstructive to improvement; and M. Renan, one would have hoped, was the very man to do it. Greece has given us art and science, Judea has given us the Bible; these are positive achievements. Whoever gives us a just and rational constitution of human society will also confer a great boon on us and effect a great work; but what has the French Revolution accomplished towards this? Nothing. It was an insurrection against the old routine, it furiously destroyed the medieval form of society; this it did, and this was well if anything had come of it; but into what that is new and fruitful has France proceeded to initiate us? A colourless, humdrum, and ill-poised life is a baneful thing, and men would fain change it; but our benefactor and initiator is the poet who brings us a new one, not the drunkard who gets rid of it by breaking the windows and bringing the house about his ears.

There seems to us a like exaggeration in the French estimate of their country's intellectul rank in the world. France is the *plat de sel*, the dish containing the salt without which all the other dishes of the world would be savourless; she is (we will use M. Renan's own words, for a translation might easily do injustice to them)—

"la grande maîtresse de l'investigation savante, l'ingénieuse, vive et prompte initiatrice du monde à toute fine et délicate pensée;"

she alone has—

"une société exquise, charmante et sérieuse à la fois, fine, tolérante, aimable, *sachant tout sans avoir rien appris, devinant d'instinct le dernier résultat de toute philosophie.*"

We wonder if it ever occurs to these masters *du goût et du tact* that in an Englishman, an Italian, a German, this language provokes a smile. No one feels more than we do, and few Englishmen feel enough, the good of that amiability, even if it does not go very deep, of that sympathetic side in the French nature, which makes German and Protestant Alsace cling to defeated France, while, mainly for the want of it, prosperous England cannot attach Ireland. No one feels more than we do, few Englishmen feel enough, the good of that desire for lucidity, even apparent, in thought and expression, which has made the French language. But, after all, a nation's intellectual place depends upon its having reached the very highest rank in the very highest lines of spiritual endeavour; this is what in the end makes its ideal; this is what fixes its scale of intellectual judgment, and what it counts by in the world. More than twenty years ago we said, lovers of France as we are, and abundant and brilliant as is her work of a lower order than the very highest:

"France, famed in all great arts, *in none supreme*"—

and this still seems to us to be the true criticism on her. M. Renan opposes living names, for or against which we will say nothing, to the best living names of Germany; but what is one generation? and what, directly we leave our own generation, are any names but the greatest? And where, throughout all her generations, has France a name like Goethe? where, still more, has she names like Sophocles and Plato, Dante and Raphael, Shakespeare and Newton? That is the real question for her, when she is esteeming herself the salt of the earth. Probably the incapacity for seriousness in the highest sense, for what the Greeks called τὸ σπουδαῖον, and Virgil calls *virtus verusque labor*, is here too what keeps France back from perfection. For the Greeks and Romans, and a truly Latin race like the Italians, have this seriousness intellectually, as the Hebrews and the Germanic races have it morally; and it may be remarked in passing that this distinction makes the conditions of the future for Latin Italy quite different from those for Celtic France. Only seriousness is constructive; Latin Gaul was a Roman construction, old France was, as M. Renan himself says, a Germanic construction; France has been since 1789 getting rid of all the plan, cramps, and stays of her original builders, and their edifice is in ruins; but is the Celt, by himself, constructive enough to rebuild?

We sincerely believe that France would do well, instead of proclaiming herself the salt of the earth, to ponder these things; and sometimes it is hard to refrain from saying so. M. Renan tempted us; yet we see with regret our space nearly gone. Why could we not have kept to our own generation? and then we might have given ourselves the pleasure of saying how high is M. Renan's place in it. Certainly, we find something of a bathos in his challenge to Germany to produce a living poet to surpass M. Hugo; but in sober seriousness we might challenge Germany, or any other country, to produce a living critic to surpass M. Renan. We have just been reading an American essayist, Mr. Higginson, who says that the United States are to evolve a type of literary talent superior to anything yet seen in the mother country; and this perhaps, when it is ready, will be something to surprise us. But taking things as they now are, where shall we find a living writer who so habitually as M. Renan moves among questions of the deepest interest, presents them so attractively, discusses them with so much feeling, insight, and felicity? Even as to the all-importance of *conduct*, which in his irritation against the "chaste Vandals" who have been overrunning France we have seen him a little disposed just now to underrate, he is far too wise a man not to be perfectly sound at bottom. *Le monde*, we find him saying in 1869, *ne tient debout que par un peu de vertu.* The faults and dangers both of vulgar democracy and of vulgar liberalism there is no one who has seen more clearly or described so well. The vulgar democrat's "happiness of the greatest number" he analyses into what it practically is—a principle *réduisant tout à contenter les volontés matérialistes des foules*, of that "popular mass, growing every day larger, which is destitute of any sort of religious ideal and can recognise no social principle beyond and above the desire of satisfying these materialistic cravings." The *esprit*

démocratique of this sort of democracy, *avec sa violence, son ton absolu, sa simplicité décevante d'idées, ses soupçons méticuleux, son ingratitude*, is admirably touched; but touched not less admirably is another very different social type, the cherished ideal of vulgar liberalism, the American type—

"fondé essentiellement sur la liberté et la propriété, sans privilèges de classes, sans institutions anciennes, sans histoire, sans société aristocratique, sans cour, sans pouvoir brillant, sans universites sérieuses ni fortes institutions scientifiques. Ces sociétés manquent de distinction, de noblesse; elles ne font guère d'œuvres originales en fait d'art et de science"—

but they can come to be very strong and to produce very good things, and that is enough for our Philistines. What can be better, and in the end more fruitful, than criticism of this force; but what constituency can accept a man guilty of making it? Let M. Renan continue to make it, and let him not fear but that in making it, in bringing thought into the world to oust claptrap, he fulfils a higher duty than by sketching paper constitutions, or by prosecuting electoral campaigns in the Seine-et-Marne. "*The fashion of this world passeth away*," wrote Goethe from Rome in 1787, "and I would fain occupy myself only with the eternal."

MATTHEW ARNOLD.

LITERARY NOTES.

A new poem by Mr. Robert Browning, of considerable length and importance, will shortly appear. It is in verse, and is modern both in subject and rendering. The relations between the sexes are discussed in a dialogue between husband and wife. She questions, he expounds.

Professor Klaus Groth, of Kiel, has been invited by the Curators of the Taylor Institution to give a course of lectures on German literature at Oxford. Following the precedent of M. Taine, who lectured last year in French, these lectures will be delivered in German. An account of Klaus Groth, and several of his Low-German poems with English translations, may be found in Max Müller's *Chips from a German Workshop*, vol. ii. p. 122-159. See also *Academy*, vol. ii. p. 348.

The *Augsburg Gazette* for February 1, 2, gives an interesting account of the *intérieur* of the venerable Austrian poet Grillparzer, who died on the 20th of January, and was buried four days later with great solemnity and a funeral oration by Heinrich Laube. Grillparzer, we are told, was watched over through life and tended in death by three domestic Graces; their names are Netti, Kathi, and Peppi Fröhlich, and the story of their connection with the poet is simple and very innocent. They were children when Franz Grillparzer got his first government appointment and wrote his first verses; their father was kind to the youth, and he gradually became almost a member of the Fröhlich household; he was generally expected to marry the eldest daughter when she was old enough, but whether it was that he wished to marry all three, or, as some say, that he preferred the second and did not like to disappoint the others, or perhaps that he thought his little idyll would lose its bloom in vulgar matrimony, years went on, and he did not propose. The three Graces gave lessons in music and languages, and the poet was not well able to meet the expenses of a household, but when in course of time Counsellor Fröhlich and his wife died, it seemed to all parties right and natural that Grillparzer should take up his abode with the orphans as their "Zimmerherr." All ideas of marriage were given up, and the middle sister, Kathi, remained his *liebe Braut* to the end; for the last twenty-two years of his life he called her so from habit and without disguise, and she inherits all his literary and other property; but this is a mere formality, for the sisters scarcely have a separate existence. Besides fugitive poems, of which Kathi is supposed to have treasured a considerable number, Grillparzer's unpublished works include essays on dramatic subjects, including the genius of Shakespeare; a dramatic fragment, *Die Jüdin von Toledo*, which, from what the author said of it to Betty Paoli, is supposed to be of considerable extent. A complete work—*Libussa*—has been in Laube's hands many years, but it was confided to him with the injunction not to produce it on the stage unless he felt certain of its success, and he did not feel justified in "risking the tranquillity of the worthy old man, who was indifferent to fresh applause, but could still be annoyed by an unfavourable reception."

We would draw the attention of our musical readers to *The Old Cheque Book of the Chapel Royal from* 1561 *to* 1744, just edited by E. F. Rimbault for the Camden Society. It contains notices of very many English composers, their admissions, obits, &c. The old Chapel Royal, Whitehall, was burnt 1698, and Dr. Blow composed his anthem, "Lord, remember David," for the opening of the new one. The Chapel Royal, St. James's, was used much later. Henry Purcell lived in a suite of apartments in St. James's Palace, access to which was obtained by a winding staircase in the clock-tower. Dryden, when in debt, used to stay with him for weeks together in these apartments, where he was secure from his creditors. The book contains curious things wherever one dips into it.—The other Camden publication, the *Life of Bishop Bedell*, contains valuable information about the Irish rebellion, but has been already used by Burnet. The supplementary chapters give a good deal of additional matter.

The *Revue des deux Mondes* (February 1) contains an elaborate and not unsympathetic critique of "Le Docteur Strauss," by M. Victor Cherbuliez. He points out that the first *Leben Jesu*, written before Strauss was thirty, includes all that is really original in his contribution to theology, while his temperament was still too exclusively that of a theologian to allow his researches to take a wider range. His biographical works are commended for their literary merits, but treated as one-sided. When theologians begin to write politics, of course they are judged according to the skill they may display in their new rather than their original branch of study. In his *Friedliche Blätter*, Strauss descended to the ordinary newspaper level, and he is followed by his critic, but M. Cherbuliez at least is aware that it is a descent.

The President of the Geographical Society of Italy has written to the papers to say that the Conservator of the Bibliothèque Royale of Belgium has discovered a MS., in twelve chapters, containing the original autograph account of the discovery of Australia by Manuel Godinho, a Portuguese navigator who touched there in 1601, and whose priority to the Dutch sailors, who arrived three or four years later, has been unduly neglected. Mr. Ruelens vouches for the authenticity of the MS., which was brought to light at the Antwerp Exhibition, though it passed unnoticed in the crowd.

In *Fraser*, F. W. Palgrave speaks with authority on the growing force of the Mahommedan religious revival; and Professor Owen feels called on to protest in the name of science against a strange statement which has found its way into *The Speaker's Commentary*, and which reduces itself to the fact that Buffon and Haller were not prepared to risk the consequences of averring that Methuselah could not have lived 969 years. The professor analyses some cases of supposed longevity, and dwells on the nearly invariable proportion between the different phases of the organic existence of allied animals. But he is content to rest the issue on the teeth. A life of eight or nine centuries would wear out several sets of molars, and if Methuselah renewed his teeth like the elephant or the megatherium, he and his contemporaries were "zoologically distinct from the actual species of *Homo*." Stories of persons who have renewed their teeth for a third time in old age are plausibly accounted for by the case, which came under Professor Owen's observation, of an old Irish woman who related the same marvel of herself, where as the fact proved to be that a broken stump over which the gum had closed was beginning to be felt again as the jaw shrank with age.

Art and Archæology.

THE EXHIBITION OF PICTURES BY OLD MASTERS.

I.—Italian Schools.

One of the first things to take note of in regard to this year's Exhibition of Ancient Pictures at the Royal Academy is that the works by Italian masters are far less numerous than before, and, with a few brilliant exceptions, comparatively uninteresting. The managers of the exhibition, seemingly in order to make the greatest show with the least possible trouble, have, it is true, obtained a certain number of Italian pictures from Hampton Court, but they are all well-known works, which have been already times and often described; with one exception, therefore, I shall pass over these specimens.

The removal of national pictures to Burlington House from their accustomed places of deposit, where the public can at any time see them, is surely as superfluous as, on the other hand, the bringing together of treasures of art hidden away in country houses and private galleries is a real and appreciable public service.

The number of such works in this country often slumbering unnoticed for generations together is enormous, and there is no indisposition to lend them for the public benefit. All that is wanted is knowledge and taste to select the right pictures, and to ignore the dubious or bad ones. Of course this is very difficult and troublesome, but in commencing these exhibitions the Royal Academy ought to have been well aware of the arduous and responsible nature of the task. Now that the task has been undertaken, the public, to whom these gatherings are most acceptable, have a perfect right to require not only the mere annual continuance of the exhibitions, but such improvements in their general status as shall render them really worthy of the quasi national institution itself. These remarks are prompted by the fact that the present exhibition displays a marked falling off in the scale and relative importance of the contributions, and also evidence of even less care in regard to the selection, arrangement, and illustration of the specimens than on the two former occasions. No little scandal and dissatisfaction have again been caused by the admission of spurious, doubtful, and inferior works. It ought to be well understood that the Royal Academy alone is to blame for this. Few private collections, it is true, are exempt from such a leaven, but in the interest of the contributors themselves the Academicians ought sternly to refuse such pictures if pressed upon them—they should clearly explain that, whilst both the "prestige" and the pecuniary value of authentic and really fine pictures will be greatly enhanced by their exhibition at Burlington House, spurious and doubtful contributions are just as certain to find their true level, to bring discredit on the judgment and taste of their owners, and, it may be, even to permanently lessen the value of any genuine and really important works with which they may be associated.

Enough has been said in the daily press (and it has been re-echoed in other countries) as to the incorrect and careless catalogues and the absence of any intelligible system of arrangement of these exhibitions. If next year the Royal Academy holds another exhibition of this kind, and these matters are not then radically amended, the serious question, wherefore, and on what grounds, a limited, exclusive, and self-appointed body of practising artists, banded together mainly for the sale of their own works, is entitled to the imposing status of the Royal Academy of Arts of England, will probably be raised by other voices than those of the timid members of their own profession.

The interest of the present gathering as regards the Italian schools centres almost exclusively in two pre-eminent names—Raphael and Titian. The one exquisite work of the former master, and four of the latter in truth alone call for special notice.

The "Little Madonna of the Orleans Gallery" (No. 95), contributed by H.R.H. the Duke d'Aumale, comes first in order.

This well-known and most precious work, executed on panel, about 11 inches high and 8 inches wide, was in all probability painted in the year 1506, when Raphael was in his 23rd year, and there are grounds for believing it to have been executed in his native city of Urbino. The picture is entirely by Raphael's own hand, and, moreover, it is one of the first productions in which that hand is seen entirely emancipated from the conventional trammels of early association. There is here scarcely any trace of the early Umbrian school or of the specific manner of his master Perugino; it displays in fact an enormous onward stride in art, so remarkable indeed as to have greatly mystified one of the most eminent and industrious of modern art critics—Raphael's special devotee and historian, Passavant. The history of the picture, so far as regards its successive ownership for about two hundred years past, is sufficiently known. Towards the end of the seventeenth century it was in the possession of "Monseigneur," brother of Louis XIV.; at a later period it passed into the famous gallery of the Orleans family at the Palais Royal, during which time it was more than once engraved. When the Orleans collection was brought to London and dispersed in 1798, the picture was bought for 500*l.* by Mr. Hibbert, one of the notable amateurs of that day; it next appears in the hands of Messrs. Niewenhuys, the eminent picture dealers of London and Brussels, and shortly after 1835 it was sold by them to M. Benjamin Delessert of Paris for rather less than 1000*l.* The Delessert collection was in turn sold by auction in Paris three or four years ago, when the picture was purchased under the hammer by the Duke d'Aumale for something over 6000*l.* It is of course impossible to say exactly how much further the natural desire of the Duke to secure one of the old treasures of his family would have induced him to extend his biddings at the sale; it is known at all events that his commission was not an unlimited one; but the picture is literally of priceless value, and one thing is certain—that his opponent, the Director of our own National Gallery, should have secured it for this country *coûte que coûte.* At the time in question the National Gallery had ample funds to have purchased the picture up to any reasonable or indeed unreasonable amount. The nation had in fact shortly before acquired a less desirable work of Raphael at a much greater price; there is therefore no excuse for the lamentable want of judgment and energy manifested on this as on so many similar occasions.

I cannot do better than translate Passavant's description of the picture (*Raphael d'Urbino*, vol. i. p. 45, ed. Fr.), especially as it embodies the unlucky error to which I have already alluded. It is as follows:—

"The Virgin, turned to the right, almost in profile, is seated on a stool or form, and holds the Infant Jesus with her left hand, whom she contemplates with loving looks—the Child, raising himself towards her, takes hold of her vestments with his hands in order to aid himself: he is looking out of the picture with a serious expression. The background represents the wall of a chamber, with a reddish grey curtain on the left, and a shelf on which are placed some small vases. *These latter accessories and the reddish grey curtain have certainly been added more recently: they are painted in the manner of David Teniers, so much so indeed as to give every support to the belief that he was actually the author of these unfortunate additions.*"

There is nothing to be said against the first part of the description; it clearly enough illustrates the composition—one of those simple representations of maternal affection so often pourtrayed with varying circumstances of detail by the great master—but the singular assertion that the accessories were added to the picture by David Teniers should be once for all rectified, and the more so as it has been recently repeated and endorsed in various notices of the present exhibition.

Not only is the picture in every portion entirely by the hand of Raphael, but the original workmanship, if it may be so termed, is so sound, the colours and vehicles used so pure and well applied, whilst at the same time the picture has always been so carefully preserved, that the surface has acquired a homogeneous so-called "patina" as transparent and to outward appearance almost as hard as a vitreous enamel. The painting must have arrived at that state long before the age of David Teniers, and any addition then executed on the surface, even by the most skilful hand, would be immediately visible to the eye of an expert. There is, however, no such appearance. The curtain and accessories are certainly of one and the same piece and texture with the rest.

I have elsewhere rectified similar errors of Passavant in regard to the works of Raphael—carefully and conscientiously, as I trust, and it will not be a waste of time to pursue the present matter further.

Passavant was an artist by profession, and with all his industry and devotion the practice of his profession did not allow him opportunity enough to acquire that wider range of knowledge and culture which are at the present day the character-

istics of the highest grade of connoisseurship. There are thus many indications which of necessity fell dead upon him for lack of adequate collateral study and observation—one of these indications in the present case alone is sufficient in itself to refute his theory. The little vases on the shelf, for instance, are not such vases as David Teniers would ever have painted, for the simple reason that they were of a kind he would never have been likely to see, still less to invent; they are, in fact, Italian majolica ware drug pots, "vasi di spezieria," just such as were manufactured in thousands for all manner of domestic uses in Raphael's own day at the head-quarters of that fabrication, his own native city of Urbino.

The oft-repeated sarcasm of the old Bolognese art-writer Malvasia, who, full of foolish local jealousy, taunted Raphael with being merely a "boccalaro urbinate," *i.e.* an Urbinese pottery painter, might indeed have received some shadow of justification if he had noticed the pots in this particular picture, and could have adduced them in evidence of Raphael's ceramic pursuits. If Passavant, however, had merely confined himself to noting the fact that the execution of these details betrays a marked bias towards the Flemish manner and technique, he would have been quite right, ; that bias does unquestionably exist, and it is an interesting and instructive peculiarity—but it is seen quite as strongly in every portion of the picture as in the details in question. I admit even that a certain fortuitous resemblance to the style and handling of David Teniers may perhaps be seen in this little work, executed more than a hundred years before he was born; the explanation of all this, however, is very simple; not only in this picture, but in several others still extant, painted by Raphael about the same time, the influence of the early Flemish painters is seen strongly marked and undeniable. For instance, in the exquisitely beautiful Holy Family with a lamb, at Madrid, this *soi-disant* "Teniers manner" is quite as much developed as in the picture now in question. But it may be objected that from the early Flemish painters of the fifteenth century to David Teniers there is a wonderful leap. So there is, but it is a curious fact that of all the great Netherlandish painters of the seventeenth century Teniers was perhaps the one whose crisp transparent execution and brilliant lightsome colour most strongly recalls the exquisite works of the Memlings and Roger Van der Weydens, whose technique and pictorial qualities he directly inherited. Unquestionably in these pictures of Raphael there is a sparkling vivacity of colour and a spirited lightsomeness and freedom of touch different from all that had been achieved before by his countrymen.

This fortuitous resemblance to the style of David Teniers, then, is a curious and interesting coincidence brought about by a well ascertained cause, which is this. It is known that the Dukes of Urbino were great admirers of early Flemish art—that they not only procured beautiful pictures by way of Venice from Bruges and Ghent, but that they had, even before Raphael's time, invited Flemish artists to Italy, and employed them at their court. There is indeed a chapter to be written on the influence of the early Flemish painters, and the introduction by them of the newly discovered processes of oil-painting into Central Italy—to all appearance next to Venice, Urbino was the principal centre from which the new art was rapidly propagated in Italy; we have proof positive that Raphael was an ardent student of the new style and processes. It is a fact that there are still extant certain works by an early Flemish painter, executed by order of Duke Federigo of Urbino about the time of Raphael's birth. These are certain large panel-pictures, heads or busts of ancient classical and mediæval philosophers and men of letters; an entire series of these panels was in fact executed expressly to decorate the walls of the library in the palace at Urbino. Several of them were preserved in the Campana Collection, and are now in the Louvre. Now these panels were doubtless daily under Raphael's eyes when a youth, and a curious proof that they were so is the fact that one of his sketch-books, made when he was about eighteen or nineteen years old, and now preserved in the Academy at Venice, contains a most careful and beautiful series of drawings made from these very panels. It is all but certain that these works were executed by one Justus of Ghent, a scholar of Van Eyck, who resided at the court of Urbino. They are completely in the style of the latter great Flemish artist, and show no evidence of the slightest acquaintance with contemporary Italian art. There is nevertheless little doubt that they were actually executed in Urbino. But this is not all—there also still exists at Urbino, in the sacristy of the cathedral, a large picture known to have been painted by the same Justus of Ghent, when he had become almost a naturalised Italian; and it, as might be expected, *does* show the influence of the art of the painter's adopted country—the latter work is in fact a hybrid production of the most curious kind, half Flemish, half Italian, in style—an oil picture drawn with much of the stiffness and archaism of the old Umbrian school, yet entirely Flemish in execution; the luminous depth and power of the old Flemish colouring and light and shade nevertheless being in great measure replaced by the clear lightsome fresco-like colour of the early Italians. Here then we have the very converse of the influence exerted on Raphael at a subsequent period.

The truth really is that Raphael, like all the greatest artists, was an ardent innovator—his art never stood still. He not only had the power of assimilating all previous and contemporary excellence, but even of anticipating in some degree developments which would necessarily result in after ages from the pregnant germs sown in his own time by others.

It is a fitting transition from the greatest masters of design to the paramount colourist of the modern art cycle. The four works of Titian now before us are all deserving of the closest study, and much more might be said about them than I shall have time or space to indite at present.

The life of Titian completely overlapped, as it were, that of Raphael. Titian was born six years earlier, and outlived Raphael no less than fifty-six years (1483–1520 and 1477–1576). Raphael was cut off in the full maturity of his powers; whilst Titian may be said to have outlived himself. As might be expected, Titian's style, necessarily tinged and influenced by the surrounding associations of passing epochs, varied very greatly during the long period of his artistic activity. Thus his early works, contemporaneous with those of Bellini and Giorgione, those of his middle time, and again those of the later period of his life, when he stood alone amidst a generation of painters to whom the early associates and rivals of the man had become, as it were, "ancient masters," have really but little in common. Were it not indeed for certain glorious veins, which run through all the epochs alike—a pure "Titianesque" alloy giving the same splendid lustre to very different metal—the productions of the several periods might well be taken as the works of altogether different men.

The earliest in date amongst the present pictures is the portrait (said to be) of Alexander de' Medici, from Hampton Court (No. 72). This belongs to the first half of Titian's art career, but not, strictly speaking, to his early period. The "replica" of "La Gloria" (No. 114) and the "Europa" (No. 126), both painted about the same time, are of his later but still vigorous period, whilst the "Diana and Actaeon" (No. 73) is decidedly a senile work of the painter.

If the Hampton Court portrait were in its pristine state, or were it even tolerably well preserved, no finer specimen of Titian's powers as a portrait painter at his best time could perhaps have been shown; but, alas! the hand of the spoiler has been heavy on this treasure—not that of the inevitable spoiler—time—but the still heavier hand of stolid ignorance! and it must needs be said that the greatest blow has been inflicted quite recently by hands probably still busy at this ruthless work!

This magnificent picture has been always well known as one of the chief treasures of our royal collections. It belonged to Charles I., and was admirably engraved during his time by the able Flemish engraver Van Dalen. Though the personage represented greatly resembles Duke Alexander de' Medici, and although the costume and evident date of the picture (circa 1520–30) are in agreement with the attribution, there are reasons which it would be too long to recite why it can scarcely be the portrait of that personage.

I shall not describe this picture in detail—this has been done before, and it is at all times visible to the public—but I shall pass at once to the consideration of its present state and condition. This picture unfortunately, within the last five or six years, has been what is called "restored"—in reality, *greatly and irreparably injured!* As it happens, some years before this occurrence, it was for a lengthened period officially deposited in my keeping, and for months together it was daily and hourly before my eyes. During that time I repeatedly examined the

picture in the best possible light, and I am therefore in a condition to speak positively as to the transformation which it has recently undergone. It may as well be remarked that most of the pictures contributed to the present exhibition from Hampton Court are amongst those which have been "restored" under the present administration of the Gallery. If the object of exhibiting them at Burlington House was to challenge public opinion in regard to the cleaning and "restoring" operations which have been systematically carried on for a series of years, I cannot but say that I think that the course was a very unwise one, and that it would have been more prudent to have left the flayed and fresh-bedizened specimens in the quiet obscurity of the sombre apartments of the old palace.

Fortunately I am not alone in my reprobation of the cruel injury which has been inflicted on the picture now particularly in question, for an ably written letter appeared in the *Times* two or three years ago, pointing out the very facts to which I have now in turn to solicit attention.

The picture had doubtless in former years been greatly neglected and misused. There had been a large hole made through the canvas in the centre of the forehead of the figure, and which had been coarsely repaired and daubed over, seemingly by a common house painter perhaps more than a century ago. The picture was heavy and black in aspect mainly from the load of dirty varnish coarsely piled upon it in repeated coats from time to time. Nevertheless, through all this, the original lustre and perfection of Titian shone like the sun through murky clouds, and in spite of every drawback the picture was evidently fairly well preserved.

The head was relieved against a dark background evidently meant to represent empty space, *i.e.* that colourless atmosphere or medium, deep-toned, transparent, and impalpable, which Titian knew better than any other painter how to depict; but this dark background was not devoid of variety: it was, in fact, wonderfully toned and graduated so as to carry out and enhance the entire scheme of light and shade of the portrait. Titian's method of executing backgrounds such as this was by painting at first in solid impasted colours; the required depth, transparency, and variety of tint being afterwards gradually obtained by repeated glazing and scumbling with thin diluted pigments. Now this modern so-called "restorer," when he took the picture in hand, proceeded to effect what in the jargon of his profession is called "stripping" it, that is, he removed all the successive coats of varnish and the retouches which may have been applied at various periods, but he also in his carelessness and ignorance "stripped" off more or less completely along with these extraneous additions the superficial glazings, &c. which Titian himself had superimposed! The disastrous results can be more easily imagined than described—space will only allow me to specify one glaring evidence of the "stripping" process. The background of the picture, for instance, was entirely changed; the colourless transparent medium in which the head was, as it were, enveloped, and from which it emerged with amazing force and reality of effect, was replaced at once by a flat, hard, bluish-grey, empty surface, heavy and meaningless, signifying nothing but mere formless, textureless paint! So completely in fact has this picture been transformed that the background, which *was dark*, is *now light*, and the head is now detached in hard violent contrast, *dark upon light*, instead of *light upon dark!*

The unintelligent polluting touch of the "restorer" is visible more or less all over this once noble picture; finally the coarse repainting of the forehead of the figure, which a really skilful operator might easily have removed, is left just as it was, and is now indeed even rendered more obtrusively visible by the scouring process to which the rest of the surface has been subjected.

I purpose to notice the three remaining pictures of Titian in the next number of the *Academy*, and afterwards to give some jottings and memoranda on some of the principal Spanish, Flemish, and Dutch pictures in the exhibition.

J. C. Robinson.

EXHIBITION OF PICTURES IN WATER COLOURS, DUDLEY GALLERY, EGYPTIAN HALL.

This exhibition, which has for some years been distinguished by a general character of excellence, does not appear to us to demand an extended notice this season. At first there were a number of rising men or painters who had not hitherto been seen in water colours; and these were joined by others who occasionally paint in that medium, whose oil pictures were well known. Besides, there have always appeared on the walls of the Dudley a great number of small landscapes distinguished by original observation and admirable sentiment. It is not necessary to mention names, representative of either of these categories, at least to those who have been interested in the exhibition. Gradually, however, the established painters have loosened their connection with the Gallery, or are now otherwise engaged; and the landscape element has this season taken a larger size and an inferior quality, some of the best artists of a year or two ago being insignificantly represented, or not at all. New exhibitors present themselves, but the committee of management treat them rather arbitrarily. Burne Jones, it is true, has been placed in the best position; and on hearing that he was an exhibitor, we went with the full intention of devoting ourselves to the study and elucidation of his works there expected. But, unhappily, the four emblematic figures in one frame, painted in tempera with some glutinous medium on cloth, called "The Triumph of Fortune, Fame, Oblivion, and Love," are too obviously imitative of old Italian work (the drawing that of Signorelli), both in manner and spirit, to be considered worthy of his transcendent powers. The only exhibitors of the original set fully represented are Simeon Solomon, whose several works here are all noteworthy, and informed with lovely and tender sentiment; and J. E. Poynter, who only sends two small portraits, painted with infinite care and refinement. But after the imaginative or historical pictures we have seen of these painters, it does not appear necessary to dwell on the present examples. A. B. Donaldson is here in great force, but also in a reproductive spirit, giving us a recollection of certain Venetian colourists; C. N. Hemy, also, imitating the modern imitations of earlier Flemish art.

It would seem as if all that now is left for the modern artist, in respect to the technique of his art, is to endeavour to do again what has been done before by the great masters. But he must use his art in obedience to other motives. Some pictures of modern times indicate this: one or two in France, "The Wreck of the Medusa," though a painful subject, perhaps De la Roche's "Hémicycle," in the École des Beaux-Arts; some in Munich, barring the colour; and in this country lovely inventions, answering "the desires of the heart," by D. G. Rossetti and E. Burne Jones, though both suffer from defective training. But such merely imitative work as these four emblems, by the latter, are nothing to the purpose.

W. B. Scott.

ART NOTES.

The administration of the city of Paris sees itself forced to reduce considerably the sums annually voted for fine art purposes. It will, however, continue the publication of the volumes containing documents relative to the history of the town. The Hôtel Carnavalet is destined to receive the new library and museum of the city.

The Vienna Museum for Art and Industry is now completed. For the moment the rooms are occupied by an exhibition of specimens of modern Austrian work, but as soon as this exhibition closes, the collections which have been provisionally housed in the old Ball-house, will be transferred to their permanent home. An intelligible description of the building, accompanied by excellent plans, will be found in the *Zeitschrift für bildende Kunst* for Jan. 12.

The Albert Memorial in Hyde Park will soon be completed. Two of the corner groups are already up, and the remaining two are in course of erection. The "Asia," by Mr. Foley, promises well, the single figure yet in place is full of fine character and dignity. In about a fortnight, the freize round the base of the Memorial itself will be uncovered, and can then be appreciated with greater justice; for at present the shed which encloses it shuts out the daylight for which the work is calculated. The portions by Mr. Armistead, "Music and Painting," are remark-

able for sound thought and work. The treatment is skilful and picturesque; some of the figures show fine lines, and the impression, as a whole, is complete. One point will be likely to challenge criticism. Mr. Armistead has boldly attempted the feat of turning the back of one of the figures to the spectator. This seems a little doubtful. Figures may appear to come forth to the air, from the solid block, but the moment we reverse the process, knowledge of the impassable wall checks the imagination, the actual limit of space is felt, and in consequence, we seem to see half a man balancing on a ledge. But light and shade do so much magic, that perhaps the removal of the shed may help this figure by throwing it into strong relief. Details in the work of the canopy deserve attention. Many portions, both in bronze and mosaic, are attractive and artistic in conception. If, however, we turn from considering separate portions to take a view of the whole, we feel that we cannot yet congratulate ourselves on having escaped the fates which attend on all our public works. Two radical defects seem in part to cause the whole shortcoming. First, the unsuitability of the base to the memorial itself. The base, the steep ascending flight of steps, is too considerable for the slight thing which surmounts the whole. Second, the site does not harmonize with the character of the monument. The lines of the canopy seem imperatively to demand an architectural background. As it is, the Memorial does not look as if it belonged to its place. Is it possible, that did it stand in a marble-paved court, on a comparatively low platform, ascended by broad and shallow steps, closed in by narrowing walls, against which every line would be boldly accentuated, rising into light from the deep cast shadows of its surroundings, is it possible that so, we might have looked on it with pleasure?

The chief feature of the *Gazette des Beaux-Arts* for February, is a reproduction of a fine pen-and-ink sketch ascribed to Mantegna, and existing in the collection of M. Emile Galichon. The subject is "Tritons restraining sea-horses," and the drawing is supposed to have been a portion of a composition representing a triumphal procession of Neptune. The letterpress does not give a scientific account of the drawing, but it seems once to have been in Ottley's hands. M. Lecoy de la Marche has resumed the publication of the correspondence of directors of the French Academy at Rome. Some letters of Natoire, printed in the present number, are an interesting contribution to the art history of the eighteenth century. The publication of the documents relative to the arts during the Commune is also continued by M. Alfred Darcel.

The "Madonna with the Veil" by Titian was generally believed to have perished in the sack of Rome by the Constable of Bourbon. It is now reported to have been discovered amongst the pictures in an old chateau belonging to the late Dr. Riteri. The professors of the Academy of Turin pronounce it to be the genuine picture.

Lady Walmsley, of Hume Towers, Bournemouth, is about to present to the nation the portrait gallery belonging to the late Sir Joshua Walmsley. The collection comprises a portrait of Cromwell by Lucy, portraits of Nelson, Garibaldi, George Stephenson, Hume, Cobden, Bright, Disraeli, and Gladstone.

The dangers run by the glass-paintings of the Paris churches during the two sieges suggested to the Municipal Council the idea of making a complete collection of the cartoons originally employed in their execution. When the original designs cannot be procured, careful tracings are to be made on the glass itself. M. Prosper Lafaye, the author of the remarkable restorations of Saint-Séverin, is the artist entrusted with the realization of the project.

A quantity of Palissy ware is reported to have been discovered on the estate of the Count de la Grandpré, in the neighbourhood of Apremont. Two peasants whilst ploughing laid bare the mouth of a cave about fifty centimetres below the surface; the count arrived on the spot, and directed excavations to be made, the result of which was that in an obscure corner a quantity of *vielles poteries émaillées* were found. The work of excavation is to be continued.

At the instance of M. Gallait, the Belgian Academy of Fine Arts proposed to the government the erection of a building specially devoted to artistic exhibitions. The request has been complied with, and a hall is to be built on some waste lands near the Rue de la Régence, which is to serve at the same time the interests of painting, sculpture, and music.

The collections of the late M. de Villestreux will be sold in two parts. His faïence, porcelain, glass, and tapestry, will come to the hammer at the Hôtel Drouot, but his pictures, as well as the paintings of the fourteenth, fifteenth, and sixteenth centuries, and *objets d'art*, from the collection of the Count de Nahuys, will be put up to auction next week at Brussels.

The catalogue for the sale of the collection of M. Michel de Tretaigne is just out. It is illustrated with nineteen fine etchings. The price is ten francs.

Anton Hess has just completed the four colossal figures commissioned for the Rathhaus of Munich. They personify *Gewerbfleiss*, *Häuslichkeit*, *Bürgermuth*, and *Wohlthätigkeit*. The building of the Rathhaus itself is nearly finished, and the figures will be immediately placed in their distinct niches.

The *Nürnberger Korrespondenz* gives a short biography of Dr. Heinrich Schliemann, whose touching enthusiasm for a particular theory of Trojan topography takes the practical form of excavations, which we have noticed from time to time. He was the son of a small shopkeeper, went to sea, was wrecked, and took a clerkship in an Amsterdam house of business. Half his salary (800 francs) was spent in learning languages, which he mastered at the rate of six weeks a piece. In 1846 he went to Russia, and gradually grew rich; and in 1856 allowed himself the pleasure of learning Greek (ancient and modern) in three months: he had been afraid before, lest the interest of the pursuit should be so absorbing as to interfere with his business engagements, from which he withdrew in 1863 to spend a well-earned fortune in travel and the indulgence of his archæological tastes.

In the *Allgemeine Zeitung* (January 30) Dr. Lübke notices some recent publications of the Austrian Museum of Art and Industry, and contrasts the neglect of all art-interests displayed by Prussia, and especially in Berlin, ever since the death of Kugler in 1857. His complaints receive additional point from the fact that the new gold coinage of the empire has been so badly struck that it will have to be called in.

Competent connoisseurs consider the supposed Jamnitzer cup, recently acquired for the South Kensington Museum, to be of doubtful genuineness.

The *Uhland-Denkmal* is now somewhat advanced. The statue modelled by Kiez of Dresden has been cast by Pelargus at Stuttgart, and is already half finished as to the chiselling. But in consequence of Kiez being behindhand with a portion of the relief, there is no chance of the statue being in position before the end of this year. The architectonic part of the work will be carried out by Nicolai of Dresden and Koch of Tübingen.

Madame Moscheles, the widow of the eminent composer, is at present engaged in writing the life of her husband. The work is to appear, if possible, simultaneously in English and German.

The large number of various classes of drawings representing the practice of William Hunt, both in his early and later time, collected by his friend and medical adviser, Mr. Wade, of 68, Dean Street, have been and are now visible by admission cards (from 12th to 17th current.) previous to dispersion. The collection is unique—as it is not likely any other either so extensive or so good exists—and is certainly very interesting, as showing the

water-colour art of the last generation from the hand of one of its greatest proficients.

Mr. Wood, to whom we alluded briefly in our last number (p. 46), has obtained authority from the Sultan to make extensive excavations at Ephesus, in order to bring fully to view the remains of the famous temple of Diana, burnt by Erostratus. The site has been discovered already, the pavement of the *cella* has been laid bare, together with several magnificent architectural fragments.

In the *Beilage* of the *Allgemeine Zeitung* for January 9, Dr. Alfred Woltmann gives an account of the rearrangement, &c. of the gallery of paintings at Carlsruhe. This gallery contains many works of value, many old German pictures, some Italian, a large collection of eighteenth-century French, amongst which are some valuable Chardin, and a good deal of modern German painting. All this was in the most miserable state of neglect and confusion; now order and reform have passed everywhere except into the catalogue, which corresponded in ignorant carelessness with the previous state of the pictures. Dr. Woltmann mentions, by way of example, that a Madonna of La Hire is ascribed to Poussin, who, it is stated, was born 1505—died 1565. Thus a painting of a century *later* than Poussin is first given to him, and then the period of his activity is *antedated* by a century.

The regulations for the coming Salon have been much debated in Paris. A sentiment has been gaining ground amongst artists in favour of establishing complete independence of the government. The present programme, founded on the report addressed by M. Charles Blanc, the Director des Beaux-Arts, to the Minister of Public Instruction must be considered only as a temporary compromise. Though for the moment no practical result has been achieved, the day is not far distant when juries, medals, &c.—all, in short, that does or is supposed to symbolize protection in art—will be swept away. M. Louvrier de Lajolais remarks in the *Chronique des Arts* for December 24, 1871: "La seule protection que l'État doive aux artistes, c'est celle à l'aide de laquelle ces derniers parviendront à se constituer indépendants de lui."

M. Jules Labarte, who is well known by his works on the arts of the middle ages and the renaissance, has just been named *membre libre* of the Académie des Inscriptions et Belles-Lettres.

Selected Articles.

Die neuen Ausgrabungen in Pompeji und Herculaneum. Von R. Engelmann. Mit Grundrissen. Zeitschrift für bildende Kunst, Feb. 9.

Die Darstellung des Abendmahles durch die byzantinische Kunst. Von Dr. Ed. Dobbert. Jahrbücher für Kunstwissenschaft, Dec. 31, 1871.

New Publications.

Becq de Fouquières, L. Aspasie de Milet. Étude historique et morale. Paris: Didier.

Burton, Capt. R. F. Zanzibar; City, Island, and Coast. 2 vols. Tinsley.

Chénier, André, Poésies de. Édition critique, par L. Becq de Fouquières. 2me éd. revue et corrigée. Paris: Charpentier.

Cherbuliez, V. La Revanche de Joseph Noviel. Berlin: Asher.

Dobbert, E. Die Darstellung d. Abendmahls durch die byzantinische Kunst. Leipzig: Seemann.

Erckmann-Chatrian. Histoire du Plébiscite racontée par un des 7,500,000 oui. Paris: Hetzel.

Graesse, J. G. Th. Guide de l'amateur de porcelaines et de poteries. 3me éd. Dresden: Schönfeld.

Heydemann, H. Humoristische Vasenbilder aus Unteritalien. Berlin: Besser'sche B.

Lefarth, J. A. Lambert v. Hersfeld. Ein Beitrag zu seiner Kritik. Göttingen: Vandenhoeck u. Ruprecht.

Legouvé, E. Conférences parisiennes. Paris: Hetzel.

Lenz, von. Die grossen Pianofortevirtuosen unserer Zeit aus persönlicher Bekanntschaft. Liszt, Chopin, Tausig, Henselt. Berlin: Behr.

Lippmann, F. Eine Studie üb. chinesische Emailvasen. (Museum Reprint.) Wien: Rosner.

Michelangelo Buonarrotti, Le Rime di. Nachdichtungen von Hans Grasberger. (Complete collection.) Bremen: Kühtmann.

Münch, A. Die Münzsammlung d. Kantons Aargau. Aarau: Sauerländer.

Nottebohm, G. Beethoveniana. Aufsätze u. Mittheilungen. Leipzig: Rieter-Biedermann.

Rimbault, E. F. The Old Cheque Book, or Book of Remembrance, of the Chapel Royal from 1561 to 1744. (Camden Soc.)

Sajjid Batthal, Die Fahrten des. Ein alttürkischer Volks- u. Sittenroman. Uebersetzt von Dr. Ethé. 2 Bde. Leipzig: Brockhaus.

Westphal, R. Elemente d. musikalischen Rhythmus, m. besond. Rücksicht auf unsere Opernmusik. Jena: Costenoble.

Physical Science and Philosophy.

Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Art, and Custom. By Edward B. Tylor, author of Researches into the Early History of Mankind, &c. 2 vols. Murray, 1871.

It is perhaps inevitable that in the present chaotic state of our knowledge of man's mental nature and its relation to his visible organism, a work like the present should be unsatisfactory. The minute anatomy of the brain has been long ago exhaustively investigated, while the comparative study of its form and size in different races and individuals has been carried on by means of extensive collections of crania and casts; yet, although the brain is almost universally admitted to be the organ of the mind, by neither of these lines of research nor by any combination of them, have any definite conclusions been arrived at as to the relation of the brain to the various mental faculties. Up to the present day our physiologists dispute as to whether the forehead or the occiput is the seat of the intellect, yet they scout the idea of giving up their hitherto barren line of investigation, in favour of that experimental method of comparing function with development which, the much-abused phrenologists maintain, leads to complete success. Equally unsatisfactory is the practice of leaving out of view, in theories of mental development, the numerous well-established cases of abnormal mental phenomena which indicate latent powers in man beyond those usually recognised. These are looked upon as obscure diseases of the nervous system, and although their occurrence is very rare to individual experience, the records of them are now sufficiently voluminous to furnish comparable cases to almost all that occur. They can thus be grouped into classes, and this fact, of each one forming an item in a group of analogous cases, is supposed to preclude the necessity of any attempt at a rational explanation of them. This is the method very largely adopted by Mr. Tylor, who in treating of the beliefs, customs, or superstitions of mankind, seems often to be quite satisfied that he has done all that is required when he has shown that a similar or identical belief or custom exists elsewhere.

In these volumes he has presented us with an enormous mass of facts of a very miscellaneous character, and he apologizes for this by the necessity of establishing a firm foundation for so important and novel an enquiry as that which he has undertaken. But the point and bearing of a large number of these facts is not always clear, and his book would have been both more readable and more instructive if typical facts only had been given, and if the propositions sought to be established had been laid down with more precision. In noticing a work so full of detail, it is only possible here to allude to a few of the more striking and characteristic features, as, owing to the author's somewhat involved and prolix style, no extracts of reasonable length could give any idea of the way in which the various branches of the subject are treated.

One of the most important results of Mr. Tylor's researches, and that which is most clearly brought out in every part of his work, is, that for the purpose of investigating the development of man's mental nature race may be left out of the question, and all mankind treated as essentially one. If we accept this as the result of a long and, as far as this particular question is concerned, almost exhaustive study, it forms a powerful argument against the polygenetic school of anthropology; for had the several races of man been derived from several distinct animal forms, or in any other independent way, it is hardly possible to conceive that no fundamental differences whatever should be exhibited in the nature and quality of their mental faculties. Another important question treated very fully is that of development and progress, which are held to be fully established, degeneration being [illegible] rare and exceptional; and the passage in Sir Charles Lyell's *Antiquity of Man*, in which he sarcastically maintains that if man has degenerated we ought to find, instead of rude implements of flint and bone, lines of buried railroads and electric telegraphs, with astronomical instruments and microscopes better than any we possess, is quoted with approval. But surely this passage is illogical; for man might slowly degenerate in mind while still progressing in arts, and even in science, because these are necessarily growths, and the adapter and improver may have less genius than the inventor who went before him. Mr. Galton has carefully discussed one phase of this question in his *Hereditary Genius*, and gives good reasons for believing that the average Greek of antiquity was higher mentally than the average European of to-day; and the fact that the Greeks had neither microscopes nor even the printing machine has really no bearing whatever on the question. The conception that the human race, as a whole, was higher morally and intellectually ten thousand years ago than it is now, is not disproved by evidence of any amount of inferiority in the arts, which of course is overwhelming. Yet even on this point the facts and arguments of Professor Piazzi Smyth should have been noticed; for he shows that what is admitted to be one of the most ancient buildings on the earth is so perfect both in design and execution, as to demonstrate that its constructors must not only have equalled our modern engineers in mental capacity, but must have possessed instruments capable of determining angles, levels, and distances, with as much precision as any we now possess.

Children's games, nursery poems, proverbs and riddles, are all adduced to show the close mental resemblance between remote ages and widely separated races; but the illustrations of this principle are sometimes far-fetched and improbable, as when the saying, that a frightened person was "ready to jump out of his skin" is connected with the belief in were-wolves—men who had the power for a time of getting out of their own skin to become wolves.

Mythology and nature-myths are next treated at great length, but with little novelty or useful result. The chapters on language are however very good. They treat especially of radical and universal similarities; so that even here Mr. Tylor is enabled to ignore race and all special linguistic affinities, and to show that there is a substratum common to all human language. The words or sounds expressing affirmative and negative, dislike, silence, near and far, and many others, are shown to resemble each other all over the world, and to be founded on interjectional sounds which express similar ideas to all mankind. The mode of counting among various nations furnishes similar fundamental resemblances. These subjects are very fully treated, and afford a solid foundation for the developmental theory of the origin of language.

More than half the work is occupied with the subject of "Animism" or the doctrine of souls. We are overwhelmed with elaborate details of the endlessly varied ideas and beliefs of men as to the soul, spirits, and gods. We are constantly told that each such belief or idea "finds its place," with the implication that it is thus sufficiently accounted for. But this capacity of being classified necessarily arises from the immense variety of such beliefs and from the fact that they are founded on natural phenomena common to all races, while the faculties by which these phenomena are interpreted are essentially the same in every case. Any great mass of facts or phenomena whatever can be classified, but the classification does not necessarily add anything to our knowledge of the causes which produced the facts or phenomena. We find at times great looseness of statement when Mr. Tylor attempts to account off-hand for superstitions. He tells us, for example, that when the devil with horns and hoofs and a tail had once become a fixed image in the popular mind, "of course men saw him in this conventional shape." Now this general statement is simply not true. In the records of witchcraft-trials it will be found that witches generally described the devil as "a man"—"a dark man"—"a black man"—"a gentleman in black clothes"—"a gentleman richly dressed," and seldom, if ever, as appearing in the full conventional form. The theory of expectant attention determining the form taken by a delusion does not cover these facts, and this is even more strikingly shown by another discordance of a similar nature. It is certainly a popular belief that the devil is hot, and that his touch burns. Yet the witches, whether in Scotland, England, or France, almost invariably describe him as cold to the touch; and this statement, so often made by persons who could have had no knowledge of what others had said, curiously agrees with the phenomenon described by modern spiritualists, of a cold wind passing over the hands during a *séance*. Such a correspondence of testimony in a direction exactly opposed to popular belief points to some substratum of unrecognised facts even in witchcraft, and it is not satisfactory to find the nature of this testimony misstated to make it fit in with a foregone conclusion. A recognition of the now well-established phenomena of mesmerism would have enabled Mr Tylor to give a far more rational explanation of were-wolves and analogous beliefs than that which he offers us. Were-wolves were probably men who had exceptional power of acting upon certain sensitive individuals, and could make them, when so acted upon, believe they saw what the mesmeriser pleased; and who used this power for bad purposes. This will explain most of the alleged facts without resorting to the short and easy method of rejecting them as the results of mere morbid imagination and gross credulity. Again, we are told that "the ghost or phantasm seen by the dreamer or visionary is like a shadow, and thus the familiar term of the *shade* comes in to express the soul." But the dreamer sees what appear real substantial bodies, not shadows or images; and it is only the waking seer who, by seeing other objects through the phantasms or by testing their unsubstantiality by means of touch, can arrive at the conclusion that they are of a spiritual or shadowy nature. So, the general belief in the ghost of a man being seen in or near the house where he lived, is not at all accounted for by dreams, which are bound by no limits of locality, and generally show persons in the most incongruous places. Accounts of the other world seen in visions are said to be "just what the seer has been taught to expect"; but at p. 47, vol. ii. the seer is *surprised* to find the trees, shrubs, and paths such as she had been used to on earth. It was not therefore what she had been "taught to expect"; and the remark becomes both valueless and misleading, instead of helping us to understand how such visions originate.

Although the details given on these subjects are so numerous and so heterogeneous as to be wearisome in the last degree, they are yet altogether one-sided. They have been amassed with one object and selected, no doubt unconsciously, so as to harmonize with the *à priori* convictions of the writer. All narratives tending to prove that anything which goes under the general term supernatural really exists as fact, are either entirely omitted or just mentioned in such a manner as to imply that they are necessarily impostures or delusions, and therefore unworthy of discussion. There is, however, on record a mass of facts or alleged facts ranging through every period of history down to the present day, and going to prove that the so-called supernatural is not all delusion, and that many of the beliefs of all ages classed as superstitions, have at least a substratum of reality. In the works of Dr. Kerner, Ennemoser, Görres, and Dale Owen, and in Mr. Howitt's *History of the Supernatural*, are collections of these facts which, although by no means exhaustive, are yet far more extensive than those Mr. Tylor has cited to support his argument; while many of them are so thoroughly well established that they cannot be explained away. It is therefore at least a possible solution of the problem of animism, that the uniformity of *belief* is due in great part to the uniformity of the underlying *facts;* and a work on the development of religion and mythology should fairly grapple with the question, "How much of truth is at the bottom of the so-called superstitious beliefs of mankind?" But our author avoids all such inconvenient enquiries by means of his infallible nostrum. A fact or a belief occurring once only might require explanation, but if a second or an analogous fact or belief can be found elsewhere, the whole thing becomes clear. "Second sight," for instance, occurs among savages as well as in Scotland. Nothing more is required, according to Mr. Tylor, to prove that it has no existence at all, except as a mere "belief." Those curious phenomena which have been recently investigated by Mr. Crookes and other Fellows of the Royal Society, and which are declared to be realities by members of the French Institute, by American judges and senators, and by many medical and scientific men in this country, are treated in exactly the same way. Something closely related to them is recorded by classical writers, and occurs now among savage tribes. It is therefore clearly a case of "survival of old beliefs," and no further notice need be taken of it. Mr. Tylor even goes so far as to say that for his purpose it really matters little whether they are true or not. In order to arrive at true results as to the origin, nature, and development of men's beliefs, it matters not whether their foundation is fact or imagination! This belief of Mr. Tylor seems to the present writer as completely an hallucination as any to be found recorded in his volumes.

It is pertinent to recall the fact that even matters of pure science, when they have run strongly counter to popular opinion, have been treated just as Mr. Tylor treats superstitions. Less than twenty years ago the evidence for the antiquity of man was in this category. It was then ignored or sneered at as beneath discussion. It was treated just as if it were an "epidemic delusion;" yet every iota of it turned out to be fact, and fact of the highest importance and of surpassing scientific and human interest. This was a purely scientific question, but there is another which had all the aspect and characteristics of a superstitious delusion, and was yet a truth. About twenty-eight years ago the phenomena of insensibility to pain in the mesmeric trance attracted attention. Experiments of this kind were often exhibited in public, and most painful surgical operations were performed on subjects who manifested no indications of feeling. The present writer well remembers the universal shout of indignation at these experiments. They were declared to be gross imposture or delusion from beginning to end. The apparent unconsciousness was all sham, and the medical men who performed the operations, and gave a detailed account of them, were acused of being parties to the imposture, and even of having bribed the patients. It took many years to establish this fact, of insensibility to the most excessive stimuli and the most intense pain produced without the use of any drug or any violence; but it was established. It remains, however, a fact of which modern science can give no intelligible account, and which it therefore ignores as much as possible.

These examples (and many others might be adduced) should teach us, that it is unsafe to deny facts which have been vouched for by men of reputation after careful enquiry, merely because they are opposed to our prepossessions. A work like the present, one-sided though it be, furnishes much evidence to support the views of those who maintain that a considerable portion of the so-called superstitions of mankind repose upon facts; that these facts have been almost always misunderstood and misinterpreted in past ages, as they are now by the ignorant and among savages; and that, until they are recognised as possible realities, and studied with thoroughness and devotion and a complete freedom from foregone conclusions, it is hopeless to expect a sound philosophy of religion or any true insight into the mysterious depths of our spiritual nature.

Alfred R. Wallace.

ARCTIC EXPLORATION.

Lieutenant Weyprecht's report of the Austrian Polar Expedition of last year was read before the Academy of Sciences at Vienna on the 7th of December last.

After showing how the ocean streams in the Arctic basin must maintain a delicate balance between the amount of ice produced and the quantity carried out southward to be restored again to a liquid state, so that a certain definite average is never exceeded; and how the outgoing cold current of necessity requires a complementary equatorial flow, the author proceeded to examine this circulation, aided by observations made during the voyage.

Lieutenant Weyprecht claims for the depth-temperatures recorded by this expedition that they are the first trustworthy observations made in these regions, and that they throw new light on the final track of the Gulf Stream.

The entire sea between North Cape, Bear Island, and Novaia Zemlia, was found to contain comparatively warm water, which moved to northward as summer advanced, giving up its warmth by contact with the ice, and carrying the ice edge before it. The depth-temperatures show that the warmer water formed a strongly marked upper stratum, which decreased in temperature and thickness as it was traced to north-eastward. In the meridian of 44° E. in 72° N. the surface temperature was 40°·5 F., and in 77° N. in the same longitude it had fallen to 36° F.; at the former point the temperature of 32° was reached at a depth of 420 feet, at the latter in 65 feet. Everywhere at a depth of 800 feet an almost uniform temperature of 29°·5 was found.*

In 60° E., near the north coast of Novaia Zemlia, the warmer stratum was found by the expedition to have decreased in thickness to 30 feet, so that its limit had nearly been reached. Judging from this, Lieutenant Weyprecht raises the question whether the open water, with a surface temperature of 44°, navigated last year beyond Novaia Zemlia to 81° E. by Captain Mack, can be due to the influence of this warm stratum alone. In explanation of it he advances the theory that the great Siberian rivers, flowing in part through steppe-lands which in summer have an almost tropical climate, pour such a quantity of fresh and warmed water into the shallow Siberian sea as to account for its observed freedom from ice. One of the smaller streams in the Taimyr peninsula was found by Middendorf to have an average temperature in August of 52°.

* Former observations with unprotected thermometers in these regions appeared to show an increase of temperature from the surface downwards.

Some light is thrown upon the further progress of this warmer water by the presence in July at the highest latitudes reached by the expedition of great quantities of drift pine-wood, which must have come from the Siberian rivers, and by the appearance in August of a large quantity of fresh-water ice to the south of Gillis Land. Lieutenant Weyprecht believes that a portion of the warmer water from these rivers unites with the furthest branches of the Gulf Stream to cause the open water so unexpectedly found last year between Novaia Zemlia and Spitzbergen, and that the great distances which these sources of heat have to traverse before reaching this area explains the fact of its being free of ice at such a late period of the year as September.

The whole of these observations, Lieutenant Weyprecht considers, clearly indicate the importance of the seas north and east of Novaia Zemlia for the object of Polar research, and he strongly recommends two lines of exploration: one, to northward from the highest latitudes, between 40° and 50° E., reached in the trial voyage, where, during three months' cruising, no ice which could be termed "pack" was seen; the other, to eastward through the unknown waters to the north of Siberia, making for Behring Strait and an American harbour.

Scientific Notes.

Geography.

Geographical Distribution of Coniferæ.—Dr. Robert Brown has communicated to *Petermann's Mittheilungen* an important paper on the geographical distribution of Coniferæ and Gnetaceæ. Separating the regions which contain a number of species, the greater part of which are peculiar to these areas, he distinguishes twenty-six "provinces" of distribution over the globe. Each of these, with its characteristic species, is described in detail in the paper. Among the conclusions drawn by Dr. Brown are the following:—That the Coniferæ are found over the whole globe, preferring, however, the colder regions; when a northerly species spreads southward beyond the region in which it has attained its greatest development, it climbs to a height which has a mean temperature similar to that of its original locality. Every species expands in the direction of least meteorological and physical change, and has probably its own limiting isotherms, though temperature is not by any means so important a condition as moisture. Every species has a region within which it attains the climax of development, and beyond this it decreases in numbers of individuals as well as in strength. Every natural genus appears to have originated in the centre of the area within which the greatest number of its species are found; it can scarcely be doubted, however, that these centres of origin have been subjected to great geological changes, and thus many of the apparent irregularities in the distribution of plants may be accounted for. It is erroneous to maintain that in every case climate and elevation exert an influence upon the distribution of plants and animals; the geological constitution of a region has an appreciable power in limiting the expansion of species.

West Africa.—Another paper in the same journal, accompanied by a map, gives a complete history of the attempts which have been made to penetrate West Africa in the neighbourhood of the delta of the Ogowai river, along with a summary of our knowledge of that part of the continent. The Ogowai must be one of the main arteries of the country, but nothing whatever is yet known of its course beyond a distance of 150 miles inland from its great delta, the outmost branches of which are more than 50 miles apart on the coast. In recent years attention was drawn to the magnitude of this river, first reported by Bowdich in 1817, by Du Chaillu's journeys in the coast regions north of the Gaboon and south of the Ogowai, in the years 1856–59. The French, who have long had settlements in its neighbourhood, have at various times made efforts to navigate its waters, as yet without much success, though there do not appear to be any great barriers in the way of a determined explorer. Their first trial in 1862, under Lieut. Serval in the steamer *Pionnier*, was made in July, the season when the river is lowest,* and soon the journey had to be continued in boats, but at a distance by river of about 100 miles from the coast, on the rumour of an attack by the natives, further progress was abandoned. Neglecting the experience of the former attempt, a second, under Lieut. Albigot and Dr. Touchard, also in the *Pionnier*, was undertaken at the same season in 1864, but, waiting till October, the expedition reached the mouth of a large tributary from the southward, named the Ngunië, at a distance of about 50 miles beyond the turning point of the first trial. A third voyage in 1867 under Lieut. Aymes did not reach farther than this confluence, beyond which the main river is named the Okanda. Overland from the Gaboon in 1864, Lieut. Genoyer, after an ascent of the coast range named by the Portuguese the Serra do Crystal, reached the Okanda above the confluence of the Ngunië, and returned to the Gaboon by one of the tributary streams of that estuary. Retraversing the country south of the Ogowai visited by him in 1858, Du Chaillu came upon and traced the Ngunië down towards the Ogowai for a considerable distance in 1864, previous to his longest journey inland to Ashango. In 1866 a journey was made by an Englishman named Walker from the Gaboon to the Ogowai, during which he followed up the tributary Ngunië to the point at which Du Chaillu had turned, and afterwards navigated the Okanda by boat in its course from north-east to a point 50 miles above the confluence, the farthest yet reached by any European. Here in July, the time of lowest water, at a distance of more than 200 miles by river from the coast, the first hindrance in the form of rapids was encountered. The river breaks into several channels of from 100 to 300 yards in width, and has a very tortuous course. From one of the rock-islands in the river, the smoking mountain of Otombi can be seen to the north-east, and, according to native report, there is a second volcano, named Onshiko, beyond this one in the same direction. The existence of a great lake far in the interior was confirmed to the traveller by every report, but whether this forms the source of the Okanda could not be ascertained. More recent excursions by the French have completed a rough survey of the region of the delta. The Ogowai is the gate through which our knowledge of Central West Africa must be obtained.

* Corresponding to the rainy season under the equator, the Ogowai has a considerable rise in April and a lesser in October.

Dr. Schweinfurth.—The African traveller and botanist Dr. Schweinfurth has happily returned in safety to Europe, and though he has suffered the loss of the greater part of his invaluable collections and drawings, he has brought back a harvest of information and experience which places his journey among the most successful of modern times. After his great journey west of the Upper Nile, in the country of the Niam-Niam and Monbuttu (see *Academy*, vol. ii. p. 96), he made a short excursion from his head-quarters, the Seriba Ghatta, westward to Kurkur and Danga, positions formerly visited by Petherick, and returning, planned a much more extended journey, when a fire broke out in the Seriba Ghatta on the 2nd December 1870, which not only destroyed the station, but with it the whole property of the traveller. Fortunately, a portion of his collection was at that time already on its way to Berlin. Provided with a few necessaries at Seriba Siber, the head-quarters of the Egyptian troops, the indefatigable traveller made a tour in a part of Fertit hitherto unvisited by Europeans, from December 1870 to February 1871, during which he found that the Bachr-el-Arab is unquestionably the main stream of the basin which mouths in the Nile at the Bachr-el-Ghazal. Having been deprived by the fire of every instrument by means of which any mechanical reckoning of the distances traversed during this journey could be made, the explorer, with an energy perhaps unexampled, set himself the task of counting each step taken, and in this way constructed a very satisfactory survey of his route.

Zoology.

The Therapeutic Use of the Poison of Various Animals.—This practice has been revived in France by several medical men, its chief advocate being no less a person than Dr. Télèphe Desmartis, the president of the Société humanitaire et scientifique du Sud-Ouest de la France. The poison is applied by inoculation. Experiments with the poison of Hymenopterous Insects, of the Weevers (*Trachinus*), and of the viper, &c. are still in progress. M. J. B. Corbiot reports on cases of intermittent neuralgia, which he has cured by the application of wasps; and Dr. Ohei relates the case of a man suffering from oedema in consequence of heart-disease, from whom all symptoms permanently disappeared, after he had been accidentally bitten by a viper. Great caution should be observed in these experiments. In Brazil it is a popular belief that snake-poison is a specific against elephantiasis. A negro whose life had become intolerable in consequence of this terrible disease insisted on the latter remedy being tried on him in the hospital at Rio Janeiro. The medical men remonstrated with him in vain, and the snake (a species of *Trigonocephalus*) was procured, but after being bitten by it, the man succumbed in a short time from the effects of the poison.

The Origin of the Domestic Turkey.—Hitherto ornithologists have been divided in their views regarding the origin of the domestic turkey, some believing with Linnæus that the European bird is a descendant of the wild race inhabiting the United States, others holding an opinion originally expressed by Mr. Gould, that it is the domesticated Mexican race which this ornithologist distinguished under the name of *Meleagris mexicana*. Mr. J. A. Allen, in a paper on the Mammals and Winter-Birds of East Florida, which is mentioned below, devotes a separate chapter to an examination of this question, and shows that the Northern and Mexican birds are not specifically distinct. The domestic turkey, in fact, was first introduced into Europe from Mexico about 1524, and subsequently into the United States from Europe: a fact which admits

of an easy explanation, since in their advanced condition of civilisation the native Mexicans had succeeded in domesticating the turkey, and this their more savage neighbours on the north did not accomplish. The turkey, after having been brought to Europe nearly a century before the establishment of permanent settlements in the United States, was introduced thence into America with the other domestic animals.

Chicago Academy of Sciences.—The zoological collections of this institution, which were destroyed by the calamitous fire, were much more extensive than is generally supposed. It appears from a report drawn up by Dr. J. W. Foster, President of the Academy, and Mr. W. Stimpson, Secretary, that in addition to the general collection, the loss of which can be made good, several special collections were destroyed containing types which can never be replaced: among these were Walsh's State-collection of Insects; the Smithsonian collection of Crustacea which filled over 10,000 jars and contained the types of the species described by Dana, Stimpson, and other American authors; the Invertebrates collected by Stimpson on the U. S. North Pacific Exploring Expedition; the collection of marine shells of the Atlantic coasts of the United States; and finally 15,000 specimens of fossils, including two mounted skeletons of *Mastodon*. In spite of this terrible disaster the Academy is making every effort to reoccupy its place among its sister institutions. The publication of its Transactions will soon be resumed. The president and secretary appeal to their correspondents for the donations of sets of publications for the past few years to replace those lost.

Affinities of the King-Crab.—Prof. Owen has recently read an elaborate paper before the Linnean Society on the structure and affinities of the American king-crab (*Limulus polyphemus*), the conclusions at which he has arrived being directly opposed to those of van Beneden (*Academy*, vol. iii. p. 30). After a very minute description of the anatomy of the nervous and muscular systems of the *Limulus*, Prof. Owen thus sums up:—"Some objected to the king-crabs being called Crustacea; there was more ground, he thought, for objecting to call them Arachnida or Myriapoda. One may call *Limulus* a Crustacean, and yet discern in its anatomy the evidence of its more generalised structure than in Malacostraca; its type preceded that of either macrourous or brachyourous Crustacea, and indicates characters subsequently appropriated by and intensified in the air-breathing members of the Apterous Insecta of Linnæus."

The officers of the New Zealand Institute have issued the third volume of their *Transactions and Proceedings*, a periodical which is not only of the greatest importance to the colony, but one fairly claiming a place in general scientific literature. We may remind our readers that the New Zealand Institute was founded under the auspices of the colonial government with the object of advancing art and science, pure and applied, as well as other branches of knowledge, and of concentrating scattered efforts under the direction of one establishment. Five provincial societies, the Wellington Philosophical Society, the Auckland Institute, the Philosophical Institute of Canterbury, the Otago Institute, the Nelson Association for the Promotion of Science and Industry, have in this way been incorporated in the general establishment, and any society which may be founded in future can likewise be affiliated if it consist of not fewer than twenty-five members, subscribing in the aggregate a sum of not less than fifty pounds annually. The proceedings of the several societies, and the papers read before them, are submitted to the Institute, which publishes in an annual volume a current abstract of the former, and under the title "Transactions" such of the papers as are of peculiar interest. The system works admirably, and the matter requiring publication increased so greatly last year that the present volume consists of 110 pages of "Proceedings," and 363 pages of "Transactions," the latter being illustrated by 30 lithographic plates. Of the sixty-eight articles admitted to the "Transactions," we shall here only refer to the more important zoological papers. Mr. Walter Buller describes a new rat indigenous in New Zealand. Important contributions to ornithology, at present the favourite pursuit of colonial zoologists, have been made by Messrs. W. Buller, T. H. Potts, Captain F. W. Hutton, and W. T. L. Travers. Dr. J. Hector, the energetic editor of the series, has taken up the study of Fishes. Finally, Messrs. L. Power and W. Buller communicate their observations on *Latrodectus*, the poisonous spider of New Zealand.

The ninth part of the *Anales del Museo Publico de Buenos Aires* (Buenos Ayres, 1871) contains a continuation of Professor Burmeister's paper on the fossil remains of the gigantic sloths which are generally comprised under the name of *Glyptodon*, but which have been divided by the author into four generic groups, *Panochthus*, *Hoplophorus*, *Glyptodon*, and *Schistopleurum*. In the present part the author treats of the second of these groups, the description being illustrated by admirably executed lithographic plates.

The second volume of the *Bulletin of the Museum of Comparative Zoology at Harvard College, in Cambridge, U.S.*, has now been completed by the issue of Nos. 3, 4, and 5. No. 3 is a lengthy paper (pp 161–450) by J. A. Allen, "On the Mammals and Winter-Birds of East Florida, with an examination of certain assumed specific characters in Birds, and a sketch of the Bird-Fauna of Eastern North America." No. 4 contains short "Directions for Dredging," by Count Pourtalès; and No. 5, Additional Remarks on *Echini*, by A. Agassiz. We have also received at the same time No. 1 of vol. iii. of the same periodical, in which W. H. Dall gives a Report on the *Brachiopoda* obtained by the United States Coast Survey Expedition, in charge of L. F. de Pourtalès, with a revision of the *Craniidæ* and *Discinidæ*.

Dr. William Baird, Senior Assistant in the Zoological Department of the British Museum, died on Saturday, January 28, after a protracted illness. He was born in 1803 at Eccles in Berwickshire. After having served as surgeon for ten years in the navy of the East India Company, he accepted in 1841 an appointment in the British Museum which he held to the time of his death. His most important work is *The Natural History of the British Entomostraca*, published by the Ray Society in 1850.

Botany.

The Structure and Classification of Compositæ.—At the meeting of the Linnean Society on February 1st an important paper was read by Mr. Bentham, the president of the society, on this subject, to which he has recently given much attention. The order Compositæ or Synantheræ is remarkable not only from its enormous size, but also from its extremely natural and well-marked characters, there not being a single instance in which it is doubtful whether a plant should be referred to this order or not. All the essential characters of the andrœcium, pistil, structure of fruit, structure of seed, and inflorescence, are absolutely constant throughout the ten thousand species comprised within it. This very fact, however, renders its subdivision into tribes and genera a matter of extreme difficulty, the systematist being compelled to adopt characters as generic which in other orders would hardly be considered as specific. The parts of the plant from which the best distinguishing characters are derived were treated at length by the author under the following heads:—1. Sexual differences in the florets contained in the capitulum; these are sometimes constant in large genera or subtribes, sometimes variable in closely allied species. 2. Di- and trimorphism; very rare in Compositæ except as connected with sexual differences. 3. Differences in the pistil; these depend on variations in the style where it is not used for its primary purposes in connection with the fertilisation of the ovules. 4. Differences in the fruit and its pappus. 5. Differences in the andrœcium; these depend on the minute appendages or tails which have apparently no functional office. 6. Differences in the corolla; numerous and important. 7. Differences in the calyx; these are not important. 8. Differences in the ultimate inflorescence and bracts; not of essential importance. 9. Differences in foliage; there is no type of foliage in Compositæ which may not be found in several other orders, although the leaves are never compound with articulate leaflets; the opposition or alternation of the leaves is sometimes of tribal importance, sometimes not. 10. Geographical distribution; on this portion of the subject a further paper is promised at a future meeting.

Change of Habits in a Plant.—We lately recorded (*Academy*, vol. ii. p. 522) a singular instance of a change of habit of comparatively recent occurrence in the case of the Kea or mountain-parrot of New Zealand. The same observer, Mr. Thos. H. Potts, has noted in *Nature* (No. 118, Feb. 1st) a somewhat similar instance of the change of habit in a plant. The *Loranthus micranthus* is one of the most showy parasites belonging to the New Zealand flora, and is nearly allied to our mistletoe. Originally parasitic on native trees belonging to the orders Violarieæ and Rutaceæ, it appears now to have nearly deserted these in favour of trees introduced since the colonization of the islands by Europeans, especially the hawthorn, plum, peach, and laburnum. The latter tree was only introduced in 1859, and appears now to be one of its most favourite resorts, where it is abundantly visited by the (also introduced) European honey-bee.

Physics.

The Relation between Density and Capillary Attraction in Saline Solutions.—M. Valson (*Compt. rend.* 74, 103) has determined the density D and the height of column H in the same capillary tube of a series of saline solutions, and finds the product of the density (at 15° C.) by the height of column in millimetres to be sensibly constant for all the solutions examined: $DH = 61 \cdot 5$ or 62. Each solution contained an equivalent in grammes of the anhydrous salt dissolved in a litre of water; salts of the alkaline and alkaline earthy metals, of manganese, zinc, cadmium, lead, and silver, were examined. In the cases of lithium chloride and silver nitrate, the extremes of the series employed, having the equivalents 42·5 and 170, the capillary heights were 60·8 and 54·2 mm. The capillary height may be calculated from the density, within very narrow limits, by the formula: $H = 118 \cdot 5 - 56 \cdot 8 \times D$, and the increase in the height of the capillary column on passing from one normal solution to another is proportional to the diminution in density of the solution.

On the Insulating Power of Various Kinds of Glass.—M. Ekman (*Ann. Ch. Phys.* xxiii. 349) finds that a glass containing much soda and little potash is a far better conductor than one containing little soda and much potash, the intermediate varieties exhibiting intermediate conductibility. In his experiments two slips of tin-foil were pasted, one to the centre, the other to the edge, of each sheet of glass, which, with the exception of the portion between the slips, was entirely covered with varnish. The centre slip was connected with the knob of a Leyden jar—equally charged in each case—the edge slip with the earth, and the time necessary for the spontaneous discharge of the jar then observed on each occasion. Moreover, the amount of water absorbed by equal weights of the several samples of pulverised glass was determined; and the results clearly indicate that the insulating power depends on the composition of the glass, and not on its attractive power for water. Of two glasses, the better conductor attracted the less amount of water.

Vaporisation of Mercury.—The *Comptes rendus*, lxxiii. 1356, contains a most important and lengthy memoir by M. Merget on the diffusion of mercury vapour. The only observations on this subject hitherto recorded are those of Faraday, who considered that the vaporisation of mercury entirely ceases at a temperature of $-7°$ C.; and that at temperatures above this limit the vapour given off (contrary to the general law of diffusion of elastic fluids) forms over the liquid a layer of but slight thickness, which does not exceed a few centimetres in height at ordinary temperatures. These conclusions being so entirely at variance with the present dynamical theory, M. Merget was led to study the phenomena anew; and his first efforts were directed to the discovery of a reagent of greater delicacy than gold-leaf, which, as is well known, was the material employed by Faraday as the test of the presence of the metallic vapour. He finds that paper washed over with an ammoniacal solution of nitrate of silver, or with chloride of gold, platinum, palladium, or iridium, is capable of indicating the presence of infinitesimal traces of mercury, the action of the latter on either of the above metallic salts being to reduce the metal of these compounds, and thus form a more or less intense stain on the paper. By aid of this delicate test he has proved: (1) that the vaporisation of mercury is a continuous phenomenon, that it does not even cease on the solidification of the metal; (2) that the vapour possesses considerable diffusive power, which, though not measurable with exactitude, appears to attain a limit little short of that assignable to it by the dynamical theory of gases; (3) that, like other elastic fluids, mercury vapour condenses on such substances as carbon, platinum, &c. which exert no chemical action on it, and that it passes with great facility through porous bodies, such as wood, porcelain, &c. M. Merget discusses numerous practical applications of the above principles, more especially "a method of photography without light," based on the above reducing action exerted by mercury on salts of certain metals.

Heat evolved by the Dissolution of Metallic Oxides.—In the *Academy*, ii. 443, we referred to a series of experiments of M. Ditte, showing that metallic oxides prepared by calcination at high temperatures evolve much more heat during solution than the same oxides do when prepared at lower temperatures. M. Marignac (*Archives des Sciences physiques*, xlii. 209) has repeated these experiments with the oxides of zinc and magnesium, and arrives at entirely different results. He finds that at whatever temperature these oxides are prepared the amounts of heat evolved by their dissolution in dilute acid are sensibly the same. Specimens of magnesium oxide, prepared from the nitrate, and heated to 440°, to a dull red heat, and to a bright red heat respectively, disengaged 852, 862, and 867 heat-units per gramme dissolved. Similarly, zinc oxide, prepared at 350°, at a dull red, and at a bright red heat respectively, evolved 261, 266, and 264 heat-units. M. Marignac found it not possible to entirely decompose magnesium nitrate at 440°, or even at a dull red heat, the respective products containing only 97·5 and 98·5 per cent. of the oxide; if then the above numbers be corrected from this error, they accord more closely, becoming 874, 875, and 876, instead of 852, &c. M. Ditte used the mercury calorimeter for his determinations; and M. Marignac is of opinion that the anomalous results which he obtained are in great measure attributable to the untrustworthy nature of this instrument.

New Publications.

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Flammarion, C. L'Atmosphère. Paris: Hachette.

Giebel, C. G. Thesaurus Ornithologiae. Leipzig: Brockhaus.

Lang, V. v. Zur dynamischen Theorie der Gase. Wien: Gerold's Sohn.

Leydig, F. Die in Deutschland lebenden Arten der Saurier. Tübingen: Laupp.

Meunier, S. Le Ciel géologique. Paris: Didot Frères.

Newton, Sir Isaac. Mathematische Principien der Naturlehre, aus dem Lateinischen übers. u. durch Zusätze erläutert von Prof. J. Ph. Wolfers. Berlin: Oppenheim.

Nitsche, H. Beiträge zur Kenntniss der Bryozoen. 2. Heft. Leipzig: Engelmann.

Pauly, Alphonse. Bibliographie des Sciences médicales, avec une introduction par le Dr. Ch. Daremberg. 1er fasc. Paris: Tross.

Pratt, J. H. Treatise on Attractions, Laplace's Functions, and the Figure of the Earth. London: Macmillan.

Pritzel, G. H. Thesaurus Literaturae Botanicae. Neue umgearbeitete Auflage. 1. Heft. Leipzig: Brockhaus.

Quetelet, Ad. Notice sur Sir John F. W. Herschel. Bruxelles: Muquardt.

Suter, H. Geschichte der mathematischen Wissenschaften. 1. Thl. Zürich: Orell, Füssli und Co.

Wilson, J. M. Solid Geometry and Conic Sections. Longmans.

Wundt, W. Nouveaux Éléments de la Physiologie humaine. Trad. de l'allemand sur la 2e édit. et augm. de notes par le Dr. Bouchard. Paris: Savy.

History.

Councils and Ecclesiastical Documents relating to Great Britain and Ireland. Edited, after Spelman and Wilkins, by A. W. Haddan and W. Stubbs. Vol. III.

The first volume of this important national work contained the history of the early British, Cornish, and Welsh churches up to the year 1295, when the latter may be considered to have been absorbed in the English. The second volume, which will contain the early Scottish and Irish documents down to the time when the Irish church also became subject to England, has been delayed by Mr. Haddan's illness; and it has, therefore, been thought better to publish the third volume (which includes everything relating to the Anglo-Saxon church down to Alfred) at once, especially as it was required for the use of the Theological School at Oxford. The fourth volume will carry on the Anglo-Saxon church history to the Norman conquest. It need hardly be said how welcome a critically sifted collection of the materials of our church history is when so much doubt has rested on some of the documents, and when the fierce disputes that have arisen on so many of the facts have been still further complicated by the critical difficulties. In the first volume, the groundlessness of the so often alleged "Orientalism" of the British churches was shown, and the British Easter controversy was placed upon its right footing, viz. of a mere confusion of cycles. After the free Celtic churches had submitted to the claims of Rome, the mischief of appeals to the papacy, the gradual diminution of freedom and self-government in the native Welsh church as English influence and law were brought to bear on the principality, were well illustrated.

It is sometimes said that the change of the modern historical point of view has an unsettling effect on the mind, since so many great men, once looked at with a species of awe, are now criticised freely on distinctly new grounds. Thus Charlemagne does not hold the same exalted place as once he did, in the eyes of those who look on him as a Frankish tyrant who crushed the liberty of the free Saxons of North Germany; while similarly the character of St. Boniface is not so highly esteemed by those who think that he subjected the Germans to the rule of the Roman emperor as well as the Roman church. But these differing points of view serve to bring out the history more clearly on all its sides; the great men themselves have injustice done them unless their motives are fully allowed for, and the reasons of the course they took explained; and the result of modern enquiry has been to reveal to us something better than the great men, the emperors, and the popes. Neander first devoted himself to bringing out the really Christian inner life of each succeeding age. While the world seemed abandoned to the spiritual wickedness of

those in high places, the lives and writings of a series of men, from Bede to Izaak Walton (to take only our own country as an instance), were set forth to us as something to which men might turn with satisfaction from the blood-smeared pages of the empire or the papacy. Part of Keble's "Advent Sunday" in the *Christian Year* well expresses the character of Neander's work, and shows the change which he made in the conception of church history, of what was really worth study. Lives of Bede or Cuthbert, of Alfred or Anselm, show us that historical development of the Christian life which it was the object of Neander everywhere to trace out. Nor was he less anxious to follow the spread of the Christian movement in all directions. Nor is there a more interesting period than that in which England was Christianised, and rapidly became the basis from which to evangelise Germany and the North. The third volume, now before us, contains all the early part of this period, a period which can never lose its interest for ourselves. It is curious to see how Pope Gregory planned his new church on the lines of the old Roman provincial constitution of Britain. The two old Roman capitals, London and York, were each to be at the head of twelve sees. With the loss, however, of the Scotch Lowlands by the English kings of Northumbria, York lost its chance of equality with the southern province, and was gradually limited to its four bishoprics. The conversion of Ethelbert of Kent made Canterbury the ecclesiastical "metropolis" instead of London; and Kent having two dioceses in it, Canterbury and Rochester, preserves the memory of the time when Kent really formed two small kingdoms. York was, in Gregory's plan, to have been ecclesiastically the equal of the southern province; whichever of the two archbishops was the senior was to preside in the common synods. The later supremacy of Canterbury rested really on the civil greatness of the south, theoretically on a set of documents which labour under the strongest suspicion of forgery. Unhappily every question of this kind gave rise to forgeries, and certain of our great monasteries, such as Malmesbury, Peterborough, Croyland, have an unhappy pre-eminence in this guilt. Similarly, Gregory, having told the English that the third degree was the limit of prohibited marriages, the later canonists, who had monstrously extended the prohibition to the seventh degree (the cause of very great misery in Europe), forged a letter of Gregory to say that he had only meant the third degree to be a temporary arrangement until the English should become strong in the faith. It is curious to see how completely the Roman scheme failed. England was not to be converted according to a fixed scheme. The Gospel, under its Roman teachers, died out of Northumbria, and the whole work had to be done over again. Only in Kent can the Roman mission be said to have permanently succeeded. The real permanent conversion of England was effected by the missionaries of the free Celtic churches; they or their English disciples converted Scotland, and Northumbria, and Mercia, and East Anglia, and Wessex (the Roman missionary Birinus had, as usual, been expelled); and Wilfrid, coming from the north, found, even at the last moment, Sussex unconverted, though so near to Kent. Wilfrid, however, had been attracted by the superior civilisation and the exalted claims of Rome, and he bowed the free English churches to submission. Theodore, a Greek of Tarsus, was sent by Pope Vitalian to organize the English church — and he organized a diocesan system throughout the country. The parochial system has also been attributed to him; but it is of later origin, and the mistake arose from construing "parochia" as if it meant *parish*, whereas the word really means *diocese* up to the twelfth century. To Theodore was also due the organization of a system of church discipline which had important consequences. And here our authors have done excellent service in extricating the genuine "Penitentials" of Theodore, Bede, and Egbert from the mass of alien matter with which they had become encrusted in the course of ages. Additions from much later systems, and a great infusion from Frankish sources, had thrown the whole subject into confusion. Rules from Charlemagne's Capitularies, from a work of Theodulf of Orleans (A.D. 797), from one of Halitgar of Cambray (A.D. 825), had been mixed up with the English rules. The genuine Penitential, compiled by a disciple of Archbishop Theodore, still exists in a MS. of Corpus College at Cambridge; while Wasserschleben, in his *Penitentials of the Western Church*, published at Halle, 1851, has given us the genuine work of Bede; and the genuine work of Egbert is contained in the Bodleian MS. 718 of the tenth century, which Bishop Leofric gave to Exeter cathedral. The sharp discipline of these codes shows how rude the state of society was, and the list of crimes (as in the Frankish regulations) gives an appalling picture of human degradation. Something, however, may be allowed for the Roman custom of stating every possible case, and one would fain hope that many of the unutterable abominations mentioned were not common; some of them look like the dreaming imaginations of corrupt monks. The light, however, thrown on the relations of the different ranks of society, and the state of manners, is very considerable. Another set of the documents collected by our authors consists of the "professions of faith" made by newly appointed bishops to the primate. One of the most curious on the roll at Lambeth is that of the Cornish bishop Kenstec to Archbishop Ceolnoth, before the year 870. The earliest of all is that of Eadulf, Bishop of Lindsey, in 796, and the word "Eboracensis" has been interpolated in it, as evidence of the supremacy of Canterbury. That of Denebert of Worcester, in 798, is important as quoting the Athanasian Creed—the first mention we have of it in England—"*Scriptum est, Quicunque vult salvus esse ante omnia opus est illi ut teneat Catholicam fidem*," &c. This would agree with the view which assigns to Alcuin, the English friend of Charlemagne, such an important place in connection with it, for this is just when Alcuin was at the height of his activity. A number of Alcuin's letters are included in this volume, some of them as yet unedited. One of them contains the earliest mention of the *Ordo Romanus*. In several letters he urges on his friends the use of St. Gregory's Pastoral. It was enjoined upon all bishops at their ordination in France under Hincmar, and was translated into English by Alfred. Another important set of documents is supplied by the Anglo-Saxon charters (published mainly by Kemble in his *Codex Diplomaticus Aevi Anglo-Saxonici*). They prove the existence of many more synods than the historians mention. One of the strangest things is that Archbishop Theodore should have appointed Cloveshoo as the regular meeting-place, and that some important synods were held there, and yet that the place cannot really be identified. It was near London (then part of Mercia), for St. Boniface speaks of one of them as "Synodus Londinensis;" but the attempts at identification are mere guesses. Our authors discuss at length the charters of Ethelwulf, which were long supposed to have been the legal origin of the payment of tithe in England, and which Kemble has so acutely examined. Unfortunately the question is complicated by the very large number of forgeries. It is painful to see the amount of forgery of which the churchmen were guilty. Of the 240 charters in Kemble's first volume (the whole of which come into this period), about half are spurious. Professor Stubbs has found it necessary to mark even more than Kemble had done.

They are detected by the errors in the dates, the impossible sets of witnesses, the later style of the description, and by other clear evidences. A new edition of Kemble's *Codex* is much wanted, which should include the remaining Anglo-Saxon charters (there are some scores of them not included in it), with the Anglo-Saxon descriptions of property, &c. translated. Much help as to the dates is supplied in the work before us. It has been well pointed out by Kemble that during about eighty years the Anglo-Saxon Chronicle is wrong by two years, the northern chroniclers giving the right dates. Thus Egbert is usually supposed to have begun his reign in 800, while the real date is 802. With this view all the genuine documents here collected agree. Forged papal bulls and letters too exist in considerable numbers, and we cannot too much praise the care and skill with which all these documents have been investigated. The student meets with the same difficulty in reading early church history, where the forged writings assigned to the early fathers equal the genuine ones in amount. There is some reason to assign a certain part of the interpolations in genuine patristic writings to the age of Alcuin, when official copies were made of the old church documents. In England something is perhaps due to the age of Dunstan, as respects the charters—something to that of Edward the Confessor; but the *scriptorium* of a great monastery was the workshop where these formidable weapons of attack or defence were being continually produced. The pious fictions of the early Christian king Lucius, of St. Paul's having himself preached in England, and so on, stand on a different ground—they are merely instances of the growth of legend; but the former kind cannot be excused, for they are conscious inventions—like the forged donation of Constantine to Pope Sylvester or the False Decretals. If any of them were done with a pious object, or with any worthy motive whatever, it would be a heavy punishment to their authors to know what a cloud of doubt their acts had spread over church history and on many of the things they valued most. All the more are our thanks due to those who have not been afraid to sweep away the time-honoured impostures, and trust to the truth alone to make its way. The confidence placed in them, in their conscientious regard for truth and admirable consistency in searching it out, is and will be a true reward.

C. W. Boase.

The First English Conquest of Canada; with some Account of the Earliest Settlements in Nova Scotia and Newfoundland. By Henry Kirke, M.A. Bemrose.

This volume suggests to us that the charge of keeping alive the memory of brave men—that old prerogative of the "sacred poet"—has in modern and prosaic times become the special province of the Record Office. Our colonial state papers of the seventeenth century have chiefly furnished Mr. Henry Kirke with materials for the biography of an ancestor respecting whose brilliant though abortive conquest of Canada and Nova Scotia under Charles I. neither Haliburton nor Macgregor knew enough to give more than a bare and very inaccurate notice. In 1627, on war breaking out between France and England, certain London merchants obtained a royal patent authorising them to break up all French settlements in those provinces, and to establish English plantations in their stead. As a preliminary step, they sent out three ships well manned and equipped; Captain David Kirke, the eldest son of a member of the company, being in command of the expedition. Its immediate object was to intercept a large French squadron, then on its way to Quebec, and conveying emigrants, artillery, and heavy stores. This was fallen in with and attacked on the St. Lawrence; its admiral, De Roquemont, whose over-freighted ships were unfit for fighting, found it necessary to surrender after the first broadside, and Captain Kirke had the no small satisfaction of bringing his own fleet of three sail back into English waters with 138 French cannon in their holds, and De Roquemont with other prisoners who could afford ransom on board. Only we could wish that the narrative of so spirited and successful an adventure had told us what became of the crowd of non-combatants taken with the eighteen captured vessels; are we to infer from this silence that the merchant-adventurer had as few qualms of "nyce conscience" as Chaucer's shipman, and does the "fury of the French king and council" when news of the disaster reached Paris, with the burning of Kirke in effigy in the Place de Grêve amid popular execration, point to a deed of blood not justifiable even by the barbarous war-code of the time? The seizure of this convoy gave the brave captain the key of Quebec and its dependent settlements by cutting off their supplies; they fell one by one into his hands, in a second expedition made with a larger force, when, having taken possession of the whole country, he came home again triumphant in the autumn of 1629. In England, however, a bitter disappointment awaited him. During his absence peace had been concluded, under the articles of which all Kirke's new-made conquests were to be restored, and all merchandise seized at the taking of Quebec was to be given up to its owners. Falconbridge's "foot of honour" was the sole set-off the luckless hero could obtain against his broken hopes and damaged fortune; the De Roquemont arms, with their lion prostrate and chained, were added to his escutcheon, and he was subsequently knighted. Having soon after his return from Canada succeeded to an ample patrimony, and having taken a wife from a family as rich as his own, a bright and prosperous life in this country lay before Sir David Kirke. With such a prospect, few men would, after his past experience, have desired to tempt fortune once more in the New World. But his was one of those rare natures, eager, dauntless, resolute, which remain unchecked by disaster and untamed by wealth. Keeping steadily in view, as his chosen task in life, the conduct of some extensive scheme of colonisation, he waited patiently for a fitting opportunity. This offered itself when Lord Baltimore, the governor of Newfoundland, disgusted with the climate, and galled with the difficulties of an infant settlement, deserted his colony. In 1638, Sir David Kirke, having obtained a grant of the whole island, sailed out as its ruler. During the next twelve years while the energies of the mother-country were spent upon civil strife, Kirke was patiently developing the resources of Newfoundland; above all, the fisheries, in which his practical sagacity recognised the true basis of its prosperity. Upon the rupture between Charles and his parliament, he declared for the king, to whom, when his affairs grew desperate, he offered an asylum; he also proffered aid to Prince Rupert after Charles' execution. For these things there came in 1651 a day of reckoning for the high-church and royalist governor, who was cited to appear personally before the Council. What we gather from the narrative of the transactions—which however does not tally with the statement made p. 186—amounts to this, that after some delay and pecuniary loss through temporary sequestration, the matter ended in Kirke's forfeit only of the ordnance and forts in Newfoundland; he retained both his office and all his private property. All circumstances considered, he was leniently dealt with, and we think that biographical zeal carries the author too far when he talks of his hero's "spoliation" by the Commonwealth. But it strikes us that this word exactly applies to the act of the king who stripped his widow and children of the home where his own father had, in time of direst need, been offered shelter. Sir David Kirke died in 1655–6, and after the Restoration,

Charles II., probably urged by court favourites, issued a warrant depriving the family of their Newfoundland estates, in favour of the heirs of Lord Baltimore, who on giving up that island had obtained a grant of Maryland in its stead.

Apart from the interest which invests the personal history of an early ruler and shaper of a now prosperous English colony, this narrative has, we think, a special significance as the history of a career typical from first to last of that tragic incompleteness which marred the lives of so many of our early maritime discoverers and adventurers. Sir David Kirke suffered, dared, and wrought much in his time, yet fate denied him the just guerdon of endeavour. Men of kindred character have, with not more than equal chances, established states, and founded dynasties; Kirke's early conquests were no sooner won than wrested from him, and after his death his sons were robbed of their heritage. His heroic qualities, with the service England reaped from them, might have given him some place on the roll-call of her worthies; it has been left to the piety of a remote descendant to revive his forgotten name and neglected memory.

George Waring.

Intelligence.

V. Palmé advertises his reprint of the *Gallia Christiana*, a sort of conclusion to his excellent reprints of the *Acta Sanctorum*, the *Histoire littéraire de la France*, and the French Historians. The book is reprinted exactly, but large supplementary matter is added. The old edition was defective in several ways; and as to the monasteries, it could not be compared to our own *Monasticon*. The reprint of these four great works does the highest credit to French energy.

We would call attention to the Ohio Valley Historical Series of Reprints (Trübner), *e. g.* that of Bouquet's expedition against the Ohio Indians in 1764, Colonel James Smith's captivity with the Indians, and other works illustrating the border history of the United States. The importance of the positions on the Ohio (*e. g.* Pittsburgh, so named after the elder Pitt) was well known to the French when they tried to make a chain of forts to connect Canada with Louisiana. Washington's first appearance in history is in connection with the attempt of the Ohio Company to form settlements there in opposition to the French attempts to prevent the English colonies from extending westwards.

Contents of the Journals.

Lit. Centralblatt (Dec. 13) reviews Roerting's Old-French translation of Ovid's *Remedia Amoris* (a part of the allegorical poem *Les Echecs amoureux*), important for its relation to the *Roman de la Rose*, and as illustrative of the dialect of Picardy (e. g. *empeesse* for *empêche*). A mention of the "Constable Bertran," *i. e.* Bertrand du Guesclin, as a knight worthy to be compared with Hector and Gawain, fixes the date of the work to the last part of the fourteenth century.——Jan. 6.—A review of Kapp's *Frederic the Great and the United States of America* points out Frederic's views as to the rights of neutrals, and as to privateering, and rejects the American claim of having done much for international maritime law.——Jan. 20.—Notices Kraus' *English Diplomacy in* 1527, when, owing to Ferdinand I.'s threatening attitude in Burgundy and Italy, Henry VIII. showed sympathy with John, King of Hungary, and Zapolya, the Voivode of Transylvania. One of the letters of Ferdinand to Henry mentions the disastrous battle of Mohacs, by which the Turks gained most of Hungary.

Gött. gel. Anz., Dec. 20.—Reviews J. van Lennep's *Travels in Asia Minor* very favourably (see *Academy*, vol. i. p. 224).—Geiger continues his account of the Humanists; this time he gives an account of Charitas Pirckheimer, the Abbess of St. Clara in Nuremberg—one of the few German ladies of that age who are interesting in this point of view.—Konrad of Würzburg's *Parthenopier und Meliur*, &c. is noticed as important in the history of medieval romance. "Parthenopaeus" has attracted the attention of Sir Walter Scott and S. Rose among ourselves.——Jan. 3.—Compares Piot's *Cartulary of S. Trond* (near Liège) with Wanter's book "on the origin of the communal liberties of Belgium," which serves as a sort of commentary on the former. The earliest charter of liberty which we know of for the cities in the north of Europe is that given by Bishop Theoduin of Liège to Huy, in the eventful year 1066.—Geiger reviews an account of another of the Humanists, "Franciscus Fabricius Harkodurasius" (1527–1573).——Jan. 10.—Analyses Hehn's excellent book, *Kulturpflanzen und Haus-thiere*, and Claretta's *Storia diplomatica dell' antica abbazia di S. Michele della Chiura*, important for Piedmontese history.——Jan. 24.—Contains a good account of the life of the Sicilian patriot, the Prince of Castelnuovo, who upheld the Sicilian constitution against the absolutist Queen Caroline, when she took refuge from Napoleon in the island. He suffered grievous imprisonment, and was not delivered till Lord W. Bentinck freed the prisoners and restored the reign of law. Unhappily, England failed to maintain the constitution after 1815, and Castelnuovo retired into private life, and spent his time and means in founding an agricultural institute and elementary schools, which were of the greatest benefit to his country in the evil times.——Jan. 31.—Wilken gives a summary of his researches as to the mystery plays of Germany in the middle ages, and compares them with those of France, &c.—There is also a notice of Hartmann's *Rede vom Glauben* (published from one of the Strasburg MSS. now burnt); and a spiritual poem of the twelfth century, apparently by an author who lived in Central Germany.

New Publications.

Brunner, C. Hans v. Hallwil, der Held v. Granson u. Murten. Aarau: Sauerländer.

Classon, Octav. Kritische Erörterungen über den römischen Staat. II. u. III. Rostock: Kuhn.

Eberty, F. Geschichte des Preussischen Staates. 6ter Bd. bis 1815. Breslau: Trewendt.

Errera, A., e Finzi, C. La vita e i tempi di Daniele Manin, corredata dai documenti inediti depositati nel museo correr dal Generale G. Manin. Venezia: Münster.

Feuerwaffen, Quellen zur Geschichte der. Herausg. vom Germanischen Museum. 1ste Liefg. Leipzig: Brockhaus.

Jones, Th. Wh. A True Relation of the Life and Death of William Bedell, Bishop of Kilmore in Ireland. (Camden Soc.)

Meyer, Dr. Mor. Die Wahl Alexanders III. u. Victors IV. (1159). Göttingen: Rente'sche Buchh.

Philaret, Geschichte der Kirche Russlands. Uebersetzt v. Blumenthal. Frankfurt a. M.: Baer, Sotheran und Co.

Recesse, Die, und andere Akten der Hansetage von 1256–1430. 2. Bd. Leipzig: Duncker u. Humblot.

Schneider, L. Der Krieg der Triple-Allianz gegen die Regierung der Republik Paraguay. 1 Bd. Berlin: Behr's Buchh.

Urkundenbuch der Stadt Lübeck. 3. Thl. 12. Lfg. Register. Lübeck: Grantoff.

Wilkens, C. A. Friedrich Mallet, Pastor zu St. Stephani in Bremen. Eine Biographie etc. Bremen: Müller.

Philology.

Aeschyli quae supersunt in Codice Laurentiano veterrimo. Edidit R. Merkel. Oxford: Clarendon Press, 1871.

This magnificent volume, at once a literary curiosity and a valuable aid to critical students of Aeschylus, stands on a par with the texts of the Vatican and Sinaitic MSS. of the New Testament as edited by Tischendorf, and of the Codex Bezae of the same by the Rev. F. H. Scrivener. The plan of all these is to represent, in ordinary Greek type, but with the minutest accuracy that is attainable in every particular, the actual text of the MSS. themselves. Obviously, if the task is performed in a perfectly trustworthy manner, this kind of transcript is much more generally useful than even photographs of the originals would be; for the one is very easy, while the other is often exceedingly difficult to read. The Medicean MS. of Aeschylus, now first presented to us entire, is one of the most difficult MSS. to decipher. A facsimile of it is not given in the present volume, to which we venture to think that a photographed page of the original codex would have formed an interesting and suitable frontispiece; but a specimen of the very crabbed, and, to ordinary eyes, well-nigh illegible, writing of the MS. is given in p. 140 of Dindorf's edition of the Scholia (Oxford, 1851).* By

* Page 140 of the MS., being page 43 of Merkel's folio, and containing *Choeph.* 373 to 416.

this we see at a glance that the scholia were appended by a different hand. They are in a cursive or semi-cursive character, much more legible than the text itself, and more approximating to the uncial form. The scholia, we regret to say, are not given at all in Merkel's volume. A careful consideration of them, *i. e.* a comparison with the text of the codex, will show that they must have been taken from some other copy than that from which the text itself was transcribed. They do not in all points harmonize with the readings they profess to illustrate; and it is highly probable that they were added by another and rather later hand and from some other source, after the text had been written. To illustrate this by an example or two from one play, though many might easily be given: in *Supplices*, 452, ἦ κάρτα νείκους τοῦδ' ἐγὼ παροίχομαι, the schol. has καὶ τοῦτο ποιῶν ἐκτὸς ἔσομαι τοῦ νείκους θεοῖς ὑπηρετῶν. Critics well-versed in tragic usage know that ἐγὼ is hardly used unless there is emphasis on the person, which here has no place.* The true reading is τοῦτο δρῶν παροίχομαι, and θεοῖς ὑπηρετῶν was originally an independent scholium on the words τοῦτο δρῶν. Again, in *Suppl.* 879, ὅ σε θρέψας ὁ μέγας Νεῖλος, "that mighty Nile that nurtured you with its life-giving waters," is corruptly given in the Med. ὁ σ' ἐρωτᾶς (*sic*) ὁ μέγασ νεῖλοσ, the ψ having been mistaken for T, which it closely resembles in uncial writing. So in *Ag.* 1566, πρὸς ἄτᾳ was written in the Med. for προσάψαι, as we may judge from the existing transcript, the MS. Flor. To the true reading, ὅ σε θρέψας, the gloss in the margin of the MS. evidently refers, ὁ Νεῖλός σε.

The MS. itself is believed to have been written in the eleventh, if not the tenth, century. It is the sole authority for four out of the seven plays, in so far as the few other existing copies are but transcripts from it. The greater part of the *Agamemnon*, and the beginning of the *Choephoroe*, have been torn away; and as the evil deed must have been done, as we know from the transcripts and early editions, some centuries ago, the chance of recovering the lost pages is, of course, though not absolutely impossible, well-nigh hopeless.

It seems by no means improbable that after the lamentable destruction of the great Alexandrian library, A.D. 651, a search began to be made, two or three centuries later, for such transcripts of the classic authors as had been taken, either for private or for public purposes, from the books at Alexandria or Pergamus, while those great libraries still existed more or less entire. Such transcripts (assuming their existence) would be of the highest authority, as being taken from the texts critically edited by the great scholars who flourished in those seats of learning. They would certainly have been written in uncial letters; and the copies from them, though made in the cursive, would be pretty certain to afford indications that uncial characters were under the eye of the copyist. In fact this is very often the case with the Medicean Aeschylus, which presents abundant proofs, in the very mistakes committed, that the archetypus was in uncial characters, and was mis-read by the transcriber. Such letters as Α, Λ, and Δ, are often confused, as κεασαι for κέλσαι, *Suppl.* 16; ἀίνοισιν for λίνοισιν, *ibid.* 132; δεξόμενον for ἀεξόμενον, *ibid.* 856; and Γ, Τ, Ι, as τὸν ταιον for τὸν γάϊον, *Suppl.* 156; and, probably, ἀγρεῖ for αἱρεῖ in *Ag.* 126. Again, Ο, Θ, Ε, C, are confused—as ἀρόεντ' for ἀρθέντ', *Suppl.* 2; perhaps θραρέ for ἐπάρῃ in *Cho.* 415; ἔο εν for ἔθεν, *Suppl.* 66; τὸ θάλος for τεθαλὼς, *ibid.* 105; φωνεῖ ὁ for φωνεῖς, *Cho.* 374. None of the above mistakes could have occurred if the original copy had been in a cursive hand. Similarly, Π has been mistaken for ΤΙ in *Suppl.* 776, and so γᾶ βουνῖτι ἔνδικον σέβας has been written, against the metre, for γᾶ βοῦνι πάνδικον σέβας. The true reading is preserved by Hesychius; βοῦνις γῆ· Αἰσχύλος. Of this class of early, and, we are disposed to think, trustworthy, codices, the Medicean MS. of Tacitus, the Ravenna MS. of Aristophanes, the Apollonius Rhodius of the Laurentian library at Florence, and the Laurentian Sophocles, preserved in the same volume as the Medicean Aeschylus, and by the same hand or hands, may probably be reckoned as examples. Merkel says that the first quaternion of leaves in the Aeschylus has been written at a somewhat later age than the rest, and that the scholia agree much more accurately with the text in the later than they do in the earlier part. "Ea scholia in primo Aeschyli quaternione conveniunt egregie suntque adcommodata ad scripturas et verborum poetae conformationem omnem" (Praef. p. 6). It is of infinite importance to the critical determination of the text (as far as that can now be done) that these scholia represent a different and probably earlier recension.

The transcriber of the Medicean, then, had to copy an uncial MS. of very early date. In many parts it was so obliterated as to be nearly illegible; notably so in the chorus of the *Supplices*, 776-901. A good deal of this ode, as written in the Medicean, is downright nonsense; and it has exercised, more or less successfully, but, after all, with very doubtful results, the ingenuity of the critics. The transcriber was a conscientious man, and, happily for us, he appears to have known very little Greek. He therefore preferred to write what was and is mere gibberish, where he could not rightly decipher his codex, to making attempts at emendation. So we now have ἰόφ ὀμ αὖθι κάκκασ (827), ἄιμονεσ ὡσ ἐπάμιδα ησυδουπια τάπιτα (848), βάτεαι βαθυμι τροκακὰ παθῶν (864), λυμασισ ὑπρογασυ λάσκεῖ (877), and similar absurdities. That the archetypus was early uncial, and that the scribe knew little or nothing at least of ancient Greek, is clearly shown by two facts: the letters were written continuously and without division of words; and the scribe did not know how to divide the words in his cursive copy. Thus, at first glance, the codex throughout presents the singular appearance of verses written with the letters almost as often placed at wrong intervals as at right. It is impossible to conceive that a scribe who comprehended the meaning of the first two lines of the *Prometheus* would write them thus:—

> χ θονὸσ μὲν ἐι στηλο υρ ὸν ἥκο μεν πέδο ν
> σκύθην ἐσοῖμον, ἄβατό ντ' ἐι σ ἐρ ημί αν.

The accents (which are often given, but generally by an after-hand, in uncial MSS.) he seems to have copied faithfully; indeed (and the fact is curious), this is always the most accurate feature in Greek MSS. of all ages, mistaken or *false* accents being extremely rare. Very frequently an attempt has been made—whether by a later hand, we know not—to connect the letters to the right words by a line or an underbracket, *e. g.* χ–θονὸς in the above passage, ἐν γυο πεδαι σ in *Prom.* 168, χει μων ο τυπωι in *Suppl.* 35, οὐ κάν ευ-θ-ε-ῶ ντι νόσ (οὐκ ἄνευ θεῶν τινὸς) in *Pers.* 164. We must, however, confess, on carefully comparing Dindorf's facsimile with Merkel's text, our doubts that these connecting lines are not always faithful copies of the transcriber's hand and intention. In cases where a very obvious letter might have been supplied by the most ordinary scholar, our worthy transcriber (we thank him heartily for his conscientious scruples) preferred to leave a blank or

* This remark throws a great doubt on the truth of a rather celebrated emendation of Porson's, *Agam.* 1291, Ἅιδου πύλας δὲ τάσδ' ἐγὼ προσεννέπω, for τὰς λέγω. The true reading seems to be τάσδ' ἔχω προσεννέπειν, as λέγω and ἔχω are known to be sometimes confused.

a dot,* to show that he could not certainly decipher it in his MS. Thus, in *Theb.* 2, he wrote ὅ.... ισ for ὅστις, in *Eum.* 6, τι ταν ὶ σ ἄλλ... πᾶισ χθον ὸ σ καθέζετο, and just below (9),

λ ιπὼνδὲ λί μιην. δ.. λία.. τε χοι ρ άδα,

though ἄλλη and δηλίαν (Δηλίαν) χοιράδα were clearly right. In *Prom.* 480, οὐ χριστὸν is written ὀυχρ... στὸν, in 492, ξυνεδρίαι is συν ε..... ίαι, &c. In many cases a comma has been added underneath, to show the separation of united words, as σπλάγχνων τε,λειότητα, signifying that the noun was not τελειότης, *Prom.* 493, νέικου,στ-ὀυδ', *Suppl.* 452, οἵ τε,τὸς–ὀύσων for οἵ τε τὸ Σούσων, in *Pers.* 15, where τετὸς formed one word by the first hand. On the whole, then, the Medicean MS. of Aeschylus is very trustworthy on these two points; it was certainly taken from a very old copy, and it certainly was not in the least or minutest matter tampered with by the copyist. The chief source of doubt thrown on our text (apart from merely accidental corruptions) is the fact that there must have been other ancient recensions of the plays, since the existing scholia, as we have already said, do not in all cases harmonize with the Medicean text. We think that Merkel's somewhat brief preface, which is not particularly interesting or explicit (and which, moreover, is written in rather "crabbed" Latin), might well have pointed out some of the inferences we have ventured to draw. The principal points which he does put forward with respect to the codex are briefly these :—

1. That the loss of the greater part of the *Agamemnon*, and part of the prologue of the *Choephoroe*, took place before the MS. was brought from Byzantium into Italy in 1423.

2. That fourteen pages of the MS. were lost subsequently to the original mutilation. If we understand aright Merkel's rather obscure argument, an inscription of about that period in the MS., at the end of the *Supplices*, enumerates among the contents of the then existing codex the *Agamemnon* τὰ μετὰ τὴν ἅλωσιν τοῦ Ἰλίου, and the *Choephoroe* "by name." The words are written in very contracted form, and the interpretation of them is ours, not Merkel's. The syllable ωλ is written over αλ, but a little beyond it. Does this mean ὅλωλε, *i. e.* "the part of the play subsequent to the capture of Troy, is lost"? For the *lacuna* in the MS. is from 310 to 1066. The *Choephoroe*, as is well known, in the present state of the MSS., and in the two earliest editions, is continued without the title, as part of the *Agamemnon*. Hence it appears that the first part of it was torn out subsequently to the above inscription.

3. That the first *quaternion* of the Aeschylus was written by a different hand from that of the Sophocles which precedes, and is somewhat later than the rest of the Aeschylus.

4. That the scholia in the first *quaternion* agree with the recension of the text they illustrate, while the scholia to the rest belong to one considerably different.†

5. That the original writing has been extensively retouched and altered by a later, but still early, hand, to suit the readings of the codex from which the scholia were copied.‡

6. That the numerous errors in the codex are due to the fact that it was written at a period when accurate knowledge was at a peculiarly low standard; but that, as no attempt at correction by guess or fraud was made, the true principle of emendation must rest on the endeavour to correct the mere blunders of the scribe.*

Whatever may be the faults and shortcomings of this edition, we must allow that the task was an exceedingly difficult one, and that it has been executed in a manner that reflects the greatest credit on all concerned in it. The MS. itself is so difficult to read that in almost numberless points it will seem to one eye to mean something slightly different from the reading copied from it by another. Thus, in the facsimile page of Dindorf, already alluded to, ἀλλὰ διπλῆσ γὰρ τῆσδε μαράγμης is written quite regularly, as any one well acquainted with Greek MSS. would admit; and we do not think that Merkel correctly prints it ἀλλὰδ–ι πλῆσ γὰρ τῆσδε–μαράγμησ, the ε being continued to join the μ after the regular custom of the cursive writers. Again, the facsimile seems to give χέρες οὐχ ὅσιει rather than ὅσιαι.† In βροτῶν τλήμονι καὶ πανόυργωι the facsimile shows nothing of the spots given by Merkel, τλήμον.. ι.. κὰι, which should indicate lost or obliterated letters. What the facsimile gives as θὶνομένου, Merkel edits as θεὶνομένου, which, no doubt, is more likely to be correct. Dindorf's ὀλλυμένῆσ is Merkel's ὀλλυμένῆσ, and ἔμπα ποτᾶται seems in the facsimile to be ἐμποποτᾶνται. And if all these discrepancies occur in a single page, it will readily be granted that nothing short of photography would present to us the original codex in a thoroughly satisfactory manner.

F. A. PALEY.

* Merkel, however, does not say whether the *dots* printed in his text are in the codex, and whether he intends them, or the scribe intended them, to represent *erasures* or *omissions* of letters.

† "Aeschyli quaterniones posteriores decem verborum poetae longe diversam habent recensionem ab ea, quam scholia sequuntur." (Praef. p. 6.)

‡ "Manus recentior, plerumque manifesta scholiorum scribae, toto corpore, singulis plus sexagies interdum paginis, erasis aut oblitteratis primae manus scripturis intulit quaecumque in eo exemplari, unde scholia deprompta sunt, discrepabant, omissis scilicet qaae excedebant patientiam." (Praef. *ibid.*)

* "Emendatione in omnibus utendum erit simplici, quae unius aut alterius litterulae dispendio peragitur." (Praef. p. 8.)

† In *Theb.* 824, we have ῥύεσθει for ῥύεσθε (probably from an ancient variant ῥύεσθαι).

PRONUNCIATION OF LATIN.

TO THE EDITOR OF *THE ACADEMY.*

Hampden Sidney College, Va., Jan. 23, 1872.

SIR,—In connection with the very interesting discussion begun some months ago, and lately resumed in lhe *Academy*, concerning the proper function of the Latin *u* consonant, will you permit me to call your attention to a passage of Velius Longus? I quote (from Putsche, p. 2223): "V literam digamma esse interdum, non tantum in his debemus animadvertere, in quibus sonat *cum aliqua aspiratione*, ut in *valente* et *vitulo* et *primitivo* et *genitivo*, sed etiam in his quibus confusa haec litera est, in eo quod est *quis*."

I do not propose to attempt to point out in technical terms the scope of these words, but will venture to ask whether the grammarian, while revealing to us this his view of the different power of *u* consonant in the situations respectively described, could have used language more appropriate to Eng. *v* on the one hand (*cum aliqua aspiratione*) and to Eng. *w* on the other?

WALTER BLAIR.

Notes and Intelligence.

Syed Ahmed Khan, in the *Pioneer*, has reviewed Dr. Hunter's book, *Our Indian Musulmans*, whose views on Wahabism have lately been so much discussed by Indian newspapers. Syed Ahmed feels himself called upon to enter his protest against Dr. Hunter's opinions, which, in spite of the amicable sentiments he expressed, were calculated to do great harm to the Muhammadans. He agrees with Dr. Hunter's statement, that "Wahabism is a system which reduces the religion of Muhammad to a pure theism;" but according to the reviewer the Wahabis—or Ahal-i-Hades, *i. e.* believers in the sayings of the prophet—are not merely the followers of the doctrines started by Abd-ul-Wahab, but were dissenters from the four orthodox churches so named after four doctors, and established in the second century of the Hegira, viz. the Hanafi, Shafai, Malki, and Humbali; as such they had gradually become hateful to the masses, and in Muhammadan law-books were held up to the execration of the Faithful. The numerous *Futwas*

issued by various Moslem divines, at the request of their co-religionists, and deciding that the Musulmans of India were not in duty bound to rebel against the British Government, were not of modern date, but had existed for hundreds of years. "The followers of Islam in India required no fresh teaching of the doctrines and obligations enjoined on them by their religion;" but they had only deemed it necessary to re-issue those *Futwas* "when accusations of disloyalty and statements of the obligation of Muhammadans to be disloyal were becoming more and more numerous."

The subject of *Jihâd* has also lately been treated in a paper read at a meeting of the Royal Asiatic Society, by Mr. N. B. E. Baillie, and printed in the Society's *Journal*.

The publication of Littré's great dictionary continues regularly. The 26th part (Scille—Souscrire) is out; and it is announced that the whole work will be completed before the end of the present year.

Contents of the Journals.

The Indian Antiquary, ed. by J. Burgess, No. 1 (Bombay, January 1872).—Editor's introductory remarks. [This monthly journal is to be a medium of communication between archæologists in the East and West on subjects concerning the manners and customs, arts, mythology, literature, history, antiquities, &c. of the people of India.]—On the present position of old Hindi in Oriental philology; by J. Beames. [The modern Âryan group of languages of India has been developed from the primitive Âryan by the same process as that by which the Romance group has evolved itself from the Latin. For a general study of the hitherto much neglected vernaculars of the mediæval and modern periods printed editions of works such as Chand Bardai's Hindi epic *Prithirâja Râsau*, which was composed about A.D. 1200, are much needed. Complete and correct MSS., however, are very rare; and the language is by no means easy, as the early Hindi poets fall in that transitional period when the case- and tense-endings of the old synthetical system, as represented in the Sanskrit and Prakrits, had become so abraded and corrupted that they no longer sufficed to distinguish clearly the relations of words, and were gradually supplanted by the system of particles, pre- or post-positions, and auxiliaries whose use constituted the distinguishing characteristic of the analytical stage.]—The *Âpastamba-Sûtra* of the Black Yajurveda, and the commentaries, &c. belonging to it; by A. C. Burnell. [Of this, the most important, Sûtra of the Trittirîya Yajurveda, Mr. Burnell has at last discovered a complete MS. belonging to a Brahman in the Tanjore district, who unfortunately does not seem inclined to part with it, or allow a copy to be made. The whole consists of 30 *praśnas*: 1-24 containing the *śrauta* rites; 25-27 the *grihya* portion; 28 and 29 the *Dharmasûtra*; and the last the *Śulvasûtra*.]—A Legend of Serpent Worship; from Bhaunagar in Káṭhiáwád; by the Ed.—Manners and customs of the Dards; by Dr. Leitner. [Accounts of the amusements, beverages, birth and marriage ceremonies, funerals and holidays of the Dards.]—A Támba patra or ancient copper-plate grant from Káṭhiáwád, trsl. by Ramkrishna Gopal Bhandarkar. [This is a grant of the Vallabhi king Dharasena IV., the twelfth in Anderson's list (Bombay B. As. S.'s Journal, vol. iii.). The genealogy down from Bhaṭârka does not vary from that given by two other plates already published; but some plays on certain grammatical terms and the name of Pâṇini, as *Śâlâturîya*, had been missed by former decipherers.]—On the identification of various places in the kingdom of Magadha visited by the pilgrim Chi-Fah-Hian (A.D. 400-415); by A. M. Broadley. [A solitary hill mentioned by Fah-Hian at a distance of 9 yojanas S.E. of Patna is here identified with a rocky peak at Bihár, contrary to Gen. Cunningham's identification of it with Giryak (*i. e.* Giri-eka). Further, the fortifications at the foot of the Baibhár and Vipula hills, three miles S. of Bargâon (Nâlanda) are identified with Rajgir, though Fah-Hian, according to his translators, makes it one yojana W. of Bargâon.]—Pâṇini and the geography of Afghanistan and the Panjâb; by Prof. Ramkrishna Gopal Bhandarkar. [Some proper names occurring in Pâṇini and his commentators are here identified with names of places, &c., as *Vallabhî*, *Ujjayinî*; *Kâpishî* (= *Kapisene* of the Greek and Roman geographers, the northernmost kingdom of Afghanistan); *Bikshoda* (= *Archosia*?); P. *Varṇu* = Hwan-Thsang's *Fa-la-nu* (by others identified with *Vaneh* or *Banu*); *Gandhâra*-country; river *Suvâstu* (=mod. *Swat*, a tributary of the *Kabul* river); P. *Varaṇâ* = the *Aornos* of Alexander the Great (Wilson, *âvaraṇa*; Cunningham, from Râjâ Vara); *Parshusthâna* = Hwan Thsang's *Fo-li-shi-sa-tang-na* (*Ortospan*, the modern *Kabul*); *Sânkala* = the *Sangala* destroyed by Alexander; *Parvata* = Hwan Thsang's *Pa-la-fa-to*; *Mâlavâs* and *Kshudrakâs* = the two tribes *Malii* and *Oxydrakae*; *Shaubreyas* = the class Sambracae or Sabracae.]—Progress of Oriental Research in 1869–70. [From the Report of the Royal Asiatic Society.]—Reviews (favourable) of S. Beal's *Catena of Buddhist Scriptures*; C. E. Gover's *Folk-songs of Southern India*; Ardaseer Framjee's *Hindustanman Musafari*, or Journal of Travels in India.—Miscellanea. [Mr. Ravenshaw's *History of Gaur*; Shri Harsha, a paper by Dr. Bühler; The Selons; Rock-temple at Harchoka; Coin of Firuz Shah Zafar; Oriental studies at Cambridge; Revision of the Sinhalese Buddhist Scriptures; &c.]

Revue Critique, Jan. 20.—A. Bergaigne reviews Benfey's essay, *Ueber die Entstehung und Verwendung der in Sanskrit mit r anlautenden Personalendungen*.—E. Tournier gives us an elaborate and on the whole appreciative account of Vollgraff's *Studia Palaeographica*, but strangely overlooks one or two important facts, *e.g.* that the book is not intended to be an exhaustive treatise on the subject, and that the author is a disciple (and indeed a most promising one) of the school of Cobet, who is not once mentioned in the course of M. T.'s long article. ——Jan. 27.—H. Weil reviews Brambach's *Metrische Studien zu Sophokles*, and professes disagreement with the writer on sundry fundamental points. A notice by Ch. Thurot of Madvig's *Adversaria* presents a clear and useful summary of this great work of the great Danish scholar.

Journal of Philology, No. 7.—Two Kasidahs of the Persian poet Anwarí; by Profs. Cowell and Palmer. [Edited from four MSS., with a poetical version.]—E. H. Palmer and J. E. Sandys: An Athenian bilingual inscription. [Restored from a copy recently made by P. in the Theseum at Athens.]—Prof. Grote (the late): On Glossology.—S. S. Lewis: On a bronze ram, of ancient Greek workmanship, now in the Museum at Palermo. [With a lithographic illustration.]—Notes on Exod. iii. 14, xxii. 4 (5), and xx. 4, 5; by W. A. Wright.—H. Hager: On the Eisangelia. [Maintains that εἰσαγγελία was correlative to a special νόμος εἰσαγγελτικός, in which the offences to which the process was legally applicable were strictly defined, though the provisions of the law may have been stretched to take in other cases. The greater part of the article is an attempt to reconstruct the νόμος εἰσαγγελτικός from statements in the Orators and elsewhere.]—D. B. Monro: On the Pedarii in the Roman Senate. [Shows that, in theory at any rate, *sententiam in senatu dicere* expresses the whole right and duty of a senator at *all* periods of Roman history.]—H. A. J. Munro: On some passages in Lucretius.—R. Burn: The Roman Capitol. [A reply to Dr. Dyer.]—J. F. MacMichael: On the sites of Sittake and Opis. [Contends, in opposition to Sir H. Rawlinson, that the Sittake of Pliny and Ptolemy is not the same as that of Xenophon; and that Opis is to be identified with the modern Eski Baghdad. A map accompanies the article.]—H. Jackson: On some passages in Plato. [Suggestions on the text of *Phaedr.* 235 D, *Rep.* 360 B, 390 B, 465 C, 615 D, and *Phileb.* 48 C.]—H. Richards: Notes on Aristotle's Ethics. [On *Eth. Nic.* v. 5, 12; v. 8, 10, and vii. 8, 4.]

Literar. Centralblatt, Dec. 30.—Fausböll's edition of the Dasaratha-Jâtaka, Marazzi's *Teatro di Calidasa*, and Pickford's translation of Mahâviracharita; rev. by A. W. Jan. 27.—Zingerle's *Chrestom. Syriaca*: by Th. N. Feb. 3.—Benfey's *Jubeo u. seine Verwandte*. Feb. 10.—Ahlqvist on Finnish words expressive of culture (Helsingfors, 1871).

New Publications.

Ahlqvist, A. De Vestfinska språkens kulturord. Helsingfors.

Bacher, W. Nizâmis Leben u. Werke u. der 2te Thl. d. Nizâmi'schen Alexanderbuches. Leipzig: Engelmann.

Canones Apostolorum, Aethiopice, ad fidem librorum MSS. primus edidit W. Fell. (Dissert. inaugur.) Leipzig: Brockhaus.

Derenbourg, J. Manuel du Lecteur, d'un auteur inconnu, publié d'après un manuscrit venu du Yemen et accomp. de notes. Paris: Imp. Nat.

De Tassy, Garcin. La Langue et la Littérature hindoustanies en 1871. Revue annuelle. Paris: Maisonneuve.

El Mubarrad. The Kamil. Edited for the Germ. Oriental Soc. by W. Wright. Parts 7 and 8. Leipzig: Brockhaus.

Lenormant, Fr. Essai de Commentaire sur les Fragments cosmogoniques de Bérose. Paris.

Lieblein, J. Dictionnaire de noms hiéroglyphiques en ordre généalogique et alphabétique. 2 livr. Leipzig: Hinrichs.

Par Palimpsestorum Wirceburgensium. Antiquissimae vet. Test. versionis Latinae Fragmenta. E codd. rescr. eruit, edidit, explicuit Ernestus Ranke. Accedunt duae Tabulae photolithographicae. Vindobonae: Braumüller.

Prätorius, F. Grammatik der Tigriñasprache in Abessinien, hauptsächlich in der Gegend von Aksum u. Adoa. 2. Hälfte. Halle: Buchh. der Waisenhauses.

Transactions of the Soc. of Biblical Archæology. (Papers by Birch, Fox Talbot, G. Smith, &c.) Longmans.

Unger, R. Emendationes Horatianae. Halle: Pfeffer.

Vetus Testamentum Aethiopicum, tom. ii. fasc. ii. Ad librorum MSS. fidem edidit etc. A. Dillmann. Leipzig. (German Or. Soc.)

Wedgwood, H. A Dictionary of English Etymology. Second ed. Part 3. Trübner.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 43.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Friday, March 15, and advertisements should be sent in by March 11.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

Art and Archæology.

Correggio. Von Julius Meyer. Leipzig: Engelmann, 1871.

THERE is no painter of the sixteenth century whose life is so completely shrouded in obscurity, or whose character, personal appearance, and surroundings, are so little known, as Correggio. Correggio lived away from the centres of humanistic teaching—away from Florence and from Rome, where the classical in letters and in art was cultivated. He spent his years in a province into which præ-Christian influence in sculpture and architecture could hardly penetrate. He knew nothing of the early striving of the Tuscans for ideals of form and proportion, less still of the labours of the realists who startled the sixteenth century with subtleties of detail and texture. Confined to a small circle of country in which the hum of the world's business seemed comparatively hushed, he never came in contact with any of the great masters whose names were household words in the cottages and palaces of Italy. His pictures were not painted for the State nor for illustrious patrons; amongst local contemporaries none thought it worth their while to note Correggio's birth or death, or tell of his daily life, his friends, associates, or wellwishers. And yet Correggio ranks in the opinion of this and earlier generations as an artist of pre-eminent power, who, above all others of his age, transfigured homeliness into sublimity. It was Correggio who, at a period when sensualism and mannerism were on the increase, clung to the purity of nature, and depicted in its most delightful aspects the fond rapture of the mother, the mirth and glee of the child, and the eager devotion of a holy congregation. It was he who combined motion in its most daring forms with sprightliness and humour, who tempered light, and shade, and colour, to the most dazzling force and most harmonious balance. It was he who illustrated with unmatched power the true maxims of aërial perspective and chiaroscuro.

We deplore this contrast between the obscurity of the man's life and the brilliant attraction of his pictures the more as the result of it is to make a history of Correggio extremely difficult to write, forcing the biographer to oscillate between minute details in which probabilities in respect of small but relevant facts receive a dry but necessary attention, and descriptions of works in which previous sobriety is usually counterbalanced by an excess of colouring. If under such adverse circumstances as these Dr. Meyer has produced a book alike interesting, varied, and full of tone, it is much to his credit. There is no biography of Correggio that can be pointed to which contains so fully and exhaustively all that has been preserved and written of the master; none which gives with more graceful picturesqueness an idea of his qualities and defects. With praiseworthy conscientiousness, the legends which have been told of Correggio's life and education are examined and reduced to their real value. The critical opinions of this and earlier generations in respect of his style are set before us; then comes such news as can be gathered directly or indirectly as to the painter's youth, his teachers, and those whose example was of influence in the expansion of his genius. Interesting chapters follow in which the frescoes and canvasses in Italy and elsewhere are described; and an essay at the close explains the character and significance of Correggio's art. Appended to this—the main body of the work—is a descriptive catalogue of all pieces genuine or not, of all drawings and engravings, under Correggio's name.

That in a field so vast and so closely sown with difficulties, criticism should not be able to find fault, was not to be expected; and Dr. Meyer's life of Correggio is not without conclusions to which we may demur, and not without statements requiring modification or correction. It may be well, however, to confine ourselves to a few salient points.

In the third chapter, which treats of Correggio's youth and education, countenance is given to theories which almost invite dispute. We are told that Mengs was probably right in thinking that Correggio had lessons from Francesco Bianchi Ferrari of Modena, because there are pictures by that artist in the galleries of Paris and Modena which bear the impress of an art similar to Correggio's in the Madonna of St. Francis at Dresden. Yet there are local masters of the school of Parma whose manner is more closely related to Correggio; and no one as yet has ventured to include them in the list of those who influenced Allegri. To start from such uncertain premisses, and build upon them as if they were sure foundations, is more than venturesome; for there is no better ground for thinking that Allegri wandered to Modena than there is for believing that he moved to Parma. We have to remember that Ferrari was an artist of very low power, who died in February 1510, when Correggio, on the most favourable computation, was barely sixteen years old; and, as regards Correggio himself, we know that he was residing in his native place as late as January 1511.

Greater force may be conceded to Dr. Meyer's view, accepted years ago by Pungileoni, that Correggio spent a certain portion of his youth in Mantua, where he acquired the taste for foreshortening and the style of architectural adornment peculiar to Mantegna; but it might also have been borne in mind that the principles of Mantegnesque art were widely diffused throughout the cities of the valley of the Po; that they were quite familiar to the Modenese through the medium of the Canozzi; that they were known to the Loschi, Mazzola, and Christophoro Caselli at Parma; and it might have been thought worthy of remark that Caselli's style, like Correggio's, was affected at different periods by Venetian and Paduan elements. In his early years a disciple of the Canozzi and Montagna, Caselli modified his manner by contact with Cima; and there is an altarpiece of 1499 bearing his name in Parma which gives us quite a foretaste of Correggio in the mould of the faces of angels, and the peculiar mild diffusion of twilight on flesh which characterizes Allegri's earlier productions. It is very probable that Dr. Meyer has underrated the importance of Parma as a place in which Correggio might study new forms of art. It was a city famous at the opening of the sixteenth century for the pictures which Cima painted there. These pictures were of a character to suggest to a young and rising artist the charms of polish, of balanced chiaroscuro and subdued silvery tone; and they might have led Correggio to acquire those delightful blended modulations of light and

shade which so many critics, including Dr. Meyer, ascribe to Leonardo. There are two artists of Central Italy in whom the influence of Da Vinci has been considered to have been markedly displayed; these are Correggio and Lotto; and yet no one can prove that they ever met or came in contact with Leonardo. Correggio and Lotto, it is interesting to observe, were alike in many respects. They were alike in their fondness for Leonardesque polish and finish; they had the same spirit in composing groups of gleeful angels, the same feeling for tenderness in the attitude and movement of saints, the same smiles and dimples, and similar ideas as to the application of the laws of light and shade. It is not to chance, we should think, that this coincidence is due; and it is not at all unlikely that Correggio at some period of his obscure career witnessed the striving of more than one Venetian craftsman to rise to mastery and eminence. We may believe that it will be possible to the future student of Correggio's life to lay down that Correggio was no stranger to Cima, to Palma, Lotto, and Pordenone; and critics may be invited to observe how many of the elements which make up Correggio's style are to be found in the works of all the Venetians above named.

In the effort to preserve a rigid chronology, Dr. Meyer is not always able to trust to his own observation; but finds it both convenient and necessary to call to his aid some brother critic upon whose opinions he carries up his own edifice of historical induction. It is, perhaps, needless to point out the danger of such a course as this. The fact is that it creates inequalities almost as startling at times as a later interpolation might be. Had Dr. Meyer seen the "Madonna with Saints" which so long adorned the collection of Bath House, he would perhaps have agreed with those who believe that "Madonna" to be a copy. He certainly would have paused before he assigned to a cold and ill-favoured picture the same date as the soft, and delicate, and supremely beautiful "Marriage of St. Catherine" at the Louvre.

Finally, Dr. Meyer may learn to distrust the sources from which *original* records are derived when he hears that the contract for the celebrated "Nativity" at Dresden which he prints is not derived from an original text, but from a copy of the original recently discovered in the archives of Modena.

Crowe-Cavalcaselle.

THE EXHIBITION OF PICTURES BY OLD MASTERS.

II.—Italian, Spanish, Flemish, and Dutch Schools.

Whether the so-called "sketch" of "La Gloria" (No. 114, contributed by the Duke of Cleveland) is actually by the hand of Titian is somewhat doubtful, but its intrinsic merit and the importance of the great masterpiece which it represents would in any case justify careful examination and discussion.

Titian's finished picture, now one of the chief treasures of the Madrid Gallery, is a great altar-piece about four times the size of the present example. The picture now being exhibited was, I believe, formerly in the collection of Mr. Rogers, the poet, and was sold at Christie and Manson's in 1856: in the sale catalogue it is stated to have been discovered in a gambling-house at Madrid, and to have been purchased by M. de Bourke, afterwards Danish minister in London. From M. de Bourke it passed through the hands of Wallis, a well-known dealer of the early part of this century, to Mr. Rogers. Probably no other world-renowned picture is really so little known to lovers of art as the masterpiece in question: the fact that the original picture was sent to Spain almost immediately after its execution in Venice accounts for the paucity of reproductions of it, whether as copies or engravings. It is true that a fine engraving of the composition was made by the Italo-Flemish engraver Cornelius Cort (in 1566, shortly after it was painted), but that engraving is scarce, and I am not aware that any other print exists. It would of course be most interesting to compare the engraving, the present "sketch," and the original picture together, and as the latter has been recently photographed in Madrid, this is now substantially practicable; some instructive evidence would doubtless result; I have not however had time or opportunity to make this comparison with a view to my present task.

The work now in question is called a "sketch," and it is doubtless assumed to be a first study for the great picture, but it would perhaps be better to designate it by the convenient term "replica," for as far as my recollection of the finished picture serves me, the two are substantially identical both in composition and colour, which would scarcely be the case if this were really a preliminary design.

In determining this point the fact should be noted that it was not the custom of the Italian painters of Titian's time to make small preliminary sketches in colours: that practice seems to have arisen in another age and school; it was perhaps mainly stimulated and established by Rubens and Vandyck; but copies or sketches from pictures already completed, on a smaller scale and sometimes with variations of design arising from afterthought, were doubtless made at all times and in all schools, often by the authors of the original works themselves. The picture before us then may, I think, safely be deemed one of these after-copies or "repliche," but the important question as to when and by whom it was executed remains to be solved. That it is an excellent reproduction of the finished picture is certain, and there is nothing in the general "technique" inconsistent with the supposition that it is of contemporary date and either by Titian himself or some talented Italian scholar; but at the same time there is perhaps an equal probability that it may be the work of an able Spanish copyist of the sixteenth or seventeenth century; the best criterion, the evidence of the "touch" or "execution" of the painter—his handwriting, so to speak—can unfortunately no longer be relied on, for the surface of the picture has been too much defaced and obscured by the results of neglect and ill-judged "restoration."

We have at all events now before us a fair representation of one of the most celebrated historical pictures ever painted—yet "La Gloria" is not one of Titian's finest performances; it was a commissioned work, and the soul of genius always rebels against stipendiary employment; in reality this great picture may be taken as the first of a declining series of official productions successively executed by the great painter for the Emperor Charles V. and his son Philip II., under the terms of his service as court painter; many of these works are still preserved at Madrid, and one after another, in the order of their production, they clearly display the deadening aspiration, the failing powers, the indifference and carelessness of advancing age.

Still, in spite of many drawbacks and even absurdities, "La Gloria" is worthy of its title, whilst nothing can be more interesting than the facts of its production; there can be no doubt that it was ordered of Titian by Charles V. when he first resolved to abdicate and retire from the world; the subject of the picture in fact symbolises that retirement in a manner which is even crudely obvious. The emperor evidently wanted an altar-piece for the church of the monastery of Yuste, where he had determined to end his days, which should perpetuate the memory of his sojourn there.

How far Charles himself prescribed the exact subject and ordonnance of the work is uncertain; whether even this mighty and arrogant monarch would have directed his painter to represent himself and his deceased queen in Heaven, being presented to the Almighty Father by all saints and patriarchs in celestial court assembled to that end, much in the same manner as he would have caused any grandee and his consort to be presented to him in his own sublunary court, seems very doubtful. There were veins of melancholy sentiment, of poetry even, in the heart and mind of Charles which rather forbid the supposition that he himself prescribed to Titian the exact composition of this picture. Surely had he done so, the wife he had loved, and whose memory he cherished in his last days more dearly than ever, would have been seen amongst the blessed souls, eagerly rushing forward to welcome her earthly consort, not, as it is, kneeling in a secondary place behind him, as if both had made their advent in Paradise together. In truth, there is as little poetry as common sense in the design and arrangement of the work, and whoever is responsible for the conception—perhaps some Spanish friar—it is in reality one of those strange sprawl-

ing "sacre conversazioni" such as Correggio first depicted in his Parma frescos, rather to the amazement of his contemporaries, which Michel Angelo in some degree, nevertheless, repeated in his "Last Judgment," and which, at a later period, Tintoretto finally carried to the utmost limits of absurdity.

Ticozzi has shown that "La Gloria" was already completed in 1554, and Charles did not retire to Yuste till 1556; it is quite certain that the picture was fixed in its place during the emperor's lifetime; and it is on record that Philip II. after his father's death lost no time in bringing it back to Madrid, together with the entire museum of art-treasures with which the emperor had surrounded himself in his retreat. The important fact of the date of the work is thus ascertained with sufficient approximate certainty.

The subject of "La Gloria" in great measure dictated the scheme of colour and light and shade—it displays, in fact, a blaze of supernatural golden light, in which the numerous foreshortened figures are upheld and immersed as if in a sustaining medium; the local colours of flesh, draperies, and accessories being all alike vivified and illumined with a degree of splendour never before achieved, and perhaps never since surpassed by mortal pencil.

It was perhaps a concession to Spanish religious symbolism which led Titian to clothe the three divine personages in the upper part of the picture, in massive ultramarine blue draperies; as it is, both in the present "replica" and in the Madrid picture, these figures have become rather obtrusively prominent, "telling" somewhat too much as dark spots on the brilliant background; it must be borne in mind, however, that this discordance is mainly owing to the fading of the light warm tints of the background, whereas the ultramarine pigment, being absolutely unchangeable, has acquired greater relative force of tint.

It is well known that in after-time the Spanish church painters' guide, *El pintor erudito*, of Padre Ayala, prescribed this colour as the fittest emblem of the purity and holiness of the highest celestial beings. There is little doubt in any case that an entire cycle of Spanish religious pictures—the radiant blue-draped Madonnas, mounting to the skies, surrounded with angels and cherubs, the "Virgens de la Concepcion" of Alonso Cano, Velasquez, and Murillo—had in great measure their antetype and model in this particular picture of Titian.

It is a fortunate coincidence that the replica of "La Gloria" should have been exhibited on the same occasion with the "Europa" (No. 126), belonging to Sir Richard Wallace, for it is evident that the latter most exquisite picture was painted at about the same period of Titian's career, and in the same style and spirit.

There exists a larger picture of "Europa," by Titian, now in the possession of Lord Darnley, at Cobham, but formerly in the Orleans Collection. It was exhibited some years ago at the British Institution in Pall Mall. From my recollection of that picture I believe it to be a later work than the present, and it is painted in a much lower tone; in fact, a comparatively dark picture, like the "Diana and Actæon" in this exhibition, next to be described. The present most admirable treasure of art was purchased for the late Marquis of Hertford, at a sale at Christie's, some years ago, for a few hundred pounds only. It is another of those unique aad priceless works which should have been acquired at any cost for the National Gallery, and which it is almost a crime in those concerned to have overlooked. I have a vivid recollection of having somewhere long ago seen a study from this very picture by the hand of Rubens—a rapidly executed black-chalk sketch on paper, but touched or slightly tinted in parts with colours—evidently added by Rubens as memoranda, the more certainly to impress on his mind the ineffable vision of glorious light and colour which entranced him.

Although not directly relevant to our present review, I may say that amongst the rich veins of that only half explored art-mine—Spain—an especially interesting one is the evidence of the influence which Titian's masterpieces in that country exercised on Rubens. The prince of Flemish painters bent the knee to the great Italian. Side by side at Madrid may be seen two pictures—and the critical student who has not yet seen them has still to profit by one of the most striking and instructive technical lessons in art; these are Titian's great picture of "Adam and Eve in Paradise" and Rubens' free copy of it, of the full size. Rubens is there seen as it were grafting himself on Titian, and endeavouring to improve on his model. Titian perhaps would have lauded the result, but I am disposed to think that Rubens would have admitted his own failure!

(No. 73) "Diana and Actæon," contributed by Earl Brownlow. This is a fine representative picture of Titian's late period—a grand, massive, sombre work, full of poetic feeling, weak in some respects, yet in others most powerful—the production, as it were, of a waning giant. The great predominance of the picturesque landscape element in this picture, and the comparatively slight and careless drawing and execution of the figures, illustrate the tendency which seemed to grow on Titian with advancing years, to neglect and underrate the more severe characteristics of form or design in favour of what may perhaps be termed the emotional qualities of colour and artificial chiaroscuro.

Titian had undoubtedly a special bias towards landscape painting—he may, indeed, almost be deemed the creator of that art as a distinct branch. If the Royal Academicians could next year obtain Her Majesty's permission to exhibit the splendid Titian landscape in the Buckingham Palace Gallery, where it hangs half concealed in a dark corner, they would render a greater service than by displacing whole rows of pictures from Windsor or Hampton Court, where they can be seen by everybody just as well as at Burlington House. Furthermore, in passing, as we are about to concern ourselves with Velasquez, I recommend at the same time to their notice a superb portrait of the young prince of the Asturias, son of Philip IV., of whom more anon, one of the little known treasures of the same royal residence; the latter picture occupies a place in one of the lower rooms of the palace, and its existence even is unknown to the mass of lovers of art. The exhibition of these pictures, especially the former work, would be a great lesson and a powerful rebuke to the present generation of "pre-Raphaelite" painters. Such pictures, moreover, are the true antidote to the great bane of modern landscape art photography!

The "Diana and Actæon" belonged at one time to Christina, queen of Sweden, and it afterwards passed into the Orleans Gallery, which famous collection numbered upwards of twenty pictures of Titian. It was purchased at the sale of the Orleans pictures in London for 200*l.* by Sir Abraham Hume, who was the author of a *Life of Titian.*

Nearly all the Orleans Titians are doubtless still in this country, and to ascertain the present whereabouts of the several specimens, and to get them together again on some such occasion as the present, is just the kind of work which the public expects the Academy to take in hand.

I cannot quit the great Venetian masters without digressing again, to put on record the fate of another picture—a masterpiece mentioned by Vasari and most of the subsequent illustrators of the life and works of Titian. Besides the well known and beautiful little picture representing Christ appearing to Mary Magdalene in the garden after His resurrection, now in our own National Gallery, Titian painted a large picture of the same subject, the figures in which were of the size of life. This was done for Philip II., and a letter from the king to Titian respecting it is still extant, from which it appears that the work was finished and ready for delivery in 1561. That picture, though known to have been sent to Spain, has been long missing; in truth, alas! it has been destroyed, yet not entirely, for a fragment of it—the head of Our Saviour, cut out of the panel—still exists; and as a further compensation, a copy—though a very bad one—of the entire composition is also extant. These were brought to light again in Spain by myself, some years ago, and as an illustration of what may happen to the sublimest works of human genius, I will briefly relate the circumstances of their discovery.

On the occasion of a visit of exploration to the Escurial, I noticed the copy in question hanging exposed to the outer air in one of the interminable corridors of that vast edifice; a single glance sufficed to show me that it represented a picture by Titian—the lost work, in fact; but my delight was greater when, at the same time, I recognised in the head of the Saviour the copy of an original head by Titian, hanging in the gallery at Madrid. A close inspection of the latter immediately afterwards, at once revealed the fact that it was a fragment evidently cut out from a larger work. On communicating my discovery to the director of the gallery, that eminent and estimable person informed me that his father, and predecessor as

director, Don Pietro Madrazo, had himself many years before discovered and rescued this fragment from destruction at the Escurial, where it then served as the cover of a "tinaja"—or large oil jar—having been evidently treated by the monks as a piece of ordinary board!

From Titian to the Spanish school is a proper and orderly transition. The present gathering is not rich in Spanish pictures; but it comprises, nevertheless, several important works of the greatest masters of the school. It would be an interesting task to show more in detail the direct influence which Titian undoubtedly exercised on Velasquez, Alonso Cano, and Murillo; time and space, however, are not sufficient for the purpose, and it must suffice to indicate the fact, to which, moreover, I have already alluded, that the royal collections at the Escurial and at Madrid were the chief sources of instruction, and contained the great precedents which mainly contributed to form the style of those pre-eminently national and untravelled painters, and that Titian was undoubtedly their principal model.

Josef Ribera, called Il Spagnoletto, comes first in order. The works of this master are so numerous and so well known that I should not have noticed the one capital picture by him in this exhibition (No. 97), the property of Mr. T. Baring, M.P., were it not that it is a somewhat exceptional work. Ribera carried out and continued to another generation the technical processes and very characteristic style of his Italian master, Michel Angelo da Caravaggio, and everybody is familiar with his dark, powerfully painted pictures. Here, however, we have a lightsome silvery picture, and at first glance it might rather be taken for the work of a celebrated Bolognese contemporary, Guido Reni, than of Spagnoletto. There can be little doubt, in fact, that the picture was executed in direct imitation of the new manner of the former artist. Guido was born thirteen years earlier than Ribera, and he had, at an earlier period than the latter, adopted the dark, violent manner of Caravaggio, but he afterwards abandoned the dark style, and painted in a manner in many respects entirely contrary—one, in fact, eminently clear, light, and "silvery."

This phase, then, seems to have exercised a passing attraction on Ribera; but it could only have been a temporary influence, for his lightsome pictures are very few in number, and they were probably executed early in the career of the master, and it would seem that he relapsed again into his original sombre style, and ever after continued faithful to it.

Velasquez, on the other hand, upon whose early essays both Caravaggio and his countryman Ribera exercised a strong influence, began as one of the "Neri," or dark painters, but steadily, with advancing powers, emancipated himself from it, adopting instead, like Guido, a clear and lightsome manner, which increased in brilliancy and vivacity to the last. There are two important works of the king of Spanish painters, Don Diego Velasquez y Silva, in the exhibition, both contributed by Sir Richard Wallace: No. 142, absurdly called in the catalogue "*Portrait* of *the* Infanta," and No. 75, equally stupidly entitled "*A* Spanish Infanta." Now the first of these pictures is a portrait of the "*Infante*" Don Balthazar Carlos, prince of the Asturias, son of Philip IV., when about a year and a half old, and the last-named is that of an unknown Spanish lady. Velasquez painted the young prince over and over again; there is, indeed, perhaps no better known historical portrait than that of this child, who died at an early age. It must be clear to everybody that the picture represents a boy, and not a girl. As regards the other picture, the different members of the royal family of Spain during the life of Velasquez were so few in number, and their portraits so well known, that there would not have been the slightest difficulty in identifying the lady if she had really been an Infanta of Spain—that is, a member of the reigning house.

The latter portrait is that of a good-looking Spanish lady of mature age, and doubtless of noble birth: she has no resemblance to either of the wives of Philip IV., and there is not the slightest trace of the family likeness stamped so unmistakably on the face of every descendant of Charles V. Not, however, that the Academicians who made the catalogue troubled themselves in any way about this matter; it is clear that they were utterly ignorant, careless, and indifferent—ignorant alike of any tincture of knowledge of languages, or they would have known that an *infanta* meant a female, not a male, personage; of the history of Spain, and of the career and works of Velasquez in particular. This is really too full a measure of ignorance in the members of an Academy which, if I mistake not, numbers a secretary for foreign correspondence and a professor of history amongst its officials!

As regards the portrait of the little "*infante*," the child is evidently only just able to stand alone; it may thus perhaps be the picture alluded to by Sir William Stirling Maxwell, in his *Life of Velasquez*, as the first work which the painter executed after his return from Italy in 1631, the young prince having been born during his absence of about a year and a half.

The picture is somewhat darker than the other works of this particular period of Velasquez, and the influence of Ribera, especially in the "handling" of portions of the work, is still perceptible, but the admirably facile yet most truthful execution pertaining to Velasquez alone—that power of expressing, with a few magical touches and loose strokes of the brush, delicate and refined passages of form and texture, to the rendering of which other painters would have patiently devoted hours or even days of labour is yet everywhere visible.

The portrait (No. 142), also the property of Sir Richard Wallace, that of a thoroughly typical Andalusian lady—"petite," short of stature, not beautiful, but yet graceful and attractive—has been for years confounded in my mind with real, living, individuals of her race. To my imagination she is the same lady who sat next to me at the first bull-fight I witnessed in Spain, when the gentle, regular waftings of that very fan never ceased or varied all the time, whilst I hid my face, and dared not look at the cruel horrors going on before me. Again how often have I seen her with that very rosary at early mass. The clear, rose-tinted complexion of this lady suggests to my mind that she must have been a Granadine belle; however, there is absolutely nothing known about her, but that she lived and died, and had the good fortune to have been painted by Velasquez.

The picture came from the collection of the Spanish banker, the Marquis Aguado, sold in Paris twenty or thirty years ago, and it is well known by more than one engraving executed from it. It was probably painted some years after the other picture.

There is but one important work of Murillo in the present exhibition (No. 98), the "Charity of Saint Tomas of Villanueva," contributed by Sir Richard Wallace. Murillo painted many pictures representing the actions of this local saint of the Seville district, and they are amongst the most interesting and beautiful of his productions. They afforded scope for the pourtrayal of the men and women of Spain as they existed around him, and as the present generation still live, but little changed—the peasants and beggars, clad in the universal "paño pardo" of russet-tinted Spain; the idle melon-munching "muchachos" of the streets; the half-naked children; the women with lustrous eyes gleaming beneath their dark mantillas; the dark, smooth-cropped priests. At an hour's notice any time the streets of Seville would still furnish materials for a *tableau vivant* the very counterpart of this fine picture.

This work belongs to the mature period of Murillo, when he painted firmly and solidly, with a practised hand and with perfect mastery of all technical resources. Those who are acquainted with the entire cycle of his works, and especially with his pictures at Seville, will discern in it traces of the external influences which still exercised lingering sway over this most national and original painter; reminiscences of Velasquez, Vandyck, and Pedro de Moya; but the mass of picture-lovers will see in it only the pure genius of Murillo. This picture is, indeed, an excellent typical example of its class and period, which was that of transition from the earlier dark manner of the master to that of his ultimate characteristic style. It offers, however, few evidences of the "estilo vaporoso," or of the colours blended with "leche y sangre" which have always been the delight of the art amateurs of his own country.

No. 104, "Moses in the Bulrushes," according to the catalogue ascribed to Murillo, and the property of the Duke of Devonshire, has nothing whatever to do with the great Spanish painter, nor indeed with any other Spanish master. It is, on the other hand, evidently an Italian picture of the second half of the seventeenth century, and although an excellent work of art, not with certainty to be ascribed to any particular master. I have an impression that it may possibly be the work of Andrea Sacchi; it is at all events clear that the authorship has always been considered rather uncertain, for there exists a last-century engraving of the picture in which it is ascribed to Vandyck;

it is, however, as little like the work of Vandyck as that of Murillo.

No. 93, by Francisco Zurbaran, is a good example of a limited special class of subjects within which a second-rate master almost achieved real excellence. This picture, which has the interesting peculiarity of being fully signed and dated (1639), was one of the pictures collected in Spain by Baron Taylor for King Louis-Philippe, and which during his reign formed the "Spanish Gallery" of the Louvre. It was there a "pendant" to the very similar but superior picture now in the National Gallery; both were purchased at the sale of Louis-Philippe's pictures at Christie and Manson's.

The Flemish and Dutch pictures form the great bulk of the present exhibition, and there are many admirable works which well deserve careful note and description, but time and space will only allow me to make a few hasty and discursive allusions. Amongst the greatest masters, Cuyp, usually so well represented in this country, is less so this year than on the two previous occasions; there is, perhaps, no really first-rate specimen—the large "Landscape with Bridge, Figures, and Cattle" (No. 157), contributed by Mr. Bond, though certainly an important specimen verging on the best period of the master, is somewhat eclipsed by the larger repetition of the same composition in the collection of the Marquis of Bute. Rembrandt also does not dominate so powerfully this year, yet the two large pictures, portraits of "Jan Palekan (?) and his Wife and Children" (Nos. 90 and 101), are very important as specimens of the style and "technique" of the early period of the great master. What can possibly have moved the managers of the exhibition to exhibit the flagrant copy (No. 68—portrait of an old woman called Rembrandt's mother), belonging to the Earl of Hopetown, passes comprehension; the well known and most certain original of that picture hangs in the National Gallery. It was, indeed, rumoured in art-circles, at the time of the purchase of the latter from Lady Eastlake, three or four years ago, that a well-known member of the Royal Academy disputed the fact of its genuineness, maintaining that Lord Hopetown's picture was the real and veritable original; it is to be hoped, now at all events, that the authority in question has recognised the fact that the late president of the Royal Academy knew more about ancient pictures than he does. In all probability the copy now being exhibited was executed during the period when the National Gallery picture was in the collection of Mr. Wells, of Redleaf.

There are several admirable works by Vandyck, the two most admirable portraits of Philippe Le Roy and his wife (Nos. 134 and 128), contributed by Sir Richard Wallace, which in the first edition of the Academy catalogue were ridiculously described as the portraits of "Philippe le *Roi*," and portrait of "the Queen of Philippe le Roi," are too well known to need further illustration. A really important contribution has been made by the Earl of Hopetown in the admirable portrait of the Archduchess Isabella Clara Eugenia, Governess of the Netherlands in her widowhood (No. 64).

With the exception of the two glorious landscapes by Rubens the "Rainbow Landscape" (No. 125, Sir Richard Wallace), and No. 195, "The Watering-place," lent by the Duke of Buccleuch, the great Flemish master is weakly represented.

The beautiful portrait, ascribed to Rubens (No. 59, belonging to Earl Brownlow), is most certainly a fine work of Vandyck, executed shortly before he came to England.

One of those services which the Academy should specially endeavour to render is exemplified in the having obtained for exhibition the series of admirable Dutch and Flemish pictures belonging to Mrs. Charles Cope—this most welcome "envoi" is a striking instance of the wealth of this country in works of art of the very highest class, all but unknown to the majority of lovers of art. Probably no finer or more precious work of the master exists than the exquisite "François Mieris" (No. 194) or the "Jan Steen" (No. 197). Two other notable pictures from the same source, works of exceptional excellence, though by masters of secondary rank, are the "Asselyn" (No. 65) and the "Van der Meulen" (No. 84).

Mr. T. Baring's beautiful picture ascribed to Job Berkheyden (No. 177) is a treasure unequalled in its speciality. The owner, however, must have overlooked the fact that the picture is in reality signed by *Gerard* Berkheyden. It was doubtless mainly painted by the latter, but in all likelihood the beautiful figures were introduced by the other and more talented brother.

I have space for only one more notice; it is that of the portrait, by Holbein (No. 32), belonging to Mr. Millais, R.A. If the pictures contributed to the present exhibition by Mr. Millais' colleagues in the Academy had all been as genuine and as important as this, the best thanks of the public would have been due to them, but as it is, some of the most worthless things in the collection have been contributed by them.

Mr. Millais' picture attracted much attention at the recent Holbein exhibition at Dresden, and it is unquestionably an authentic, well-preserved, and important work of the master—all the more interesting inasmuch as it has only recently been brought to light.

J. C. Robinson.

THE TEMPLE OF DIANA AT EPHESUS.

Since the notice of Mr. Wood's discoveries in the *Academy*, vol. ii. p. 370, considerable progress has been made by him in clearing the site of the temple. He recommenced his excavations at the end of September last, the earliest period when work could be resumed with safety on a site so subject in the summer months to malaria fever. Mr. Wood calculates that at the beginning of this month he had cleared about one-third of the whole area of the temple. The depth of soil over the site is upwards of twenty feet, so that the excavation will necessarily be a long and costly undertaking. Mr. Wood thinks that he has traced part of the line of the inner row of columns and *cella* wall on the south side, and there seems to be ground for believing that the intercolumniations of this row were 17 feet. Until, however, a much larger area has been cleared, and the water, which now in the winter months rises to four feet at the bottom of the excavation, has been drained off, no exact knowledge of the plan of the temple can be obtained.

The architectural marbles found up the present date consist of portions of bases of columns, portions of capitals, and many drums. The cornice and architrave have nearly disappeared, and as yet there is no trace of a frieze either plain or sculptured. Pliny, as is well known, asserts that 36 out of the 127 columns of the temple were *cælatæ*, "sculptured in relief," a statement which has been a needless stumbling-block to commentators. Mr. Wood has discovered fragments of several drums from these *cælatæ columnæ*, and portions of pilasters, also sculptured in relief. Of these the most important is a drum next the base, on one side of which the figures in relief are very well preserved; on the other side the relief has been completely broken away, probably by the great weight of this drum (upwards of eleven tons) when it was overthrown.

The figures still preserved on this drum consist of a group of male and female figures, probably Olympic deities. A naked male figure, with the *petasus* hanging from his back, the *chlamys* twisted round his left arm, and a *caduceus* in his hand, is clearly Hermes. He stands looking up as if addressing or listening to a female figure who stands in front of him. Her drapery, a talaric *chiton* and *peplos*, would be suitable for either Hera or Demeter. Her head is unfortunately broken away. On the left of this female figure is a naked female figure, winged, and girt with a sword, who can hardly be other than Victory. On the right of these figures, *i.e.* behind Hermes, is a group of a draped female figure standing, her head broken away, at her side is the lower half of a draped figure seated, which appears to be male. The standing figures in this composition are six feet high; the sculpture varies in projection, but may be termed high relief. The composition of the draperies is good, but wanting in originality; the figure of Hermes rather too naturalistic, with a want of refinement in the modelling and somewhat ignoble in the *pose*. The same remarks apply to the Victory; and the shortcomings in the anatomy and general carelessness in the execution of both these figures remind us of similar defects in the treatment of figures on the coins of the Seleucidæ and other kings of the Macedonian period. If, however, regarded as *sculpture*, these reliefs will not bear the test of the highest standard of criticism; they appear to be admirably calculated for their purpose as *architectural decorations*. If, as there seems reason to believe, every drum of the 36 *cælatæ columnæ* was adorned with reliefs, and if these columns were 60 feet high, a richness of effect unexampled in Greek architecture must have been attained, which Phidias might perhaps have pronounced barbaric, but which was in harmony with the Oriental tendency and exaggerated proportions and gorgeousness of ornament which characterized

the Greek art of the Macedonian period. Fragments of reliefs on pilasters, corresponding in proportions with those of the drums of columns, have also been found, but it is as well to reserve the description of these till they arrive in England, with the rest of the cargo of marbles shipped by Mr. Wood on board H.M.S. *Caledonia* last month. This cargo will probably be sent on from Malta very shortly.

The architecture of the temple of Diana is, as might have been expected, Ionic, and very similar in character to that of the Temple of Apollo at Branchidæ, which was probably of the same date. With the exception of the fragments of *cælatæ columnæ* and pilasters, no sculptures have been found on the actual site of the temple except such very small fragments as to lead us to fear that the Byzantine Christians, who evidently used the temple as a quarry, smashed up its statues with an iconoclastic thoroughness which left nothing for subsequent barbarians to destroy.

C. T. Newton.

THE ORATORIO CONCERTS.

It was pleasant to find the "Oratorio Concerts," after so long an interval, again proclaiming their *raison d'être* by such a performance as that of Bach's *Passionsmusik* on February 20; in the presence, too, of so large and sympathetic an auditory. The inevitable imperfection of the earlier performance of this work in England—inevitable not so much from its absolute difficulty as from the novelty or strangeness of its style to English musicians—might have postponed for an indefinite period the ultimate acceptance of one of inferior order. On the *Passionsmusik* the effect of these essays has been altogether different. The attention of thoughtful students has been continually directed towards it. Favoured by the recent accessibility of copies, singers and players whose consideration formerly was limited to their own "parts" have learned to know the work as a whole; and hearers, like performers, in becoming familiar with, have become reconciled to much in it that once seemed to them ugly or uncouth. Nothing seems now wanting but more frequent hearing to give *The Passion* of Bach a place in the hearts of the English people beside that of *The Messiah* of Handel.

Mr. Joseph Barnby, following in the track opened out by Sir W. Sterndale Bennett, has certainly done his utmost to bring this about. The performance on the 20th ult., under his direction, was incomparably the best that has yet been given in England —a performance (the first of which this could fairly be said) *correct* as well as hearty enough to have enabled an intelligent amateur, hearing the work for the first time, to form a fair estimate of its merits. The principal solo parts were assigned to Madame Cora de Wilhorst, Miss Julia Elton, Mr. Edward Lloyd, and Herr Stockhausen. To the ladies may be awarded the credit of good intention and careful study; to the gentlemen something—indeed, much—more. Mr. Lloyd sustained his arduous part, consisting almost exclusively of recitative and *aria parlante*, bristling with difficulties physical and musical, with words which *must* be spoken, on notes at the top of the voice, separated by intervals often the most ungainly and unexpected,—most admirably. Herr Stockhausen is never heard to such advantage as in sacred music of the highest class, on the interpretation of which he brings to bear vocal aptitude increased and refined by careful training, an acquaintance both extensive and close with music of every epoch, nation, and quality, and general culture not common among those of his absorbing profession. The highest and rarest quality of an interpreter is just expression, impossible without deep and intense feeling. The depth and intensity of Herr Stockhausen's are in no way so clearly proved as in the reticence by which he governs its expression on the greatest occasions. Those who remember—none who heard it can have forgotten—his delivery of the only one of the Divine Sufferer's last utterances with which Bach has ventured to deal, will thoroughly appreciate my meaning.

In comparison with the enormous mechanical difficulties with which the performance of much contemporary music is accompanied, those of the *Passionsmusik* might not seem to demand special consideration; on the contrary, though of a different kind, they are still considerable. Both the instrumental and vocal parts are deficient in that form, the boldness and symmetry of which so greatly facilitate the realisation of most modern music, and even of the music of many of Bach's predecessors as well as contemporaries. It can never be argued from one of his passages what the next will be, or even from the beginning of a passage how it will end. Their execution, therefore—their *reading* at least—demands, if not a great, an unintermittent strain on the executant's attention. For the first time in my recollection, band and chorus, under Mr. Barnby's latest guidance, trod the intricate mazes which the ruthless old John Sebastian had prescribed for them, not merely with unswerving, but apparently unhesitating, feet.

Having said thus much, I will touch on two or three matters in which I think their performance might have been better. In the first chorus, "Come, ye daughters," the chorale, "O thou begotten Son of God," was, even with one's eye on the notes of it in the score, nearly inaudible. As Mr. Macfarren has shown in his admirable essay prefixed to Messrs. Novello's edition of *The Passion*, this and other melodies incorporated in Bach's works were, and indeed still are, familiar to the people of Germany; and there can be no doubt that the great composer calculated on the congregations who might "assist" at their presentation lending their voices to add to the intensity of these melodies. Congregational singing all the world over is and always has been *in octaves;* men and women uttering in their natural registers the same progressions in the same key. It is to be hoped, therefore, that in the next performance of *The Passion*, Mr. Barnby, or it may be Mr. Done—for the work, I rejoice to hear, is to be performed at the next Worcester Festival—will not be withheld by any pedantic or superstitious veneration for Bach's *score* from carrying out Bach's very obvious *intention*, even if need be in some new way; either by reinforcing the sopranos to whom the chorale is assigned by as many tenors, or by brass instruments. Perhaps both might be employed with good effect. Having counselled one seeming innovation, I have to protest against a real one—the singing by Mr. Barnby's choir of the chorales without accompaniment, and indeed the altogether too sparing use of "the sacred organ" throughout his performance of the work. It is needless in this case to call into court tradition, whose evidence would be irrefragable. That of the score is still more emphatic. To every chorale in the Leipzig edition express directions are attached concerning the instruments by which the several parts of it are to be accompanied: "viol° 1mo col sop° 1mo," and the like. Moreover the *basses* are, throughout the work, *figured;* and figures added to basses, it need not be said, represent notes. Why are *these* notes omitted in performance rather than any others? Mr. Barnby can hardly be moved to their omission by the small desire to show how cleverly his choir can do without them. Nor can he think that Art is served by turning these Titanic expressions of the most tremendous event in history into pretty part songs. The finical gradations, the obstreperous fortes, and the all but inaudible pianos, for the exhibition of which the organ is mute during these chorales, are of themselves heresies unknown to ancient practice; in any case they are altogether out of place in the rendering of these austere products of the country of great organs and great organists.

The work under Mr. Barnby's direction is considerably curtailed. This is inevitable: as a whole, its performance—with all the "da capos"—would as certainly exhaust the patience of the most enthusiastic auditor as of the most untiring performer. Probably, however this curtailment may be made, somebody will miss something he would willingly have retained. Perhaps on another occasion Mr. Barnby will feel encouraged to restore a few of the excised numbers. Or how would it do to perform each part entire on two separate and not distant occasions? The *Weihnachts-Oratorium* is designed for performance on six different occasions. Anyhow, the occasional presentation of such a work is a thing to be grateful for, and a thing the possibility of which, a quarter of a century ago, would never have entered the mind of its great author's most enthusiastic worshipper.

John Hullah.

NOTES ON ART AND LITERATURE.

Professor Liebrecht writes to us to say that the opinion which he expressed in the *Academy*, vol. ii. p. 279, concerning Simrock's translation of *Midsummer Night's Dream* by *Walpurgisnachtstraum* was not intended to be final, and

communicates the following summary of the objections which have been made to it :—

"In *Midsummer Night's Dream* mention is made of a May-day festival just over, which cannot be reconciled with the title or the remainder of the play. Kurz, the principal opponent of Simrock, attempted two years ago to explain the contradiction in the *Shakespeare-Jahrbuch*; but whatever view is taken of the question, the allusion to the 'observance' is only incidental, and cannot be relied upon as fixing the date positively and precisely, while in all the rest of the play a different time of year is certainly supposed. Thus Titania says to Oberon :—

"'And never, since the middle summer's spring,
Met we . . . . . .
But with thy brawls thou hast disturbed our sport.'

Midsummer nights therefore are the season for elfin revels, and the title is in complete correspondence with Titania's words.

"The objection that the title, *Midsummer Night's Dream*, may be spurious is met by Meres, who gives it, so to say, as the official designation in his catalogue of Shakespeare's works ; and another suggestion, that Shakespeare may have written *Summer Night's Dream*, and included May in the summer, is equally untenable, for, like the Germans, Shakespeare and his contemporaries had long laid aside the old Teutonic division of the year into two seasons, and 'mayings' and 'summerings' were kept even superfluously distinct. In short, there is but one single passage in the play where the season is May, everywhere else it is Midsummer ; the one is a passing allusion, and the other is essential and lasts throughout the whole piece.

"But again, even supposing, what is not conceded, that May-night is the time of the play, it still should not be looked upon as *Walpurgisnacht*, for the English maying and the German witches' sabbath are two distinct and in their form diametrically opposite traditions, which must not be confounded. Shakespeare had no conception of a Walpurgis-night. It is only since Goethe that the idea has been common property in Germany : and to credit the great poet with a conception quite foreign to his mind is a serious falsification of literary truth. To the objection, 'We translate for Germans, not for Shakespeare,' it may be answered that Germans have a right to the genuine Shakespeare, who knew nothing about Walpurgis-night ; otherwise we might have a translation of Homer in which Troy is bombarded with cannon."

Don Andrea Caravita recently completed his valuable book of reference on the codices and treasures of art in the abbey of Montecassino. With the publication of a third and final volume he carries the history of his monastery to the opening of the present century. An interesting MS. fragment describes the sack of Montecassino by the French, and the narrative, from the pen of an eye-witness, reads curiously enough at a time when the French are complaining of the plundering which the Germans are said to have carried on in France. The most valuable contributions which the book contains are, however, excerpts from accounts and papers illustrating the lives of Andrea da Salerno, Marco Pini of Sienna, Francesco and Leandro Bassano, Antonio and Francesco da San Gallo, Marliano da Nola, Solosmeo, and other artists of less note.

It has been hitherto believed that Andrea da Salerno, after studying under Raphael, retired to Naples, where he died in 1545. The Montecassino records give notices of the works which Andrea executed between 1518 and 1530 in the choir and two chapels of the monastery ; they comprise a will drawn up at Gaeta a few days before the painter's death. Andrea resided habitually at Gaeta, where he produced several pictures. He was buried there in 1530 in the church of Sant' Angelo Pallanzano.

Marco Pini is well known as a pupil of Beccafumi, who wandered from Sienna to Rome in 1549, and, passing south, founded a pseudo-Michaelangelesque school of art in Naples. The contract in which he agreed to paint the whole of the crypt-church of St. Benedict at Montecassino is dated 1557–8.

Travellers may still see in the refectory of the abbey a large picture, twenty-seven feet long by eighteen feet in height, representing the charity of St. Benedict. On a corner of the canvas are the words : "Leander Bassano fecit." This colossal piece was unknown to Ridolfi, and escaped the attention of Lanzi, though it was noticed in the chronicles of Gattola and Tosti. It was re-discovered, so to speak, in 1863, by M. de la Fage, who printed the records referring to it in his *Essais de Diphtérographie musicale*. The curious fact which the documents republished by Caravita reveals is that the canvas was ordered in 1591 of Francesco Bassano, and left unfinished at his death in 1592. But a new agreement was made with Leandro, who finished and delivered the work in 1593. But Leandro had no more right to sign his name where we find it than Giovanni Bellini would have had to sign Gentile Bellini's "Sermon of St. Mark" at the Brera.

For the first time we have a distinct account of the share which the San Galli and others had in the celebrated tomb of Piero de' Medici at Montecassino. It is well known that Piero had been appointed governor of the Cassinese estates by Louis XII., and that he successfully defended the abbey against the Spaniards. When the French star was on the wane, Piero tried to escape into the fortress of Gaeta, but he was lost in a storm at sea, and his remains after recovery were placed in a vault at Montecassino. It was not till Clement VII. received the tiara that any attempt was made to do honour to Piero's memory. Caravita's documents show that the mausoleum was planned by Antonio da San Gallo, executed by Solosmeo and other Florentines, and adorned with statues by Francesco da San Gallo. The first stone was laid in 1531, and the whole structure was finished, after many delays, in 1546, but the inscription was only carved in 1552, and the translation of Piero's remains only took place in 1559.

At no great distance from this mausoleum is the tomb of Guido Fieramosca, respecting which we ascertain that it was designed by Giovanni Marliano da Nola, who contracted for it in 1535, the carvers being Solosmeo, Giovanni Francesco di Chimento, and Lorenzo il Fancelo. C.-C.

In the *Allgemeine Zeitung* for February 15, Julian Schmidt discusses, *àpropos* of Hermann Grimm, the question whether contemporary artists ought to be criticized in their lifetime. He answers in the affirmative as regards all varieties of art and literature, and proceeds to characterize Grimm's *Essays on Modern Art* with a good deal of justice and discrimination, but the article is chiefly remarkable as an illustration of the endlessness of literary criticism when once criticism is recognised as a branch of literature. Hermann Grimm is an art-critic, and Schmidt's critique upon him would be fair matter for fresh criticism unless we decide that only original and independent contributions to art and literature should be criticized while their authors are alive, in which case only here and there an immortal critic like Lessing would live to be judged at all.

A. Gaedeke communicates to *Im Neuen Reich* (February 2) some unpublished letters from the Austrian minister in England at the time of Peter the Great's visit to this country in 1698. They confirm the report that the czar sat to Sir Godfrey Kneller for his portrait, and agree with other contemporary notices in failing to see in him much more than a barbarian with an extravagant taste for shipbuilding.

A curious discovery of buried treasures was made some days ago at Benevento by a mason who was removing the foundations of an old wall. His pickaxe struck upon a large pot, and on putting in his hand he found it full of freshly stamped gold coins. They proved to belong to the time of Manfred, and bear on one side his escutcheon, on the other the Suabian eagle.

The *Revue des Deux Mondes* (February 15) is enlivened by a *Proverbe* from George Sand ; the dialogue has the lively dramatic neatness of which the French stage possesses and retains the secret, but it is a pity that the author, like most of her countrymen, seems unable to bring this remarkable and admirable technical dexterity to bear upon any other subject than the "to be or not to be" of a criminal intrigue ; in this case the latter alternative is however preferred.

Towards the end of last year the *Anzeiger für Kunde der deutschen Vorzeit* published some extracts from a newly discovered Middle-Dutch poem on the Trojan War, which a writer in the *Allgemeine Zeitung* (February 13) proceeds to assign to Maerlant, the author of the *Spiegelhistoriael* and other works well known in the history of Dutch literature of the thirteenth century. The manuscript was found in the library of Graf v. Loë in Wissen-Weeze, and contains about 38,400 lines, though the end appears to be wanting. Its authorship is plain from a passage

which also establishes the identity of the "Jacob de Coster van Merlant," mentioned in the famous "boec van Merline," with the well-known poet Maerlant, who was therefore probably sexton of Maerlant, near Brielle. The romance of *Torec*, which has hitherto passed for an anonymous work, is, by a plausible emendation, restored to the same writer. Two other poems, one on dreams and the other on precious stones, are mentioned by name, and may perhaps be discovered hereafter, but the *History of Troy* is in any case an interesting and important work.

New Publications.

Andreucci, O. Della Biblioteca e pinacoteca dell' Arcispedale di Santa Maria Novella, delle ricordanze dei suoi benefattori: considerazioni storico-critiche. Firenze: Campolmi.

Erzählungen u. Schwänke. (Deutsche Klassiker des Mittelalters mit Wort- u. Sacherklärungen beg. von. F. Pfeiffer.) Leipzig: Brockhaus.

Essays on Cathedrals by various writers, edited by Rev. J. S. Howson. Murray.

Henkel, H. Studien zur Geschichte der Griechischen Lehre vom Staat. Leipzig: Teubner.

König Rother. (Deutsche Dichtungen d. Mittelalters mit Wort- u. Sacherklärungen beg. von K. Bartsch. Bd. 1.) Herausgeg. von H. Rückert. Leipzig: Brockhaus.

Lamartine, A. de. Twenty-five Years of My Life. Transl. by Lady Herbert. Bentley.

Meissner, J. Untersuchungen üb. Shakespeare's "Sturm." Dessau: Reissner.

Obermüller, W. Die Abstammung der Magyaren, mit einer Einleitg. üb. die kelt. Wanderungen u. die heut. europäischen Völker. Wien: Herzfeld u. Bauer.

Proverbes et Dictons agricoles de France. Strasbourg: Berger-Levrault et Cie.

Shakespeare. Macbeth. Erkl. von W. Wagner. Leipzig: Teubner.

Strube, C. Supplement zu den Studien üb. den Bilderkreis von Eleusis. Hrsg. von H. Brunn.

Walcott, M. E. C. Traditions and Customs of Cathedrals. Murray.

Theology.

The Greek New Testament, edited from Ancient Authorities, with the Latin Version of Jerome from the Codex Amiatinus. By S. P. Tregelles, LL.D. Matthew to Philemon. Bagster and Sons, 1870.

Novum Testamentum Graece. Ad antiquissimos testes denuo recensuit, apparatum criticum omni studio perfectum apposuit, etc. C. Tischendorf. Ed. octava critica major. Vols. I. II. fasc. 1. Lipsiae: Giesecke et Devrient, 1869, 1870.

A joint notice of these two editions of the New Testament is amply justified, as well by the similarity of their form and object, as by the common relation in which they stand to the labours of Lachmann. Assuming, as we may fairly do, that the careers of Tregelles and Tischendorf are well known to our readers, the first question which arises is obviously this, What are their respective principles of textual criticism? In the case of Tregelles, we are referred by himself to his *Account of the Printed Text of the Greek New Testament, &c.* (Bagster, 1859), and his *Introduction to the Textual Criticism of the New Testament* (Longmans, 1856). We regret that we have only had access to the latter of these works, but the remarks it contains on the character, &c. of manuscripts (pp. 24–389) are among the best which have been written, and confirm us in the earnest hope that the author may soon be well enough to bring out the prolegomena together with the small remaining portion of the text. A just admiration is expressed (p. 134 *sqq.*) for Lachmann, who is ably defended by Tregelles against many objections and misconceptions. At the same time the two notorious defects of Lachmann's edition are clearly brought out, viz. that the authorities cited are too few in number, and that the Greek MSS. were but imperfectly collated by Philip Buttmann. Three (*i.e.* B, C, D) out of Lachmann's four primary documents (A, B, C, witnesses for the East; D, for the West) were, as Tischendorf has shown (*Novum Testamentum Graece*, 7th edit. p. cix *sqq.*), not as yet properly edited. Both defects have been carefully avoided by Tregelles, whose authorities are at once more abundant than Lachmann's, and have been most scrupulously edited and collated by himself or by Tischendorf; in rare instances by others.

The object of Dr. Tregelles' edition is thus described by himself in the Introductory Notice:—

"To give the text of the New Testament on the authority of the ancient witnesses, MSS. and versions, with the aid of the earlier citations, so as to present as far as possible *the text best attested in the earlier centuries;* to follow *certain proofs*, when obtainable, which carry us as near as possible to *the apostolic age.*"

This too was the aim of Lachmann, but is hardly in accordance with the words of Tregelles, which occur soon afterwards: "The object of textual criticism is the ascertainment, on grounds of evidence, of *what the sacred authors actually wrote.*" For it is clear that the best attested is not necessarily the original reading, and Lachmann therefore drew a distinction between his diplomatic criticism, which is simply concerned with the best accredited text, and the function of exegesis, which has to restore the original text itself, and which he, as a mere philologist, modestly forbore to exercise. Tregelles, indeed, probably means chiefly that the actual words of the sacred authors are much more traceable in the earlier than in the later MSS., but his hesitation between the method customary among historians and practised even by Griesbach, of at once inferring the original reading, and the purely diplomatic method of Lachmann, cannot be mistaken. The difficulty of keeping criticism objective increases with the growth of the critical material, and the extension of the limits of textual evidence. Even Dr. Tregelles has not entirely succeeded in overcoming this. It is true that exegetical propriety finds no place among his criteria of a good reading, an omission doubtless dictated by the consideration that a reference to exegesis would interfere with a criticism which is essentially diplomatic. And yet his critical decisions are not always uninfluenced by internal evidences, of which no account is given in the notes below the text, and which we must therefore read "between the lines." This is clear from the examples given in the *Introduction* (p. 345 *sqq.*), where the critical evidence on the sections Matt. i. 18–25, xiv. 22–xv. 11, 1 John v. 7, is accompanied by a very explicit commentary. We are far from censuring severely this modification of theory by practice, and will only add that the critical rules stated in the preface to Part I., and at greater length in the *Introduction* (p. 343 *sqq.*), are well deserving of attention.

We now turn to the eighth edition of the *New Testament* by Tischendorf; the seventh has been already noticed elsewhere.* Very large additions have again been made to the critical apparatus, chief among which is the Cod. Sinaiticus. Without prejudice even to a Tregelles, we may venture to say that the material supplied by Tischendorf *is marked by equal exactness, and is much more copious.* Among other points of superiority is this, that Tischendorf has employed a greater number of cursives than Tregelles, who has contented himself with adducing a few important specimens, and that he has also mentioned how many of these support any particular reading. But, as we said before, this copiousness of material does but increase the difficulty of constituting the text, and this explains the charge, brought by

* See the present writer's review in *Studien u. Kritiken*, 1861, where Tischendorf's principles are compared with those of Lachmann, and his dissertation on "The Sinaitic MS. of the Bible with Reference to its Publication by Dr. Tischendorf" (*Stud. u. Krit.* 1864), where too an attempt is made to estimate the value of its text with especial reference to manuscripts A, B, C.

Tregelles (*Introduction*, p. 137 *sqq.*) against Tischendorf, of instability in his critical principles. Tregelles, too, has investigated the quality and value of his authorities more than Tischendorf has found opportunity to do, and on the basis of this investigation (*ibid.* p. 106) has undertaken, at any rate for the Gospels, to group the uncial MSS. according to their quality and affinity. The duty of also determining the quality of our critical authorities in the main from an exegetical point of view has been, to the best of his ability, fulfilled by the present writer, not only in the places referred to in the note, but in his *Commentary on the Epistle of Paul to the Galatians* (see the Excursus on Textual Criticism, p. 601 *sqq.*).

We may hope that Tischendorf may find space in his forthcoming *Prolegomena* for a more complete examination of the subject than he has yet published. Perhaps the result will be that the corruption of the text, supposed by this critic to have taken place before the middle of the second century, exists rather in the Gospels than in the Epistles, and that it has but seldom affected the meaning to any considerable extent.

The peculiarity of this eighth edition is that it professes to be based on the earliest authorities, purely internal evidence being thrown into the background.

"Quo in negotio, postquam Bentlejus, quem rursus Lachmannus sequutus est, ea ratione acquiescendum censuit, quæ tempore concilii Nicæni per ecclesiam legi solebat, felicissime providente deo evenit, ut nobis ad Irenæi certe tempora redire liceat" (Preface, p. xiii).

To this objective criticism, produced in the case of Tischendorf mainly by the discovery of the Cod. Sin. (see his *Synopsis evangelica*, 3rd edit. p. liii), we have already expressed our adhesion, though it still seems to us desirable to keep in view the other object as well, that, namely, of restoring the original text. But is the editor justified in his assertion that he can generally recover the readings *which prevailed most widely in the second century?* We think not. Supposing that we could argue from the Latin translation which arose in the second century to the Greek text employed, we should not therefore have arrived at the most prevalent form of the text, and still less so if, with Tischendorf, we regard the original text as having undergone no slight modification before the date of this Latin translation. And it has scarcely been made out by the editor that the Cod. Sin., on account of its agreement with Origen or the *Itala* in isolated passages, deserves to be treated, even in a partial degree, as a witness of the *second* century. As the case stands at present, it will often be easier to restore the original text than that of the second century. Besides, the Cod. Sin. seems to be over-estimated in various places, even according to the editor's own principles, *e.g.* when John xxi. 25 is excised contrary to the express testimony of Origen.

In conclusion we will mention a few passages in which the sense is affected by the variety of readings, and from which it will appear how much depends on the correct application of a critical method, and that even such eminent critics as those before us, starting from essentially similar principles, not unfrequently arrive at a different result. For instance, Matt. vii. 13, Treg. reads ἡ πύλη, Tisch. brackets it; vii. 14, Treg. reads τί στενὴ ἡ πύλη, Tisch. ὅτι στενὴ [ἡ πύλη]. The former seems to me to be right in both cases: τί is more probable than ὅτι, as less common in this sense, and therefore liable to be replaced by the ὅτι of the preceding verse. Matt. xxvi. 28, Treg. has τῆς καινῆς διαθήκης, Tisch. τῆς διαθήκης. We prefer the former reading in this passage, the latter in Mark xiv. 24, and explain the omission of καινῆς in ℵ B from a harmonizing tendency, while A, for the same reason, has καινῆς in Mark xiv. 24. From the point of view of objective criticism, Tischendorf might have omitted καινῆς with the two earliest MSS. Luke vi. 1, Tisch. has ἐν σαββάτῳ δευτεροπρώτῳ, Treg. omits it. No doubt it is wanting in ℵ B, but this is because the difficult chronological datum was not understood. John i. 18, Treg. μονογενὴς θεός, Tisch. ὁ μονογενὴς υἱός. The former reading is a dogmatic correction, as is shown by the patristic quotations. Explanations and alterations of the text by eminent Fathers have occasioned corrupt readings, more than many critics are inclined to allow. The works of the Fathers should therefore be examined in this as well as other aspects. Both our critics omit the addition to Matt. xxvii. 49, ἄλλος δὲ λαβὼν . . . . αἷμα (comp. John xix. 35), in spite of a remarkable weight of testimony, and this with reason, at least if we aim at the original reading. Luke xxiii. 45, Treg. καὶ ἐσκοτίσθη ὁ ἥλιος, Tisch. ἐκλιπόντος τοῦ ἡλίου. The former is certainly correct, for a true solar eclipse does not take place at the time of the full moon (see the writer's *Chronologische Synopse, &c.* p. 387), but earthquakes are accompanied by obscurations of the sun. The Fathers, particularly Eusebius in his *Chronicon*, were accustomed to connect the year of the Crucifixion with a real solar eclipse reported by Phlegon (his words are ὁ ἥλιος ἐξέλιπεν), and this was the origin of the reading. Luke xxii. 43, 44, and xxiii. 34, are rightly retained by both critics, in spite of several old MSS., especially B (and we may now add ℵ), which omit them with an evident eye to Christology. Luke ii. 1, both critics omit the article before ἀπογραφή; they have the historical fact, too, on their side. John v. 1, Treg. rightly omits the article before ἑορτή; Tisch., who omitted it in the seventh edition, now inserts it, apparently induced by ℵ. Of course "a festival" is intended, namely Purim; comp. John iv. 35, vi. 4. So, too, he now reads, John v. 2, βηθζάθα, while Treg., with whom we rather agree, has βηθέσδα. These examples may suffice to show that the purely diplomatic method of criticism does not always lead (though it does often lead) to the discovery of the true reading, even in the hands of the most skilful and learned critics. K. WIESELER.

Christian Ethics. [*Die christliche Ethik*, dargestellt von Dr. H. Martensen, Bischof von Seeland. Allgemeiner Theil.] Gotha: Besser.

IT has been justly observed that ethics will continue to be the most interesting of the sciences, as long as it deals with general principles, and theories of the world and of life, but must at once become as tedious and trivial if we pass to disputed points of detail, such as are supplied by the doctrine of duties, casuistry, &c. Even Rothe gives an indication of sharing this view, when he declares (*Theolog. Ethik*, vol. iv. p. xlvii) that the pleasure with which he has worked at the doctrine of good and of virtue is equalled by the struggle it cost him to elaborate that of the duties. Our author, on the contrary, believes that the side on which ethics is related to the concrete forms of morality is equally important with the doctrine of principles (p. 82). How far he will succeed in avoiding the rocks of obviousness and redundancy, on which so many attempts to draw out a system of rules for life's shifting relations and demands have split, will be seen from the second part of this work. The volume before us is confined to the theoretic half of the subject. The introduction consists of an enquiry into the postulates of Christian ethics, *i.e.* the ethical conception of God as the only God, and of man as the creature made in the image of God. It is on the whole a summary of the contents of the well-known *Christliche Dogmatik*, to which this system of "Christian Ethics" forms the counterpart. As for the fundamental ethical conceptions themselves, our author treats of them under the points of view developed

and definitively constituted by Schleiermacher and Rothe, those, namely, of the highest good, virtue, and law. His manner, however, is nothing less than scholastically abstruse or pedantic. The vivid form which he employs in order to unfold the primary moral ideas, standards, and ideals, comes very near that of the English "essay." In tone he preserves a happy mean between the purely scientific and the religious or devotional, and we think his book will supply a valuable mental stimulus to those who combine a habit of reflection on the riddles of life with the traditional supernaturalism of which the author is a representative. H. Holtzmann.

Intelligence.

Mr. S. R. Driver, Fellow of New College, Oxford, has edited, with a translation and notes, a commentary on Jeremiah and Ezekiel by R. Mosheh ben Shesheth. The author was a learned Spanish Jew, who emigrated to Babylonia towards 1200. He wrote scholia on several Biblical books, of which only the present is known to exist in a MS. of the Bodleian Library. His system is rational, not Agadic, and he is now and then really felicitous in his explanations. It was not an easy task to edit a unique MS., which is besides somewhat defective, and not very distinctly written. As far as we have seen, both text and translation are fairly correct; and the numerous notes of the editor testify to his knowledge of Rabbinic literature, as well as of modern grammarians. But why does he try the patience of his English readers by writing Raschi instead of Rashi, Chajjug instead of Ḥayyug? On the title-page we even find Ezeqiel; why not be consistent, and write either Y'ḥezqel or the naturalised Ezekiel?

Students of the text of the Old Testament will welcome the belated appearance of the nominally first fasciculus of Mr. Field's *Hexapla* (Clarendon Press, Oxford), containing fragments of the versions of the Pentateuch. The execution of the work shows no signs of falling off. Professor Dillmann has brought out the second part of the second volume of the Æthiopic Old Testament, containing the third and fourth books of Kings. It is based on a collation of three families of MSS.: 1. That representing the earliest form of the text; 2. That revised in accordance with another recension of the LXX. text; and 3. That corrected by the light of the Hebrew. The text is printed from the first of these three, but the variants, often considerable, of the other two are given in the notes.

Prof. Riehm has an important article in the *Studien u. Kritiken*, No. 2, on the so-called primary record in the Pentateuch, with reference to Graf's remarkable work on the historical books of the Old Testament.

Two popular essays on the narratives of the Deluge deserve attention from the reputation of their authors, one by Dr. Nöldeke in *Im Neuen Reich* (the new German *Macmillan*), the other by Dr. Diestel, in a series of lectures published by Holtzendorff and Virchow. A brilliant paper on the Bible and archæology, by M. Jules Soury, in the *Revue des deux Mondes*, Feb. 1, seeks to co-ordinate the Assyrian discoveries (?) of M. Lenormant, who "glories in the name of Catholic," with the most advanced theories of Biblical criticism.

Dr. Davis' new *Student's Hebrew Lexicon* (Asher and Co.) aims at supplying a want that has long been felt by beginners. It is at least portable and cheap, but the attempt at comparative philology is of very questionable value. We decidedly prefer Bagster's *Gesenius*.

Dr. Hase, of Jena, most amiable and cultivated of "Rationalists," has published his recollections of his youth, chiefly from old diaries. *Ideale und Irrthümer* appeals not only, nor indeed chiefly, to theologians, but throws a flood of light on the political and intellectual currents among German students from 1818 to 1830.

Dr. Grätz, of Breslau, has gone to Jerusalem to collect further materials for vols. i. and ii. of his *History of the Jews*.

Prof. Oehler, of Tübingen, a moderate theologian of the semi-orthodox school, died on Feb. 18.

Contents of the Journals and Notes.

Jahrbücher für deutsche Theologie, vol. xvii. No. 1.—Huther on the signification of ζωή and πιστεύειν in the Johannean writings.—Schirm on hints for pastoral theology in the pastoral epistles.—Stern on John Milton and Calvinism. [Milton's theological liberality.]—Zwingli, a lecture by A. Ritschl.—Reviews of books: Ewald's *Biblical Theology*, by Dillmann. [Eulogistic.]—Kleinert's *Deuteronomy*, by Stähelin. [Approximates to the very singular position of the author.]—Merx' *Job*, by H. Schutz. [Very thorough review.]—Laurent's *Clemens Romanus*, by Jahn. [Unfavourable.]—Lipsius' recent works, by Weizsäcker; &c.

Monatsschrift für Gesch. u. Wiss. des Judenthums, Jan.—On the syllable *hal* in Deut. xxxii. 6, by Dr. Grätz. [Two motives for its separation: 1. To emphasize the sentence; 2. To avoid the danger of cancelling a whole column, in case a syllable prefixed to the second name were miswritten.]——Feb.—The sons of Tobias, the Hellenists, and the Proverb-writer Sirach; and the prophet Jeremiah in Ramah, by the same. [1. To account for the apostatizing tendency among the Jews of that period; 2. To show that Jer. xxx. xxxi. xv. 10–19, were written after the fall of Jerusalem among the captives at Ramah.]

New Publications.

Kalisch, M. M. Leviticus. Part II. (completion), with historical and critical commentaries, a new translation, and five treatises. Longmans.

Keim, Th. Geschichte Jesu von Nazara. III. Band (Schluss). 2. Der jerusalem. Messiastod. Zürich: Orell, Füssli und Co.

Luynes, Duc de. Voyage d'Exploration à la Mer morte, à Pétra et sur la rive gauche du Jourdain. (En livraisons.) Paris: Bossange.

Philosophy and Physical Science.

A NEW SYSTEM OF PHILOSOPHY.

Philosophy of the Unconscious. [*Philosophie des Unbewussten.* Von Eduard v. Hartmann. Dritte beträchtlich vermehrte Auflage.] Berlin: Carl Duncker, 1871.

The rise of a new philosophical system, which its adherents hail as embodying the most important metaphysical discovery since Hegel and Schopenhauer, cannot be viewed with indifference, and curiosity changes into interest when we find on what principles it claims to rest. Dr. Hartmann modestly confesses that the mysteries of the Dialectic Philosophy are as inaccessible to him as to the ordinary world, and he declares in favour of a simple inductive method, by which he hopes to reconcile or at least to lay the foundations of a system which shall reconcile and embrace the last conclusions of physical science and speculative philosophy. He does not disguise from himself the difficulty of the task, and it would certainly be impossible to exaggerate its importance. In examining the value of his present contribution towards its accomplishment, we must remember that something is gained if only the conditions of the problem have been clearly stated, and the best means for its solution correctly pointed out. For this reason we are anxious to do full justice to the "Philosophy of the Unconscious," and though the author is somewhat unmethodical in the exposition of his views, this can perhaps be better done by following his own arrangement than by recasting his arguments in a logical order which he might repudiate.

The nature and existence of "the Unconscious" have to be explained and demonstrated in the course of the work, but the meaning of the name can be described at once; it does not stand for *unconsciousness*, but for "the unknown positive subject of whom unconsciousness can be predicated," for *the unconscious Will and unconscious Idea of the Unknown.* The name is new, but the thing, as the author explains, is only his equivalent for the common first principle of every considerable philosophy (Spinoza's Substance, Schelling's Subject-Object, Fichte's Ich, Plato's and Hegel's Idea, Schopenhauer's Will, &c.), now for the first time approached by the light of scientific experience instead of *à priori* reasoning. To relieve philosophy from the reproach of remoteness and unpracticality would be much, and considering how slowly metaphysical science advances, it would perhaps be more to have suggested a name which designates the sum of our actual ignorance rather than a climax of fancied knowledge. There are some scientific discoveries which are a mere question of time and patience, there are others which may reasonably be expected to follow from the first, and there are also questions which we are at present quite unable to conceive as soluble by the methods of

mathematical or physical science. If these questions have anything more than their inscrutability in common, x might be a better name than the Unconscious for the unknown quantity; but it is certainly well that there should be some general name under which we can conceive all that we do not know in contradistinction to all that we do or easily might know. Unfortunately, Dr. Hartmann aims at more than this simple clearance of the intellectual ground, and the whole superstructure of his argument rests on no more solid basis than the evidences of design in nature! It is the old story of the watch and the watchmaker with fresh illustrations taken from the more curious facts of natural history, and we might think we were reading Paley but that the name of the artificer is changed, for the Unconscious is endowed with all the old theological properties, Eternity, Omniscience, Omnipotence, and especially Incomprehensibility, which serves here as elsewhere to explain why the others are not of more use to their possessor.

The author confesses that he does not hope to convince any one who is not already persuaded that nature works with a purpose (*Endzweck*), and he is perhaps right not to think highly of the efficiency of reasoning if he himself, after studying Spinoza, Hume, and physical science, still finds it possible to ascribe anthropomorphic motives to nature and to consider cause as a metaphysical idea. However, in support or confirmation of the opinion where it exists, he has one curious argument. Assuming that everything must have an efficient cause, that cause must lie either in the material circumstances attendant on the production of the effect, or in other material circumstances, or it must be of a spiritual nature. The second alternative is inadmissible because all the material circumstances which can in any way influence the result are supposed to be reckoned in the first, so that it may be said that there is an equal antecedent probability in favour of the material or the spiritual character of the desired cause. Thus far there is nothing amiss, except the application of the law of chances to ascertained physical facts; but the author proceeds to argue as if no physical facts *were* ascertained, that the probability of the cause being spiritual increases with every material circumstance that is set aside as not cause. In illustration he enquires why hens sit, and children see with their eyes, and enumerates the conditions required for both phenomena, with the omission of the one thing needful in the eyes of a naturalist—their descent from animals with eyes and a habit of hatching eggs. Of course the laws of inheritance can only give the reason, not the cause, of the occurrence, and science does not trouble itself to provide the hen with an adequate motive for her sudden adoption of a sedentary life, such as Dr. Hartmann finds in the intention of the Unconscious that the species shall be preserved. But in the second case there is not even the appearance of voluntary action, and all the mathematical formulæ brought together to determine the degree of improbability (0·99994) that the fourteen physical conditions of sight which he enumerates should come together fortuitously, are little short of absurd in face of the simple fact that parents with two eyes and the necessary optical apparatus do, under normal conditions, invariably give birth to children similarly endowed.

The body of the work—for thus far we have not got beyond the introduction—is divided into three sections:—A. The corporeal manifestations of the Unconscious; B. The Unconscious in the mind; C. The metaphysics of the Unconscious. In these, two points have to be established: first, that the words unconscious thought and unconscious will do not involve a contradiction in terms; and, secondly, that we see traces in nature of thought and will which we cannot refer to any known conscious subject. It is one of the difficulties of the attempt to reconcile science and speculation that we are obliged to use abstract terms before the nature of the things they denote has been ascertained. In the present case we are called upon to recognise the assumed effects of Will and Idea in the first book, while the possibility of their existence is considered in the second, and their reality not till the third book. A better arrangement might have been possible, though, we admit, not easy. Following the author, we begin with "the unconscious will in the independent spinal and nervous systems," and the "unconscious idea which presides at the execution of involuntary (*i. e.* reflex or mechanical) movements." Apart from the teleological tendencies already noticed, it is a matter of indifference (or terminology) whether conscious human will is explained away into the action of physical laws, or whether the action of physical laws is uniformly described as voluntary, but less than nothing is gained if we are simply invited to credit nature with will in its popular acceptation of free preference and choice. In some passages the author seems almost guilty of this inconsistency, but it is not a necessary part of his system. Will in the abstract does not exist, and any particular act of Will can only will the transition from one state or condition to another. The tenour or content (*Inhalt*) of the Will is formed by the Idea of two states, one of which is viewed as actual and the other as desirable, and the will itself is the longing or striving after the realisation of the second idea, or, to speak more precisely, Will is defined as the immediate cause of whatever change takes place.

Before tracing the distinction between conscious will and idea and the same faculties as ascribed to the Unconscious, we have to ascertain what the author understands by consciousness. In the first part the answer is that of simple materialism: the threshold of consciousness is passed whenever the clearness and strength of the brain-vibrations reaches a certain point. It is in the account of what takes place short of that point, and in the metaphysical explanation of the dawn of consciousness, that, for better or worse, we come to something original. Consciousness (Bk. C. 3) is also "the stupefaction of the will at the sensible existence of an idea not willed by itself." How the will, which, according to a very able argument, is shown a few pages farther on to be naturally and necessarily unconscious, can be supposed capable of feeling (*i.e.* being conscious of) astonishment, is not explained. And the companion demonstration that consciousness cannot be an inherent element of the idea, but must be something accidental to it produced from without, has the effect, whether intentionally or not, of neutralising all the preceding materialist admissions. In effect Dr. Hartmann makes conscious thought material, and unconscious thought the reverse, a proceeding plainly at variance with his own principles of the economy to be observed in explaining natural phenomena. The passages which he quotes from idealist philosophers, who knew even less than we do of the physiology of the brain, to show that they recognised the existence of thought which had not quite passed the threshold of consciousness, refer in their original contexts rather to thought which as thought is not yet quite perfect and complete. Spinoza's "confused ideas" should have been coupled with Kant's "dunkle Vorstellungen." We should have expected to find a writer, who goes so far in his devotion to positive science, prepared either to deny the existence of unconscious ideas or to explain it as a state of the brain to which the finishing touch, which brings consciousness, was still accidentally wanting. Materialism offers the simplest solution of such problems as memory, association, &c., for material modifications of the brain may be of many kinds or degrees without quite reaching that kind or degree which corresponds to completely developed

thought or consciousness. And it is not easy to see why, after braving the dangers and difficulties of an unpopular system, he rejects its help when most readily available. If consciousness presupposes thought, and thought presupposes certain physical conditions, the cross requisition of a contradiction to will is superfluous, though its presence may be recorded as a fact in psychology. But psychology is not the author's strongest point, at least there is much that might be objected in detail to his account of the next phase of the unconscious idea, in which it seems simply to be a name for as much of our ordinary mental processes as has become mechanical and involuntary from habit, or is too swift and simple for analysis.

After the proof that unconscious thought is possible follows the enquiry into the thought of the Unconscious, and all Dr. Hartmann's learning and ingenuity are called upon to bridge the yawning gulf between the two. He explains by the influence of the Unconscious in language the strangely perfect grammatical arrangements of barbarous languages, which have before now been claimed by Christian apologists as evidences of the miraculous origin of speech, and are scarcely more strange than the way in which figures lead of themselves from one combination to another, or the way (only proving that human thought obeys its laws) in which men of genius divine remote discoveries, and one intelligent system of philosophy is always on the point of blending with another, and that of leading to a third. But his chief reliance is of course upon the argument from design, in support of which he multiplies stories of instinct and instances of adaptation, from all of which he draws the same inference which their number does not strengthen; namely, that the course of the material universe is governed and actuated by mind, to wit, the mind of the Unconscious, an entity of a somewhat theological character, indefinitely more so at least than Spinoza's God, as the author in his third edition expressly admits. Here it is that Dr. Hartmann disappoints expectation: the Unconscious, or, as we should prefer to say, the Unknown, must be looked upon provisionally as the agent in innumerable natural processes; but it is impossible that a general name, improbable that a supernatural being, should be actuated by human feelings such as want and wish. The actual tendencies of nature can and must be recorded and summed up, but we can account for very few, and the attempt to explain and motive all has never yet led to anything but Fetishes. But even supposing, as in the absence of proof to the contrary is allowable, that the Unconscious is the one and indivisible mind of the universe, it does not, on the whole, will the preservation of every species, but (since it is omnipotent) what takes place, *i.e.* the struggle for existence, and the alternating inferiority of its own most ingenious contrivances for offensive and defensive warfare.

The distinction between the will of the brain and that of the nervous or muscular system is no doubt valid. The brain possesses very little indirect and no direct power of influencing the course of such vital functions as the circulation, respiration, digestion, &c., which are fairly paralleled to the instinctive life of less developed animals, and like that might perhaps be ascribed to the unconscious will of the organism, but have nothing to connect them with the intelligent will of the Unconscious. The author supposes "intelligence in the central organs," but the intelligence is probably of the same transcendental character as the will and the ideas: for, whatever else is doubtful, science certainly tends to establish an indissoluble actual connection between rational and conscious mind and brain-fibre of a particular kind. It is for physiologists to decide whether the spinal marrow and ganglions do what they do in so far as they approximate in composition to the organ of thought, but the intelligence of which Dr. Hartmann speaks is independent of these conditions. Instead of resolving the dualism of mind and matter into a higher or simpler unity, the third hypothetical element which he introduces merely parodies the known forms of the other two, and while its very existence does not admit of scientific proof, the imaginary fertility of the principle discourages really hopeful trains of thought. Thus, in the third Book the author appears for a moment on the point of arguing to the real existence of the world from the independent material existence of the human body as evidenced by the material conditions of thought, some of which fall within and others without the direct sphere of consciousness. The hint is not followed up, though we can scarcely imagine a discovery more likely to lead to the reconciliation of science and philosophy than a rational inference from physical facts in favour of a doctrine which no deductions *à priori* have yet succeeded in securing against the attacks of scepticism.

It would take too long to examine the "Metaphysics of the Unconscious" as carefully and minutely as they deserve, for even when we decline to follow, or perhaps fail to trace, the thread of the main argument, the incidental matter is always interesting and suggestive, and the more abundant that the author's method is not severely consequent. Chap. V., "Matter as Will and Idea," is perhaps the most important, though the physical theories it contains are rather in advance of our present knowledge, and, a still more serious objection, they do little to support the metaphysical assumptions previously made. In a perfectly consequent scheme unconscious mind would correspond to rudimentary atomic matter; the Unconscious would begin where the conscious ends, and the continuity of nature, already defended in a chapter on Consciousness in the Vegetable Kingdom, might have been firmly established. The existence and nature of the Unconscious, however, having been already taken for granted, it only remains to reduce the elements of consciousness to their simplest form. Matter is, on the one hand, "a system of atomic forces in a state of equilibrium," on the other, "a combination of acts of will emanating from the Unconscious." Of course, the idea of force ends by swallowing up that of the material upon which it acts; but we must ask what is a *Kraftpunkt* without the idea of extension, and therefore of body; and in this atmosphere of rarefied speculation the paradoxical redundancy of the Unconscious to cause what is already accounted for, or to account for what does not take place, is more apparent than ever. The conception of individual existences is also rendered unnecessarily difficult by the attempt to deduce their singularity from the Unity and Totality of the Unconscious. Individuality of character is surely either a series of facts or a generalisation based on them, and in real existence it is similarly either physical or rational; the germ-cell and the conscious mind are one and many, according to the definition preferred.

We have not as yet noticed the extent of Hartmann's obligations to Schopenhauer, which are about equivalent to those of Schopenhauer to Kant, but rather less freely and gratefully acknowledged. In the chapter on "The Unreason of Willing and the Misery of Being," Schopenhauer's influence is supreme, for pessimism is not the conclusion to which a systematic admiration of the works of nature would seem to point. Optimism of an unusually sweeping character would have been more natural, and indeed the supposition of unconscious happiness seems almost necessary to stimulate the unconscious will to give effect to the unconscious idea. Instead of this we find one more paradox. The Unconscious is All-wise and All-powerful, and the world is

the best possible world; but that does not interfere with its being heartily bad, and in fact a great deal worse than nothing. *Why* it could not have been better is not exactly explained, though the author is no doubt right in supposing that it would if it could. His remedy for its evil estate only differs from that of Schopenhauer in being more radical. Annihilation is the goal, but the annihilation of the individual is not enough.

> "Du kannst im Grossen nichts vernichten
> Und fängst es nun im Kleinen an"

is the reproach he addresses to his master. The release of one man is followed (such is the imbecility of will) by the birth of another, and even if the whole human race were to die out by common consent, nothing would be gained, for "the poor world would still continue and the Unconscious would have to take the first opportunity of creating a new man or other similar type." "The whole creation groaneth and travaileth with us," and the problem is to enable the rational will for self-destruction to outweigh the blind, *alogical*, absolutely stupid creative will. Consciousness is the first step towards the attainment of the desired result, but the later ones are involved in mystical obscurity, only for our encouragement it is pointed out that the world will probably have an end, because it has an *Endzweck* (aim) which would be absurd on its part if the aim were not attainable, while its attainment of course marks the conclusion of the world-process thereto directed. Here however an awful prospect opens before us. Even when the universe has committed suicide by the exercise of moral forces as yet undreamt of, "the possibility still remains that the potentiality of the will may once again decide itself in favour of willing," and a new universe and after that another and an endless series beyond may come in the future to know "the misery of being." It is true that the author calculates the probabilities after his favourite fashion, and settles that the chances are against existence, but the apprehensions he excites are too lively to be allayed by a sum. Schopenhauer's Nirwana is surely better than this still more Indian vision of infinite worlds. The blind will which has once produced the calamitous phenomena of existence may do so again, for it is as incapable of experience or memory as of reflection, while no being capable of reflection could have voluntarily created the mass of evil actually extant.

This last rather circular argument has not prevented the obvious enquiry as to the difference between Dr. Hartmann's "Unconscious" and the God of the vulgar. In the rapidly succeeding second and third editions of his work he has attempted to answer the question in a manner which seems, upon the whole, intended to qualify the uncompromising irreligion of his central standpoint. He treats Pantheism as the inevitable outcome of philosophical theism, and admits that the Unconscious is simply the Pantheist's God without the attribute of consciousness, which he thinks ought not to be ascribed to nature on the mere ground of analogy, though he was content to attribute intelligence for no better reason. He concludes that there is no valid distinction between philosophical theism rightly understood and the philosophy of the Unconscious, but the motto on his title-page,

> "Speculative Resultate nach inductiv-naturwissenschaftlicher Methode,"

should warn him not to carry his concessions too far. Philosophical theism, however "rightly understood," is not a doctrine that can easily be proved by the inductive methods of natural science. The other additions, amounting in all to something like a seventh part of the original work, serve rather to complete and amplify the superstructure than to strengthen the foundations of the system, or to modify its general character.

To sum up the results of this new philosophy in a few words: The Unconscious is a metaphysical divinity who reigns but does not govern; Will is an irrational fate whose decisions are not final, and Consciousness is the creature of one and pupil of the other of these two inaccessible forces which it is to reconcile in the common destruction of itself and them. Untenable as a system, the "Philosophy of the Unconscious" is certainly the work of an able man, but the author is heedless as well as daring, and he follows the uncertain course of his ideas without pausing often enough to compare the whence and the whither.

H. LAWRENNY.

Intelligence.

An attempt is being made to raise a testimonial—"Ehrendank"—to Ludwig Feuerbach. The committee who have recently published an appeal on his behalf include (among other well-known German residents in England) Professor Goldstücker, Dr. Max Schlesinger, and Feuerbach's former fellow-worker in the famous *Hallische Jahrbücher*, Arnold Ruge. The intrinsic value and historical importance of Feuerbach's work none can doubt who has even a superficial acquaintance with the troubled period of German thought from Hegel's death to the revolution of 1848: a period dominated by the effort to unriddle the ambiguous utterances which—in all departments of thought, but especially in theology—the oracle of Berlin had left as the final outcome of philosophical method. Among the knot of younger thinkers who first developed in a negative direction and finally broke loose from the master's system, Feuerbach is the most impressive, with the doubtful exception of Strauss. His work has not the weight derived from concentration and coherence, nor his mind the clear grasp and steely acumen that belong to Strauss, but in impetuous comprehensiveness of speculation, the passionate earnestness of utterance, even the very incoherency and inconsistency with which he pursues truth in leaps and springs down the bewildering precipice of negation, he seems the more representative man. As such work as his inevitably excludes the worker from the ordinary material rewards of intellectual toil, such a recognition of its value as the committee propose seems very appropriate, especially when, as the appeal informs us, the philosopher, at the age of 68, is bearing the double burden of disease and severe pecuniary losses. The treasurer's address is, Herrn Gustav Sachs, 39, Mincing Lane, E.C.

Scientific Notes.

Anthropology.

Primitive Urn.—Dr. Marschall, of Marienburg, describes (*Zeitschrift für Ethnologie*, Berlin, 1871, part vi. 120) an urn found in an ancient tomb at Liebenthal near Elbing, on one of the mouths of the Vistula. The remarkable feature of it is that, while the other clay urns found in the district are invariably plain, this one has a cover rudely modelled in the form of a human head, resembling the Canopic urns of the Egyptians, and, still more, certain very early examples of Etruscan pottery. Dr. Marschall points out that the place where this urn was found is not more than six German miles distant from the ancient Truso (on Lake Drusis), the centre of the amber trade in early times, and imagines Etruscan traders to have conveyed or sent thither, among other wares to be exchanged for amber, urns of this description. But the Liebenthal specimen is more rude than the rudest Etruscan ware: whence it is conjectured to be the work of a native potter copying perhaps a pretty rude Etruscan model, a conjecture which seems to be well founded considering the amount of Etruscan work in metal and other materials already found, not only in the district in question and along the shores of the Baltic, but also in most other parts of Europe. The dates he assigns as the limits within which it must have been made are B.C. 1000 and B.C. 300, corresponding to the duration of the Etruscan nationality. The word Trusi may or may not be related directly to Trusci and Etrusci.

Stone Implements found in Greece.—Mr. George Finlay's collection of implements of the stone age found in Greece consists now of about 300 pieces, considerable additions, both in numbers and importance, having been made during the last year. Dr. Hirschfeld (*Zeitschrift für Ethnologie*, Berlin, 1871, part v. 106) describes them as mostly axes, chisels, and hammers, but all excepting two without any trace of handles. Two are of precious stone and small, one being cornelian, the other amethyst, but the material generally is serpentine, diorite, nephrite, granite, porphyry, or hæmatite. It is strange that of all places in ancient Hellas the first where implements of the stone age were found should be the neighbourhood of Orchomenos, the seat of the

Minyæ, whom the Greeks used to look back to as the prehistoric founders of their civilisation. As yet these implements have mostly been found in Eubœa, Bœotia, Attica; in the Peloponnesus at Gythium, Sikyon, Corinth, and Epidauros; in Macedonia, at Athos, and in Thessaly. Mr. Finlay is an English resident at Athens, and well known as the author of the *History of the Byzantine Empire.*

In the *Journal of the Anthropological Institute of New York*, vol. i. No. 1, 56, J. W. Ward describes some remarkable sculptured rocks near the town of Barnesville, Belmont County, State of Ohio. They are the outcrop of the coarse carboniferous grit of the Muskingum coal-beds, and lie, slightly tilted, a foot or two above the soil. They bear, as the drawings accompanying the paper show, chiselled intaglios of the foot-prints of the buffalo, deer, wolf, or possibly the dog, the bear, land-birds, one of which is undoubtedly the turkey, water birds, and prominently man, both juvenile and adult; presenting in each case the exact appearance of the natural tread in plastic clay of the several animals represented. In the case of the representations of the birds' feet, the details of the general plant of the foot, the spread of the toes, the joints, the phalangial cushions, and the whole impressions are so perfect that the author almost accepted the suggestion that they are real bird-tracks. Engraved figures of the foot-tracks of animals are frequently met with throughout the States, rarely, however, in association with those of man, and they are generally mere scratches in outline. On each of the Belmont slabs is a well-drawn figure of a serpent in motion.

Geology.

The Nullipores in Limestone.—Limestones of many formations, but especially of the triassic and tertiary, are composed of small organic bodies, which have hitherto generally gone by the collective name of "Nullipores." C. W. Gümbel has collected Nullipores of every variety, from all formations, and subjected them to the most critical examination. In a lengthy paper on the subject (*Abh. der bairischen Akademie, II. Classe*, Bd. xi. Abhandlung 1) he divides the so-called Nullipores into two great groups, the one belonging to the Dactylopores and the other to Lithothamnium; the former occur principally in triassic rocks, the latter in tertiary limestones. There are likewise a number of subordinate forms, as Ceriopora, Pustulopora, &c. As yet Gümbel has only described the second group, the Lithothamniæ. It is remarkable that the recent representatives of this group contain only two per cent. of organic matter, the remainder being inorganic, and consisting chiefly of carbonates which were most probably produced in the organism of the plant from the sulphates of lime and magnesia of the sea-water. This powerful collector and consumer of carbonates of lime caused during the tertiary epoch the enormous deposits of "Nullipora" limestones of the Vienna basin, of Northern Italy, and the pisolitic limestone of Paris. A point of great interest is the enormous percentage of magnesia in certain recent Lithothamniæ, reaching in some cases 17 per cent. And it is a question whether the agent of the direct formation of dolomite and dolomitic limestone may not perhaps be traced to this vast collector of mineral matter.

Infra-Lias in Yorkshire.—The Infra-Lias, *i. e.* the zone of *Ammonites planorbis* and *A. angulatus*, has hitherto been only found at Redcar. In a paper read at the meeting of the Geological Society of London, January 24, the Rev. J. F. Blake described its occurrence in section at Cliff, near Market Weighton, where it and lower beds are well exposed, and yield an abundant suite of fossils. He considers, however, that these beds do not belong to the typical Yorkshire area, but are the thin end of the series which stretches across England. He supposes there was a barrier in Carboniferous times, separating the coalfields of Yorkshire and Durham, breaking the continuity of the Permian beds, and, curving round the secondary rocks to the north of it, formed the real Yorkshire basin, while the beds at Cliff were immediately to the south of it.

The Upper Greensand of the Neighbourhood of Cambridge.—At a meeting of the Geologists' Association, held on February 2, the Rev. J. G. Bonney, of Cambridge, read a paper on the geology of the Cam valley, and described the position of this seam, which is barely a foot in thickness, and rests on the eroded surface of the Gault. It is full of green grains and dark nodules, rich in phosphate of lime, the matrix being a fine chalky marl, full of Foraminifera and minute fragments of organisms, with a considerable mixture of mud, insoluble in hydrochloric acid. The composition of the green grains, commonly called glauconite, was shown to differ considerably from that of the typical mineral bearing the name. He failed to convince himself that any of the granules are casts of Foraminifera. The fossil remains of the deposit are remarkable, more especially for the number and size of the Pterodactyles and Turtles. Mr. Bonney believes this deposit to have been formed during the Upper Greensand epoch, but to contain many fossils that have been derived from the Upper Gault by slow denudation.

The Occurrence of Brackish Forms in Marine Deposits.—Dr. Lorenz was the first to notice that in places where organic masses are in process of decomposition a true brackish fauna springs up. Th. Fuchs (*Verhandl. geol. Reichsanst.* 1872, No. 2, 1) has had an opportunity of observing the same phenomenon in the Bay of Messina, where large quantities of refuse are thrown into the sea at a point where a brackish fauna has arisen, strangely contrasting with the neighbouring marine forms. He found amongst them large numbers of *Cerithium mediterraneum* (Deh.), with *Buccinum neriteum*, *B. corniculum*, *Columbella rustica*, &c., all forms that are common in the fauna of the Sarmatian etage. This observation explains the sudden appearance of brackish shells with marine ones in the same deposit, and accounts for the fact that, with very few exceptions, all coal-beds contain representatives of a brackish fauna.

Scarcity of Organic Life in the Alpine Flysch.—Dr. Carpenter and Mr. T. G. Jeffreys, it is well known, made the startling discovery that the great depths of the Mediterranean are entirely destitute of organic life, and they hinted in their report at the possible absence of all traces of life in the great sandstone zone of the Flysch, assigning to it a deep-sea origin. Th. Fuchs (*Verh. geol. Reichsanst.* 1872, No. 2, 2) controverts this view, and shows that the Alpine Flysch possesses an abundant, though monotonous, fauna of Annelida, while Fucoides are so plentiful that the zone has received the name of Fucoid sandstone. These remains clearly indicate a shallow-sea origin for the Flysch.

Alpine Formations in Eastern Transylvania.—The labours of the Kön. Ungar. geol. Anstalt (the Hungarian geological survey) during the last year demonstrated beyond doubt that the mountain-ranges dividing Transylvania from Moldavia are an eastern continuation of the Alps, or rather of the Bakonyer Wald, which is the eastern extension of the Alps. Between Transylvania and the Alps a tertiary sea covered the enormous tract of country now forming the plains of Hungary. Among strata yielding great numbers of Alpine fossils may be mentioned the Werfener shales, Guttenstein limestone (Trias), the Grestener and Hierlatz strata (Lias), and Lower and Upper Nevcomian. (*Verh. geol. Reichsanst.* 1872, No. 2, 27.)

The Geology in China.—In a letter on the "Regions of Nanking and Chinkiang," by Baron von Richthofen, dated August 31, 1871, this indefatigable traveller and geologist gives a short sketch of the result of his geological investigations in China. He has distinguished the following groups:—1. *The Peking system*, which covers the largest space in Eastern Asia, and most probably corresponds with the Silurian formation of Europe and North America. Eruption of granite and great disturbances in connection therewith towards the end of this period are to be traced. 2. *The Nanking system*, representing our Devonian formation, consisting principally of quartz sandstones, with coal-beds, lead and iron ores. 3. *The Kitao limestone and coal formation*, which resembles the Carboniferous of Europe, and is divisible into two groups. 4. *The Tatung* strata consist of stratified conglomerates of unknown age, and seem to have been deposited as deltas of rivers. Over these again are loess and alluvium.

The Upheaval of the Swedish Coast.—Not far from Morup, on the Hålland shore, is a large block, ten feet high and fifteen feet broad, which served as a beacon as far back as the eleventh century. In September 1816 this stone was, according to the measurements of Bexell, four feet above high-water mark, and it still bears an inscription to that effect. It is stated in *Ausland*, 1872, No. 8, 191, that this block of stone was last summer 120 feet from the shore, indicating a comparatively recent and rapid upheaval along this coast. In no historical records of this stone it is stated to have been actually in the water, but invariably at the water, from which it appears that the upheaval commenced with the present century, and is now rapidly progressing.

Physiology.

Mechanism of Thought.—An important paper was read at the last meeting of the Medico-Chirurgical Society on this subject, by Dr. Broadbent. His theory was based partly on the results of his own dissections, partly on remarkable cases of loss of speech and paralysis that either came under his own notice or have been recorded by others. It may be broadly stated as follows. The impressions derived from the several senses are conducted by fibres radiating from the *crus cerebri* and central ganglia to the convolutions of the longitudinal and Sylvian margins of the hemispheres, the intervening convolutions receiving no radiating or callosal fibres. In the former the impressions are associated together into ideas, whilst they become the subjects of thought in the latter. Now, when it is desired to express these trains of ideas in speech, impulses are transmitted along those medullary fibres of the brain that extend from the supreme centres to the third left frontal convolution. In this the ideas are formulated into words, as representing intellectual symbols, the centre selecting, as it were, the sounds appropriate to the expression of the idea. To produce the audible expression of these sounds, that centre again in its turn propagates impulses to the *corpus striatum*, the great co-ordinating motor centre at the base of the brain. In order to speak, a great variety of muscular movements required then have to be co-ordinated; those,

in short, governing the movements of the chest, the larynx, the tongue, and the lips. The co-ordination of these muscles is effected by the *corpus striatum*, which acts upon the requisite nerve nuclei in the *medulla oblongata*, and thus speech is effected. Lesions at different points of this chain of ganglia and nerves are of course accompanied by different symptoms, some of which are of a most remarkable character. The sequence of events on this theory then is: the formation of ideas in the marginal convolutions at the summit of the sensory tract; the employment of these in trains of thought in the convolutions withdrawn from immediate relation with the outer world; the propagation of excitations to the third left frontal convolution, leading to the selection of certain sound groups; the co-ordination in the *corpus striatum* of the muscular movements required to produce those sounds; and, finally, the transmission of impulses from the several nuclei of the *medulla oblongata* to each individual muscle required to be brought into play.

Position of the Centre of Gravity in Insects.—F. Plateau contributes a paper on this subject to *Nature* (Feb. 15, 1872), in which he shows that the centre of gravity in an insect is situated in the vertical and median plane which passes along the longitudinal axis of the body. It occupies a position almost identical in Insects of the same sex and species when in the same attitude. The exterior form of the body, however, rarely allows its exact position being determined without experiment. The centre of gravity varies in position in the two sexes; and during metamorphosis the relative centre approaches the head, whilst the absolute centre recedes from it. While standing, the centre of gravity is placed at the base of the abdomen, or in the posterior portion of the thorax, and usually in the centre of the length of the body. Inwalking it undergoes constant displacement around a mean point too small to be measured. In aquatic insects the centre of gravity is nearer the lower than the upper surface of the body. F. Plateau also points out what are the displacements of the centre of gravity in flying and swimming.

The Influence of Violet Light on the Growth of Animals and Plants.—General Pleasonton, of Philadelphia, has been engaged on some very interesting experiments on the influence of light transmitted through violet glass in developing animal and vegetable life. Cuttings of vines of some twenty varieties of grapes were planted in a vinery in the roof of which every eighth row of glass was violet-coloured. Very soon the vines placed under the violet glass began to attract attention by their rapid growth, attaining in the course of five months a growth of 45 feet in length, and an inch in diameter at the distance of one foot above the ground. Besides the formation of new wood, and the display of the most luxuriant foliage, there was a wonderful number of bunches of grapes, which soon assumed the most remarkable proportions, the bunches being of extraordinary magnitude, and the grapes of unusual size and development. The vines have continued, year by year, to produce remarkably large crops, without any apparent abatement of vigour. Similar experiments were tried on young pigs and calves, and though the results were not quite so striking, yet the animals exposed to violet light grew decidedly faster and showed greater vigour than those exposed to ordinary white light.

The Minute Anatomy of Serous Membranes in Health and Disease.—A provisional communication on this subject appears in the *Centralblatt für die medizinische Wissenschaft* for January 1872, from the pens of Dr. Klein and Dr. Burdon Sanderson. Their researches embrace experiments and careful microscopic observations made on no less than 250 animals, including rabbits and guinea-pigs, many frogs, several cats and dogs, some rats, and a monkey. They commence by describing the lymphatics of the central tendon of the diaphragm, which they divide into an anterior and a posterior set, connected by means of fine lacunar passages, which run straight from before backwards. They admit the presence of the same stomata and the characters of the endothelial cells to be the same as v. Recklinghausen has described. They injected the peritoneal cavity with various fluids, such as a mixture of starch and oil, a turpentine solution of alkanin reduced to fine drops by agitation with an aqueous solution of gum, aniline and oil of milk, and other fluids; and they have satisfied themselves that absorption takes place not only through the true stomata, but by pseudo-stomata, juice or serous canals, whence the absorbed fluids are conveyed to the true lymphatics.

Physiology of Wings.—Dr. J. B. Pettigrew's researches appear in the *Transactions of the Royal Society of Edinburgh*, vol. xxvii.; and a good abstract is given of them in the *Edinburgh Medical Journal* for Feb. 1872. The author shows that the wing acts as a kite during both the down- and up-stroke, and that it elevates and propels in either case—the rising and falling movements merging by insensible degrees into each other to form one pulsation. As the wing rises, the body falls, and *vice versâ*; the wing, when the body of the flying animal is advancing in space, describes *a waved* track, the body describing a similar but smaller wave; the wing is twisted upon itself when at rest, and when in motion; the ill-defined impression produced on the eye by it, when set in rapid vibration, is concavo-convex and twisted in form. The under or concave surface of the wing, in being carried obliquely forward against the air by the body, is effective both during the down- and up-stroke; the wing rotates in the direction of its length and breadth as it rises and falls, and reverses its places more or less completely at every stroke. It produces during one stroke the currents by which it is elevated during the succeeding stroke—the wing literally rising on a whirlwind of its own forming. The wing is movable and flexible as well as elastic, and capable of change of forms in all its parts; it is forced into waves during action, and impinges on the air as an ordinary sounddoes; it produces a cross pulsation, the pulsatile waves running in the direction of the length of the wing and across it; during vibration it moves on the surface of an imaginary sphere; the natural wing, when elevated and depressed, must move forwards; the movements of the wing are comparatively slow at its root, but very rapid at its tip. Balancing is in a great measure effected by purely mechanical arrangements operating independently of the will of the animal; weight is necessary to horizontal flight; the wing acts upon yielding fulcra; a regulating power is necessary in flight, the wing being at all times thoroughly under control. The wing in the bird descends as a long lever and ascends as a short one, the tip of the wing describing an ellipse while doing so; the wing forms a parachute, from which the body is suspended both during the down- and up-stroke; the wing opens and closes as it rises and falls, and has a valvular action; and all wings are drawn toward the body, and partly elevated by the action of elastic ligaments.

The Relative Powers of Substances to Prevent the Generation of Animalculæ.—A pamphlet has been published by Dr. J. Dougall, of Glasgow, giving in tabular form the accounts of a great number of substances which prevent the appearance of animalculæ when they are added to infusion of hay, mixtures of beef-juice and albumen of eggs, and other liquids capable of undergoing putrefaction. He arranges them in fifteen groups. The metallic salts form Group I. on account of their showing the highest average preventive power; amongst these sulphate of copper occupies the highest position—higher even than bichloride of mercury—whilst nitrate of silver exhibits the lowest individual average; taken altogether, however, the metallic salts are very uniform in their action. In Group II. we have the organic acids; of these benzoic acid has the highest and acetic the lowest average power; carbolic acid only occupies the fifth rank. Group III. comprises the salts of the alkaline earths; of these chloride of aluminium stands highest. In regard to the inorganic alkaline salts, their position would be extremely low were it not for bichromate of potash which is very high. The poisonous vegetable extracts are inert. These results, as Dr. Dougall points out, have an important bearing on the disinfecting method of treating wounds, so strongly advocated by Mr. Leslie, of Edinburgh; for, if the advantages of this method be due to the power possessed by carbolic acid of preventing the growth of germs, it is obvious that solutions of chromic acid, bichromate of potash, and sulphate of copper have the same property to a still greater degree, and should be employed in preference to that acid unless they can be shown to have some injurious influence on the tissues from which carbolic acid is free.

Chemistry.

The Reciprocal Substitution of Certain Metalloids.—Boracic acid and oxychloride of phosphorus, if heated together for eight or ten hours at 150°, have been observed by G. Gustavson (*Zeitschrift für Chemie*, vii. 417) to act on each other in the following way: $B_2O_3 + 2POCl_3 = PBO_4 + PBOCl_6$. When the reaction is complete, and the mixture distilled in a paraffin-bath, crystals sublime of $PBOCl_6$; a portion of them, however, decomposes during the operation into BCl_3 and $POCl_3$. The residue consists of PBO_4, and is possibly only a mixture: $2PBO_4 = P_2O_5 + B_2O_3$; it is completely soluble in water from which boracic acid crystallizes out, leaving phosphoric acid with a little of the former acid in solution. By ignition this white residue is rendered insoluble in water, but it is taken up by boiling alkalies with the formation of salts of the two acids. The crystalline body $PBOCl_6$ is very readily formed direct from BCl_3 and $POCl_3$ by long sustained sublimation, but splits up into its constituents already at ordinary temperature, though but slowly in that case, with evolution of BCl_3; water and moist air immediately decompose it. If heated in a closed tube, it melts at 73°. This compound of two acid chlorides may be regarded as a salt in which BCl_3 in some measure plays the part of a base and $POCl_3$ that of the acid. If the chlorine be supposed to be replaced by oxygen, we have the body PBO_4 mentioned above. In a similar manner anhydrous phosphoric acid and chloride of boron, if heated together for two or three days at 200°, react on each other: $P_2O_5 + 2BCl_3 = PBOCl_6 + PBO_4$.

Animal Cellulose.—Since the first discovery of cellulose in animal tissues, by Schmidt in 1845, in *Ascidia mammillaris*, its occurrence under these conditions has been investigated by Löwig and Kölliker, as well as Payen in association with Dumas, Milne-Edwards, and Boussingault. Each of these observers extracted from the tissues a pure substance, containing no nitrogen, and giving numbers that accorded with the formula $C_6H_{10}O_5$. More recent observers have cast doubt on the identity of the cellulose from the two sources; while Berthelot, who obtained his material from *Cynthia papillata*, and found the pure

product identical in percentage composition with cellulose, though differing from it in its structure and behaviour with boron fluoride, considered it to be another substance than woody fibre, and gave it the name of tunicine. Schäfer has just communicated to the *Annalen der Chemie*, clx. part 3, 312, the results of an elaborate examination of the entire question. He derived his material from the tissues of *Pyrosoma atlanticum*, *Phallusia mammillaris*, &c., and establishes the identity of their cellulose with that met with in the vegetable kingdom by its possessing the following characteristics:—1. The percentage composition of vegetable cellulose; 2. The striking a violet-blue with iodine after previous treatment with sulphuric acid; 3. The solubility in cupriferous ammonia and subsequent precipitation with acid; 4. The formation of fermentable sugar with sulphuric acid; and 5. Its conversion by forming nitric acid into a nitro-compound which dissolves in a mixture of alcohol and ether, and resembles gun-cotton.

The Decomposition of Soluble Metallic Sulphides by Water.—J. Thomsen has been led by the results of his thermo-chemical researches to regard hydrogen sulphide as a monobasic hydrogen acid, with the formula H.SH, in which the first equivalent of hydrogen only is replaceable in the wet way by sodium or ammonium. Solutions of normal metallic sulphides, like that of sodium, are held to be mixtures of hydrates and sulphhydrates, the sulphur existing in the solution only as a sulphhydrate of the form R.SH, the radical SH occupying the position of chlorine in hydrogen chloride. From the analogy of hydrogen sulphide to water, he considered the latter to be a monobasic acid, and H.OH its rational formula. Many well-known facts support Thomsen's view: a hot aqueous solution of barium sulphide deposits on cooling crystals of barium sulphhydrate and barium hydrate. But, it is contended by H. Kolbe (*Chem. Centralblatt*, iii. 19), the crystals obtained on saturating one volume of strong soda solution with hydrogen sulphide, and adding a second to it, contain nine molecules of water, and they may be regarded either as N_2S+9H_2O or, according to Thomsen, $NaSH+NaOH+8H_2O$. If the latter view be the correct one, their watery solution, when heated with potassium sulphovinate, should form ethyl sulphhydrate, not ethyl sulphide. It was found by experiment that along with ethyl sulphide considerable quantities of mercaptan are produced, that the amount of ethyl sulphide was greatest when little water was used, and that the yield of mercaptan was augmented and that of ethyl sulphide diminished by increasing dilution. As the latter sulphide is obtained from even dilute watery solutions, they must of necessity contain a proportion of unchanged metallic sulphide. Thomsen's proposition, therefore, may take this modified form: the soluble metallic sulphides, by their solution in water, suffer a decomposition arising from the fact that the metals of these compounds possess for the oxygen of the water an affinity apparently nearly equal to that which they have for the sulphur, or varying but slightly from it, and in the case of each metal to a degree which has yet to be determined. Thomsen's hypothesis respecting the monobasicity of hydrogen sulphide and of water is therefore erroneous.

The Occurrence of Inosite in the Vegetable World.—Inosite was originally found by Scherer in the muscles of the heart, and afterwards discovered by other observers in the lung, liver, kidneys, and other organs of the body. Vohl was the first to meet with it in the vegetable world, in the Leguminosæ; and it has since been shown to enter into the constitution of the plants of other families. Lindenborn in 1867 detected its presence in wine, and Hilger (*Ann. der Chemie*, cix. 3, 333) has now found it to be a normal constituent of the juice of the grape. It was shown by Vohl that during fermentation inosite furnishes, among other products, lactic acid, though which of the two forms of this acid it gave, he did not determine. The point is one of interest, since lactic acid is a normal constituent of muscular tissue, and the theory has been frequently expressed that this lactic acid is derived from the inosite after muscular activity. Hilger states the acid formed from inosite to be para-lactic or, as it is sometimes termed, sarco-lactic acid.

The Reducing Action of Palladium Hydrogenium.—The very energetic manner in which black pulverulent palladium, which has been saturated with hydrogen, acts on organic compounds has been noticed by H. Kolbe (*Chem. Centralblatt*, iii. 19). He found, when benzoyl chloride is conducted in the form of vapour in a current of hydrogen over moderately strongly heated palladium, that a considerable portion of the chloride is converted, in the liberation of hydrochloric acid, into an oily body having the odour of oil of bitter almonds. It is unacted upon by dilute soda solution, furnishes but a small amount of a crystallizable compound with bisulphite of soda, and appears to be chiefly benzylic alcohol. If platium be used in such experiments, no action takes place. Nitrobenzol carried over the palladium in a current of hydrogen is converted into aniline. The author is endeavouring to convert benzoic acid, or perhaps benzoic anhydride, into benzylic alcohol, and acetic acid into ethylic alcohol.

Native Phosphates of Lime.—In continuing his classification of the mineral species having this composition, T. Petersen (*Chem. Centralblatt*, 1872, iii. 24) notices the objections raised by Kosmann to considering staffelite a species distinct from apatite, as the investigations of Stein, Sandberger, and himself, indicate it to be. He maintains his previously expressed view, and, pending the decision of the question of the crystalline form of staffelite, sees in other characteristics of the mineral sufficient cause for considering it an independent species. He finds confirmation of this view in a communication by Maskelyne and Flight on a Cornish mineral which differs from apatite in containing lime carbonate as an essential constituent. The author remarks that irrespective of the amount of water in this mineral, which differs barely from that met with in staffelite, the formula given to the Cornish mineral, $5Ca_3P_2O_8 + CaCO_3 + 2CaF_2$, accords closely with the mean composition of a good many staffelites, and this mineral therefore is probably identical with staffelite. The author includes in the name staffelite all those basic lime phosphates of the form $Ca_3P_2O_8+xCaH_2O_2$ (where x is about 1) in which the basic lime is in combination with fluorine or carbonic acid, and all or part of the water of hydration is still present.

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Philology.

Uttaracanda. Versione Italiana per Gaspare Gorresio. Parigi: dalla Stamperia Nazionale, 1870.

Signor Gorresio has at length completed his elaborate edition and translation of the *Rámáyaṇa*, according to the recension current in Bengal. The first volume of the text was published in Paris in 1843, and the title-pages of the different volumes curiously illustrate the changes which the twenty-eight years have brought in their course. The first three volumes of the text and the first of the translation were printed in the reign of Louis-Philippe, at the "Stamperia *Reale*;" the fourth and fifth volumes of the text and the second of the translation, at the "Stamperia *Nazionale*," from 1848 to 1851; then follow the volumes "dalla Stamperia *Imperiale*," until this present volume, the last of the translation, which of course again returns to the "Stamperia Nazionale" of its earlier predecessors. It is also very interesting to read by the light of subsequent events the editor's own words in his preface to the fourth volume, published in 1848. He there mourns over Charles Albert's defeat and Italy's ruined hopes, and he adds, "io accarezzava la speranza che questo volume più felice che i primi suoi fratelli dovesse uscire in sull' aurora dell' indipendenza e dell' unione italiana, e portarne impresso in fronte il fausto

segno: il cielo destinò altramente; e il gioia di salutar nascendo l' Italia redenta e unita sarà forse destinata ad un altro fra i volumi che verranno dietro a questo." This last volume was printed just before these hopes were finally accomplished; but as he promises us at some future time two more volumes (the 13th and 14th), on the Áryan civilisation and the early migrations of the race, his words will still come literally true.

The *Uttarakáṇḍa* bears the same relation to the *Rámáyaṇa* as the Cyclic poems to the *Iliad*. Just as the *Cypria* of Stasinus, the *Æthiopis* of Arctinus, and the little *Iliad* of Lesches completed the story of the *Iliad*, and not only added the series of events which preceded and followed it, but also founded episodes of their own on isolated allusions in Homer, so the *Uttarakáṇḍa* is intended to complete the *Rámáyaṇa*, and at the same time to supplement it by intervening episodes to explain casual allusions or isolated incidents which occur in it. Thus the early history of the giant Rávaṇa and his family fills nearly forty chapters, and we have a full account of his wars with the gods and his conquest of Lanká, which all happened long before the action of the poem commences, just as the *Cypria* narrated the birth and early history of Helen, and the two expeditions of the Greeks against Troy; and the later chapters continue the history of the hero Ráma after his triumphant return to his paternal kingdom, and the poem closes with his death and that of his brothers, and the founding by their descendants of various kingdoms in different parts of India.

But the *Uttarakáṇḍa* also resembles the Cyclic poems in their attempts to render the great epic cycle a self-interpreting whole by developing Homer's casual allusions into long episodes. Stasinus filled out the incidental mention of Achilles' attack on Æneas while tending the herds (*Il.* xx. 91), and the killing of Troilus (*Il.* xxiv. 257); and exactly in the same way we have several chapters in the *Uttarakáṇḍa* which seem entirely to have arisen from the natural desire to know the details of some event which the older epic had only glanced at in a passing mention. Thus Rávaṇa always appears in the *Rámáyaṇa* as borne by a magic self-moving car Pushpaka which he had won from Kuvera, the god of wealth; the acquisition of this car forms the subject of an episode detailed in chapters ix. xiii. xiv. xv., and we have an elaborate description of the car itself in ch. xv. Similarly the friendship of the monkey-king Báli with Rávaṇa is described in ch. xxiii., which is readily suggested by Ráma's friendship with Báli's rival Sugríva; and in ch. xxxii. we have a legend to explain why Khara was sent by Rávaṇa with his mother Súrpaṇakhá and fourteen thousand Rákshasas to occupy the Daṇḍaka forest. Ráma of course subsequently meets them there, and his victory over them had been described in the *Rámáyaṇa* itself. There are also some curious passages, where the later poem suggests explanations of apparent incongruities in the older epic. Thus in chs. xxxix. xl. we have a legend related to Ráma by the sage Agastya to account for the stupendous strength of the monkey Hanumat, as it had been described in the *Rámáyaṇa*. Ráma naturally wonders (as perhaps many readers of the *Rámáyaṇa* have done since) why a monkey of such marvellous power and prowess had not easily overcome Báli and secured the throne for his friend Sugríva. Agastya replies that Hanumat was at that time under a curse from a Ṛishi, and consequently was not conscious of his own might.

It is well known that there is a Buddhist version of the story of the *Rámáyaṇa* which gives the earlier portion of the life of Ráma, down to his unjust banishment by his father into the forest, where he lives with his brother Lakshmaṇa and Sítá, who, however, is represented as his sister, not his wife. Prof. Weber has pointed out the close similarity between the two accounts, even to the incident of Ráma's slippers, which the brother, who remains as regent, places on the throne, when he has vainly tried to persuade Ráma to return from exile before the period prescribed by his father has expired. But the Buddhist legend has no mention of Sítá's rape by Rávaṇa or the subsequent expedition to Lanká (Ceylon) and the destruction of the ravisher. Prof. Weber has hence conjectured, with some plausibility, that this portion of the story as told in the *Rámáyaṇa* is of later origin, and may be a reflex of some faint tradition of the *Iliad* derived through Bactria and the Græco-Bactrian settlements in the north-west of India. Prof. Kern has shown that the *Gárgí Sanhitá* (B.C. 50?), in its prophetical history of the Kali yuga, mentions Parásu-Ráma and the Mahábhárata war, but it is entirely silent as to Ráma the son of Dásaratha. Perhaps the *Uttarakáṇḍa* may increase the likelihood of the hypothesis, as we here have an addition to the original legend which we cannot hesitate to ascribe to a later author, though Hindu tradition associates it with the sacred name of the inspired bard Válmíki, just as Proclus says, Οἱ μέντοι ἀρχαῖοι καὶ τὸν κύκλον ἀναφέρουσιν εἰς Ὅμηρον.

Of the date of the *Uttarakáṇḍa* we are entirely ignorant, but it is at any rate older than the *Raghuvanśa* ascribed to Kálidása (A.D. 200?) if the later books of that poem belong to him. We need hardly mention the *Uttararámacharita* of Bhavabhúti (A.D. 720), which, though deviating in some particulars, generally follows the same tradition.

The poem itself is decidedly inferior to the better parts of the *Rámáyaṇa*, and the legends introduced are generally childish in their ideas and ludicrous in their exaggerations. Some, however, are curious. Thus, in ch. xviii., Rávaṇa is described as violently interrupting a sacrifice which is being performed by King Marutta, and the assembled gods in terror assume different shapes to escape. Indra becomes a peacock, Yama a crow, Kuvera a lizard, and Varuṇa a swan; and each deity bestows a boon on the animal he had chosen. The peacock's tail recalls Indra's thousand eyes; the swan's colour becomes white, like the foam of the ocean (Varuṇa being its lord); the lizard obtains a golden colour; and the crow is never to die except when killed by a violent death, and the dead are to enjoy the funeral oblations when they have been devoured by the crows. In ch. lxiv. there is a curious dispute between a vulture and an owl, each claiming the original ownership of a nest. The vulture affirms that it had belonged to him ever since the earth had been peopled by mankind; but the owl retorts that it had been his ever since the earth had been adorned with trees. Ráma, as umpire, accordingly decides in favour of the owl. This legend seems to have an affinity with the Buddhist fable in M. Julien's *Avadánas*, No. lxxvii., where the elephant, the monkey, and the partridge dispute, under a pipal tree, which is the oldest and most venerable. The elephant remembered the tree when it only reached up to his belly; the monkey when he could reach its top as he sat on the ground; but the bird had himself dropped the seed from which it had sprung! We have a similar story in the *Sindibád Námah* (see Falconer's analysis).

The finest part of the poem is undoubtedly the closing scene of Sítá's life. After her rescue from Lanká, Ráma had only consented to receive her on her passing unscathed through the ordeal of fire; but after his return to Ayodhyá he learned from popular rumours that his people were still unsatisfied as to her innocence. To his own bitter distress he therefore resolves to send her away to the hermitage of Válmíki; there she bears her two sons, Kuśa and Lava, who are taught by the sage the great epic which celebrates

their father's exploits. Ráma, in course of time, hears of the poem, and when the boys are brought into his presence to recite it, he recognises them as his sons. He then sends for Sítá, and, to satisfy any doubts in the minds of his subjects, he promises to receive her again if she will once more solemnly call the gods to witness that she is innocent. But Sítá's heart was too full; this second ordeal was beyond even her power to submit to, and the poet rose above the ordinary Hindu ideal of women when he ventured to paint her conscious purity as rebelling.

"Beholding all the spectators, and clothed in red garments, Sítá, clasping her hands and bending low her face, spoke thus, in a voice choked with tears: 'As I, even in mind, have never thought of one other than Ráma, so may Mádhaví, the goddess of Earth, grant me a hiding-place. As in thought, deed, and word I worship only Ráma, so may Mádhaví grant me a hiding-place. As this word of mine is true that I love none other than Ráma, so may Mádhaví grant me a hiding-place.' As Sítá made this oath, lo! a marvel appeared! Suddenly cleaving the earth, a divine throne of marvellous beauty rose up, borne by resplendent dragons on their heads; and, seated on it, the goddess of Earth, raising Sítá with her arm, said to her, 'Welcome to thee!' and placed her by her side. And as the queen, seated on the throne, slowly descended into Hades, a continuous shower of flowers fell down from heaven on her head."

Both the great Hindu epics thus end in disappointment and sorrow. In the *Mahábhárata* the five victorious brothers abandon the hardly won throne to die one by one in a forlorn pilgrimage to the Himálaya; and in the same way, Ráma only regains his wife, after all his toils, to lose her. It is the same in the later Homeric cycle—the heroes of the *Iliad* perish by ill-fated deaths; and even Ulysses, after his return to Ithaca, sets sail again to Thesprotia, and finally falls by the hand of his own son. But in India and Greece alike this is an afterthought of a self-conscious time, which has been subsequently added to cast a gloom on the strong cheerfulness of the heroic age.

I may add that the name Kapila which occurs in the first book of the *Rámáyaṇa* as that of the divine destroyer of the sons of Sagara, and of which Schlegel remarked in a note to his translation, "de hoc Vishnuis cognomine non habeo quod expromam," is distinctly ascribed to Vishṇu in the *Uttarakáṇḍa*, xxxi. 68. Kapila is the reputed founder of the Sánkhya philosophy, and is by his followers honoured as an incarnation of Vishṇu (cf. Vijnána Bhikshu's *Comm. on the Sánkhya Sútras*, vi. 70); but the appearance of Vishṇu under this name in this passage of the old poem seems to prove that the *Rámáyaṇa* in its present form belongs to a date long subsequent to the rise of the Sánkhya philosophy. The mention of the name in the *Uttarakáṇḍa*, which is evidently intended to explain its older occurrence, proves the antiquity of our present text. E. B. Cowell.

A Grammar of the Latin Language from Plautus to Suetonius. Part I. Sounds, Inflexions, Word-formation. By Henry John Roby, M.A., late Fellow of St. John's College, Cambridge.

Mr. Roby has conferred by this work a great service on all students of Latin, and especially on those in this country. The activity of German scholars in the field, not only of Latin grammar on its formal side, but of all philological study bearing upon it, has been of late both multitudinous and fragmentary, producing a number of works which are virtually elaborate monographs on special departments, but no complete summary bringing the results of modern research into focus. Such a summary, executed by a competent scholar of independent judgment, is thus a real necessity for all, whether specially interested in the subject or not, who wish to gain, without waste of time, an insight into the present condition of this branch of Latin scholarship. Mr. Roby has neglected nothing which is necessary to the effective performance of such a work: and it should be observed in particular that he has turned thoroughly to account the labours of the most eminent phoneticians, so far as they can be used to clear up the more intricate problems of Latin pronunciation.

This would seem but cold praise for so thoroughly careful and able a book; but in truth at the present time a judicious writer on Latin grammar must feel that his most important task is to arrange and to summarize. A previous generation of philologers, when research was less minute, small difficulties less apparent, and the multitude of facts less obvious in its pressure, could venture more boldly on generalisation: "paupertas impulit audax." Now, the interest of speculation must for a time be put by, until greater certainty is achieved. The apprehension of giving an air of dryness to his work has not prevented Mr. Roby from concentrating his main attention on a clear and accurate exposition of the facts. His views often differ, indeed, from those generally received: but his tendency is rather towards scepticism than fresh construction. He has rigidly limited his field to the investigation of Latin: of Latin, that is, independently, so far as may be, of Sanskrit, Greek, or even the Italian dialects, which, he thinks, offer few results "sufficiently solid to allow one to rest any theories of Latin grammar upon them." This method gains in exactness what it loses in interest. The severe sifting of materials, of which Mr. Roby's book gives evidence, is a merit which deserves the more appreciation as it has been found that Corssen's lists often leave something to be desired in point of accuracy.

Besides the pains taken by Mr. Roby in the verification of facts must be noticed the excellence of his arrangement and the fulness of his lists. The general pathology of the various sounds is treated shortly in the chapter on the laws of phonetic change, their special pathology in Latin in the section on the various letters: an arrangement which saves considerable trouble and repetition. The declensions are properly distributed into two, not into five classes: and the arrangement of compounds in Book iii. according to the syntactical relation of their parts, is both sensible and ingenious. With regard to the lists of compound and derivative words, few readers will probably find them, as the author fears many will, "needlessly full." Such lists are, as he rightly judges, indispensable for the study of Latin formation. In the case of the verbs, Mr. Roby has made out not only a list of the stems (which, if given alone, might have seemed to bind the reader to his arrangement), but an alphabetical catalogue. The index might with advantage have been fuller.

The preface, in which Mr. Roby discusses a number of the moot points of grammar and pronunciation, will probably be found, to general readers, the most interesting part of the work. It will be convenient to follow him, point by point, in his own order. In the excellent section on *v* consonant, p. xxxii, he seems to us, in spite of Prof. Max Müller's letter in the *Academy* of December 15, to have completely made good the view which he has previously defended in these columns: and his treatment of *c* and *g* before *ae*, *e*, and *i* is equally satisfactory. His views on the etymological position of *f*, as expressed both in the preface and in the body of the work, seem more open to dispute. Mr. Roby says (p. xlii):—

"The rare occurrence of *f* in suffixes goes far to show that the sound did not exist in the time when these suffixes assumed shape and use.

It may well be that *-bro* (in *candela-bru-m*, &c.) is of the same stock as *ferre*, to bear; but if so, they are collateral relatives, and *-bro* is the earlier of the two. Similarly the verbal tense-suffixes *-bam*, *-bo*, &c., the derivative noun-suffixes *-bulo*, *-bili*, the case-suffix *-bi* in *tibi*, *-bis* in *nobis* and *vobis*, *-bus* in nouns, may very possibly have correspondents in Latin (or Umbrian or Oscan) beginning with *f*, but I should be inclined to regard such words with *f* as in a collateral, not a parental, relation to those with *b*: and thus *ama-vi* would not be for *ama-fui*, but it may contain a suffix from the same root as *fui*."

The facts, however, will, we think, better bear the ordinary explanation. Comparative philologists tell us that *f* in Latin mostly represents one or other of the Sanskrit aspirates *bh* and *dh*, the former of which is in Greek generally turned to *φ*, and the latter to *θ*. Stems beginning with *bh* in Sanskrit constantly begin with *f* in Latin: but, as contrasted with the Italian dialects, Latin exhibits a great aversion to *f* in the middle of a word, where it represents Sanskrit *bh* by *b*. The Umbrians could say *Tifernum*, but Rome was built on the *Tiber*: the *Safini* were called by the Romans *Sabini*: *Rufus*, *Alfius*, *Alfenus*, *Orfius*, were preserved as proper names, but *rubere*, *albere*, *orbus*, continued in use as words. Compare *sifilum* and *sifilare* ("quod nos, vilitatem verbi evitantes, *sibilare* dicimus," Nonius, p. 531) with their more usual forms, and the Umbrian *tre-fu* with the Latin *tri-bus*. It may be argued that where *b* in Latin answered to Sanskrit *bh*, it represented it as directly as *f* would have done: but it must be remembered that where the Romans had no objection to *f*, namely, at the beginning of a word, they used it as their representation of the Sanskrit aspirate, and it is therefore reasonable to suppose that they originally used *f* in the middle of a word as well, and subsequently let it degenerate into *b*. Certainly, supposing that they wished to make *fuo* a suffix to a vowel-stem, they could not, averse as they were to an *f* between two vowels, do otherwise than change the *f* into *b*: and then (as *bu* before a vowel was again no favourite with them) omit the *u* and write (say) *ama-bo*. To have written *ama-bi* for the perfect would in some persons have caused a confusion with the future, and in this case therefore the *b* was sacrificed. *Pot-ui*, which has usually been considered, on the analogy of *pot-eram*, *pot-ero*, to stand for *pot-fui*, and therefore be a crucial instance of *fui* as a suffix, is held by Mr. Roby (§ 725) to be equivalent to *potivi* (comp. *potior*, *potiri*). But it seems extremely doubtful whether the forms in *-ivus* and *-ivi*, *-uus* and *-ui*, can be considered as identical, for the ordinary contraction of perfects in *-ivi* is not into *-ui* but into *ii*. *Vacivus*, therefore, and *vacuus*, *posivi*, *posui*, &c. are more probably distinct formations from the same stem.

It is very difficult to obtain evidence on the pronunciation of *s*. Mr. Roby differs from Corssen as to its having had a soft or flat sound between vowels: and perhaps the balance of argument may be said to be on his side. But we venture to think that Curtius' account (quoted p. lvi) of the lengthening of vowels before *-ns* is less open to the charge of unreality than Mr. Roby supposes. *N*, being itself vocal, will lengthen a preceding vowel if it can assert itself: it does so to a certain extent even when followed by a mute, and to a greater extent in proportion as it is less checked by a following consonant. Compare the quantity of *bet*, *bent*, *bend*: and again that of *yes*, *pence*, *pens*. By lengthening the preceding vowel *n* often runs a risk of destroying itself, unless protected by a strong mute: thus *Gänse* became *geese*, τυφθέντς τυφθείς. This, which is virtually Curtius' explanation of the matter, seems more natural than saying with Mr. Roby that "the *n* (in *-ns*) was scarcely audible, but that to compensate for this the Romans lengthened the preceding vowel . . . . to signalise the fact of the syllable being more than the vowel + *s*." Indeed, the process usually described as "compensation" deserves altogether a more minute analysis than it has generally received at the hand of grammarians.

In treating of the origin of *ss* (p. lvii, foll.) Mr. Roby is probably quite right in opposing Corssen's theory that in the case of supines like *tonsum* the process of contraction was from *tond-tum* through *tons-tum* and *tons-sum*, as a much simpler explanation can be given, that *tond-tum* became first *tond-sum* and afterwards *tonsum* (p. lx). The combination *st* is no doubt a stable one in Latin, and seldom passes into *ss*. Mr. Roby says never; yet it is difficult to go so far with him as this, and say that the common superlative ending *issimus* stands not for *is-timus* but for *ior-imus* (see § 755): that *levissimus*, for instance, was contracted from *levior-imus*. Is there, in the first place, any instance of such a contraction as *levis* for *leviōr* or *leviōs*? Such abbreviations as *victrix* for *victorix* are hardly parallel. And, secondly, the progressive assimilation of *st* into *ss*, to which Mr. Roby strongly objects, seems to have taken place in the participle *iussus*, formed like the perfect *iussi* from the stem *ius* (*iustus* retaining a different form to distinguish it from the participle). So *pustula* has another form *pusula* (= *pussula*?), which, had it been formed from the stem *pus* + *ulo*, would have been *purula*. *Assus* (dry or roasted), compared with the substantive *assura*, looks very like a participial formation, and, if so, must stand for *as-tus*, the stem being *as*, which in *arere* and *aridus* follows the ordinary rule of change from *s* to *r*.* Mr. Roby extends his theory to such forms as *acerrimus* and *facillimus*, which he thinks stand not for *acer-timus* and *facili-timus*, but for *acerior-imus* and *facilior-imus*. But that *acerrimus* should stand for *acer-simus* (= *acer-timus*) is not stranger than that *torreo* should stand for *torseo*: perhaps *facillimus* and *simillimus* are formed directly from *facul* and *simul*: but, if not, it is easier to imagine them developed out of *facil(i)-simus*, *simil(i)-simus*, than by long degrees out of *faciliorimus similiorimus*. Mr. Roby, indeed, contends that *t* does not change to *s* after a single *l* or *r*, but only after a double one: yet it is doubtful whether the first syllable of *pul-sus* (comp. *pepul-i*) be not the genuine form of the stem. Compare *perculi* with *percello*.

On the question of the division of words into syllables, Mr. Roby departs from Madvig's doctrine that a consonant between two vowels belongs to the second vowel, holding that the tendency of Latin pronunciation is "to unite a consonant with the preceding, not with the following, vowel." Space will not allow of our entering into the wide-spreading minutiæ of such a question, when there are other points, more interesting and definite, awaiting consideration: but it may be remarked that from the nature of the case it is hardly conceivable that uniformity was observed in the matter, and, further, that arguments from prosody and etymology are, in a case of this kind, apt to be fallacious. For instance, the fact on which Mr. Roby lays so much stress (§ 273), that vowels are often lengthened to compensate for the extrusion of consonants *following* (*exa-men-* = *exag-men*, &c.) does not prove that the *m* "belonged" to the preceding vowel, but that in the pronunciation of the whole word it had more weight than the *g*.

The observations on noun-stems in *-e* and *-i* (preface, pp. lxxxii–lxxxviii) are among the most valuable in the book, and deserve attentive study as contributing much towards the solution of a difficult problem. The *-e* and *-a* verbs with perfects in *-ui* and supines in *-ĭtum* present anomalies in dealing with which we think that Mr. Roby goes too far in his attempt to reduce them to uniformity. He assumes

* Merguet, in his able tract, *Die Entwickelung der Lateinischen Formenbildung*, starts an ingenious hypothesis that *issimus* stands for *i-sti-mus*, *-sti-* representing the root *-sto-*, which appears in forms like ἄριστος, μέγιστος, &c.

(if we rightly understand §§ 688 and 693) stems in *-ĕ* and *-ă* throughout the verb (except apparently in the perfects of the *-ă* stems), so that he would make *monui* = *monĕ-vi*, *monĭ-tum* and *domĭ-tum* = *monĕ-tum* and *domă-tum*. It seems to us safer to assume consonant stems for the perfects (*mon-ui* not *mon(ĕ)-vi*, &c.), whatever may be the case with the present stems; and with regard to the latter, while the question of the *-e* stems may be put on one side as undecided, it is surely going too far to set up hypothetical stems in *-ă*, with the exception, of course, of *dă-tus*, *ră-tus*, *să-tus*, and *stă-tus*. Wherever *a* appears in words like *crepare*, *sonare*, &c. it is long, as in the genuine *-ā* verbs both in Latin and Greek: and it is quite consonant to the analogies of the Latin language (which produced most of its *-ā* verbs on its own ground) to suppose that consonant stems like *ton-*, *son-*, *crep-*, &c. were lengthened by a long *ā* in the present and those parts of the verb which follow it, while preserving their consonantal character in the perfect and supine. Little can be made out from the supines in *-ĭtum* as to the character of the present stem, as these supines, answering to perfects in *-ui*, are found affixed to stems unquestionably consonantal (*frem-ĭtum*, *gem-ĭtum*, *strep-ĭtum*, *vom-ĭtum*). Some twenty are attached to *-e* verbs: of these some seem to have been adopted to avoid confusion with other verbs:* most of the rest are appended to stems characterized by *l*, *m*, *n*, or *r*.

Some remarks are necessary on Mr. Roby's treatment of the locative case in his section on inflexions. He says (p. 112): "Another case, distinguished in some other languages, called the *locative*, is in Latin always the same in form as either the genitive, dative, or ablative. Nouns of the first class (*-a*, *-e*, and *-o* stems) have the genitive singular (except in the pronouns), the locative singular, and the nominative plural (except in a few *-e* stems) alike. . . . . Nouns of the second class (*-u*, *-i*, or consonant stems) have the locative usually the same as the ablative." Accordingly, *mensae*, *pueri*, *boni*, *animi*, *belli*, *equi*, are marked in the tables as genitive and locative: *nubi* as locative and dative: *rate*, *igni*, *imbri*, with their plurals as locative and ablative, *sus*, *artus*, and *gradus* being denied locatives altogether. There seems to be a want of clearness about this arrangement which might have been obviated had a distinction been taken at the outset between words locative in form and words locative in meaning: or (so to speak) between dead and living locatives. For words which are locative both in form and meaning, which have, that is, the proper locative ending *-i* and its meaning at the same time, are limited both in number and signification. They may be arranged as being words either of place, as *Romae*, *Carthagini* (special), *ruri*, *domi*, *peregri* (general), or of time (*tempori*, *die quarti*, *postridie*), or of action (*belli*, *militiae*). But in what author are *mensae* or *pueri* used as locatives (= *in mensa*, *in puero*), as any reader would infer from Mr. Roby's declension-tables that they were? Again, to come to the *-i* and *-u* stems, *igni* and *imbri* require the preposition *in* to give them a locative sense, and are therefore as much ablatives as *campo* or *mensā*: nor is *nubi* more a locative than *gradui*. And in any sense in which *equus* possesses a living locative, *sus*, *gradus*, and *artus* possess one, though none is allowed them by Mr. Roby. It would have added to the clearness of the grammar to have stated this difference accurately.

H. Nettleship.

* *Habitum*, *iaciturus*, *licitum*, *meritum*, *tacitum*, *territum*, *tuitum*, *veritum* might have been confused with *aptum*, *iacturus*, *lictum*, *mersum*, *tactum*, *tersum*, *tutum*, *versum*.

The rest are *abolitum*, *caliturus*, *cariturus*, *doliturus*, *miseritum*, *monitum*, *solitum*, *valiturus*, *libitum*, *nociturus*, *placiturus*, *puditum*. We quote from Mr. Roby's lists.

Notes and Intelligence.

Mr. A. Burnell is reported to have completed his catalogue of the large collection of Sanskrit manuscripts at Tanjore, undertaken at the order of the Madras government.

It is reported from Lahore that Dr. Trumpp, who has been entrusted by the Indian government with an English translation of the *Adi Granth* of the Sikhs, is about to return to Germany, there to complete a work so eagerly looked forward to by all who take an interest in the growth of Oriental creeds.

Bábú Rágendralála Mitra has issued the third part of his *Notices of Sanskrit Manuscripts discovered in the Bengal Presidency*, thereby completing the first volume. This fasciculus contains Nos. CCCLXII–DXIX; besides a classified Index of the titles of works contained in this volume.

A new magazine has been started at Geneva, under the title—*Atsume gusa, pour servir à la connaissance de l'extrême Orient.*

Mr. Whitley Stokes, Secretary to the Government of India in the Legislative Department, has presented to the Bodleian a copy (recently made at Benares) of the *Kauçika-sûtra* of the *Sâma-veda*. It has been ascertained that no other copy of this sûtra exists in Europe. Mr. Stokes has also presented to the University Library, Cambridge, a Persian manuscript containing the *Qaçîdahs* of Nazîri of Naishâpûr, the *Dîwân* of the same poet, and the largest collection yet found (about 800) of the celebrated *Quatrains* (*rubâ'iyât*) of Omar Khayyâm, the astronomer-poet of Persia.

Contents of the Journals.

Journal Asiatique, No. 66.—Personal pronouns in Egyptian, by M. G. Maspero.—Chapter of the preface of the Farhangi Djehangiri on dactylonomy, by M. St.-Guyard.—Ottoman bibliography, by M. Belin.—The Fetwa of Ibn Taimiyyah on the Nosairis, published for the first time with a new translation, by M. St.-Guyard.—Letter to M. le Baron de Slane on three coins of generals of the Khalif Omar, by M. de Saulcy. Notices:—Querry's *Droit musulman*, by M. Barbier de Meynard.—The Catalogue of the Arabic MSS. of the British Museum; the Bengal Notices of Sanskrit MSS.; and Lewin on the Hill Tribes of Chittagong, by J. M.

New Publications.

Acta societatis philologae Lipsiensis. Ed. F. Ritschelius. Tom. I, Fasc. II. Leipzig: Teubner.

Aeschinis in Ctesiphontem oratio. Rec. explic. A. Weidner. Leipzig: Teubner.

Aeschylus' Prometheus. Nebst den Bruchstücken d. Προμηθεὺς λυόμενος. Erklärt von N. Wecklein. Leipzig: Teubner.

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ERRATUM IN No. 42.

Page 77 (*a*), line 20 from bottom, for "John, King of Hungary, and Zapolya, Voyvode of Transylvania," read "John Zapolya, Voywode of Transylvania, and King of Hungary."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 44.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*

The next number will be published on Thursday, March 28, *and Advertisements should be sent in by March* 25.

General Literature.

The Works of John Hookham Frere. 2 vols. Pickering.

JOHN HOOKHAM FRERE was born of good and ancient lineage in 1769, and died in 1846. His life of seventy-seven years may be roughly divided into four chief periods. The period of youth was passed by him at Eton and Cambridge. In 1796 he entered public life as a friend of Canning, whom he succeeded in the Foreign Office on Canning's removal to the Board of Trade in 1799. In 1800 he was appointed envoy to Portugal; afterwards in 1802 he undertook the functions of envoy at Madrid, where, having failed to maintain the full confidence of the government, and being superseded in his post by Lord Wellesley, he abandoned his public career in 1809, and retired into a privacy from which he never again emerged. This date closes the second period of his life, to which belongs a good portion of his most famous literary productions, especially his share in the *Anti-Jacobin*. The third period embraces the years of his residence at Roydon, and of his marriage with Lady Erroll. In literature it is distinguished by the composition of *King Arthur and His Round Table*, the only work of complete originality which Frere produced. At the end of 1820 he left England, never to return to it for any lengthened stay. The last twenty-five years of his life were passed at Malta, which he visited at first for his wife's health, and which he never felt the inclination afterwards to quit. To this fourth period belong the translations of Aristophanes and the *Theognis Restitutus*, on which his literary fame is founded. On the whole, after reading the life of Frere, we are tempted to wonder at the small amount achieved when compared with the magnitude of promise—at the disproportion between the leisure enjoyed and the work done in it—at the richness of faculty and the comparative poverty of result. His biographers apologize by saying, what is true, that "he wanted the stimulus of ambition or of necessity to write, whilst his extreme fastidiousness disinclined him to regard anything he composed as finished." But this will not account for the phenomenon. The real truth is that the individuality of Frere was greatly inferior to his faculty as a *littérateur*. His taste was excellent, his command of language almost unbounded, his sense of humour considerable, his critical instinct delicate, his reasoning powers acute. But he had no real creative power; thoughts and emotions did not force themselves upon him and require expression; invention was neither a joy nor an imperative necessity to him. His real strength lay in translation; his taste and sympathy and wealth of diction made him a master in that department. Nor was he unsuccessful in such occasional verses as the political and social circles of London at that time highly relished—though here it must be admitted that at times he made mistakes of taste and judgment, as in the case of a stupid poem upon Landor, vol. i. p. 271. But from all the higher regions of poetical invention he was excluded, not indeed by indolence, or by fastidiousness, or by want of ambition, but by want of special genius! The great exception to this criticism is the poem of *King Arthur and His Round Table*, written under the pseudonym of "Whistlecraft." In this poem, which is avowedly the precursor and model of Byron's *Beppo*, Frere invented a new style, and gave a humorous complexion to the octave stanza of Fairfax. Nothing stronger in his praise can be spoken than the simple fact that without "Whistlecraft" the world would probably have never known *Don Juan*. But Frere's talent could not carry him beyond the creation of the form. He had nothing particular to say. His poem was not a romance or a satire, an ingeniously constructed comedy or a political allegory. It was a tale of knights and giants in an age when chivalry was so dead that nothing could be gained by laughing at it. People naturally looked for some object in the poem, for some thread of interest or meaning underneath its veil of exuberant phraseology and mask of fun. They would not accept it as a simple burlesque: perhaps they might have been ready to do so, had the scene and characters been modern and familiar; but *Monks and Giants* failed to arrest their attention. Therefore Frere abandoned the poem at the end of the fourth canto. His own view of the purport of the burlesque is admirably expressed in a passage quoted at p. 158 of the Memoir. The quaint wit, the wealth of language, the power over metre, first displayed in all their fulness by the pseudo "Whistlecraft," were destined to do the world nobler service in the translation of Aristophanes. There thought, invention, meaning were supplied by the Greek poet. Frere did what no man but Frere could do: he gave an adequate expression in the English tongue to all the many-sided moods of his great master.

The full publication of Frere's versions of the *Frogs*, the *Acharnians*, the *Knights*, and the *Birds* of Aristophanes, together with his Essay on Aristophanic translation, is an invaluable contribution to English literature. Of all Athenian poets, Aristophanes is the one who brings us most closely into contact with the facts of actual Greek life. To understand his allusions, and to appreciate the point of his situations, requires a mastery over antiquarian details, and a sympathy with the spirit of the ancient world, which are rarely to be met with among modern students. At the same time, the imagination of Aristophanes is so gigantic, his machinery so huge, his humour so audacious, the scope and purpose of his comedy so profound, that no one but a poet by nature can hope to grasp his meaning in its fulness. Scholars and critics and historians of literature have failed where Frere has succeeded with the facility of inborn mastery. His command of the universe of Aristophanes is nowhere shown more vividly than in the introductions and interpolated explanations by which he assists the imagination of his readers. These place the student at the proper point of view, illuminating the history and opinions of the time, indicating the drift of the poet's conception, and connecting his inventions with the realities they adumbrate. Then follow passages of light elastic verse, in which the lyrical beauty, the *buffo* garrulousness, the satiric pungency, the comic absurdity of Aristophanes, are successively revealed through the Coan gauze of inimitably sympathetic translation. Avoiding on the one hand the dulness of *faithful translators* who try to render word for word, and on the other the specious parade of *spirited translators* who distract the mind by tasteless introduction of modern phrases, Frere realises the ideal of the *lawful and true translator*, which he has so ably set forth in his article on Mitchell. There he says: "The language of translation ought, as far as possible, to be a pure, impalpable, and invisible element

the medium of thought and feeling, and nothing more; it ought never to attract attention to itself." To prove from his version of the *Birds*—which of all the comedies of Aristophanes best lends itself to reproduction, owing to its universal and highly poetical character—how Frere has applied in practice his own canons of criticism, would be an easy and a pleasant task. We must, however, leave this pleasure to the readers of his book; for to quote from a work so connected, and of so consummate excellence, is nothing but to mutilate. Yet if one example of Frere's style must be given, let us take the song which the hoopoe sings to lure the nightingale from her thicket (p. 150):—

"Awake! awake!
Sleep no more, my gentle mate!
With your tiny tawny bill
Wake the tuneful echo shrill,
On vale or hill;
Or in her airy rocky seat,
Let her listen and repeat
The tender ditty that you tell,
The sad lament,
The dire event
To luckless Itys that befell.
Thence the strain
Shall rise again,
And soar amain,
Up to the lofty palace gate,
Where mighty Apollo sits in state
In Jove's abode with his ivory lyre,
Hymning aloud to the heavenly quire;
While all the gods shall join with thee
In a celestial symphony.
(*A solo on the flute, supposed to be the nightingale's call.*)
Peis. Oh, Jupiter! the dear delicious bird!
With what a tone she swells and falls,
Sweetening the wilderness with delicate air."

In all his translations, Frere was not so successful as with Aristophanes. The simple brevity of *Theognis* and the exquisite art of Catullus are better suited to a different method of work—to that close rendering of form and phrase, for instance, of which Rossetti has given masterly specimens in his translations from Villon and the early Italian lyrists. Yet if we examine closely the whole texture and composition of the *Theognis Restitutus*—a biographical sketch and critical commentary, in the midst of which the translations from that poet are embedded—we find a new illustration of the peculiar qualities of Frere's genius. In this remarkable work of combined imagination and scholarship the fragments of the Megarian moralist—about 1389 lines, reckoning by Bergk's collection—are arranged for the first time in a connected order, so as to illustrate the supposed biography of the poet, and to throw light upon the history of Greece under the despots. It is just in such a work that Frere's powers showed to best advantage. His fancy, which needed an external stimulus, working in combination with his acute reasoning faculty and with his great erudition, enabled him by a kind of critical magic to construct a romance out of the *disjecta membra* of one who commonly passes for the driest of moralising poets. It may be doubted whether Frere has rightly stated or brought into sufficient relief the relations of Theognis to Kurnus, or whether some of the elements which he regards as purely autobiographical may not have had their origin in the fashions of the Dorian Syssitia. Anyhow, as the Italian proverb runs, the whole *se non è vero, è ben trovato.*

Thanks should be rendered to the editors for the complete and faithful execution of their work. The Memoir may indeed appear too long, especially in its excursus upon Spanish affairs (pp. 57–137), and in its quotations from an article of Mr. Charles Norton—an American critic, who is far from underrating Frere's original genius. But all the details about the life of this highly cultivated gentleman in his elegant retirement at Malta—the model, we may say, of an intellectual and aristocratic existence that has almost passed away—will be read with great interest by those who care to remember what the Englishmen of the beginning of this century were.

J. A. Symonds.

History of the Ragusan Drama. [*Historia Dubrovacke drame.*] By Professor Arnim Pavich; edited by the South Slavonic Academy. Agram, 1871.

From the beginning of the sixteenth to the middle of the eighteenth century Dalmatia has been the centre of a remarkable movement in Slavonian literature with which the east of Europe and even the Slavonians themselves long remained unacquainted. To take only one example, the famous Mickiewicz omits all mention of it in his *Course of Slavonian Literature.* The history of this literary movement has only begun to be studied seriously within the last twenty years by the Slavonian *savants* who have their centre at Agram; and the results of their studies have amply demonstrated that the Croatian people do not deserve the reproach of barbarism which has been very unjustly addressed to them. The chief focus of these researches is at present the South Slavonian Academy of Agram, which, founded in 1867 under the auspices of Bishop Strossmayer, has ever since displayed a praiseworthy and fruitful activity. It has applied itself especially to the task of bringing to light the works of Dalmatian writers, some of which can only be met with in editions of great rarity, while a few have never been published at all.

The literary language in which these productions are written is a Slavonic dialect, identical with the present Croatian, if we allow, that is, for the variations to which a living language is subject in the course of time, and for the special influence exercised by the dominant Italian language in a part of Dalmatia. The Croatian dialect itself tends more and more to approximate to the Serbian, so far as its literary use is concerned, and at the present day a difference in their alphabets is all that separates the two idioms (or what pass for two), as is proved by the fact that certain works are printed in both alphabets, as, for instance, the Bible published by M. Danicich, at the expense of the Bible Society, which has two different editions printed in different alphabets from a uniform text.

There are no signs of national literary activity in Dalmatia before the fifteenth century. A few documents and the poetical genius of the Slavonic race make it probable that the country always possessed some popular poets like those belonging to other Slavonic tribes, but the refinements of a civilisation borrowed from Venice and Italy led to the neglect of the popular muse. In the fifteenth century, under the influence of the renaissance, the literary movement declared itself suddenly and almost simultaneously at Spalato, at Ragusa, and in some of the islands bordering on the coast. The movement was exclusively poetical, and prose composition was still neglected. Most of the poets who made their appearance first at Spalato, towards the end of the fifteenth and beginning of the sixteenth century, wrote indifferently in Latin, in Italian, and in their native tongue, which they call sometimes Illyrian (*illirski*), sometimes Slavonian (*slovinski*).* In the sixteenth century the literary school of Dalmatia established its head-quarters definitely at Ragusa (Dubrovnik). Ragusa, the Slavonian daughter of the ancient Epidaurus, was then one of the most

* Even at the present day in Dalmatia the Austrian authorities affect to call the Croatian language *lo slavo.* The Dalmatian peasant, if he is asked what language he speaks, answers readily: *Govorim naski,* "I speak *our* language."

flourishing cities on the basin of the Mediterranean; her vessels ploughed the seas, she maintained diplomatic relations with Hungary, Turkey, and the Italian republics; Venice and Genoa were her rivals, and like those great commercial cities she had an aristocratic and wealthy population fond of pleasure and all the elegancies of life. In such a centre the theatre was sure to be cultivated with enthusiasm. Accordingly, in the course of two centuries we find no less than twenty-eight known dramatic poets, without counting anonymous authors; and M. Pavich, the author of the work we are considering, analyses no fewer than 116 dramas written during this period. Most of these are still in manuscript, and are to be found in the Library of Agram, and in some public and private collections in Dalmatia; 76 of the dramas rescued from oblivion by this patient compiler are by authors now unknown.

M. Pavich has divided his work into four parts: in the first he examines the dramatic school of Spalato and the island of Hvar (called in Italian *Lesina*); in the second, the Ragusan drama of the sixteenth century; and in the third and fourth, the Ragusan drama of the seventeenth and eighteenth centuries.

It is rather difficult to follow the author through the confused and slightly disjointed mass of analyses on which he has expended so much industry. One fact which the whole of his book brings into relief is the immense influence of Italian upon Dalmatian literature. The first works which he mentions at Spalato are only imitations of Italian authors long since forgotten, Feo. Belcari, Antonio Aralda. They are a kind of mystery or religious drama, to which, when the Italian original is missing, it is easy to find parallels in other European literatures, as, for instance, in the French piece *Débat du corps et de l'âme;* a subject, by the way, which had already been treated in Czech literature in the middle ages. Certain stage directions added to the manuscript lead us to suppose that the pieces were acted either in the principal church or in the open market-place of the town. The rhythm of these first attempts is clumsy, and the verse consists of eight syllables. Some of the dramas are long, containing as many as 2000 lines, and, as may be supposed, the dramatic interest is sufficiently slender; the laws of probability are not much regarded; an angel recites the prologue and the epilogue, which bears some resemblance to the end of a sermon. Here, for instance, is the epilogue of a piece on the history of Joseph and his brethren; it is the angel who speaks:

> "You who have been here to-day,
> And have seen the deeds of Joseph,
> May God give you his blessing,
> And [entertain] you ever in joy,
> And forgive you your sins,
> And give you paradise joys,
> In this world a good condition,
> In that the state of paradise."

The subject of another piece is the Annunciation of the Virgin Mary; the Sibyls play an important part; angels, Lucifer, and Leviathan appear; some parts recall an Italian piece by Belcari, others are altogether original. In another drama St. Stephen, who recites the prologue, indicates clearly where the representation is being held: "Good people of Hvar, you who have come into my church, listen to what I am going to say." The church is mentioned in the same way in another drama on the martyrdom of St. Cyprian. On the manuscript of *The Martyrdom of St. Lawrence* there is the following note in Italian: *Al dì* 15 *di Agosto* 1614 *fu recitata in città vecchia la prima parte; così pure tutta intiera li* 16 *al giorno di San Rocco fu recitata in publica adunanza.*

According to M. Pavich the general tone and style of these pieces is what differs most from corresponding Italian works; one feels, he says, that while these are written for aristocratic circles, the Dalmatian pieces are intended for the people; the angel of the prologue often expresses a hope that God will cause the crop and vines to prosper.

The most original drama of this period is due to a writer named Lucic, and represents the adventures of a young Christian girl carried off by the Turks and happily rescued; the piece is thoroughly national, and besides the usual love intrigue we find in it interesting details relating to the local manners. It is called *Robinja* ("The Slave").

In the Ragusan period, properly so called, religious dramas are less numerous, and the form is more carefully studied; they are written in distichs, which rhyme at the end of the line and of the hemistich—

> "Blazene dusice | hodite vi k meni
> iz viecne tuzice | u pokoj blazeni."
>
> "Happy souls, come to me
> From eternal sorrow to a happy peace."

This is the favourite measure of the Dalmatian poets, and presupposes a rich and very flexible language. It appears from a prologue that these dramas were represented in the open air.

Secular or profane tragedy began at Ragusa with translations. Some pieces are called by ancient names, such as Hecuba, but on examination they prove to be founded on Italian imitations. In some cases the Italian original is unknown, and the learned had a very delicate problem to resolve, whether, namely, we were in the presence of a piece translated from some ancient play since lost. This hypothesis does not appear probable to M. Pavich. Amongst translations of well-known Italian dramas we may quote Tasso's *Aminta* and the *Pastor Fido* of Guarini. The taste of the Italians at that time for Pastorals is well known, and several Ragusan poets attempted flights in this style upon their own wings. Amongst those who distinguished themselves in this way the names of Vetranich, Naljeskovich, and others, are cited; their subjects are sometimes borrowed from Greek mythology, sometimes from the imagination of the author; they are generally short dialogues in graceful and poetical language.

At the same time, other poets tried their skill in original comedy. Some of their attempts are of an elementary simplicity, others are interesting for the study of local manners, but the dialect is hard to be understood even by the descendants of the ancient Ragusans; it bristles with maccaronic Italianisms, and there are occasional traces of the obscenity which disfigures the Italian comedy of the period. These pieces were acted by companies of young people and amateurs; some of them are in prose.

In the seventeenth century the greatest of the Ragusan poets makes his appearance, Gundulich, whom the Italians call Gondola. He is chiefly famous for his long poem on the *Osmanide*, which has caused him to be compared to Tasso and Ariosto. The language reaches its highest perfection in his works. Amongst his dramas *Ariane* is the most admired, especially the choruses, which are excellent as lyrics; it is imitated from an Italian opera of the time, and other "classical" pieces are also Italian reminiscences. The only really original piece by Gundulich is an allegorical pastoral in honour of Ragusa. The contemporary and rival of Gundulich, Palmotich (Palmota), the author of a great epic poem on Christ, shows some *naïveté* and talent in his attempts at original tragedy. The dramatic element is what his works are most deficient in; they are narratives in dialogue, for which Tasso, Virgil, Ovid, &c. furnish the subjects. The author also borrows largely from Ariosto (especially in his use of the marvellous); his works are

interspersed with songs and dances, and, when the occasion offers, with flattering allusions to the glory of the writer's country.

In 1666 the city of Ragusa suffered from an earthquake which greatly affected its prosperity, and the theatre shared in the common decline. From that fatal date down to the fall of the republic (1806) we find only nineteen dramas, and these of little merit. M. Pavich analyses them conscientiously, and we cannot but be grateful to him for his labour, but we will not abuse the reader's patience by dwelling on this period of decadence. M. Pavich concludes by enumerating the names of eight societies of amateurs who used to give representations in Ragusa; their titles resemble those borne by the Italian academies. In taking leave of this meritorious and instructive work we must express a hope that it will be utilised by all future historians of the theatre, and that some Dalmatian *littérateur* may be found to publish an Italian translation (or abridgment) which would place it within the reach of the European public.

For the rest, most of the dramatic works analysed by M. Pavich will be published in the course of a few years by the Academy of Agram, which has already edited three volumes of the ancient authors of Dalmatia, and is still continuing their publication. Louis Leger.

English-German Lexicon, [*Englisch-Deutsches Supplement-Lexikon*, als Ergänzung zu allen bis jetzt erschienenen Englisch-Deutschen Wörterbüchern, insbesondere zu Lucas. Von Dr. A. Hoppe.] Berlin: G. Langenscheidt.

An exhaustive English dictionary, or at least a word-list with examples, is one of those unwritten books some vision of which has probably floated before the eyes of every student of our tongue. At first sight it does not seem that such a compilation presents any very overwhelming difficulties, but further consideration shows that to form a verbal key to a literature so large as ours is well nigh an impossible achievement. The range is so vast, and the new words which trade, science, and, more than all, the newspapers are introducing day by day are so many, and for the most part so uncomely, that a man must be possessed not only of gigantic working powers, but also of an immense and peculiar range of thought and taste to be able to grasp them so as to give a fairly trustworthy interpretation. We do not believe that such a work can ever be thoroughly accomplished; but that some parts thereof that are at present neglected should be undertaken is a bare necessity if men are to continue to understand what they read.

A foreign word-hunter has some advantages over one who has spoken our language from childhood. He at once catches a new word, because, if it be not in his dictionaries, it is almost sure to be unknown to him, whereas to the Englishman it will probably be far more familiar than many of those classic compounds which are in all the standard authorities from Johnson downwards, but are hardly ever heard out of them, except when some half educated person is anxious to make an impression by the fineness of his diction.

Dr. Hoppe has undertaken to do for German students of English what no Englishman has as yet performed for his own countrymen. He has read, as we suppose, pencil in hand, the writings of most of our popular novelists and other books of light literature that are not works of fiction, and has marked the uncatalogued words, reduced them into alphabetical order, and given specimens and his own interpretation of each. Books are not the only field in which this careful gleaner has wandered. *The Times*, *The Daily Telegraph*, and *The New York Herald*, are also quoted as authorities. The motto on the title-page,

"All is fish that comes to net,"

fully describes the nature of the collection. Nearly everything Dr. Hoppe's net has brought to land has been worth catching. Perhaps indeed there is nothing in the book that may not be useful to a foreigner. Some few of the words, however, seem out of place, from the fact that the special meaning for which they are inserted here differs by so slight a shade from the ordinary one given in all the dictionaries. Take for instance Belt in its secondary meaning of a belt of trees. We have it defined thus: "Auch ein runder, rings von Bäumen eingeschlossener Platz in einem Gehölz," and its use is further illustrated by quotations culled from the writings of Dr. William Howard Russell and the author of *Guy Livingstone*. It seems odd also to meet in a dictionary of words with names of persons and places, such as Pall Mall, Beau Nash, Petticoat Lane, Lindley Murray, and Palmetto State, but the information given under each of these and their companions is undeniably accurate and useful. These and the like redundancies, if they be indeed blemishes, are errors on the right side, and will readily be excused by those who object to them, occurring as they do at rare intervals among a very large mass of useful and minute information.

No slight service has been done by reducing so large a mass of stray words into alphabetical order. Had Dr. Hoppe contented himself with picking his recruits out of the mob and forming them into an orderly regiment, we should have thanked him, but he has done far more: he has given us a long array of useful examples and a series of explanations singularly free from error. Edward Peacock.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—In a late review of the very useful little book which has been brought out by Professor Seeley and Mr. Abbott, *English Lessons for English People*, you call particular attention to the chapters on Prosody. I have been reading these with some care, and while agreeing with much and finding much to admire, here as in the rest of the book, I venture to think that their statement of the laws of metre is in some points open to criticism. Not to encroach too much on your space, I will confine my remarks to the consideration of the irregularities admissible in the English Heroic Metre. The typical form of this metre is a line of ten syllables, with the accent falling on each even syllable, each pair of syllables making a so-called iambic foot; the pause falling at the end of the line, and each foot ending at the end of a word. But a long series of lines formed precisely on this model would be found intolerably monotonous. The poet, therefore, seeks to vary it, both in respect to the number and accentuation of the syllables and in respect to the pause and break. Of this last mode of varying the rhythm I shall not speak, as it is treated with sufficient fulness in the *Lessons*. I proceed to consider the other ways in which variety is produced.

A. Variation in the number of syllables. Perhaps the irregularities under this head might be more simply classified as follows:—

(*a*) Variation by *excess*.

I. The addition of a superfluous syllable or syllables at the end of a foot.

1. Usually the final foot (the so-called *female rhythm*), as—

> That durst | dislike | his reign | and me | *prefer* | *ring*.
> To you | our swords | have lead | en points, | Mark *An* | *tony*.

2. More rarely after other feet, as—

> Except | immor | tal *Cæ* | *sar*, | speaking | of *Brut* | *us*.
> Took it | too *ea* | *gerly*— | his sol | diers fell | to spoil | .

Where there are two superfluous syllables, the first syllable is more or less slurred.

II. The interpolation of a syllable within the foot.

1. Preserving the distinct sound of the extra syllable, as—

> *With impe* | *tuous* | recoil | and jar | ring sound | ,
> The sound | of man | y a *heav* | *ily gal* | *loping* | hoof | .

2. Slurring the extra syllable, either within a word, as—

> Whom *reas'n* | hath e | qualled, force | hath made | supreme | ,

or at the end of a word before a following vowel (*elision*), as—

Towards thee, | *I intend*, | for what | I have | misdone | .

Also where the same sound is repeated, we find elision in Milton, as—

Justly yet | despair | not of | his fi | nal par | don, (*S. A.* 1171)

and possibly in the following—

In e | qual ruin | into | what pit | thou seest | .

Sometimes it may be doubted whether we should explain the scanning of a line by the supposition of an elision or slurred syllable, or of a superfluous syllable *at the end* of the foot or an extra syllable *in the* foot. Thus, in the line—

Of *riot* | ascends | above | their lof | tiest towers | ,

while there is no doubt of the slurring in the last two words, *riot* may be either treated as a monosyllable or as a dissyllable, whose second syllable is either metrically superfluous or is to be joined with the following word and make a trisyllabic foot. The same explanation is applicable to the word *ruin*, above.

(*b*) The next variation is that produced by *defect* in the number of syllables. This is well treated by Mr. Abbott in his *Shakespearian Grammar*, but hardly touched on in the *Lessons*. It is of course more common in dramatic than in narrative poetry, but I am not sure whether Milton has not employed it at times, *e.g.*—

Shoots | invis | ible vir | tue e'en | from the deep | ,

unless we take this as a case of double trochee, discussed below.

B. It is in reference to irregularities of accentuation that I am most disposed to question the view given in the *Lessons*. Children or uneducated persons naturally read any iambic line with a sort of sing-song, emphasizing the accent on the alternate syllables without regard to the ordinary or prose accent of the separate words. An educated person feels this to be injurious not only to the sense, but to the sound also; and in his reading of poetry he gives to each word its own pronunciation without losing the consciousness of the general iambic rhythm. It is this educated reading of poetry which supplies the basis and test for our technical systems of prosody. Prosody has in the first instance to describe in simple and precise terms the rhythm of any passage as given by a good reader; and next it has to ascertain the general and special laws of the metre as employed by the poet and interpreted by the reader.

It seems to me that there are two different principles on either of which the facts of any metre may be consistently explained. A distinction may be made between the metrical accent and the natural emphasis of a syllable; and it may be maintained that the metrical accent is always present, but that it varies in force as it coincides with the natural emphasis. This is what I should call the artificial system. On the other hand, no accent except that of natural emphasis may be recognised. This I should call the natural system. It should be remembered, however, that the exigency of rhythm may sometimes require stress to be laid on a syllable in verse which it would not have in prose. For this the poet is responsible. The natural system simply professes to reproduce or stereotype his reading.

The two systems may be exemplified in the following lines:—

(*a*) Then tore | with bloo | dy ta | lon *the* | *rent* plain |
(*b*) *Rocks*, caves, | *lakes*, fens, | *bogs*, dens, | and shades | of death |
(*c*) 'Tis sure | the hard | est sci | ence *to* forget |
(*d*) *Comfort*, | my liege; | why looks | your grace | so pale? |

It is plain that all these lines depart from the typical 5-foot iambic metre. The natural system would describe the irregularity of (*a*) as consisting in an unaccented eighth and accented ninth syllable; that of (*b*) as consisting in the accent on the first, third, and fifth syllables; that of (*c*) in an unaccented eighth syllable; that of (*d*) in an accented first and unaccented second syllable. The artificial system maintains that in (*a*) *the* is accented though unemphatic, and *rent* unaccented though emphatic; that in (*b*) *rocks*, *lakes*, and *bogs* are long in quantity, but unaccented; that in (*c*) *to* is accented; and in (*d*) the first syllable of *comfort* is emphatic but unaccented, and the second accented but unemphatic. In the *Lessons* the artificial system is that which is generally followed, but in lines of the type (*d*) it is abandoned for the natural system. The trochee is recognised as belonging to the iambic metre. But if this is so, why not recognise the spondee in lines of the type (*b*), and the pyrrhic in lines of the type (*c*)? The reason for calling *comfort* a trochee is that a good reader lays more stress on the first than on the second syllable. For the same reason the name of spondee must be conceded to the three feet, *rōcks*, *cāves*; *lākes*, *fēns*; *bōgs*, *dēns*: no good reader would make any difference in the stress he laid on the first and second syllables in each. I do not imagine any one would be found to dispute this, but perhaps the line—

Kill, fire, | burn, sláy, | let not | a trai | tor live |

is a still stronger case in point. Similarly the fourth foot of (*a*) and (*c*) ought to be called pyrrhics. A good reader would, if anything, lay less stress on *the* and *to* than on the preceding syllables.

Following, then, the natural system of accentuation, I should classify irregularities as arising from (*a*) excess, (*b*) defect, or (*c*) transposition of accent in the same foot.

(*a*) Excess of accent is shown in the substitution of the spondee for the iambus. That this deserves at least as much attention as the substitution of the trochee will appear from the examination of a few lines of Milton. Thus, in the first hundred lines of the *Paradise Lost*, I find forty-two spondees compared with twenty trochees; and this prevalence of the spondaic rhythm greatly contributes to the stately and solemn tone of Milton's poetry.

(*b*) Defect of accent appears in the substitution of the pyrrhic for the iambus. The effect of this is to throw additional weight on the next emphatic syllable.

(*c*) Transposition of accent appears in the substitution of the trochee for the iambus. In the *Lessons* two laws are laid down with regard to the use of the trochee in iambic metre: (1) that a trochee cannot follow upon a trochee, (2) that a pause or at all events a long syllable is necessary before a trochee. With regard to the former, it is stated that "it is usual to quote as an exception Milton's line,

Ūnĭ | vērsăl | reproach | far worse | to bear | ,

but that such a line would be a monstrosity, and it is far more likely Milton pronounced unĭversăl." If this were really the only line in Milton where the double trochee occurred, there might be some excuse for trying to explain it away, though it is hardly likely that the word *universal*, of which Todd quotes twenty other examples from Milton, all used with our present accent, could have been pronounced differently in this one case.* But the fact is, this line is by no means an isolated case of the double trochee. Compare—

P. L. vii. 518. *Présent*, | *thús to* | his son | aúdi | bly spake |
P. L. vii. 533. *Óver* | *fish of* | the sea | and fowl | of the air |
P. L. iii. 750. *Ín their* | *tríple* | degrees; | régions | to which |
P. L. iii. 586. *Shoots in* | *vísi* | *ble* vir | tue even | to the deep |

[Unless this line is taken, as suggested above, with a monosyllabic foot.]

P. L. xi. 377. *Ín the* | *vísions* | of God. | It was a hill
P. R. i. 175. *Bút to* | *vánquish* | by wis | dom hel | lish wiles |
P. R. ii. 243. *After* | *fórty* | days' fas | ting had | remained |

the last a much harsher line to my ear than that quoted "Universal reproach," &c.

Nor is Milton alone among poets in his occasional use of the double trochee. Mr. Abbott (*Shak. Gram.* p. 329) quotes a few examples from Shakespeare, which might be largely increased; and instances might be given from modern poets, as Tennyson, in the *Coming of Arthur*,

Félt the | *light of* | her eyes | into | his life | .

It seems therefore that there is no ground for the assertion that the iambic metre does not admit of the double trochee. At the worst it is allowable as an occasional discord to add richness to the general

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* Since writing the above, I have been reminded that the line—

S. A. 175. Universally crowned with highest praises—

cannot be read as a regular iambic line unless the second and fourth syllables of "universally" are accented. But I see no reason why we should try to read this as an iambic, more than other lines in the same chorus, *e.g.*—

115. This, | this is he, | soft | ly a while |
116. Let us not | break in | upon | him
121. And by | himself | given o | ver—

all of which seem to me to have an anapaestic rhythm. Or—

329. Forthwith | how thou ought'st | to receive | him
1707. A sec | ular bird | a | ges of lives |

both of which (like 175) end a chorus, and the latter is preceded by a regular 5-foot iambic—

1706. And though | her bo | dy dies, | her fame | survives | .

More than this; if we examine the strophe to which 175 belongs, I think we can have little doubt that Milton meant it to be anapaestic, like the 172nd line to which it corresponds:—

For him | I rec | kon not | in high | estate | — 5 iamb.
Whom long | descent | of birth | — 3 iamb.
Ŏr thĕ sphēre | of fōr | tŭne rāis | es: — Cf. 116, 329.
But thee | whose strength | while vir | tue was | her mate | — 5 iamb.
Might have | subdued | the earth | — 3 iamb.
Ŭnĭvēr | sălly crōwned | with hīgh | ĕst prāi | ses.

harmony. Even taken by itself it is not necessarily unmusical, and it is certainly forcible and expressive. Leigh Hunt singles out for special admiration the rhythm of the following Alexandrine—

As the | *Gód of* | my life. | Why hath | he me | abhorred? |

To proceed to the consideration of the second law: no doubt the trochee sounds better if it follows a pause; but this cannot be called a law, in the sense that it is strictly observed by the best poets. Thus Milton has—

P. L. vi. 912. Yet fell, | remem | ber and | *féar to* | transgress |
P. L. v. 160. Before | thy fel | lows am | *bítious* | to win |
P. R. ii. 171. And made | him bow | to the | *góds of* | his wives |
P. R. ii. 180. Cast wan | ton eyes | on the | *dáughters* | of men |
P. R. ii. 405. And with | these words | his *temp* | *tátion* | pursued |
P. R. ii. 428. Not dif | ficult | if thou | *heárken* | to me | .

J. B. Mayor.

LITERARY NOTES.

The Mazzinian organ, *La Roma del Popolo*, for Feb. 22, contains a desponding review of M. Renan's *La Réforme intellectuelle et morale*, by Signor Mazzini. He disapproves of the political inaction of the intellectual aristocracy of France, represented by Ledru-Rollin, Louis Blanc, Edgar Quinet, &c., who might and should have directed the Parisian insurrection to a better end.

G. L. Kriegk communicates to the *Allgemeine Zeitung* (Feb. 29) what he calls "An Autobiography of Gervinus," a sketch written in 1829, which gives an interesting though brief account of the historian's early intellectual history. His father was in middling circumstances, and insisted for some time upon the boy's choosing some mercantile career, so as to retard the beginning of his university life. He expresses himself as grateful to the works of Hessemer and Jean Paul for rousing his dormant energies to life, even though they filled him for a time with wild poetical aspirations, and led him alternately to wish to become an actor, and to fancy himself in love with a girl he had never seen. At last, as he was trying to write a conscientious journal of his mental uncertainties, it suddenly dawned upon him that he had mistaken his vocation, that his mind was naturally critical, and that science would give him the satisfaction which he sought in vain in aesthetics with Hessemer, in morals with Jean Paul, and six weeks later, he writes again to the same friend (Kriegk) that he is at last "three-cornered," and therefore happy and glad.

K. Goedeke writes to the same paper (March 3) to protest, at least on his own behalf, against the often repeated complaint that North Germans neglect and misunderstand Grillparzer, and he communicates two letters he had received from the poet, who spoke of himself in 1869 as "his own critic, and seeing everything grey upon grey," but grateful to Goedeke for expressing about his works just the thoughts which had directed and inspired their composition.

Chaucer tells us himself that his *Treatise on the Astrolabe* was chiefly translated from Latin treatises on the subject. It has been discovered, by Mr. Bradshaw and Mr. Skeat, that the treatise which he has made most use of (as it accounts for nearly two-thirds of his work) is the Latin version entitled *Compositio et Operatio Astrolabii*, translated from the original of Messahala, or Macha-allah, an Arabian astronomer of the eighth century. MS. copies of this Latin text are probably numerous, as there are no less than five in Cambridge.

Art and Archaeology.

A PHYSICAL EXPLANATION OF TURNER'S LATER STYLE.

A very remarkable lecture was delivered to a crowded audience at the Royal Institution, on Friday last, by Mr. Liebreich, ophthalmic surgeon and lecturer at St. Thomas's Hospital, "on the effects of certain faults of vision on painting, with special reference to Turner and Mulready." He explained the changes in Turner's later pictures as arising out of an alteration of Turner's sight, produced by dimness in the crystalline lens. This dimness developed itself during the last twenty years of Turner's life, and caused, in the first instance, a diffusion of light, which gives to his pictures painted after 1831 a peculiar blueish haze in the lighted parts of the canvas, contrasting too strongly with the surrounding portions in shadow. After the year 1833, a limited opacity develops itself in the crystalline lens, the effect of which is to give a vertical direction to that diffusion of light. The consequence of this further and more serious modification is a vertical streakiness in the pictures. Every illuminated point in nature was transformed on the picture into a vertical line, which is the longer in proportion to the intensity of the light of the point in nature. Thus, *e.g.* there proceeds from the sun in the centre of a picture a vertical yellow streak, dividing it into two entirely distinct halves, which are not connected by any horizontal line. But even less illuminated objects, like houses or figures, form considerably elongated streaks of light. In this manner, therefore, houses that stand near the water or people in a boat, blend so entirely with their own reflections in the water that the horizontal line of demarcation between house and water, or boat and water, entirely disappears, and all becomes a conglomeration of vertical lines. The lecturer maintained that everything abnormal in the shape of objects in the drawing, and even in the colouring of the pictures of that period, may be explained by this vertical diffusion of light. It was only during the last years of Turner's life that the dimness of his crystalline lens had increased to such an extent that it prevented him from seeing even his own pictures correctly. This alone is sufficient to account for the strangeness of their appearance, quite apart from any consideration of the state of his mind. In proof of this view, a very remarkable experiment was here introduced by the lecturer. A small copy on glass had been prepared of Turner's picture of Venice (1833), painted from sketches taken in Venice in 1829, before the painter's eyesight had begun to alter. This copy was then placed in a magic-lantern, and thrown upon a screen. By the addition then to the lantern of an optical contrivance simulating the subsequent defect in Turner's eye, the whole picture was transformed into the Venice which Turner saw on his second visit in 1839; the resemblance to his pictures painted after this date was certainly very striking. By the same contrivance an ordinary tree was transformed into a Turneresque tree, &c.

The lecturer then explained the influence of other more frequently occurring anomalies of sight on painting, especially of myopia, hypermetropia, and astigmatism, as well as that of colour-blindness, and proceeded in the second place to discuss a change perceptible in Mulready's later paintings. In the latter part of his life Mulready's crystalline lens became yellow, and therefore absorbed a certain small quantity of blue light. To understand the effect of this yellow discoloration, the best means is to look for a long time through a yellow glass. In the first moment we see all yellow; but soon the retina is dulled by the yellow light, and therefore the aspect of nature becomes again correct; not so the aspect of a picture: in a picture the intensity of light is so infinitely smaller that the quantity of blue light, completely absorbed by the yellow glass, cannot fail to be remarked even in such places of the picture as are painted with the intensest blue; while smaller quantities of blue pigment are not seen at all because they have been completely absorbed by the yellow glass. In this way we comprehend how it was possible that Mulready, in his later years, saw nature quite correctly, but his picture too yellow, and that he therefore painted it too blue, not, as is generally believed, too purple. If we look through the yellow glass at his later pictures, we see that all their faults disappear; the blue shadow of the flesh becomes grey, the purple face becomes naturally red, the glaring blue of draperies is softened. That we really, by means of this yellow glass, see his later pictures as Mulready saw them himself, is proved by applying it to the latter of two pictures, both in South Kensington Museum, representing the same subject ("Brother and Sister," or "Pinching the Ear"), the one painted in 1836, the other twenty-one years later.

After having explained that Turner, in consequence of what was really the beginning of cataract, saw nature changed, his picture, however, correct; that Mulready, through his yellowish lens, saw nature correct, but the colour of his picture changed; that another painter alluded to in the course of the lecture, in conse-

quence of his astigmatic eye, saw distant objects elongated in a vertical direction, while the painting on his canvas, on the contrary, was enlarged in a horizontal direction ;—Mr. Liebreich explained the means by which such defects might be corrected, and concluded by saying that artists and art-critics ought to make the results of scientific investigations their own. In this way art-critics will often obtain explanations of certain changes in the style of painters, and artists avoid the inward struggles and disappointments which often arise through the difference of their own perceptions and that of the majority of the public.

The lecture will appear *in extenso* in the April number of *Macmillan's Magazine.*

CORNEILLE-PIERRE BOCK.

A MEMOIR of Corneille-Pierre Bock, by M. Alfred de Reumont, has just been reprinted from the *Annuaire de l'Académie royale de Belgique*, of which society Dr. Bock was an associate. Dr. Bock was born at Aix-la-Chapelle in 1804. After having prosecuted his academical studies at Bonn, at Heidelberg, and at Freiburg im Breisgau, he spent some time in Italy following up researches in classical and Christian archaeology. His first public post was that of professor extraordinary in the university of Marburg, to which he was named in 1821. But in 1834 the university was so disturbed by the serious antagonism between the elector and his subjects that Dr. Bock, then professor ordinary, felt his position no longer tenable, and resigned his chair. He next settled in Brussels, which he quitted after the death of his wife for Stuttgart, and finally fixed himself at Freiburg in the Breisgau. He was then named honorary professor in the philosophical faculty, and the lectures which he delivered in this capacity were always fully attended. They dealt chiefly with the history of art, but embraced that of literature and politics. The subjects of some of his most important courses were the history of the last days of the Eastern empire ; that of the Iconoclastic emperors ; and the origin of Christian art in its relation to classic work. It is to be regretted that, though he devoted all his life to special study, Dr. Bock has not published nor finished a single work of any length, so that his reputation even with the learned public is by no means that to which his considerable acquirements should have entitled him. In respect to the topography and archaeology of early Christian Rome, Constantinople, and Alexandria, he had amassed, in long years of labour, a fund of erudition which is now, it is feared, lost to the world. Though he has left numerous MSS. they are in a most unsatisfactory state, overloaded with corrections, and written in a hand which it is extremely difficult to decipher. His contributions to periodical literature and to the publications of societies were throughout his life incessant. All dealt with points connected with the history and archaeology of art. M. de Reumont closes his memoir with a brief account of some of the most important. They appeared for the most part in the *Bulletins de l'Académie royale de Belgique*, the *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande*, the *Christliche Kunstblätter*, and the *Niederrheinisches Jahrbuch für Geschichte und Kunst.* Dr. Bock was but sixty-six years old when he died on the 18th October, 1870.

ART NOTES.

C. J. Cavalucci gives a curious account (in the *Gazzetta uffiziale*) of the discussions which have been held respecting the site of Michelangelo's "David." In January 1503 (O. S.), when the statue was just completed, a council of artists and citizens met to discuss the question ; Giuliano da Sangallo opined that the marble would perish by exposure to the weather, and that the "David" should therefore be placed in the middle arch of the Loggia dei Signori ; Lionardo da Vinci, Piero di Cosimo, and others voted on the same side ; Salvestro, a jeweller, and Filippino Lippi thought that the artist should be consulted and his opinion followed ; Botticelli thought either in the Loggia or by the side of S. Maria del Fiore would be best ; we are not told how Ghirlandajo, Perugino, and Lorenzo di Credi voted. The fears of Giuliano da Sangallo have now, after more than three centuries, been proved to be well founded, and experts express great anxiety as to the safety of the statue if it is left longer exposed to the action of frost and rain, an almost imperceptible crack in the left leg of the figure being especially dangerous. The statue is now enclosed by substantial scaffolding, and its removal is settled upon, though its future place is uncertain ; probably the Accademia delle belle Arti will be enriched with it.

The Lille Museum has again enriched itself by the acquisition of two considerable paintings. One is a remarkable specimen of the work of Simon van der Does ; the other, a very valuable example of Pierre Verelst, a native of Antwerp, who was dean of the painters' guild at the Hague in 1660, and was one of the most distinguished disciples of Adrian van Ostade.

The illustrated catalogues for the sales of MM. Michel de Tretaigne, Pereire, and Paturle, may be obtained on application to M. François Petit, 7, Rue Saint-Georges, Paris.

At the sale of Étienne Arago, the Louvre Museum acquired the "Environs of Vincennes," by Étienne Moreau, for 2050 fr. ; and the "Terrace at Versailles," a very beautiful example of Bonnington, for 3050 fr.

On the occasion of the excavations made lately at Pompeii, by the direction of Signor Fiorelli, in the presence of the Grand-duchess Olga, a table in Greek marble was discovered, decorated by painted figures, which are supposed to represent a scene from the Niobe. There were also found several bronze vases, and a rudder of bronze, supposed to have belonged to a statue of Fortune.

A worthy monument to the memory and honour of Ingres has just been erected in the great hall on the ground floor of the École des Beaux-Arts at Paris. A stele in white marble, designed by Duban, has received the bronze bust executed by M. Guillaume. On the base of the stele two medallions are sculptured, those of Ingres' two pupils, Hippolyte Flandrin and Simart.

A third and revised edition of the catalogue of the picture gallery at Oldenburg has just appeared. In the preface, the director, Herr von Alten, gives full particulars as to the general formation of the collection by successive grand-dukes. But the important feature of the work is the reproduction in an appendix of the different monograms and signatures which occur on the various paintings. It is hardly possible to over-estimate the value to students of catalogues executed in this thorough way, catalogues which really give us reliable materials.

The *Kieler Zeitung* for December 1871 contains an article by Professor Klaus Groth, which is nominally a review of Dr. Hermann Grimm's recent publication *Zehn ausgewählte Essays etc.*, but actually a very interesting commentary upon the notice of Asmus Jacob Carstens, which formed one of these ten essays. The account which it contains of the bygone interest and taste in art of the Schleswig-Holsteiners, an interest and taste which found perhaps its highest expression in the marvellous wood-carvings of Bruggemann, will be information to most, and has especial value as aid to us in tracing the line of Carstens' artistic descent.

A terracotta vase has been recently brought to light from the bottom of the Seine. It contained several small coins of Philippe le Bel, and a fine medal in gold which represents Philippe le Bel holding a sceptre in his right hand, and a *fleur-de-lis* in his left. The reverse is a cross which divides the inscription, and is surrounded by four *fleurs-de-lis.*

M. Beulé opened his course of archaeology at the Bibliothèque Nationale on the 20th of February. The subject was "Une maison pompéinne."

M. René Ménard concludes his excellent notice of the Pereire collection in the *Chronique des Arts* for February 18th.

J. E. Millais, R.A., has recently executed a portrait of Sir James Paget, which is one of the most masterly pieces of

painting which have ever come from the hand even of this most masterly painter. Sir James is represented at half-length; he is lecturing; on the slate behind him he has just chalked the fracture which is his text. Mr. Millais attended the class on one occasion to see Sir James in the act, and whatever Mr. Millais has seen he has a supreme power of painting. A full-length portrait of the Marquis of Westminster is also, in spite of pink, and in spite of the figure looking somewhat unsubstantial, a highly satisfactory achievement. It seems exacting, rather than just, to demand yet more of one who gives us so much. But, in face of this magnificent sleight of hand, rises up the recollection of the exquisite workmanship of some of Mr. Millais' earlier work, the lingering traces of which seem now to be fast disappearing, and we ask that Mr. Millais should give us yet again, as perhaps he alone can, the touch of colour carrying on its edge that drawing without which the freest handling degenerates into mere smudges of the brush.

Mr. Huth has just purchased two paintings by Mr. Watts, R.A.: the "Daphne," which was exhibited at the Royal Academy in 1870; and "The Three Graces," a picture which is a very charming and refined example of this artist's treatment of female form.

We have received with much regret the announcement of the recent death of M. Riocreux, the custodian of the Musée de la Manufacture de Sèvres. M. Riocreux had attained the ripe age of eighty-four. His name is well-known in this country as the author, in conjunction with M. Brongniart, of the valuable *Description méthodique du Musée céramique de la Manufacture de Sèvres.*

The engravings which were stolen from the library of the Louvre, a few days before the final struggle of the Commune, have turned up in a shop in the Rue Lafitte. The police got scent of the person by whom they were sold, and have seized a professional thief, who at once made full confession.

The projected restorations of St. Mark's at Venice are exciting dread and anger throughout the whole world of archaeology and art. The municipal council having destroyed—*i.e.* restored—Torcello, and inflicted much irreparable damage on other precious monuments, intends finally to set to work on St. Mark's. Salviati is to cook up the mosaics, the gilding is to be entirely renewed, the floor to be levelled up, &c. But can nothing be done to avert this catastrophe? Ignorance, not intentional vandalism, is directing the efforts of the council, and if appeal were made from proper quarters, they might perhaps stay their hands, and eventually this restoring fever might pass over. We have seen it ravage England and France, and, in watching its course, we have felt that what was lost was as nothing provided only Italy might escape. And now, whilst we sit still, zealous renovators approach St. Mark's. Such matters as these are commonly most at heart with those who can bring least time or power to serve them. But surely some one, lacking neither power nor will, might be found—say, for instance, Lord Stanhope—who might initiate here an effective protest against the wholesale degradation of one of the chief monuments of Europe.

Professor Dr. Anton Springer has accepted the Professorship of "Kunst- und Kulturgeschichte" in the new University of Strasburg.

In a letter to the *Beiblatt zur Zeitschrift für bildende Kunst* for February 23, Dr. Max Allihn demonstrates the untenableness of the theory recently put forth by Herr Bergau as to the interpretation of the Dürer composition commonly known as the "Vier Hexen." Herr Bergau maintains that the bullet on the table is the apple of Discord; that the "O. G. H." which has been taken to stand at one time for "o geliebte Hexe," at another for "o Gott hilf," means really "Olympischer Götterhader"! that three of the witches are Juno, Minerva, and Venus, and that the fourth must be Paris, because she is remarkably small-hipped and small-breasted. As to this last peculiarity, Dr. Allihn very correctly remarks that small breasts and narrow hips were points in the most esteemed type of female beauty in the sixteenth century, and he might have added that in all the best periods of art artists have invariably approached as nearly as possible to the male type whilst accentuating the distinctive peculiarities of female form.

An exhibition of the works of Henri Regnault is in course of preparation at the École des Beaux-Arts.

A pupil of Hippolyte Flandrin, M. Perrodin, has just completed, in the church of Notre Dame de Paris, an important series of paintings. In the chapel of the Virgin behind the choir he has executed six compositions, the subjects of which are taken from the life of the patroness of the church. In the south transept, above the altar, M. Perrodin has depicted the Annunciation and the Assumption; in the arcades are twelve sacred personages, connected either with her life or worship. The martyrdom of St. Stephen is painted in the north transept, and in the arcades twelve saints, who were of the clergy of Paris. The artist has also decorated the inside of the doors of the "armoire aux châsses" with eight subjects from the history of St. Louis.

The Académie des Beaux-Arts has decided, in accordance with other sections of the Institut, that each of its members shall contribute a month's salary towards the work of the liberation of the French territory. The French artists have been for some time past actively engaged in organizing committees amongst themselves to receive contributions in money, or in works of art. The Comité Directeur published its circular in the *Moniteur universel* of February 25, and fresh names and fresh particulars are given every week in the *Chronique des Arts.*

The principal event of the Paturle sale was the contest between the agents of the museums of New York and Neufchâtel for the "Pêcheurs de l'Adriatique." This picture was the last painted by the unfortunate Leopold Robert, a native of Neufchâtel. It was executed in Venice, and was despatched to France early in 1835, but arrived too late for the "Salon," and shortly after this, on the 20th March, he committed suicide. An exhibition of his works was organized during the same year at Neufchâtel by his brother, Aurel Robert. His nephew, M. de Meuron, was the agent sent by his native town to secure for their museum the last work of their distinguished fellow-citizen. The biddings ran high, but it is supposed that, on learning the state of the case, the New York agent ceded the point, and the picture became the property of the canton for the sum of 83,000 fr. A fine example of Troyon, "Animaux fuyant l'orage," went for 63,000 fr. The well-known "Anes au repos," by Decamps, was knocked down to M. Yriarte, after a spirited contest with the New York agent, for 51,500 fr. Scheffer's "Marguerite à l'église" fetched 40,000 fr. There seems, however, to have been a general sense of disappointment when the numerous paintings preserved in this collection, and held to have been the masterpieces of this artist, faced the blaze of common day. The mode is past.

Dr. Franz Bock, of Aachen, has just brought out, in conjunction with Mr. Willemsen, an archaeological historical description of *Die mittelalterlichen Kunst- und Reliquienschätze zu Maestricht aufbewahrt in den ehemaligen Stiftskirchen des heil. Servatius.* The book is amply illustrated with woodcuts.

We learn from the report for 1871 of the committee of the Germanischen National-Museum at Nürnberg, that they received during the past year, amongst other gifts, the important portrait by Albrecht Dürer, of Hieronymus Holzschuber, which has been presented by the Holzschuber family, in whose hands it has remained up to the present day.

The Hodshon picture gallery at Amsterdam comes to the hammer about the middle of April. It consists of twenty-five fine examples of the Dutch and Flemish schools in the sixteenth and seventeenth centuries, amongst which occur the names of Jan Steen, Van Dyck, Dow, Hobbema, Polter, and Ruisdael. The catalogue is on the point of appearing.

The *Gazette des Beaux-Arts* for the present month contains an article entitled "A propos d'un portrait politique," which narrates, from authentic documents, "extraits des archives du Saint-Office, qui sont à la Bibliothèque," a curious episode from the combat in which the court of Rome engaged to prevent the success of the candidature of Henry IV. These documents relate the prosecutions instituted against certain persons who had engraved in Rome a portrait of the "pretended king of Navarre." The facts in themselves are not unworthy notice, but they derive especial interest from the fact that the chief offender was Philippe Thomassin, the most celebrated of the "graveurs troyens." The most zealous researches have hitherto failed to bring to light the date of his birth, which is now settled beyond dispute, for in his deposition, taken June 12, 1590, he says, he is the son of Jean Thomassin, native of Troyes in Champagne, and aged twenty-nine years.—The "Vue générale de l'art chinois" is concluded.—The publication of documents relating to the arts during the Commune is continued.—M. Henri Lavoix contributes an entertaining chapter on the "Portraits of Molière."—M. René Ménard begins a notice of the Institution of South Kensington, and M. Champfleury reviews the Bibliophile Society's edition of the *Éloge de la Folie*, which has just appeared, accompanied by a careful and spirited reproduction of Holbein's original designs.

The magnificent bust of Voltaire by Houdon, which was sold at the Broderip sale for 665 guineas, became the property of Mr. Alfred Morrison.

On comparing the recent translation of Dr. A. Woltmann's *Holbein and his Time* with the original, it will be found that the work has been in parts quite remodelled by the author, and that in some respects he has materially improved upon the form of the German book. Unfortunately the results of the last two years' discoveries, which have materially added to our knowledge of the Holbein family, have not been incorporated into the translation, and the suppression of the catalogue of works makes the English volume quite useless to students.

The scope and intention of Mr. Eastlake's *History of the Gothic Revival* is announced on the title-page, where he defines it as "an attempt to show how the Gothic style which lingered in England during the two last centuries has since been encouraged and developed." With this object in view, his work opens with a description of some of the more notable phases of the survival of Gothic design—firstly, in the common and vernacular specimens of architecture which, though later in date than the introduction of the renaissance spirit into England, exhibit unmistakable characteristics of an unbroken Gothic tradition; and secondly in the Gothic works of Sir Christopher Wren. The conspicuous announcement above quoted would naturally lead us to expect a more thorough and exhaustive treatment of the intermediate styles; and few subjects could be more interesting than a discussion by a thoroughly competent writer, educated by an intimate acquaintance with buildings rather than with documents, of the gradual encroachment of the later on the earlier style, and its own adaptations and developments, which terminated on the one hand in a predominance which was never absolute (the conquered style from time to time re-asserting itself by a recognisable reversion), and on the other, in the formation of a style which was to the greatest possible extent national and vernacular. Some portion of the discussion which we have suggested might perhaps reasonably be considered beyond the present writer's scope, but, from any point of view, this portion of his work is very inadequate. The history of the development of antiquarianism (which should have been more clearly defined as a mere development of a special phase of a study which existed previously) brings the writer to the well-known epoch of Horace Walpole, whose literary and artistic mediaevalism, together with the products of the fashion which he set, is discussed at greater length than the importance or interest of the topic appears to deserve, seeing that no attempt is made to give any intellectual significance to this strange development. A similar defect is evident in the treatment of the later revival in the time, and in connection with the influence, of Sir Walter Scott. At this period, at least, the revival of Gothic architecture was distinctly the result of intellectual changes of the widest extent and of the deepest possible import. From this to our own period, the history of Gothic architecture is one of unbroken and almost unchecked development, and in this more modern portion of his subject, Mr. Eastlake appears to be more at home—so much so that for mere facts he leaves little to be desired. For criticism it is otherwise. The criticism of contemporaries involves considerable embarrassment; and the means which Mr. Eastlake has adopted of solving the difficulty—that, namely, of modifying a lengthened panegyric of pretty even complexion by an occasional common-place exception—though no doubt safe, is scarcely profitable. His collocation of descriptions and illustrations will, however, give those who possess the necessary interest and capacity the means of forming theories of their own as to the tendencies of our own architectural period. While feeling grateful for this attempt to fill a gap in our art literature, we do not consider the present work to have attained a sufficiently high standard, either literary or critical, to merit more prolonged discussion. It is, in fact, little more than a compilation from somewhat obvious literary sources; whereas a really valuable work on this and cognate subjects should, in the first place, be founded on an acquaintance with stone rather than paper, and, in the second place, should embrace a thorough acquaintance with the intellectual changes implied in changes of external fashion.

New Publications.

COLERIDGE, H. J. (S. J.) Life and Letters of St. Francis Xavier. Vol. I. (Quarterly Series.) Burns and Oates.

LAMARTINE, Alphonse de. Twenty-five Years of my Life. Translated by Lady Herbert. Bentley.

MEISSNER, J. Untersuchungen über Shakespeare's Sturm. Dessau: Reissner.

MEZIÈRES, A. W. Goethe, les œuvres expliquées par la vie, 1749–1795. Paris: Didier.

MILTON, John, Autobiography of. Ed. by Rev. James J. G. Graham. Longmans.

MORRIS, R., and SKEAT, W. Specimens of Early English. Vol. II. A.D. 1298–1393. Clarendon Press.

NÁGÁNANDA; or, The Joy of the Snake-World. A Buddhist Drama. Translated with explanatory notes by Palmer Boyd, with introduction by Prof. Cowell. Trübner.

RALSTON, W. R. S. The Songs of the Russian People. Ellis and Green.

ROGERS, J. E. T. Bacchae of Euripides translated into verse. Parker.

Physical Science.

Stricker's Handbook of Histology. [*Handbuch der Lehre von den Geweben des Menschen und der Thiere*, unter Mitwirkung herausgegeben von S. Stricker. 1870–1.] Leipzig: Engelmann.

DURING the thirty and odd years which have passed since Schwann published his famous essay, the science of Histology has progressed with most remarkable rapidity. Perhaps it would be more accurate to say that our knowledge of histological facts, our acquaintance with the details of the microscopical and so-called ultimate structure of living beings has become immensely extended. The admirable recent improvements in the microscope, the skilful or fortunate use of staining and hardening reagents, the possibility of carrying on microscopical observations at all manners of times and in all kinds of places, the exquisite pleasure, the charm of a satisfied curiosity which comes from the study of the delicate and fantastic patterns of animal and vegetable tissues—these and other causes have led to the accumulation of memoir upon memoir and of fact upon fact. But while the knowledge of particulars has come, wisdom has lingered; the insight into general laws has moved but slowly, or even stood still, if not actually gone back. Of the rank and file of histologists we might almost say that the breadth of their views has been in direct ratio to the focal length of

their lenses, year by year diminishing in arithmetical progression. There have been many, perhaps too many, animated controversies, but these have been for the most part factitious and unreal, while the efforts after a larger grasp have been few and far between. When, therefore, it was announced some two years or more ago that "all the talents" of Germany were about to join under Stricker's leadership to write a new *Handbook of Histology*, the hope sprang up that a work might result which should mark the beginning of a new era in histology, and breathe a spirit of unity into a body of disconnected facts.

We cannot say that this hope has been fulfilled. With all respect to the many praiseworthy labours of the Viennese histologist, the production of himself and his fellow-workers, the last part of which has just reached us, shows that he does not possess the peculiar qualifications for so important a task as that of editing such a volume. It was within his choice either to select such writers as would, without further oversight on his part, do their respective works in such a way as to construct a congruent whole, or by constant editorial action to have fitted together the unequal segments. Neither of these has he done; indeed in an exceedingly *naïve* preface he simply flings over all such graver duties.

The various writers seem to have had no definite standard whatever set before them. Some of the contributions are just what all the articles in such a work ought to have been: exhaustive but concise and critical expositions of the present state of our knowledge concerning the subjects in hand, the author's individual views being not concealed but subordinated to the views generally held, or at least not made predominant. Such are the articles of Max Schultze on the Retina and on the Structural Elements of the Nervous System. These are very clearly written, are not too long, embody all the important points of the author's own researches, and yet distinguish very successfully between the actual known and the hypothetical or probable, and may be studied with profit both by the young student who knows little or nothing of the subject, and by the working histologist who is already acquainted with Max Schultze's original memoirs. Very similar in general scope and work is Waldeyer's article on the Auditory Nerve and Cochlea, thus contrasting favourably with the preceding one by Rüdinger on the Membranous Labyrinth, which is singularly lacking in expository power. Somewhat differing from these longer articles, in as much as they deal with quite special points, but still characterized by the same good qualities, are the articles by Brücke on Muscle in Polarized Light, and by Kühne on Nerve and Muscle Fibre. The title of the latter should however rather have been "On the Ending of Nerves in Muscles;" and we see here in a very marked manner the editorial deficiencies. Kühne's paper deals only with the terminations of the nerves in muscles, and deals with the subject, as on such a matter of detail might be expected, from his own point of view; Brücke's article treats of the appearances presented by muscle under polarized light. Both papers would have been extremely valuable as adjuncts to a general exposition of the structure of striated muscle; but this, perhaps the most important subject in the whole range of Histology is, marvellous to say, absent.

More than half the fourth part is taken up with an article by Meynest on the Mammalian Brain. This is in great measure a monograph embodying the author's own views on the subject, and as one of a series of similar monographs would have been a valuable memoir in its right place. But to speak of it as an expository treatise would be a jest. Writing in exceedingly bad German, and in as twisted and matted a style as it was ever our misfortune to meet with, the author complicates the difficulty of an already sufficiently complex subject with further and needless perplexities of his own making.

Several, we might say very many, of the articles have a fault of quite a different kind; the writer's individuality, instead of being in excess, is not sufficiently prominent—the result being a certain flabbiness and want of tone. Such for instance is the contribution of Rollett on the Blood. Perhaps no one subject in the whole work afforded larger scope for decisive handling; but Rollett's article is loaded with detail without being exhaustive, enters into a variety of theories without the safeguard of a searching criticism, is an industrious compilation of real or supposed facts without perspective, and what appreciation of size it shows, is in the direction of magnifying unduly the most recent novelties from the newest physiological laboratory.

A similar want of judgment concerning the relative importance of various topics must, too, we fear, be laid to the charge of the editor himself.

The article on the Cornea is of inordinate length, apparently for the reason that of late years corneal research has been the fashion among young histologists, so that histological journals are seldom continued for many numbers without a paper on the cornea. On the other hand the articles by Hering and Ludvig on the Liver and Kidneys respectively, which together occupy fewer pages than does the cornea alone, to a certain extent suffer because the writers have evidently been anxious to confine themselves within fixed limits. The article by Pflüger on the Salivary Glands is longer than either Hering's or Ludvig's; and while every one is very glad that Pflüger should have such an opportunity of expounding his own particular views, the length of space given to him is out of proportion to the relative importance of his topic, compared with that of the two articles just mentioned. Had it been worth while to undertake the labour of such a book with the knowledge that it could only last a few years, the plan of giving up space to what may be called in a certain sense topics of the day would have been intelligible enough. But the editor surely had the ambition that this book should last for many years at least; and in such a case to stint matters of lasting value for the sake of enlarging on questions whose interest is emphatically of to-day, and may prove quite transitory, shows want of judgment.

But it may be we wrong the editor in laying this charge at his door; his plan has been, perhaps, to have no plan at all, and hence each contributor has taken just such space as he pleased. The older tried writers have accordingly drawn away towards the golden line of silence, while the younger writers have written without restraint.

In some however of the articles contributed—or rather in reference to some of the topics treated of by the younger coadjutors—one would have gladly seen a greater amount of matter. We cannot but regard it as error to have left such an important matter, for instance, as that of the placenta to be written up, "unter Stricker's Leitung," by an investigator whose chief qualification seems to be that the organ in question has been selected by him as the field of his *Erstlingsarbeit*. The subject in consequence, by no means of least importance, has been very imperfectly treated, as will be recognised at once when it is stated that all the writer knew or thought worthy of mention about the placenta is comprised without compression in *three* pages of a work in which the cornea occupies more than fifty.

The articles which we have selected for special mention may be regarded as typical of so many classes in which all the contributions may be arranged according to their value and character; and it will be evident from what we have

said that the publication of this *Handbook of Histology* does in a certain sense mark an opportunity lost. The work is not, what we hoped it might have been, a general exposition exhaustive in character, and yet manifesting a bold grasp and clear critical insight; it is not a series of original monographs, a few of which might become classical and thus the whole remain valuable; it is not a text-book to put into the hands of a learner, being in this respect less useful than Kölliker's work and far below Sharpey's treatise; but it is a collection of essays very diverse in value and dissimilar in bent, and, except that it does nominally embrace the whole range of Histology, might almost have been published under the title of an *Archiv* without the editor's intention being recognised.

Regarded indeed as an *Archiv* it does fulfil very important functions, justifying perhaps the labour bestowed on the English translation which Mr. Power has undertaken for the New Sydenham Society. It gives a very vivid picture of the immense histological activity going on in Germany at the present moment; it brings before the reader all the latest information, shows him all the lines of enquiry which are being worked, makes him thoroughly acquainted with all the various controversies now raging, and if English work has perhaps been a little neglected by the various writers (if for instance the name of our most active successful microscopist, Dr. Beale, occupies greater space in the foot-notes than the facts which he has observed in the text), it is perhaps scarcely the part of an English reviewer to complain.

Of the intrinsic value of the various controversies which go so far to swell the volume, in what way they will probably end, which in each debated part is grain and which is chaff, it does not become a single critic to speak in a judicial spirit. It is his duty to report that the whole field is vexed with many eddies and crossing currents, and that it should have been the duty of the editor to show that there was also a general stream in a given direction, and to have made it clear what that direction was. MICHAEL FOSTER.

Scientific Notes.

Geography.

The Region of Mount Vitos in Central Turkey.—Dr. F. von Hochstetter, the geologist of the north island of New Zealand, publishes in *Petermann's Mittheilungen* the results of his geographical and geological researches made during 1869, in the district surrounding Mount Vitos. Though classic ground, and the source country of rivers described by Thucydides and Strabo, the region has remained up to the present time a blank in the exact topography of Europe. Dr. Hochstetter accompanied a large party of engineers and surveyors, whose object was the selection of a route for the central line of the future railway network of Turkey, and used this opportunity of collecting valuable material for the construction of the large scale map (of an area of about 4500 square miles of country) published with his memoir. A notable feature of the map is the great number of elevations above sea-level, determined by levelling and barometer, which are marked on it. The Vitos, a huge mass of syenite, rising to a height of 7600 feet, stands midway between the Rilo Dagh and the Balkan, and may be considered the central point of Turkey, being the source mountain of four of its chief rivers. It bears the same relation to Sofia, the capital of southern Bulgaria, as Vesuvius does to Naples, or Table Mountain to Cape Town, and is weather prophet for the whole region; when the mists collect into clouds round its summit-plateau in summer, refreshing showers water the plain of Sofia; when a white snow-cap appears in winter, heavy storms are expected in the lowland. The magnificent view commanded by the summit, and the ease with which the mountain is ascended, will doubtless make Mount Vitos the Rigi of Turkey as soon as the district is opened up by railways. The famed iron-country round Samakov, south of the Vitos, will also become accessible, and this has been considered a point of great national importance by the Turkish government: from the peculiar character of the distribution of the mineral, however, Dr. Hochstetter does not anticipate any great future development of this industry. The iron ore occurs as grains of magnetite in the syenite which extends over a vast area, and is collected at weirs intercepting the mountain torrents which wash it from its matrix.

Arctic Regions.—Dr. Petermann has collected and published in the *Mittheilungen* the results of those expeditions of last year which took the direction of Spitzbergen, extracted from journals kept in no less than thirteen vessels, and gives in a memoir the history of the discovery of Gillis and King Carl Lands to the north-east of Spitzbergen; each subject is illustrated with most admirable charts. The map of the sea-bed round Spitzbergen is specially interesting, showing clearly the limits and the steep outward slopes of the great submarine plateau on which the archipelago rests. A great point in the work of last year was the discovery and survey, by Mr. Leigh Smyth and his Norwegian sailing-master, Captain Ulve, of a hitherto unsuspected extension of the north-east land of Spitzbergen, proving it to stretch three degrees farther eastward than the supposed coast, and nearly doubling the extent of land hitherto shown upon the map. The additions made to our knowledge of the temperatures of the sea in these regions, both at its surface and at various depths, are likewise of great importance. Generally, Mr. Leigh Smyth found the water colder below than on the surface; but there were some exceptions, these being the most remarkable:—

July 1st, Lat. 70° 40′ N. Long. 20° E.

	Maximum. ° F.	Minimum. °
Surface	38	38
100 fathoms	38	35
Bottom 200 fathoms	44	35

September 11th, Lat. 81° 15′ N. Long. 18° E.

	Maximum. °	Minimum. °
Surface	33	33
No bottom 300 fathoms	42	33

South Africa.—Herr Carl Mauch, the explorer of the South African gold-fields, has sent to Gotha a most valuable geological map of the Transvaal Republic, based upon his own journeys and astronomically determined positions. The traveller, at the date of his communication in July 1871, was on the point of undertaking a new journey to Manica between the Limpopo and Zambezi rivers. South African newspapers announce the discovery of diamonds in various parts of the north and north-west of the Transvaal Republic. This greatly extends the known field of their distribution, and gives a prospect of a much wider region of active search.

Zoology.

Hippocampus and Calamostomus.—All the species of recent Hippocampi lack a caudal fin; their slow movements are entirely effected by the rapidly undulating dorsal fin, the tail having merely a prehensile function. In this respect they differ from the otherwise extremely similar fossil Calamostomus from Monte Bolca. Professor Canestrini, of the University of Padua (who has recently been elected one of the foreign members of the Zoological Society of London), has made the interesting discovery that very young Hippocampi are provided with a rudimentary caudal fin, and he regards this as direct evidence of a genealogical connection between these two genera. A similar relation exists between the recent genera Nerophis and Syngnathus, the latter being provided with, while the former is without, a caudal fin. (*Atti Istitut. venet. di Scienze*, vol. xvi.)

Development of Sturgeons.—Not less interesting than the discovery of a caudal fin in the young of Hippocampus is that of the presence of teeth in recently hatched sturgeons. This discovery was made by two observers, Pelzam and Knoch, nearly at the same time, and independently of each other. The latter describes and figures them in *Bull. Soc. Nat. Mosc.* 1871; in the sterlet (*Acipenser sterletus*) there are ten teeth in the upper jaw and eight in the lower. These teeth are not without function, the young sterlets being carnivorous, and, in fact, so voracious that they attack each other. The exact period when these teeth are lost has not yet been ascertained.

The Hairy Tapir (*Tapirus Roulini*) has hitherto been one of the greatest desiderata for zoological collections; beyond two skulls presented by Roulin, the discoverer and first describer of this animal, to the Paris Museum in 1829, no other example has ever been brought to Europe. This is to be accounted for less by its scarcity than by the difficulty of transporting skins of so bulky an animal on the back of Indians from the highlands of Ecuador and New Granada, to which region it is confined, to the coast. Thanks to the exertions of Mr. Buckley, the British Museum has recently acquired a very fine series of six perfect examples, three adult, two halfgrown, and one young, the skeletons and skulls having been preserved beside the skins. This tapir differs from the lowland species in being covered with dense and long black hair, which adapts it to the requirements of the colder elevated region that it inhabits. The young, as in all the other American tapirs, is spotted or banded with white or yellow, thus calling to mind the affinity of these animals to the pig.

The Fauna of the Mammoth Cave.—In the *American Naturalist* for December 1871 and January 1872, the editors have collected a vast amount of interesting matter regarding the Mammoth Cave and its inhabitants. The remarkable blind fishes are described by F. W. Putnam; the paper being provided with some excellent steel-plates illustrating the anatomy of *Amblyopsis spelaeus*, as well as that of *Chologaster cornutus*, *Typhlichthys subterraneus*, and *Chologaster Agassizii*. Diptera are represented by two species, one of Anthomyia, the second belonging to the genus Phora. Among the beetles are *Anophthalmus Tellkampfii*, which is totally blind, and *Adelops hirtus*, on which are seen two pale spots that may be rudimentary eyes. Next there are two wingless grasshoppers, *Hadenoecus cavernarum* and *Raphidophora stygia*, with perfectly formed eyes. A species of Campodea (*C. Cookei*) is remarkable for occurring in the vicinity of the cave: it is without eyes. Of the Myriopods, *Spirostrephon Copei* was met with three or four miles from the mouth of the cave; it is the only truly hairy species known, and is blind; the other species of this group found living in caves have eyes. Next to the blind fish, the blind crawfish (*Cambarus pellucidus*) has attracted most attention. The eyes are atrophied; the cornea exists, but is small, circular, and not facetted. The eyes are more perfect in the young than the adult, indicating ancestors unlike the species now existing. There is further an isopod crustacean (*Caecidotea stygia*) found, in company with the Campodea, on the sandy bottom of a shallow pool four or five miles from the mouth of the cave. It is nearly allied to Idotea, but differs from it in being blind; as its nearest allies are marine, it is difficult to explain how the present form became a cave-dweller. The authors have figured a fish with eyes which was found in the stomach of an Amblyopsis. Guided probably by the movements which its prey makes in the water, so sensibly influencing the delicate tactile organs of the blind fish, the latter is enabled to follow rapidly, while the pursued, not having the sense of touch so fully developed, is constantly encountering obstacles in the darkness.

Domestic Dogs in Brazil.—Dr. R. Hensel relates (in the *Zoolog. Gart.* Frankfurt, 1872) his experiences of the domestic dog of Brazil. No well-marked race can be distinguished, with the exception of one used in chasing deer; and European races, introduced into the country, soon degenerate. He instances the pointer, the form of the head of which becomes entirely changed; with every successive generation the skull becomes shorter, finally resembling that of a bull-dog, whilst the ears retain their usual length. Individuals with a very short head had the forelegs curved, so that this change appears to be due to rhachitis.

The Aquarium at Berlin.—We find from the annual report of the secretary of this establishment that the income derived from visitors during the year 1871 amounts to 52,955 thalers (7943*l.*), the number of visitors admitted on payment having been 215,828. This is rather more than half the number of visitors who paid for admission to the Zoological Gardens in Regent's Park last year. The price of admission is nearly the same in both cases, but, like all other similar institutions on the continent, the Berlin Aquarium is not only open to the paying part of the public on Sundays, but the price of admission is reduced to one-half during the afternoon of that day.

A new zoological journal has been started in France by Professor H. de Lacaze-Duthiers under the title *Archives de Zoologie expérimentale et générale*. The annual volume will be issued in three parts in octavo (at a price of 32 fr.); the first part contains 144 and xvi pages, and five steel-plates. In a long introductory article on the "Direction des études zoologiques," the editor explains that the journal is intended to take a position in French literature similar to that occupied by Siebold and Kölliker's *Zeitschrift für wissenschaftliche Zoologie*. The first part contains two original memoirs: 1. "Histoire naturelle du *Dero obtusa*," by Dr. Ed. Perrier (pp. 65–96); and 2. "Otocystes ou capsules auditives des Mollusques gastéropodes," by the editor (pp. 97–144). The remaining sheet is devoted to shorter notices and reviews.

Die in Deutschland lebenden Arten der Saurier, untersucht und beschrieben von Dr. Franz Leydig, Tübingen, with 12 plates.—The author intends to give in this work a complete description of the external characters, internal structure, and natural history of the Lizards of Germany. The work is accordingly divided into three parts: 1. A detailed account of the anatomy of the genera Lacerta and Anguis, with particular reference to the species found in Germany. This is by far the most important part of the work, and may be consulted with advantage by all students engaged in the anatomy of Saurians; those only will be disappointed who seek for myological details. 2. A general account of the biological phenomena. 3. Special descriptions of *Lacerta viridis*, *agilis*, *vivipara*, and *muralis*, and of *Anguis fragilis*. The plates illustrate the first part, and are beautifully executed.

Öfversigt aft K. Vetenskaps Akademiens Förhandlingar, vol. xxvii.—We have received Nos. 8–10, which contain the first part of an account of the Scandinavian Myriopods, by A. Stuxberg; a paper on opercular structures in corals, by G. Lindström; and a highly important contribution to the history of the Oligochaetous Annelids of Scandinavia, with a monograph of the eight species of *Lumbricus* met with in that part of Europe, by G. Eisen.

Bulletin de la Société impériale des Naturalistes de Moscou.—The volume for 1871 contains Dr. J. Knoch's account of his journey to the Volga, undertaken for the purpose of obtaining ova of the sterlet (*Acipenser sterletus*). The greater number of the other zoological papers are devoted to descriptive entomology: Baron de Chaudoir has continued his monograph of *Lebiidae;* M. Ballion makes additions to Gemmingen and Harold's invaluable *Catalogus Coleopterorum*, adds a hundred new beetles to the Russian Fauna, and describes *Leptura Jaegeri* and *Stenura oxyptera;* Messrs. Lindemann, Hochhuth, Erschoff, and Becker have papers on various local Faunae of the Russian Empire; M. Lindemann compares the skeleton of Hymenopterous Insects with that of Coleoptera; and M. Erschoff has critically examined the species of Lepidoptera established by Eversmann.

In the two annual parts (Nos. 11 and 12) of the *Jornal de Sciencias mathematicas, physicas e naturaes da Academia R. das Sc. de Lisboa* for 1871, Professor B. du Bocage has continued his account of the ornithology of the Portuguese possessions in West Africa, with the description of a new pelican, and notes on *Francolinus rubricollis;* M. de Brito Capello issues the first part of his list of the Fishes from Madeira, the Azores, and West Africa in the Lisbon Museum, and contributes descriptions of new Crustaceans; M. Luso da Silva's Catalogue of the Land and Freshwater Shells of Portugal supplies a great desideratum in conchyliology; it is not completed in the two parts of last year.

The publication of the fifteenth volume of the *Mémoires de la Société pes Sciences naturelles de Cherbourg* has been considerably delayed. Observations on zoology are confined to two papers, both by M. Henri Jouan, entitled "Notes sur les Archipels des Comores et des Seychelles" (pp. 45–123), and "Notes de Voyage sur Aden, Pointe-de-Galles, Singapore, Tché-fou" (pp. 169–198). A paper on Lophobranchs by Duméril is an abstract from his general Ichthyology.

Baumhauer's *Archives néerlandaises des Sciences exactes et naturelles* for 1871 contain an important paper by W. Marshall on the elongated caudal plumes of the birds of paradise (livr. iii. 296). He was aided in his observations by the extremely rich collection of the Leyden Museum, which, we may state in illustration of its completeness, comprises a series of fifty-three specimens of *Paradisea apoda* and seventy-two of *Paradisea regia*, not one of which can be considered a duplicate. —Dr. Bleeker has contributed descriptions of a new *Cirrhilabrus* and *Chilinus* (livr. iv. 326).

A letter from Mr. A. S. Packard, Jun., of Salem, Mass., one of the editors of the *American Naturalist*, directs attention to the report of Dr. Dohrn's investigations on the embryology of the Arthropoda in the *Academy* for 15th January (vol. iii. p. 28). Mr. Packard states that he does not group the Trilobites with the Isopoda, considering them to have no characters in common; while so far from excluding Pterygotus and Limulus from the Trilobites, he attempted to show (*Amer. Nat.* iv. 498) that the Limuli are closely allied to the Trilobites. It would seem, in fact, that Dr. Dohrn's views have been anticipated about a year.

Physics.

A New Form of Galvanic Battery.—By using a concentrated aqueous solution of potassium permanganate, acidulated with sulphuric acid, in the place of nitric acid, in a Grove's battery, J. H. Koosen (*Pogg. Ann.* 144, 627) has produced an element of greater power, its electromotive force, according to numerous determinations, being at least double that of a Daniell. While the electromotive force of a Grove's element varies according to the strength of the nitric acid, that of the permanganate couple, the author finds, remains the same no matter what the concentration of the liquid: the introduction of a single drop of permanganate solution into the porous cell containing acidulated water at once develops the full force of the current; this of course subsides as rapidly owing to the decomposition of the permanganate. It is well known that in Grove's battery, owing to the evolution of gas, there is a continuous movement of the liquid in the cell, constantly bringing fresh portions of acid to the surface of the platinum plate; when permanganate is used, the dissolved salt in immediate contact with the plate is soon exhausted, and owing to its small diffusive power a fresh supply is not immediately forthcoming, so that the strength of the current sinks rapidly; the slightest agitation, however, suffices to restore it to its original strength. This difficulty the author overcomes by increasing the surface of the platinum plate, constructing it as follows: a number of strips of the same size are cut from very thin sheet platinum, slightly narrower than the diameter of the porous cell, and about 4 cm. shorter than the cell in length; these are placed one above the other and soldered together at either end with gold, at the middle of their narrow ends; a platinum wire, at least 1 mm. thick, is also soldered to one plate as pole wire; the several halves are then so bent apart as to form a cylindrical fan of platinum plates. By dispensing with a porous cell the internal resistance may be greatly lessened; in which case, in order to prevent contact between the platinum and zinc, a cylinder of coarse hair-cloth is loosely placed inside the zinc

cylinder, on this rests the platinum electrode; the whole is charged with water and sulphuric acid, the permanganate (20 to 30 grm. in crystals) being placed in a platinum sieve with meshes not more than 1 mm. in diameter, resting on the zinc cylinder, but separated from it by the hair-cloth, which has therefore to be longer than the cylinder itself.

Relations between the Optical Rotatory Power of Organic Bodies.—F. W. Krecke, in a most exhaustive and interesting memoir (*Archives néerlandaises*, 6 (1871), and *Jour. f. prakt. Chem.* 5, 6), discusses the subject of circular polarisation and the undoubted relations which exist between the rotatory powers of bodies of the same class, such as the carbohydrates, the cinchona and opium alkaloids, &c. His investigations lead him to the conclusion that the molecular rotatory powers of various carbon compounds obey two laws:—(1) That if an optically active body enter into combination with an optically inactive body, or if it be modified by chemical agents, the molecular rotatory power either remains unaltered or becomes so modified that the molecular rotatory power of the new body is a simple multiple of that of the mother substance. (2) That the molecular rotatory powers of isomeric substances are multiples of one and the same number. Among many others the following examples are given in proof of the existence of these laws:—

GLUCOSES. (m) = molecular rotatory power.

	(m) =		°
Dextrose (fresh solution)	+190·8	: 4	= 47·7
,, (old solution)	+ 96·3	: 2	= 48·1
Laevulose (t = 15°)	−190·8	:−4	= 47·7
,, (t = 90°)	− 95·4	:−2	= 47·7
Galactose (fresh solution)	+251·3	: 5	= 50·2
,, (old solution)	+149·8	: 3	= 49·9
Maltose	+286·2	: 6	= 47·7

By dividing the sum of the molecular rotatory powers by the sum of the numbers in the third column, a mean value is obtained for the common factor: $\frac{1260·6}{26} = 48·5$, with the help of which the following results are obtained:—

	(m) =		Theory.	Experiment.	Difference.
			°	°	°
Dextrose (fresh solution)	= 48·5 ×	4 =	+194·0	+190·8	+3·2
,, (old solution)	= 48·5 ×	2 =	+ 97·0	+ 96·3	+0·7
Laevulose (t = 15°)	= 48·5 ×	−4 =	−194.0	−190·8	−3·2
,, (t = 90°)	= 48·5 ×	−2 =	− 97·0	− 95·4	−1·6
Galactose (fresh solution)	= 48·5 ×	5 =	+242·5	+251·3	−8·8
,, (old solution)	= 48·5 ×	3 =	+145·5	+149·8	−4·3
Maltose	= 48·5 ×	6 =	+291·5	+286·2	+4·8

The greatest difference between the calculated and experimental numbers is 8·8°, or slightly above 3%, a difference which certainly is not greater than the possible error of experiment.

SACCHAROIDS.

	(m) =		°
Lactose (fresh solution)	+323·5	: 13	= 24·9
,, (old solution)	+202·8	: 8	= 25·3
Saccharose	+252·4	: 10	= 25·2
Melezitose	+321·8	: 13	= 24·7
Melitose	+348·8	: 14	= 24·9
Parasaccharose	+369·4	: 15	= 24·6
Mycose (Trehalose)	+752·4	: 30	= 25·0

The mean value of the common factor of this group is 24·96°, which is about half that of the factor of the glucose group (48·5°). The following explanation is given by the author of this law of simple relations. In racemic acid we have an optically inactive body, consisting of an equal number of molecules of dextro- and laevo-rotatory tartaric acid, but bodies containing an unequal number of molecules of either modification may be imagined: thus in a compound of 5 mols. dextro- and 1 mol. laevo-rotatory tartaric acid, the action of a molecule of the dextro-rotatory acid would be neutralised by that of the laevo-rotatory, and such a mixture would consequently have $\frac{2}{3}$ of the rotatory power of dextro-tartaric acid. A compound of 4 mols. dextro- and 2 mols. laevo-rotatory acid would only exert $\frac{1}{3}$ of the rotatory power of dextro-rotatory acid. To apply this theory to other substances, it is merely necessary to select from each group of bodies possessing a common factor that one which rotates most to the right, and to oppose to it that which rotates equally in the opposite direction, then all the remaining members of the group we may consider to be formed by the union of varying numbers of molecules of these two. If, in the case of the glucoses, the molecular rotatory powers of which are to each other as 4 : 2 : − 4 : − 2 : 5 : 3 : 6, we assume that besides the dextro-rotatory maltose there exists one of exactly equal laevo-rotatory power, and if for convenience it be supposed that all these bodies consist of twelve molecules, they may be considered as composed as follows:—

Dextrose (fresh solution)	10 mol.	+	maltose	and	2 mol.	−	maltose
,, (old solution)	8 ,,	+	,,	,,	4 ,,	−	,,
Laevulose (t = 15°)	2 ,,	+	,,	,,	10 ,,	−	,,
,, (t = 99°)	4 ,,	+	,,	,,	8 ,,	−	,,
Galactose (fresh solution)	11 ,,	+	,,	,,	1 ,,	−	,,
,, (old solution)	9 ,,	+	,,	,,	3 ,,	−	,,
Maltose	12 ,,	+	,,	,,	0 ,,	−	,,

In his *Index of Spectra*, Dr. Watts has collected from every source measurements of the spectra of the elementary bodies, and reduced them to a uniform scale of wave-lengths. Great confusion has arisen from the use of different scales in the mapping of strata, as well as from the varied dispersive powers of the materials forming the prisms, and from other causes. In dispersion spectra the relative breadth of the colours differs according to the nature of the prism, and it is evident that the exact position of a line can only be indicated by its colour; in other words, by the length of the wave of light producing it. In a diffraction spectrum the position of a line depends solely on its colour, and never shifts, no matter by what method the spectrum be formed. For the positions of lines to be comparable, the spectra must either be diffraction spectra or the observations made with prisms must be reduced to wave-lengths either by graphical interpolation or by aid of the formula used by Gibbs. Dr. Watts has based his calculations on Ångström's measurements of the wave-lengths of the principal Fraunhofer's lines, and under the name of each element (and air) he has tabulated the results of the examination of each line in vertical columns, the first of which gives its number when met with in Bunsen's first drawings; others the wave-lengths calculated from the observations of Ångström, Huggins, Kirchhoff, Plücker and Hittorf, Thalén, and others; and the last the intensity of the line roughly estimated. At the end of the index are drawings of the spectra of each element made on Bunsen's plan and arranged alphabetically: they represent the dispersion spectra, and are those referred to in the first column of the tables. The intensity of a bright line is in each case indicated by the altitude of the line which marks its position.

Spectroscopic Examination of the Aurora of 4th February.—Many communications have been received by the Academy of Sciences in Paris respecting this very fine aurora. M. Cornu noticed a yellowish-green band coincident with that observed by Ångström in 1867–68. M. Prazmonski also found a green band near Fraunhofer's line E, and possibly identical with Cornu's line, a red band near C, and two very faint ones in the blue and violet near F and G. M. Salet, in a paper sent to the Société chimique (*Revue scientifique*, 9th March, 1872) attributes the red line to the inversion of an atmospheric ray, and has not detected the substance producing the yellowish-green ray (λ = 557). He examined the gas occluded by the Lenarto meteoric iron for it, but found only the rays due to hydrogen and carbonic oxide. It should be mentioned that several English observers have recorded in recent numbers of *Nature* their observations on the green line, and others in the more refrangible portion of the spectrum.

Mr. Backhouse, of Sunderland, states in the *Times* of the 9th instant that T Coronae Borealis, the star which in 1868 burst forth so suddenly and then waned to telescopic size, and which for the last two years has not varied perceptibly in brightness, is now fading still further.

New Publications.

ASKENASY, E. Beiträge zur Kritik der Darwin'schen Lehre. Leipzig: Engelmann.

ASTRONOMISCH-GEODÄTISCHE ARBEITEN im Jahre 1870. Herausg. von C. Bruhns. Leipzig: Engelmann.

ENGLER, A. Monographie der Gattung Saxifraga. Breslau: Kern.

GÜNTHER, S. Studien zur theoretischen Photometrie. Erlangen: Besold.

HARTMANN, F. Handbuch der allgemeinen Pathologie. Erlangen: Enke.

JELLETT, J. H. Treatise on the Theory of Friction. Dublin: Hodges, Foster, and Co.

ORMATHWAITE, Lord. Astronomy and Geology Compared. Murray.

PETTENKOFER, M. V. Ueber Oelfarbe und Conservirung der Gemälde-Gallerien durch das Regenerations-Verfahren. Braunschweig: Vieweg.

WOLF, R. Johannes Kepler und Jost Bürgi. (Rathhaus-Vortrag.) Zürich: Schulthess.

ZÖLLNER, J. C. F. Ueber d. Natur d. Cometen. Leipzig: Engelmann.

History.

The History of the Norman Conquest of England, its Causes and its Results. By Edward A. Freeman. Vol. IV. Oxford: at the Clarendon Press, 1871.

OWING chiefly to increasing difficulties, the progress made by this great work from the third to the fourth volume has been a little slower than is customary with its energetic author. However, the pause has not been to the disadvantage of the production itself. After having bestowed in the preceding volume a wonderful amount of learning, art,

and affection on one single year and its hero Harold, the author had to adhere to the proportion of the book as designed by himself from the beginning. The decisive catastrophe of Senlac is succeeded by the Conqueror's reign, and the current of events becomes both broader and at the same time more rapid. There are some who have objected to Mr. Freeman an overweening fervour for his favourite. They will now probably complain of a certain lack of admiration for William, which of necessity becomes more apparent in the course of the history of his reign. But are there not many reasons for a certain coolness on moral grounds as well as on critical? We would invite those critics to try the same nice balance of the original materials as it is applied by Mr. Freeman throughout this almost ponderous volume. Very probably they will agree with us that full justice has been done to the Conqueror in strict accordance with his real merits and demerits, with the increasing and declining elevation of his most extraordinary character. Is there, indeed, any due acknowledgment withheld from William, the most sagacious politician of his age? "In this present matter"—as supreme judge—"Aelfred and Cnut could have done no more than William did" (p. 368). Ever and again we are referred to the bright passages of his history, for instance his relations to Lanfranc, John the Italian abbot of Fécamp, and Vital of Westminster, which show him in the most favourable light (cf. 402). Upon William's refusal to do homage to Pope Gregory VII. even Mr. Freeman forgets for a moment the stern foreign ruler of the English. On the contrary he rejoices in the English spirit of the celebrated answer, which declined fealty, but faithful to precedent admitted the regular payment of Peter's pence. "The simple dignity, the crushing logic, of these few words of William the Great form a marked contrast to the foul calumnies and wild invectives which the partisans of Pope and Caesar were hurling at one another in other lands" (p. 433). Is there unfairness in the full view upon the darker side of such a man if we remember the greater prominence of this darker side during the later years of his rule, his genuine Norman cruelty in the harrying of Dorset or the sacking of the North, the exceptional capital punishment of Waltheof, his practical despotism, moving like that of Henry VIII., if possible, in strictly legal and constitutional forms, the state of *unlaw*, as the Peterborough Chronicle calls it, to which his consistent and harsh policy was in the end leading?

It is needless to enlarge upon the well-known sterling qualities of Mr. Freeman's historical art, his lucid arrangement of a very unwieldy material in the only adequate chronological order, and his forcible style, adopting occasionally as its pattern the Old English of the Chronicler (see the use of the epithet *stark*, pp. 316, 620). The author knows how to bridle the imaginative power, which so very often becomes fatal to the true objects of the historian. Sparing in mere conjecture, he provides the reader, if possible, in each case with the evidence for and against every particular conclusion, that he may judge for himself. Perhaps there is now and then a want of perspective in the importance attached to small matters and great, especially where minor personal, local, or antiquarian notices are chiefly used for filling up the gaps and breaks which unavoidably occur in our historical knowledge of a comparatively early century. Mr. Freeman aspires with a rare impartiality to the same accurate completeness in the different auxiliary disciplines, comparative philology and etymology, chronology and genealogy, diplomatic and legal antiquities, without a certain mastership of which the consummate writing of history is impossible. Throughout the volume again we trace the fruits of his favourite researches in architectural history, in geography, and topography. It is quite characteristic of him that he should prefer "to look on a town as a whole with a kind of personal history, instead of simply the place where such and such a church or castle was to be found;" and to insert a special excuse why after having investigated most carefully every important place, Stafford had been by accident omitted (p. 318). Indeed, this even and scrupulous exactness of detail is the most eminent virtue of our author, as it is the basis and foundation of a truly methodical structure. There is no other work of an English historian which of late has won more readily the heart of the predominating historical school in Germany, not so much on account of its fervid Teutonism, but simply because by the application of strict scientific principles in sifting the sources it brings out successfully many points which have never been brought out before. There is no greater charm for the student than seeing from page to page in an abundance of notes, and in a copious supply of separate investigations reserved for the appendix, as in the former volumes, with how much skill and experience the materials are handled. A great deal of excellent minute criticism is bestowed on the Saxon Chronicles, the Worcester and the Peterborough copies, whose documentary value, as is well known, increases the nearer they approach their end; on Ordericus Vitalis, the *one* author who is English, French, and Norman at the same time, especially in his relation to the incomplete work of William of Poictiers; on William of Malmesbury; on the valuable Northumbrian interpolator, known generally by the name of Simeon of Durham, and on some other chief authorities. Perhaps it is not superfluous to point out the great assistance which an author like Mr. Freeman will necessarily derive from the great number of new editions, either in the series of the Master of the Rolls, Dimock's *Giraldus Cambrensis*, Luard's *Annales Monastici*, Hamilton's *Malmesbury* (*Gesta Pontificum*), Stubbs' *Roger of Howden*, or separate as Mr. Hinde's *Simeon of Durham*, published for the Surtees Society, or Mr. Earle's excellent *Two of the Saxon Chronicles parallel*. And does there exist a more unique document for the Conqueror's reign than *Domesday?* Indeed, everybody without hesitation will subscribe the words (p. 691): "No other nation has such materials to draw upon for its history." It is utterly amazing what a mass of personal and local detail may be recovered from its incidental entries. Though referred to always and by everybody, *Domesday* has never before been so universally and on the whole successfully made use of as by Mr. Freeman. Besides elucidating the general tendency of the great survey, the legal fiction of the king, who never forgot to play the part of legitimate successor to Eadward the Confessor, the system of legal spoliation carried out with increasing rigour the more he pushed on his conquest north and west in the face of renewed rebellions and invasions—we meet with numberless inestimable touches, which, thanks to William's commissioners, have been preserved as belonging to great and small personages of the time, to localities and events. There may be, indeed, some cases where our author rather stretches his combinations of these notices beyond what is plausible. Certainly, he distinguishes most carefully between the different epochs of the Conquest, and by the very arrangement of his book insists on the interruptions which were occasioned by William's expeditions in Normandy and Maine, or by the chances of a more friendly intercourse with Malcolm of Scotland and even with Swend of Denmark, the chief protectors of so many English fugitives. But nevertheless there not unfrequently remains a margin of doubt and difficulty with respect to the chronology of entries in *Domesday* assigned with too little auxiliary evidence to particular dates between 1067 and 1086.

It is hardly necessary to mention that whatever has appeared in modern literature, English and foreign, bearing on the general subject or its details, has not been overlooked by our author. He reserves a special quiet humour, however, for Thierry's *Histoire de la Conquête*, bringing to book in the pleasantest way its more than romantic statements.

After speaking as we have done of the *technique* of the work, there remains but little space for the more common task of the reviewer. Moreover, Mr. Freeman has been long enough under the eyes of a very fastidious class of readers for them to have made up their minds about the intrinsic value of his writings. As for our own part, we confess that we have been attracted not so much by the more graphic portions of the volume, treating of the English and continental campaigns, of the personal history and dismal end of the Conqueror, as by the chapters which discuss the acts of the statesman. The glimpses into the municipal existence of such places as Exeter, Lincoln, Cambridge, Chester, and of certain early civic federations, whose independence fell a prey to the jealousy which never permitted his Norman and English tenants to accumulate much property in one and the same shire, are brought out in Mr. Freeman's happiest style. These and the other distinct causes by which England became permanently consolidated in a united kingdom appear with adequate clearness.

The few genuine remains of William's legislation are distinctly stated in perfect accordance with Professor Stubbs' *Select Charters*, p. 80. The great chapter on the ecclesiastical settlement, the combined church policy of William and Lanfranc, at once orthodox and yet independent, which Pope Gregory VII. himself did not venture to depreciate, stands like a gem set with natural and therefore the very best taste in the centre of the volume. As in William's dreary later years, the interest falls off fast owing to the severe and rapacious monotony of his despotism and the general change from victory to defeat, it is hardly otherwise with his later legislation. The midwinter gemót at Gloucester in 1085–6 would never in constitutional interest reach up to the scíregemót on Pennenden Heath in 1072 if the commission for the great survey had not been issued by the former. Yet these were the days in which the English Conquest struck root after all. Who will not regret that the general and special examination of *Domesday* in connection with the most palpable and the most enduring results of the Conquest, which just here would have been in their place in the text as well as in the notes of the appendix, had to be reserved for the next and last volume on account of the great bulk of the present. We doubt whether the author will be able to work out his epilogue in some seven or eight hundred pages more and still do full justice, as he promises, to Earl Simon and King Edward I.

We conclude with a few suggestions and corrections from our notes taken during a careful perusal of the most substantial book ever written on the subject, as it is not unlikely that one or the other may find acceptance in a second edition.

The author points out in two different pages (41 and 85) that the English, so famous themselves in the art of jewelry and gold embroidery, were supported by skilful Germans. He justly combines Will. Pict. 155, "Ad hoc incolere apud eos Germani solebant talium artium scientissimi," with several entries in *Domesday* about Theodoric or Tedric, "Otto aurifaber, Grimbaldus aurifaber." Some other foreigners settled in England by William, "Heppo balistarius, Odo arbalistarius" (pp. 215, 216), are most probably of the same origin, the name of the first being pure High-Dutch, and the same craft being represented very frequently by their countrymen in the later days of Henry III. and the Edwards.

Among the auxiliaries of Swend's expedition in support of the English insurgents in 1069, Ordericus Vitalis, 513 B.C., mentions Poles, Frisians, and continental Saxons, and goes on to say, "*Leutecia* quoque pro Anglicis opibus auxiliares turmas mittebat." This is interpreted by Mr. Freeman, though with some reluctance, by *Lithuania*. With a zeal above praise he very rarely omits going to the very fountain-head in continental history as well as in English. If he had turned this time to William's contemporary, Adam the canon of Bremen, Pertz, vii. 312,* he would have found: "Ultra *Leuticios*, qui alio nomine Wilzi dicuntur, *Oddara flumen occurrit*, ditissimus amnis Sclavaniae regionis." An imperial statesman, Wibald Abbot of Stablo and Corvey, the contemporary of Orderic, writes in one of his letters, dated 1149: "intraveramus cum armata milicia et exercitu christianorum principum terram Leuticiorum, *transmisso Albi flumine*;" see Jaffé, *Bibliotheca Rerr. Germ.* i. 244. Here is meant undoubtedly the Slavonian tribe inhabiting western Pomerania, the country opposite the isle of Rügen. It is Orderic's ignorance, the reverse of Sir Walter Scott's in *Ivanhoe*, which makes them worship Teutonic deities instead of their national Czerni Bog.

The volume, as it appears, retains more misprints than commonly occur in the excellent works issued from the Clarendon Press: *e.g.* p. 349, No. 3, Paul Bernfried instead of Bernried; and p. 423, No. 2, Pertz, iii. 362, instead of Pertz, vi. 362.

Now and then Mr. Freeman prefers an inferior text, when a better was at hand; cf. 435, 436. Everything that Dr. Giles has edited—and his edition of Lanfranc's Letters does not make an exception—is done in a most slovenly manner. A letter of Gregory VII. to the archbishop, quoted p. 411, No. 2, occurs likewise in the much safer text of the *Registrum Gregorianum*, edited by Jaffé, *Bibliotheca Rerr. Germ.* ii. 49, and there is not the least doubt that *viâ nostrâ* is to be altered into *vice nostrâ*, and the perfectly inadmissible *singulis* into *singularis*. But it is much the same with the copies of papal letters in Labbe's *Concilia*. In an epistle of Hildebrand, quoted p. 431, No. 2, is to be read: "Haec *ideo*, karissime, tibi inculca*vi*mus," see Jaffé, ii. 89; and in another place, quoted p. 431, No. 3, and dated most precisely May 8, 1080: "ut cura et dispensatione apostolica dignitas post Deum gubernetur regia," Jaffé, ii. 419, instead of the falsified sentence: "ut cura et dispensatione apostolicae dignitatis post Deum gubernetur regia."

With regard to the coronation of the Emperor Henry IV. at Easter 1084 *or* 1085, we are referred to the authorities collected by Struvius, i. 389, about 150 years ago. There is now not the least doubt about the year, as we have a charter of the emperor himself, dated from St. Peter's, March 21, 1084. See Stumpf, *Die Kaiserurkunden des* 10., 11. *und* 12. *Jahrhunderts*, No. 2854; and Giesebrecht, *Geschichte der deutschen Kaiserzeit*, iii. 1122.

Mr. Freeman shows exceedingly well what is to be thought of the alleged design of Anno, Archbishop of Köln, to make William the Conqueror interfere in Germany, and of Henry IV.'s wish to win him over in conjunction with the King of Denmark as an ally against his own rebellious Saxon subjects—stories told in different versions by two German authors of the time, Lambert of Hersfeld, and Bruno, *de Bello Saxonico*. As for the first, Mr. Freeman, p. 539, joins the praises of Dean Milman, *History of Latin Christianity*, iii. 168: "whom no incompetent judge has placed at the head

* Page 356 of the same author is also worth referring to, as it contains the contemporary opinion in Germany concerning Harold and the reforms carried out by William the "Bastard" and Lanfranc the "Philosopher."

of all the historians of the middle ages." This unqualified laudation is out of date at least with German critics, especially since Ranke's paper in the *Transactions* of the Berlin Academy: *Zur Kritik fränkisch-deutscher Reichsannalisten*, 1854. See Wattenbach, *Deutschlands Geschichtsquellen im Mittelalter*, 321 ff. 2nd ed. R. Pauli.

History of the Imâms and Sayyids of Omân by Salîl-Ibn-Razîk, from A.D. 661–1856. Translated from the original Arabic, and edited, with notes, appendices, and an introduction, continuing the history down to 1870, by G. P. Badger, F.R.G.S., late Chaplain in the Presidency of Bombay. With a Map. Printed for the Hakluyt Society.

The geographical position of Omân, the south-eastern corner of Arabia, to the history of which the present volume is devoted, is a very isolated one. A range of mountains traverses the whole country from Râs-Musandim to Râs-alḥadd, dividing it into an eastern part from the mountains to the sea, and a western part the limits of which disappear in the great desert Al'aḥkâf. The former with the important towns Maskat, Almaṭra, Alrastâk, and Sohâr, is chiefly the territory of Omânî history. There is scarcely any natural connection between Omân and the countries to the north (Albaḥrain) and south (Mahra, Ḥaḍramant, and Yemen). Hence Omân has always been very slightly affected by the fate of the remainder of the Arabian peninsula. It led a life by itself, and was more concerned in the affairs of Persia, Balûcistân, and India than of Syria and Mesopotamia, the chief theatres of Muḥammadan history.

Omân did not submit to the authority of the khalifs of the house of Omayya till the time of 'Abd-almalik (died A.D. 705), under whom the famous Alḥajjâj, then governor of Irâḳ, succeeded in subduing it. But not more than half a century later (A.D. 751) the Omânîs threw off this yoke under the first of the Abbâside khalifs; they elected a ruler from the tribes of their country, and have always, from that time till the present, been independent of the whole Muḥammadan world. Their war of liberation was brought about not only by political, but also by religious motives. A sect of the Khawârij, who derive their system and name (Al'ibâḍiyya) from one 'Abdallâh b. 'Ibâḍ Tamînî, spread over the whole of Omân towards the end of the rule of the Banû Omayya. Native leaders seem to have favoured this movement, and the war against the generals of the Banû Abbâs was not only one against foreign intruders, but also a war against a different confession, the Sunnite Islâm. The 'Ibâḍî creed has ever since been the state religion of Omân.

The chief object of the author of this chronicle, called "A plain and authentic exposition of the Chronicles of the Sayyids of the Âl-Bû-Sa'îd" (*sic*), was to narrate the history of Sa'îd b. Sulṭân, who ruled over Omân and Zanzibar A.D. 1804–1856. In the third book he treats exclusively of this prince, whilst in books i. and ii. he delineates the previous history of the country. The first book extends from A.D. 751–1741, containing an account of the princes who were elected from the tribes 'Azd, Yaḥmad, Kinda, Nabhân, Hinâ, Ya'rub, and Ghâfir. In some parts the account is very meagre. For the period A.D. 1154–1435 we get only scanty extracts, not even a list of the rulers of the country. It is of some interest to learn that it was as far back as the time of 'Abdalmalik (died A.D. 705) that some Omânî tribes, on being pressed by the generals of Alḥajjâj, emigrated to Zanzibar, which from that epoch till A.D. 1856 formed a dependency of the empire of Omân. The first volume concludes with the history of the rise of the family Âl-Bû-Sa'îd, who still hold sway in Omân and Zanzibar. The founder of this dynasty, 'Aḥmad b. Sa'îd, seems originally to have been a rich and influential merchant, who first came into power towards the end of the rule of the Ya'rubî dynasty. Whilst the sovereigns of the latter ruined each other by endless intestine broils, the Persians invaded the country A.D. 1737, under pretence of bringing aid to one of the contending parties. They ravaged the whole country indiscriminately for several years, and it was 'Aḥmad, then commander of the fortress Sohâr, who succeeded in expelling them A.D. 1741. In recognition of his eminent services, the people elected him ruler of the country. The second book contains the history of his reign and that of his descendants from A.D. 1741 as far as 1804.

The first two books were composed during the reign of Sa'îd b. Sulṭân (that is, before 1856), and dedicated to a nephew of this prince, Sayyid Ḥâmid b. Sâlim b. Sulṭân. The third book was composed after the death of Sa'îd (19th October, 1856), whose history it contains. But it was not finished by the author himself, because at the end there is a note, dated 12th December, A.D. 1857, stating that it was finished by one Ḥamîd b. Muḥammad b. Razîḳ, whilst the name of the original author is Salîl. Accordingly Salîl must have died between 19th October, 1856, and 12th December, 1857, and his work was finished by a relative of his, as we shall see hereafter.

Mr. Badger calls the author, on the authority of his MS., Salîl-bin-Razîḳ. But this is a mistake for Salîl b. Muḥammad b. Razîḳ. The author speaks in several places of his father and grandfather, who held successively the post of clerk of customs at Maskat, and played a not insignificant part in the history of Omân (*v.* pp. 135, 148, 153, 158, 165, 204, 216, 222); his grandfather he calls Razîḳ b. Bakhît, his father Muḥammad b. Razîḳ. Hence it seems evident that that Ḥamîd b. Muḥammad b. Razîḳ, mentioned in the note on p. 370, who continued and finished the work of Salîl was his brother.

Originally the ruler of Omân was called 'Imâm. He was the religious and political head of the people and freely elected—according to the tenets of the 'Ibâḍiyya creed—but "with a strong preference to the ruling family over strangers, and with a strong preference in favour of the son, not necessarily the eldest, of the last 'Imâm over the other members of his family." This title has become obsolete since the death of Sa'îd b. 'Aḥmad (between 1811 and 1821). During his actual rule, from A.D. 1775–1779, he made himself so odious to his people that his son Ḥâmid found it easy to insinuate himself with the people of Omân, and gradually obtain possession of all the forts, including Maskat. Ḥâmid was acknowledged by all the chiefs; he resided at Maskat, and governed the country as an independent chief till his death in 1792. He retained his former title "Sayyid," which means "Prince of the royal house," as all his successors have done up to the present time. Meanwhile his father Sa'îd, the legitimate 'Imâm, lived in retirement without having any influence on the affairs of the country, at Alrastâk, and died unnoticed, between 1811 and 1821. By his death the 'Imâma became vacant, but it has not been filled again. The 'Imâma was superseded by the Siyâda; the name being changed, the office remaining the same.

Mr. Badger has doubtless rendered an important service to the history of the East by translating this work of Salîl. With the exception of a portion of "the opening book, which consists mainly of genealogies of the Arab tribes of Yemen, and a few irrelevant episodes and laudatory poems," he has translated the whole. In the foot-notes many explanations are added, and the appendices, "On the Title of 'Imâm," "The 'Ibâḍiyya," "An Account of the Murder of 'Alî," will

be found very useful for the general reader, though they scarcely contain anything that is new to the professed scholar. For the benefit of those who find it tedious to wade through the monotonous account of the Arab chronicler, Mr. Badger has composed a history of Omân of his own, based upon Ṣalil's work. And this part ("Introduction and Analysis") is particularly valuable, because he has added an account of the latest history of the country from 1856 till 1870. For this task he was eminently fitted, being acquainted not only with the country, but also with several of its leading men, for all which interesting matter we may refer to the "Editor's Preface."

Not knowing the Arabic original whence this translation was made, we cannot judge whether it is accurate or not; but we can say this much, that it is very readable. Regarding the numerous geographical names, the pronunciation of which was not always certain, we should have advised the translator to give not only his mode of reading them, but also the Arabic forms, as he found them in his MS. In doubtful cases this would have greatly facilitated any attempt at emendation. A very valuable portion of his work, which contains such a store of positively new information, is that referring to the relations between the Wahhâbîs and Omân, which will have to be carefully perused by the future historian of Wahhâbîism. Lastly, we may mention that Mr. Badger frequently criticizes the "brilliant pages" (as he calls them) of Palgrave's *Central and Eastern Arabia.* He proves that all the assertions which Palgrave makes regarding Omân are just "a tissue of fallacies from beginning to end"—notwithstanding which he loads the author with compliments!

ED. SACHAU.

Contents of the Journals.

Revue des Questions Historiques, Jan. 1.—Contains an article on Charles of Blois, Duke of Britanny, trying to refute the charges against him on the ground of his pious character. Unhappily this was in that age compatible with excessive cruelty and many acts that we should consider monstrous.—A better notice follows on Augustin Thierry's mode of interpreting the Frankish proper names.—A summary is given of some new works on Massillon, and a reply made to the recent attempts at rehabilitating Pope Alexander VI. (Borgia).—In a notice of the *Gallia Christiana* the writer complains that Haureau, the continuator of that great work, does not allow, any more than the able Benedictines whose work he has continued, "the apostolical origin of certain churches in Gaul."

Theologisches Literaturblatt, Feb. 12.—Contains an interesting review by v. Schulte of Zoepffel's *Papal Elections and the Development of their Ceremonial from the Eleventh to the Fourteenth Century.* (See notice by Prof. Pauli in *Academy*, vol. ii. p. 561.)—A notice follows of Nikolaus von Flüe, the Swiss soldier who became a hermit, and had great influence among his countrymen, which he showed especially in the important meeting at Stans, Dec. 22, 1481. His life illustrates the epoch of Charles the Bold of Burgundy, when the Swiss became a leading power in Europe.

Literarisches Centralblatt, Feb. 10.—Contains a review of Ranke's important book, *Der Ursprung des siebenjährigen Krieges*, which we shall notice ourselves very shortly. The influence of the Jesuits on Louis XV.'s mistress, Madame de Pompadour, in bringing about a close union of the Catholic powers, is specially noticed.——Feb. 17.—Analyses Büdinger's *Untersuchungen zur mittleren Geschichte*, which criticises the mediaeval chroniclers Liudprand, Bishop of Cremona, Ruotger, &c.——March 2.—Notes Palacky's *Zur böhmischen Geschichtsschreibung*, an account of his literary life and difficulties. He had to pay Monsignor Marini, the head of the archive department at the Vatican, nearly all the sum allowed him for his journey to Italy; and the censorship at Vienna made him blame John Huss's "obstinacy and pertinacious self-will," though Palacky's account of Huss by no means corresponded to this character of the great Bohemian reformer.

Gött. gel. Anzeigen (*Nachrichten*, Feb. 14).—Dr. Matz communicates an account of "Early Lists of Antiques," which are as valuable for the history of art as the early manuscript collections of inscriptions are for the *Corpus Inscriptionum.* Some of these lists are among the Queen's collections at Windsor.—Wachsmuth reviews Schmidt's *Das Volksleben der Neugriechen und das hellenische Alterthum.*——Feb. 21.—Tobler reviews Paul Meyer's *Les derniers Troubadours de la Provence.* The use made of some of them by Nostradamus is noted as curious.—Liebrecht analyses *La Leggenda della Reina Rosana e di Rosana sua Figliuola*, an Italian version of the romantic old French story of "Flore and Blancheflor," but with a more religious tone infused into it.

New Publications.

PARKER, J. H. The Ashmolean Museum of History and Archaeology. Oxford: Parker.

URKUNDENBUCH, Wirtenbergisches. 3. Bd. Stuttgart: Aue.

WATTERICH. Die Germanen d. Rheins (die Sigambern u. die Anfänge der Franken). Leipzig: Duncker.

WOLFF, O. Geschichte der Mongolen. Breslau: Dülfer.

Philology.

New Date for the Jerusalem Talmud. [*Gib'eth* (*Gib'ath*) *Jeruschalaïm.* Eine Studie über Wesen, Quellen, Entstehung, Abschluss und über den Verfasser des Jer. Talmuds, von J. A. Wiesner. Wien.] In Hebrew.

IT is only a short time since Prof. Grätz surprised us by announcing the late composition of Ecclesiastes (*Academy*, vol. ii. p. 476), and the Canticles. Scarcely recovered from the shock, we are informed by Rabbi Wiesner, well known by his learned scholia on part of the Talmud of Babylon, of an equally surprising result about the Talmud of Jerusalem. Up to the present time, as we have had occasion to state in the *Academy* (vol. i. p. 192), this Talmud was believed to have been compiled in the first half of the fifth century. Rabbi Wiesner, however, produces striking arguments to show that its compiler imitated the Talmud of Jerusalem, which was finished somewhere about 600 A.D. In a review cited above, we have mentioned the remarkable fact that the two Talmuds do not quote one another. Now, if the Jerusalem Talmud had been written in 450, the doctors of Babylon must have been aware of it, as there was a pretty regular communication between the two countries. On the other hand, if it was a plagiarism, the absence of quotations was necessary to give it an appearance of antiquity. Here is another link in the chain of evidence. It has been conclusively shown by Rapoport (the late chief rabbi of Prague), as well as by Dr. Frankel, the profoundly learned director of the rabbinical school at Breslau, that neither Simon of Kairowan nor R. Aḥa of Sabḥa (in Babylonia), both of the second half of the eighth century, had any notion of the existence of a Jerusalem Talmud. The latter, who migrated to Palestine, where he died, ought certainly to have heard something of the Talmud of Jerusalem—a fact which makes it all but certain that the process of compiling it was not ended before 760, the date of R. Aḥa's treatise called *Sheelthoth.* We must now advance another striking fact. The well-known R. Saadyah Gaon (tenth century) appears to have learned the existence of this Talmud from the Karaite Salmon ben Y'ruḥam, who brought it from Palestine to Babylonia. Again, R. Haya Gaon in Babylonia (eleventh century), as Rapoport has observed, either did not know the Talmud of Jerusalem at all or knew it imperfectly. Now, is it conceivable that the Geonim, living after the close of the Talmud of Babylon, and spending their lives in commenting on this Talmud, making compendia and settling questions of casuistry from it, should have ignored an earlier Talmud, composed on holy ground? They could not certainly have been influenced by a dislike to the ancient Palestinian schools, such as led the doctors of the Talmud of Babylon to ignore that of Jerusalem, according to some critics. And now let us turn to the evidence supplied by the Talmud itself. The compiler, as Rabbi Wiesner shows, was imprudent enough to leave several indications of recent origin, *e.g.* Karaite interpretations of the Law (the Karaite

sect is known not to have begun earlier than 754). Again, the Talmud of Jerusalem has liturgical formulae, and references to synagogue-usages, not known to the doctors of the Babylonian Talmud. It also gives directions for fixing the times of the feasts by astronomical calculations, introduced probably not earlier than the end of the eighth century, for previously they were fixed by the new moon, as they are still among the Karaites. It would even follow from one passage that the compiler was acquainted with the vowel-points.

We are quite prepared to be told by conservative critics that all the above-mentioned passages are interpolations, for Rapoport has proved that there are many interpolations in the Talmud of Babylon. But what can be said to the numerous passages, cited by Rabbi Wiesner, where the Talmud of Jerusalem is in flagrant and deliberate contradiction to that of Babylon? Besides, a large number of passages in the Talmud of Jerusalem are incomprehensible, until they are explained by parallel places in that of Babylon. Either there are frequent omissions in our copies of the Talmud of Jerusalem, which is improbable, or, as we think, the compiler wrote against time, and made nonsense in shortening passages of the other Talmud, which perhaps he also misunderstood. He even goes so far in his imitation as to speak of two revisions of the Jerusalem Talmud, because it is stated that the Talmud of Babylon was thrice revised by R. Ashi, its first compiler. Rabbi Wiesner makes no remark on the language of the Jerusalem Talmud, which seems to us to be artificial, and of late date. It has much resemblance to that of the Samaritan Targum. Neither does he make any suggestion as to the author's object in the mystification. That problem he leaves for the historians. It is remarkable, however, that the Geonim have always shown a certain reserve in the use of this Talmud. They quote it but seldom, and whenever it contradicts the Talmud of Babylon, they blindly follow the latter. Dr. Geiger has asked, How could R. Saadyah and others have been taken in by such an imposture? but the venerable delusion, which is far from being extinct, about the *Zohar*, and many another like it, supplies an answer. Only thirty years ago that famous Cabbalistic book was ascribed to R. Simon ben Yohai (second century), but critics are now agreed in bringing it down to the thirteenth century. May we not add that personal ambition goes far to explain the origin of such mystifications? We now await the criticisms which Rabbi Wiesner's pamphlet cannot fail to elicit from Dr. Geiger, Prof. Grätz, and others. If his idea should be confirmed, Talmudic philology will appear under a new light, and the parallel between sayings of the Gospels and the Talmud of Jerusalem must be definitely set aside.

Ad. Neubauer.

Inedita Syriaca. Eine Sammlung syrischer Uebersetzungen von Schriften griechischer Profanliteratur . . . herausgeg. von Dr. Ed. Sachau. Wien, 1870.

The scantiness of the profane element in Syriac literature is a fact which has not yet been adequately accounted for, though its explanation naturally presents itself to anyone long conversant with the authors of Syria. It is the Christian spirit that pervades their works which supplies the key to their selections from Greek literature; it is this which enables us to understand their preference of Aristotle, Plutarch, Lucian, and Themistius to the brilliant but distinctively pagan creations of the Attic muse. The few profane works extant in Syriac are mostly translations from the Greek, and these are seldom complete; Aristotle himself, notwithstanding his immense reputation in the age when Christian Syria was in her bloom, and Mussulman Asia was reposing from conquest in the pursuits of literature, never had the distinguished honour of an entire translation.

And even the Nitrian manuscripts deposited in the British Museum, though they reveal to us works of whose existence we had no suspicion, would only supply the material for two such volumes as the *Inedita Syriaca*.

Dr. Sachau has formed the design of supplementing the texts already published by Prof. de Lagarde and Prof. Land. A treatise of Lucian on *Calumny*, two discourses of Themistius on *Virtue*, and on *Friendship*, some sentences extracted from the works of Plato, some proverbs, or aphorisms of moral philosophy, of more or less doubtful authenticity, make up the contents of his book.

This simple statement shows the justice of the observations we made respecting the principle which directed the Syrian translators in their selection. It is the more necessary to give this a passing notice as it finishes the only reasonable explanation of a fact which has drawn some censure on the translators: we mean the licence exercised by them in modifying, abridging, or partly omitting, the original texts. This procedure is the more surprising as they show themselves in other places to be models of fidelity. But our surprise ceases when we perceive that these arbitrary changes are limited to words capable of wounding the pure and delicate feelings of Syrian Christians, to facts calculated to scandalise a Christian imagination, to allusions, obscure, or too closely connected with pagan mythology.

The want of exactness in the Syrian translator is therefore not the result of negligence or incapacity, but of a preconceived idea, a definite system. And let it not be supposed that this is a groundless hypothesis. A collation of a few passages of the *Inedita Syriaca* with the Greek will amply justify our assertion. For instance, the four inaccuracies in the first six chapters of Lucian's work on *Calumny* can only be thus accounted for. When the Greek reads, *τοιγάρτοι μυρίας ἤδη τοῖς τραγῳδιδασκάλοις ἀφορμὰς εἰς τὰ δράματα τὸ τοιοῦτο παρέσχηται, τοὺς Λαβδακίδας καὶ τοὺς Πελοπίδας καὶ τὰ τούτοις παραπλήσια· σχεδὸν γὰρ τὰ πλεῖστα τῶν ἐν τῇ σκενῇ ἀναβαινόντων κακῶν εὕροι τις ἂν ὑπὸ τῆς ἀγνοίας καθάπερ ὑπὸ τραγικοῦ τινος δαίμονος κεχορηγημένα· λέγω δὲ καὶ κ.τ.λ.*—the translator merely says, "It is by ignorance that we furnish the material for so many sad stories relating to us" (*Ined. Syr.* p. 1, l. 2; cf. de Lagarde, *Abhandl.* p. 120, &c.). A little further on (p. 3, l. 23), after the words, "This statue had large ears," the translator has omitted an allusion only intelligible to a reader familiar with Greek mythology, *μικροῦ δεῖν τοῖς τοῦ Μίδου προσεοικότα.* P. 4, l. 7, the Greek has, "The young man called on the gods," *τοὺς θεοὺς*, where the Syriac reads God, in the singular. Lower down we find this incident of the Greek text omitted as useless, *ὡς δέ μοι καὶ ταύτας ἐμήνυσεν ὁ περιηγητὴς τῆς εἰκόνος.*

The Syriac is beautifully printed, and as correct as can fairly be expected. I should, however, propose some alterations, *e.g.* p. 30, l. 4, *esh'kofo* for *lo sh'kofo;* p. 30, l. 17, *Estilpon* for *Estipon;* p. 32, l. 20, *m'shalet* for *m'shatel;* p. 35, l. 10, *saghiê* for *saghé;* p. 49, l. 3, *Qoulossaïcoun*, with the Greek, for *Qoulossaïhoun;* p. 53, l. 16, *neb'har* for *neb'ar;* p. 82, l. 10, *mesh'tah'ion mesh'tahein* for *mesh'ta'ion mesh-ta'ein.* I do not think, with Dr. Sachau and M. Renan, that Theodore, metropolitan of Merou, is the person to whom Sarghîs of Rîsh-'aïn addressed his treatise on Astrology, but space compels me to reserve my reasons for differing from these eminent scholars.

These remarks, far from attenuating the merit of the *Inedita Syriaca*, prove on the contrary that I have read the book with care, and found it interesting, and I am persuaded that the same interest will be shared by all who have the

courage to approach a Syriac text, often difficult, without the aid of a translation. The style however is pure and elegant, and belongs to the best epoch of Syrian literature. Some slight palaeographical indications preserved in the printed text seem to reveal a Nestorian rather than a Jacobite or Melchite origin. But we refrain from expressing an opinion on this point, as well as from offering a conjecture as to the author.

The appendices contain several other fragments of translation or original works, the principal of which will raise one corner of the veil which still hangs over the eminently Oriental and Assyrian science of Astrology. We have only to add that lexicographers will find in the *Inedita* an abundant harvest of new words or meanings, and that grammarians will meet with certain forms noticed as frequent in neo-Syriac, *e.g.* p. 3, i. 9, *Azîl leh;* p. 18, l. 15, *Azîl li.* Once more we congratulate Dr. Sachau on his valuable publication.

P. Martin.

W. Dindorf's Greek Dramatists and Lexicon on Sophocles. [*Poetarum Scenicorum Graecorum, Aeschyli Sophoclis Euripidis et Aristophanis fabulae superstites et perditarum fragmenta.* Ex recensione Guilelmi Dindorfii. Editio quinta correctior. Lipsiae: Teubner, 1869.—*Lexicon Sophocleum.* Edidit Guilelmus Dindorfius. Lipsiae: Teubner, 1870.]

Professor W. Dindorf's edition of the Greek dramatists is almost too well known to require much recommendation, even if the work were not so completely changed and improved in its fifth edition as it actually is. The first edition, published in 1830 by Messrs. Black and Young, contained a very unpretentious text of the four dramatic poets, with a very brief collection of the fragments. A second edition, considerably revised and augmented, appeared at Oxford, 1851, and the so-called third and fourth editions subsequently published by Messrs. J. H. Parker and Co. are no more than repetitions of the second, without any further improvements or additions by the editor. It is, however, for this reason that the new Leipzig edition (which is to all intents and purposes quite a new work) appears under the title of *editio quinta.* It is necessary to inform English purchasers that the new Leipzig edition is so much superior to the Oxford editions (be they styled *tertia*, *quarta*, or even *quinta*) as to render it a perfect waste of money to buy a mere reprint of a work now given up and superseded by the editor himself.

The difference between the two works is easily perceived. In the new edition the text of the dramatists is very carefully revised, and almost every page attests the accuracy with which the editor has availed himself of the numerous editions, emendations, and commentations published since 1851. In Aeschylus we find frequent mention of Heimsöth and Weil, and many of their readings appear now in the text; in Sophocles, Nauck, Linwood, and Blaydes are quoted, and even among the innumerable conjectures of the latter, Prof. Dindorf has succeeded in picking out some of genuine excellence; in Euripides, Hirzel's investigations on the antithetic composition of the *diverbia* are carefully made use of, and Badham's, Paley's, Weil's, and Nauck's editions are often quoted. Those who have an idea of the great multitude of conjectures annually proposed on Sophocles and Euripides alone, both in philological journals and separate treatises, will be surprised to see with what perseverance the editor has pursued his subjects, and will thank him for selecting valuable emendations out of the chaotic mass of rubbish with which this kind of literature is sadly overlaid. We advise the possessors of Nauck's edition of Sophocles (in the Weidmann series) to compare his so-called critical notes with Dindorf's commentary, and we trust that they will not fail to admire the unerring tact with which our editor discriminates the grain from the chaff.

Professor Dindorf's own criticism is, on the whole, as conservative as we believe that his nature and learning will ever allow it to be. A man who has edited and re-edited the Greek dramatists so many times during the last fifty years may be supposed finally to acquire a very great familiarity with them, which may embolden him to venture sometimes on re-writing rather than emending them in very difficult passages. Such readings as λύζω, Aesch. *Agam.* 14, and γυναῖκας ἶλαι μηδ' ἀνειμένας ἐᾶν, Soph. *Ant.* 579, may be in the spirit of the poet, nor are they to be condemned as mere intuitive guesses at the original reading of the text, but in the present state of our MSS. emendations of this kind can scarcely be admitted as *sound* criticism. We are, however, glad to find that the editor generally restrains this ingenious bent with all his usual soberness of mind, except in the choral parts of Aeschylus, and there we may as well admit that in ever so many places sober-minded criticism ends and guesswork begins.

The critical apparatus is considerably simplified by the important discovery (which is to a great extent Dindorf's) that in Aeschylus and Sophocles we should only follow the Medicean MS., whose readings we find here, as far as they appear to influence the criticism of the text. In Euripides the MSS. are neither so good nor so easily valued and classified, but in Aristophanes we depend on two good MSS., the Ravenna and Venetian.

In the Prolegomena the editor treats of the metres and the prosody of his poets—a part of the work especially useful to the student. We should also add that the fragments appear in the new edition in far greater completeness than in the English editions of 1851.

In his preface Prof. Dindorf promises to publish annual supplements to his critical notes in Fleckeisen's *Jahrbücher.* It would be desirable to issue these supplements separately so as to enable the purchasers of the present work to follow the development of the criticism of their authors. Another promise made in the preface has already been partly fulfilled by the editor. The indefatigable firm of Messrs. Teubner are going to publish a series of lexicons in connection with the new edition of Dindorf's *Poetae Scenici*, in which Dindorf's text will be used as basis, though these lexicons will also contain original emendations caused by renewed consideration of the readings of the MSS. and grammarians. The *Lexicon Sophocleum* has already made its appearance, and a *Lexicon Aeschyleum* is, we are told, in active progress. The *Lexicon Euripideum* will be by a number of young scholars, though we believe that the general arrangement and direction are entrusted to a gentleman well-known among his friends as a most careful student of Euripides. The readers of our journal may be aware that the *Lexicon Sophocleum* has caused a quarrel between the proprietors of Ellendt's well-known work and Professor Dindorf, and that the matter is likely to be tried by law. We cannot understand how the editor of the new lexicon can be deemed guilty of plagiarism in any sense, as his work is original *so far as the circumstances allow of originality.* Ellendt's book being a very careful, but somewhat awkward and tedious work, Prof. Dindorf has contrived to give more matter in less space. It is of course unavoidable that his quotations should, as a rule, agree with those of Ellendt; but first of all, his explanations and comments, as a rule, do *not* coincide with Ellendt; on the contrary, while Ellendt often wanders from his point, Dindorf is always concise and to the point, and in many instances illustrates his opinions with original matter. One of his chief merits consists in his Latin translations, which have generally appeared to us

to be the very best it was possible to give, while Ellendt's translations are mostly vague. We have not the slightest doubt that students of Sophocles will soon learn to prefer Dindorf's work to Ellendt's, and hope that the *Lexica Aeschylea*, *Euripidea*, and *Aristophanea* will not be delayed too long, as the fifth edition of Dindorf's dramatists and these lexicons together will form an invaluable work for the student of the Greek language in general, and of these poets in particular. W. Wagner.

Intelligence.

Anglo-Saxon Prose Texts. — Dr. Grein, the well-known editor of the *Bibliothek der Angelsächsischen Poesie*, has just put forth a prospectus for a new edition of all the Anglo-Saxon prose that has been hitherto printed, to be called *Bibliothek der Angelsächsischen Prosa.* He thinks that this will lay the foundation for a future new Anglo-Saxon dictionary. So extensive a scheme will of course occupy a great number of volumes. In the first volume, he proposes to reprint Thwaites's edition of the Heptateuch, that is to say, the Pentateuch together with the books of Joshua and Judges, as well as the Homily on Job. But it does not appear that he will include the Apocryphal Gospel of Nicodemus, which is to be found in Thwaites's volume. In his second volume, he proposes to reprint the translations of the Psalms, edited by Spelman and Stevenson; and, in his third volume, the prose paraphrase of Psalms i.–l., as edited by Thorpe, together with several smaller pieces, including Aelfric's Grammar. No further volumes are as yet announced. We may remark that the scheme is by no means satisfactory. A mere reprint of old editions in which all the mistakes and misreadings of editors are reproduced, with foot-notes containing conjectural emendations, is not a work to which we look forward with much anticipation of advancing the study of Anglo-Saxon or with much confidence. Many of the works ought to be completely re-edited from MSS. as yet unused or insufficiently used; and a great improvement of the texts might be made in some cases by careful collation. But if Dr. Grein is resolved to do no more than go over the old ground, the very least that ought to be done is to consult the MSS., and to remove editorial errors and misprints. Possibly, he relies upon his own knowledge to remove such mistakes, but this is not at all what we should wish. Much trouble and ingenuity are often expended in making "conjectural emendations," which might have been saved by mere reference to the original itself; and hence the whole scheme is a very disappointing one. Even a little verification of the texts would be better than none at all; and we strongly recommend Dr. Grein to consider this point before he proceeds to patch up his reprints by *guessing at* the whereabouts of the errors that have been committed.

Dr. E. Baehrens, a young German scholar already favourably known to philologists by several contributions to the *Rheinische Museum*, is at present engaged on a new edition of the *Panegyrici latini*, which is to appear in the Bibliotheca Teubneriana. As there are no old MSS. known of these authors, an editor is entirely reduced to the copies made in the fifteenth century. One of these is found among the Harleian MSS., No. 2480, and it would be desirable that it should be used in the new edition.

Professor Theodor Nöldeke, of Kiel, has accepted the appointment of professor of Oriental languages at the university of Strasburg.

Professor A. Kiessling, the well-known editor of Dionysius Halicarnassensis, is about to leave Hamburg, where he has been professor at the Johanneum for the last three years, having accepted a chair at the university of Greifswald, in the place of Professor W. Studemund, who is going to Strasburg.

Dr. E. Hiller, of Bonn, is about to publish a new collection of the fragments of Eratosthenes.

M. E. Legrand and M. Gidel are to be the joint editors of a recently discovered mediaeval Greek poem in about 600 trochaic lines, to which five political lines are prefixed. M. Legrand has also discovered a second MS. of the poems of Sachlikis, which represents quite a different text from the Paris MS. The MS. bears the subscription ἐτελειώθη ὁ Ζαχκλικὴς (*sic*) διὰ χειρὸς ἐμοῦ φρὰ Νοὲλ δὲ λὰ Μπρῶ ἐκ τῆς Ῥοδῶν καβαλλάρης.

The premature death (Feb. 24) of Dr. M. A. Levy, professor at Breslau University, will leave a gap difficult to supply in the ranks of Semitic philologists. His rare talent for the decipherment of inscriptions is borne witness to by numerous dissertations, among which we need only mention *Die palmyrenischen Inschriften*, *Phönizische Studien*, *Phönizisches Wörterbuch*, and *Siegel und Gemmen mit aramäischen, phönizischen u. s. w. Inschriften.*

IN MEMORIAM.

By the death of Theodor Goldstücker, at the early age of fifty-one, Philology has lost one of its greatest scholars, and Society, what it can still less afford to lose, one of the noblest and most disinterested of men. The pupil successively of Peter von Bohlen, Lassen, Schlegel, and Eugène Burnouf, the collaborator in the particular matter of Hindu philosophy, of Humboldt in the *Cosmos*, Goldstücker came over to England after the reaction of 1848–9, for the purpose of assisting Professor Wilson in the preparation of a new edition of his Sanskrit dictionary. For this new edition no material whatever existed save the dictionary itself in its printed form. Goldstücker, nevertheless, undertook its revision single-handed; and the immense proportions which under his hand the first six parts assumed (480 pp. without getting to the end of the first letter) rendered the completion of the work by one man or in one generation impossible. Many thousands of notes and references, for this and other works, the result of an unremitting study of the MSS. treasures at the India House, &c. are left behind; and we are glad to be able to state with certainty that the report in some of the newspapers that the deceased had left directions in his will for their destruction is without foundation. Nothing however will be published without the authorisation of Professor Cowell, of Cambridge.

It is well known that Goldstücker had compiled a comprehensive index to the principal grammatical works connected with Pânini, as well as a complete index of Kâlidasâ's works, the publication of which might help to solve not a few philological problems. His knowledge of the Sanskrit grammarians, especially of Pânini, was and will probably ever remain unrivalled. His views on Pânini are expressed in the preface to his facsimile edition of the *Mânava-kalpa-sûtra* (1861): see also *Academy*, vol. i. p. 269. For the last two years he has been engaged in carrying through the press, for the Indian government, a photo-lithographic edition of the *Mahâbhâshya*, of which 300 pages still remain to be done. By his decease, what may be called the "traditional" school of Vedic criticism, which gives to the interpretations of native tradition the preference over those derived from comparative philology, ceases to have a European representative. His manuscript of a Sanskrit grammar has long been finished; and it is hoped that this work, which is likely to revolutionise the teaching of Sanskrit in many respects, may be allowed to see the light. The great psychological value *as an educational instrument* which he attached to the Sanskrit language, if properly taught, was well known to his friends; and it was through his advocacy that a committee of the professors of University College, London, was appointed to report on the desirableness of making Sanskrit an integral part of all the degree examinations in the university of London.

Of the philosophical literature of India, the *Mîmânsa*, from its close connection with grammatical researches, engaged his chief attention; some fruit of his labours in this field is a nearly finished edition, prepared for the Sanskrit Society, of Mâdhava's *Jaiminîya-nyâya-mâlâ-vistara* (1865).

It was however Goldstücker's thorough familiarity with the legal and ceremonial literature of the Hindus which rendered his advice of so much value to the Indian government. A paper recently published by him, *On the Deficiencies in the Present Administration of Hindu Law* (Trübner, 1871), contains an exposure of the frequent failures of justice arising from the misunderstandings of native codes, which disgrace our Indian administration.

Besides some papers in the *Reader* and the *Athenæum*, Goldstücker contributed an excellent essay on the *Mahâbhârata* to the *Westminster Review* in April 1868; and among his papers will be found a copy of the great Eastern epic collated with the best European MSS. His library is, we are glad to hear, to be kept together.

New Publications.

Morris, R. Historical Outlines of English Accidence. Macmillan.

Schott, W. Altajische Studien od. Untersuchungen auf dem Gebiete der tatar. [turan.] Sprachen. Heft 5. Berlin: Dümmler.

Thomas, E. Comments on Recent Pehlvi Decipherments. With an Incidental Sketch of the Derivation of Aryan Alphabets, &c. Trübner.

ERRATA IN No. 43.

Page 90 (*b*), line 2, for "second" read "sacred."
,, 95 (*b*), line 41, for "Leslie" read "Lister."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 45.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, April 15, and Advertisements should be sent in by April 10.

General Literature.

Enciclopedia Dantesca. Di Gius. Jacopo Prof. Ferrazzi. Vol. IV.: Bibliografia. Bassano: 1871.

Bibliographia Dantea ab anno 1865 inchoata. Edidit Julius Petzholdt. Dresdae: 1872.

The volume now issued by Professor Ferrazzi is the conclusion of an immense labour undertaken by an estimable Italian scholar for the glory of the national demi-god. The first volume appeared in 1865, the year of the Dante Centenary, and contained a phraseology of his *Divine Comedy* and lyrics, as well as of Petrarca, and the great works of Ariosto and Tasso. Here the various passages from the several authors are arranged under appropriate headings, according to subject-matter. The second volume comprised a vast fund of miscellaneous matter, such as a chronological summary of the life of Dante, and of events more or less directly connected with it; Dante's politics, philosophy, cosmology, metaphysics, theology, &c.; his commentators and translators, and the bibliography of his works in various languages. The third volume gave numerous axiomatic or proverbial sentences, and similes, from the *Divine Comedy*, a list of the principal personages named in that poem, and various other particulars; also a considerable body of analogous details regarding Petrarca, Ariosto, and Tasso. The newly published volume iv. aims less to open up entirely fresh lines of investigation respecting Dante than to fill gaps perceptible in the previous issues, and amplify information there proffered. We find here such headings as biographical studies of Dante; poetical compositions in his honour; his religion and catholicism, and knowledge of divers kinds; an itinerary of the *Divine Comedy;* works of art relating to Dante and his poems; legends and visions with which the *Divine Comedy* has some apparent connection; Virgil according to the conceptions of the middle ages; variations and other textual studies (a very serviceable compendium); the chief editions, comments, and translations, of all Dante's works; and much other miscellaneous matter.

Allighieri has in all ages found readers and commentators with no lack of ingenuity—rather, possessed of even a morbid ingenuity in the research and solution of difficulties: they might now apply this faculty to a new problem—namely, whether there is a single matter closely or remotely connected with their poet that is not, in some way or other, touched upon by Professor Ferrazzi. In fact, the reader who has once become expert in the scheme and arrangement of the book has before him a perfect mine of information. In many instances he will find a detailed answer to any enquiry which may have suggested itself to his mind; in others, he will at least be referred to available sources whereat he may drink deeper of Dantesque lore. To take a single small example:—We have just written the poet's family-name as "Allighieri." The reader may study the much mooted question of the spelling of this name, by aid of a number of authorities cited by Professor Ferrazzi. The Professor himself is in favour of "Alighieri:" the present representative of the line, I observe, Pietro Serego-Allighieri, uses the double *l*.

Here is a note of some singularly interesting documents that were brought together in the great Dante Exhibition of 1865:—

"1. Register of Matriculations in the Guild of Physicians and Druggists, wherein is found written the name of Dante Alighieri. 2. Book of Deliberations of the Councils of the Capitudini and the Hundred; where are found registered certain opinions expressed by Alighieri. 3. Book of Sentences, commonly named the 'Nail,' in which are registered the two sentences that Cante de' Gabrielli of Gubbio, podestà of Florence, pronounced against Dante on the 27th January and 10th March 1302. 4. The Minute of the 12th August 1373, whereby Giovanni Boccaccio is commissioned to read the *Divine Comedy* in public. 5. Minute of the Council of the Eighty, in the Commune of Florence, of the 8th June 1485, ratifying the demand of Messer Dante Alighieri, grandson of the divine poet, to be relieved from any exile, and allowed to return to the country, 'considering . . . that it is well to show some gratitude to the posterity of that poet who is so great a distinction to this city.' 6. The Florentine Academy to Leo X. Having heretofore petitioned him that the bones of Dante might be brought from Ravenna to Florence, they thank him for assenting, and for the favours whereby they can further promote the study of arts and letters, and especially poetry, in virtue of the public expounding of the *Divine Comedy*. Many Academicians subscribe, among whom is Buonarroti, who signs thus: 'I, Michelagnolo, sculptor, make the same petition to your Holiness, proffering myself to the divine poet, to construct his sepulchre, appropriate, and in an honourable site in this city.'"

Another document, published by Signor G. Milanesi, dated 28th April 1301, deputes "Dante de Allagheriis" to see the Via di San Procolo and the Via dell' Agnolo widened and straightened, and the obstructive house of Ruta d'Allerone pulled down. A less authentic record of the poet is the drama of *Dante*, by Ignaz Kollmann, published in 1826, and said to be now extremely rare. We here find Allighieri banishing the chiefs of both factions; his wife Gemma presumptuously chafing at his moderate and patriotic policy; her brother, Corso Donati, in love with Beatrice, poisoning her father, and eventually herself, and calling the alien Valois into Florence; Beatrice, on her deathbed, signifying to Dante, now in exile, the theme of the *Divine Comedy*. There is also a humorous incident of a German newly arrived in Florence, who, being pounced upon by a Florentine "White," and summoned to join that faction, knocks his interlocutor down, taking him for a madman; a "Black," observing this, jumps to the conclusion that the German must be a "Black," and he also is felled to the earth on like cause shown. Dante then has to adjudicate upon the case of this bellicose man of peace, and dismisses him scathless.

Professor Ferrazzi has no doubt a wide and minute acquaintance with the works of Dante, and the matters of scholarship more directly relating to those works and to the poet himself. Outside of this immediate circle, however, there is a great deal requiring to be done in a work of so comprehensive and encyclopaedic a character as that to which the Professor has vigorously addressed himself; and, to make the work finally complete and satisfactory, he should, I think, commit certain sub-sections to the care of sub-editors. For instance, the details of English books, &c.

are left in a sad state. An Italian scholar printing his vast aggregation of particulars in Bassano cannot be expected to get these things right: but *some one* ought to do so. A "Baronet" is not the same thing as a "Baronella" (p. 329); and I never heard of Mr. Morris Moore's being an American. The titles of English books are a thing to wonder at in many instances: perhaps the following is the worst example of all (I transcribe *literatim*): "Milton Jhonson.—Paradise, Loft Post, in 8°. Cloth. 55 (Ball. 1863." This entry appears among "English Translations" of Dante, the assumption, no doubt, being that one "Jhonson Milton" has translated Dante's *Paradiso*. Need I say that no such translation exists? and that this fearfully mauled title can only represent the *Paradise Lost*, a sufficiently well-known original poem written by John Milton? Professor Ferrazzi was evidently himself embarrassed by this entry; for he adds to the title, as cited above, "Thus notified by Carpellini." Here follows another mistake; for which indeed the Professor is in no wise responsible, but which yet would not have passed muster in his pages without some word of protest, had the sub-section of fine art been separately and cautiously supervised. In the Dante Exhibition already mentioned appeared a "portrait of Messer Folco Portinari," which some daring enthusiast or excited proprietor attributed to "John van Eack [should be Eyck] of Bruges." It is of course grossly improbable that any portrait of Folco Portinari exists or ever was painted; and that an artist born and residing in Flanders should have painted it is practically beyond the pale of debate. But van Eyck, of all men in the world! when Folco died in 1289, and van Eyck was born in 1370!

To leave minutiæ, however, I must heartily congratulate Professor Ferrazzi—and, as an individual student of Dante, thank him—in view of the completeness of this onerous and most creditable undertaking. A second edition should be forthcoming at no distant date: details can then be rectified, and the arrangement of the whole work systematized—in especial, incorporating the new vol. iv. according to the proper sequence of its items in vols. ii. and iii. The accomplished Professor has done his patriotic work in the best spirit, and to a truly useful result.

The second of the two Dante publications named in my heading is of a much more restricted scope. It only gives that section of Dantean bibliography which has accrued since 1865 inclusive, the year of the centenary. The vast area over which Professor Ferrazzi has had to range may be approximately suggested by noting that the poor seven years of bibliography recorded by Herr Petzholdt fill no less than 67 pages, and this although he (unlike the Italian adept) hardly ever gives anything beyond the bare words of title, and other such catalogue items. If we reckon eight books to a page (which seems rather below the mark than above), we find 536 separate works named by Herr Petzholdt in his sightly and careful brochure. Ten more pages are filled to advantage with a list of the works of art, almost entirely by German artists, collected in the Dresden Library by that eminent Dantophilist the King of Saxony—to whom, under his pseudonym of Philalethes, this pamphlet is dedicated.

W. M. Rossetti.

Le Testament d'un Latin. Par Louis Rambaud. Paris: Charpentier; London: Williams and Norgate.

Mea culpa is not always a sincere ejaculation; men are found to cry, "miserable sinners," when no other way of glorifying themselves is at hand, and then of course they seek to startle by the enormity of their confessions.

Is M. Rambaud in earnest, or is the tone of unmixed depression in which he speaks of the future of his race only another form of *forfanterie?* Either way, we trust there are not many like him; for to say plainly that you despair of your country is a very different thing from being severe upon her faults.

And M. Rambaud is worse than a pessimist: he is a fatalist to boot; he believes in the inherent fitness of some races and the unfitness of others for that liberty which alone (he says) can keep a people permanently alive. This fitness depends on the possession of "three talents, those of dignity, responsibility, and solidarity . . . and a talent—*une faculté—ne se donne pas.*" Now some of us will demur to the assumption that the Latin race has no real sense of that "solidarity" about which its mouthpieces are so fluent; and those who have lived in France will generally admit that in "dignity"—respect for himself and for the rights of others—the humbler Frenchman is on the whole above his English or German brother. But M. Rambaud, Latin to the backbone, must start with assumed principles; and if facts interfere with his deductions—we know the proverb. For instance, to say that "France submitted so long to the empire because the principle of association cannot work among the Latin race" is to say something which requires proof; but to prove it by asserting that *trades' unions* do not flourish in Wales is to ignore a movement which has just now almost disorganized the coal-trade throughout a large part of the United Kingdom.

Still M. Rambaud is well worth reading: for "physics and politics" will always be a taking study—chiefly perhaps because of the "unknown factor" which meets us in every calculation of the causes why Frenchmen are Frenchmen, and Germans Germans. Nothing in history is stranger than the difference between the way in which the Americans went on without a hitch when their president was struck down and the servile waiting upon one man's health and temper which for years characterized what we suppose must be called French policy.

And this weakness is of old date: M. Rambaud traces it through the whole sad tale of the *parlements*, their petty revolts and easy submissions. Once, in 1356, under Marcel, the states-general seemed about to make a stand and to force the king to take a privy council into partnership with him; but (in M. Morin's words: *la France au moyen âge*) the attempt *avorta douloureusement;* Marcel was beguiled by the dauphin's promises, and the chance was lost of anticipating our constitutional arrangements. Mediaeval France was as fond as we were of representative government; whence then the rapid change on which Mr. Froude delights to expatiate, and the difference between the free sturdy Englishman and the slavish Frenchman as they are drawn by Sir John Fortescue?

"It is all race," says M. Rambaud; and his only hope is in an infusion of new blood, though he believes that "jamais la grande vierge saxonne n'épousera les noirs petits capitaines latins." But there have been successive infusions—one of the strongest when orthodox Franks came down to fill up the gap left by those ultra Latins the Albigenses. And France (says our author) owes all her worry and her profitless civil wars to her lack of homogeneity; she cannot go quietly to decay like a people of pure Latin race, and the Germanic element is not strong enough to bring lasting liberty out of her struggles. What an opportunity for Prince Bismarck to promote a fresh immigration!

This Latin blood, then, is answerable for everything—for the centralisation which makes provincials (as Heine said) like milestones that tell you at once how far you are from the capital; for the system which gives one soldier and one civil servant for every twelve *citoyens actifs*, and which enables M. Renan to compare France now with the empire

under Diocletian, "the equality of civil rights consoling us for the want of anything like real political freedom;" it is even answerable for the decay of population compared with "the exuberant life which is filling the world with English colonies."

The only question with M. Rambaud is, will things go on thus to the bitter end? Are these signs of death, or is it only a change passing over the nation? "In nations which have no capacity for freedom these are signs of more than change: such nations have nothing to give instead of that individuality which is the safeguard of the race, and with which modern life is always at war. They may last a long time: a tree goes on for years after it is really dead at the heart; *il n'y a rien qui vive si longtemps qu'un peuple mort.*"

It is a new thing for a Frenchman to take the title "second empire" as more than a sobriquet, and to tell his countrymen that he is sadly afraid they have begun that life in death which the case of Byzantium shows may last for many centuries. France is in a sad plight; but so she has been before. Even the national morals are not lower than they were in the days of Henri III.; and as for drawing comparisons between a French lad, "à qui manque la vie et qui épuise le peu qui lui en reste à satisfaire ses passions de vieillard" (p. 253), and a *lourd colosse anglais* drawn after the pattern of one of *Punch's* Midland colliers, let M. Rambaud go into Touraine and Anjou, instead of taking his types from the Paris streets, and he will find that man for man the peasantry there are finer fellows than those in many English counties.

Fatalism works in two ways: it may lead to desperation and that "wretchlessness" of which the Church article speaks; it may foster that energy which has made the Scotch successful all the world over. If you believe yourself predestined to great things, your faith will most likely be helpful; but if you are convinced that you belong to a rotting race, there is not much hope for you. Whatever you set about, you will think that you start heavily handicapped, and your running will be weak in consequence.

If Frenchmen come to feel as M. Rambaud does, what are they to do? Creative power in art (most manifest, as he truly says, in times of upheaval) he denies them; even taste they will lose, if the wretched works which have been set up as models under the late empire do not show that they have already lost it. Their art and their literature are condemned to be Hindoo or even Chinese.

This is a bad state for the home of ideas to fall into—a strange contrast to that glorious future which the ex-emperor foresaw for the Latin races when he supported the Jecker claims. Even we, with our "Celtic element," and America with its strong Irish leaven, had better beware—unless indeed Mr. Huxley is right, and Celt and Saxon are at bottom the same; in which case we may say that it is the Basque and not the Gaul which makes France too "Latin" in its characteristics.

With all his assumptions M. Rambaud is suggestive and (as we said) worth reading: his quotations, above all, are valuable; it is well to be reminded (from M. Laboulaye) that the Spanish republics find the constitution of the United States a shirt of Nessus which destroys them; and this from Châteaubriand, "on affirme que dans cette civilisation à naître l'espèce s'agrandira; n'est-il pas à craindre que l'individu ne diminue?" is an unexpected parallel to a well-known line of Mr. Tennyson. H. S. Fagan.

LITERARY NOTES.

In the *Révue des deux Mondes* (March 15) M. Renan begins to summarise the researches of MM. Boutaric and Natalis de Wailly on another of Philip the Fair's ministers, Guillaume de Nogaret. This first part includes the affair of Anagni and the election of Benedict XI. M. Renan calls attention to the astuteness with which Nogaret makes his report of his negotiations with Boniface in 1300 justify or extenuate the later act of violence; and he points out that Philip's victory over the papacy depended not so much on the daring *coup de main*, which failed, but on the death of Boniface and the pacific intentions of Benedict, which left it apparently unresented and certainly unpunished.

The *Gazzetta uffiziale* (March 18) abridges from an unpublished MS. in the Casanatan library some letters to Cardinal Rinaldo da Este, written by G. B. Niccolosi, a Sicilian, giving a description of his journey from Milan to Baden in 1645. His observations and his jokes are strangely like those of tourists of the present day, though the latter are not always intelligible. He proposes that *Via Mala* should be called *Via Pessima;* he describes the inhabitants of the Grisons as all "playing the Cato, the Fabius, the Marcellus in slippers;" and by mentioning that the ruined castles on inaccessible heights above the Rhine were said to have been erected by "tyrants of the country" in the time of "the ancient Romans," he gives a curious measure of the extent and longevity of quite untrustworthy traditions; for Italian *vetturini* of the present day are in the habit of giving just the same account of local strongholds, confusing most probably a real memory of small mediaeval tyrants with a hearsay belief in the omnipresence of the "antichi Romani."

The *Nation* (March 7) quotes from *La Fleur des Chansons amoureuses* (Rouen, 1600?) a poem "which is either the original or the translation" of the pretty Elizabethan song, beginning "While that the sun with his beams hot," given as xli. in Mr. Palgrave's *Golden Treasury*. There are two verses more in the French than the English, but the refrain is one line instead of three.

The publisher of the University of Glasgow, Mr. Maclehose, has forwarded us a poem entitled *Olrig Grange*, which seems worth noticing because it is a work of very considerable and at the same time most uncertain promise. The characters remind us of Mr. Oliphant's *Piccadilly*. The story is worked out rather too much in the manner of Mr. Browning, but it is conceived with quite uncommon power of kindly discrimination and insight; and this is the promise; but it is at bottom a poor hackneyed old story, and this the writer does not seem to see. The situation of Lockley Hall supplies a text for admirable declamation, but when it comes to be developed, the hero is always a poor creature wearing himself out in a vulgar struggle with vulgarity. The pious self-pity of the worldly mother and the despair of the worldly daughter, which is *less* unreal for being theatrical, are really brilliantly put. But the light by which the author sees and shows them, though it is kindled from within, will only go on shining if it is shone upon; it will soon burn itself out if only used to illuminate brilliant "glimpses of the obvious." The author, if he works out the satirical side of his book, may become a popular novelist; if he works out the ideal side, or the side he means to be ideal, he may inherit the mantle of A. K. H. B.; if he rises altogether above *Olrig Grange*, he has force enough to be a real poet.

The mysterious story of Kaspar Hauser, the wild boy, is nearly forgotten in England; but a book lately published by Dr. Meyer to prove that his whole story was a fraudulent invention has awakened a lively controversy in the newspapers, in which the surviving partisans of Hauser or their descendants endeavour—not to explain the mystery—but to show that there really was a mystery to explain. Unfortunately all the contemporary investigations into the case were conducted with incredible carelessness and disregard of the rules of evidence; and though Professor Daumer promises fresh facts in favour of the sincerity of Lord Stanhope's *protégé*, his letter on the subject in the *Allg. Zeit.* (March 14) does not lead us to expect that they will be very important or conclusive.

We have to announce the death at Cracow of Count Prezdziecki, a considerable name in the history, archaeology, and literature of Poland. Born in 1814 in Podolia, he began life in the Russian diplomatic service. As a youth he had travelled throughout Europe, and in 1845 published a couple of volumes of travels in Sweden, and a series of historical and picturesque sketches in Podolia, Volhynia, and Ukrain. A large fortune enabled him to play Mecaenas to Polish history: and Theiner's *Monumenta Poloniae et Lithuaniae*, the last three volumes of Michael Wisyniewski's *History of Polish Literature*, as well as the great edition of Dlugosz's works now in course of publication at Cracow, were supported by his liberality. Among his own books may be named—*Specimens of Mediaeval Art in Poland*, the *Domestic Life of Hedwiga and Jagellon*, the *Queens of the Jagellon Family*, &c. His death is a great loss.

The controversy as to the nationality of Copernicus has been lately resumed in an anonymous pamphlet published at Breslau. The arguments in support of the Polish claim to him are that he was born in a Polish town (Thorn) of a Cracow family, that his name and his best friends were Polish, and that, if he had been a German, he would not have studied as he did at the University of Cracow. Unfortunately for the discussion, Copernicus has left nothing behind him in any other language but Latin. An excellent edition of his works, with Polish translation by Bartoszewicz, has lately been published at Warsaw.

Art and Archaeology.

Grimm's Select Essays. [*Zehn ausgewählte Essays zur Einführung in das Studium der modernen Kunst.* Von Hermann Grimm.] Berlin: Dümmler's Verlag, 1871.

The student of classic art finds himself in a deserted ruin, where out of mouldering fragments he strives to reconstruct a whole, to divine the life of the dead, to image forth their work, their age, and the character and succession of their different periods of production. But, if we turn to modern work, we are embarrassed by the very abundance of our materials. Letters, documents, biographies, are at hand, with which to piece out, complete, and interpret, the faults, the doubts, the problems suggested by the subject. Instead of resting on the shifting sands of hypothesis, and the uncertain bases of subjective impressions, we are able to make deductions from facts. Yet, after all, our mass of materials is but a mass of materials which no one has yet attempted to bring into shape and order. Every day the want of anything like systematic arrangement is more and more painfully felt. In the present volume of essays Dr. Grimm contributes something towards the commencement of the herculean task, rather, indeed, by the spirit in which he writes than by actual fact of accomplishment.

Under the somewhat inappropriate title of "an introduction the study of modern art" we have what is strictly speaking an introduction to the study of German work of the present day. We pass from Raphael and Michel Angelo to Carlo Saraceni, who becomes the text for an essay on the decadence; Albrecht Dürer typifies the great movement of the sixteenth century in Germany; a chapter on Goethe's relations to the arts seizes the critical moment when German art became again an expression of national life; Carstens brings us to Cornelius and Schinkel; and the closing paper discusses the fresh impetus given in a wholly new direction by the national art museums which are now springing up over the whole of Europe. These essays are really completely independent of each other, and were produced at very different periods of time. They are now put before us without any attempt having been made to give them a connected literary form, and it is only because of the tone common to them all that we are enabled to treat them as a whole. In the opening paper, an address to the Venus of Milo, the key-note of the book is struck—

"Bewunderung und Staunen erweckt sie, die Phantasie trägt uns mit Macht zurück zu ihren Zeiten, aber fremd bleibt sie uns dennoch, und während wir im Anschauen verloren sind, sagt uns eine leise Stimme, es sei für uns kein Herz mehr in dieser Schönheit."

The product of a past age may say much to us, but it cannot have the full significance which attached to it in its own place and day. There is no such thing as cosmopolitan art. The charm of novelty is a legitimate charm. The age in which we live is the best for us. It is impossible for us to thrill with the emotions which quickened the pulse of past life. Therefore the art of our own time has power to move us when the work of the Past, however great, leaves us cold in the midst of our admiration.

"Orest und Oedipus, Ipigenie und Antigone, was haben sie gemein mit meinem Herzen?"

The crowning beauty of that which is handed down to us from the Past is fled. The surroundings are gone, the people are no more who girt about the master and his work—that work in which he shadowed forth his secret, which was one and the same as the secret of his people and his day. So, for us, to-day, the day which is ours, is the best, and its art, however bad, better to us than any which has been before.

It will be evident from these passages that Dr. Grimm approaches the subject of art from the literary point of view. And this point of view, however full of value and interest, gives us only one side of the question, the side which is alone intelligible to the artistically uneducated mind. Form and content, the constituent elements of a work of art actually inseparable, are separable in idea. To the man trained in literature as to the public, the chief element of interest is content, a quantity ever varying in relation to the age. To the artist, the predominant interest is form. The brotherhood of art is no empty word; each artist is a student of the same science, the science which gives form. The learner of to-day can stand in spirit without effort by the teacher of the Past. But he who enters on the study of art through the gate of literature has ever to create for himself by a mental process the conditions which complete the work under observation, before he can see its import. As a consequence he stands admiring, moved rather by cold and conscious pressure than because he has given himself over unreservedly to his impressions. The skilled musician, on the contrary, reads a sonata of Mozart's unchecked by reflections on the conditions of life in Austria when Mozart wrote; and the Venus of Milo is to the artists of England as she was to the sculptors of Greece. And even when we speak strictly of the content—the "geistige Inhalt"—we must remember that works of the finest art develop generally some simple strain of passion, eternal in human nature, which, as such, speaks straight to the heart of all time in spite of unaccustomed mode of manifestation. It is only after having made these limitations that we can give a qualified assent to Dr. Grimm's proposition—"the art of the day is the best for the day." It is, indeed, the outcome of the day's striving, fashioned of the thoughts common to us all. Doubtless to the German, Potsdam is more lovely than the Parthenon; the frescoes of the Ludwigskirche surpass the hand of Raphael in the Vatican; and Frederick, brave in the Berlin square, breathes a holier inspiration than the god-born sorrow of Niobe.

Yet, out of what may seem to some onesidedness and defect, comes the special point and value of these essays. Dr. Grimm has confined himself to criticism and interpretation in that province in which he is a master. He does

not pretend to offer us here speculative theories, or aesthetic criticism for which he has no gift, but seizes on the relation of the artist to the thought and life of his time. And he has given us in every instance a suggestive and vivid picture, without affectation in thought or manner. In the paper on Michel Angelo and Raphael he has indicated the relative position of both by happy touches, which discriminate them not only as artists but as men. The grand figure of Michel Angelo is treated with a sympathy rare even in those ready to do him just honour, and the stress which is laid on the depths of tenderness and sensitiveness in his nature shows considerable power of insight into character. Wherever there is any falling short in judgment, it would seem to arise rather out of the influences of early association and training than from any defect of natural power. It appears, indeed, in the highest degree improbable that one who so warmly enjoys modern German work, and who can speak of the Cornelius movement in terms of such enthusiastic admiration, should be able to bring to his task full appreciation of the qualities which are essential to a genuine work of art. If, however, certain signs are here noted which the English critic, in common with the non-German world, holds to be marks of imperfect or improperly trained perception, it is with much reserve of judgment, and with a strong desire to bring into full relief the valuable qualities of Dr. Grimm's book. No one who reads it will fail to see its freedom from pretension and phrase-making, or to be attracted by the way in which he sketches the leading lines of each age, the power with which he individualises each man, connects him with his time, and reads him in his work. E. F. S. Pattison.

ART NOTES.

A letter dated Berlin, end of February 1872, and signed Phil. Silvanus, appears in the present number of the *Zeitschrift für bildende Kunst.* It gives interesting particulars as to the relations now existing between the government and those art institutions which are under governmental control. Both the Academy of Arts and the Royal Museums have suffered severely under the Mühler *régime*, and are hoping anxiously for a more liberal policy from his successor, Dr. Falk. Many posts have been allowed to remain vacant from motives of economy; the question now is by whom are they to be filled, and what is to be the programme of the future. Of old, there was a General-Director, to whom the directors of the separate galleries and cabinets were subordinate; the chief was always considered to fill a court office, and it was necessary that he should be *hof-fähig.* Since the voluntary resignation of Herr von Olfers, who obtained this appointment through the favour of the Queen Dowager, this post has remained unoccupied. It is now nominally held by the Crown Prince, Herr von Usedom being appointed at least for six months as his Adlatus. According to all report, Herr von Usedom is the right man for the place. But, it is asked, is the existence of such a place desirable? The General-Director has the supervision of a number of collections and galleries, which represent the most various departments of the arts. No man alive can possess in each special knowledge which would warrant him in trusting to his own judgment. He must therefore often (whoever he may be) rely on his subordinates if he wish to avoid making serious mistakes. On the other hand, it is urged with much show of reason that in the interests of the institutions themselves it is highly desirable that they should have a zealous and active representative who can make their wants known to government, and enforce the attentive consideration of their pecuniary and other needs.

The Burlington Club intend to hold an exhibition of pictures and drawings by Holbein in the house of the club, and to open the same at the end of April next. This exhibition will include pictures and drawings from Windsor Castle and other royal palaces. At present there is a fine collection of drawings by Claude on view, together with Limoges enamels lent by Baron Rothschild and another member of the club.

The Academy at Düsseldorf has been destroyed by fire. The picture gallery and library have escaped.

Mr. George Burnett's choice collection of modern pictures, water-colour drawings, and a few pictures by old masters, was disposed of on Saturday, March 16, by Messrs. Christie and Manson. The drawing by T. M. W. Turner, R.A., of St. Agnes' Hill, engraved in the "England and Wales" series, fetched 350 guineas; his "Kelso Bridge," an exquisite drawing in miniature, 141 guineas; "Brienne," another drawing in miniature, engraved as an illustration to Sir Walter Scott's works, 150 guineas; "Whitehaven and a View on the Medway," a sketch in oils, 150 guineas. "The Spring of Life," by Mr. Frederick Walker, 101 guineas. Two fine paintings by J. Constable, R.A., "A View on the Stour, Canterbury," 475 guineas, and a cabinet picture, "The Opening of Waterloo Bridge," 315 guineas. The "Frank Encampment," by J. F. Lewis, R.A., 420 guineas. Three cabinet examples of Édouard Frère, 1021 guineas. "Dolores," by John Phillip, R.A., 900 guineas. The prices now given for works of recognised merit, both in England and abroad, have reached a point never before touched. On the Friday preceding the sale of Mr. Burnett's collection, a single plaque of Wedgwood ware, the "Nine Muses," by Flaxman, was sold for 100*l.*

Sir John Gilbert, who has just received the honour of knighthood on succeeding to the presidency of the Old Society of Painters in Water Colours, was born at Blackheath, Kent, in 1817. Although he is principally known to the public by his popular illustrations of popular works, he has throughout his career constantly painted both in oil and water colour, and exhibited at the Royal Academy, at the British Institution, and at the Gallery of British Artists. In 1852 he was elected an associate of the Old Water Colour Society, and he became a full member in the following year. He is now the president of the society, and has recently been elected an associate of the Royal Academy.

We hear that the paintings offered for exhibition in the Albert Hall, though equalling in number those sent in last year, have considerably deteriorated in quality.

The sale of the Pereire collection ended on the 9th of March. Examples of the French school in the eighteenth century came to the hammer on the 7th. A "Little Girl," by Greuze, went for 32,500 fr.; and Pater's "Plaisirs champêtres" fetched 19,200 fr. On the 8th and 9th came the Flemish and Dutch pictures. A "Female Portrait," Franz Hals, 21,000 fr.; Rembrandt's portrait of Justus Lipsius, 38,500 fr.; Rubens' "Apollo and Midas," 40,000 fr.; Jacob Ruysdael's "Le Château," 47,000 fr. The sum total realised by the sale was 1,785,586 fr.

M. Champfleury has been named successor to M. Riocreux, as head of the collections of the national manufactory of Sèvres. The death of M. Riocreux was announced in our last number.

The administration of the Louvre has just purchased the crayon portrait of Ingres which was engraved by Calamatta.

A superb specimen of eighteenth-century art was brought to the hammer on the 20th March, at the Hôtel Drouot. Amongst about a hundred fine Italian, French, and German medals, occured the magnificent medallions of Louis XVI. and Marie Antoinette, executed in 1785 in hammered and chiselled silver by Lortior, the king's goldsmith. The copper gilt frame which surrounds them is also a gem in its way; it was the work of Gouthière, and is elaborately ornamented with the royal arms encircled by branches of lilies.

The rumour runs in Paris that Mlle. Rosa Bonheur is to be made a member of the Academy of Fine Arts. It is also said that the Royal Academy of London has in contemplation the admission amongst its number of the most distinguished English women artists. As respects the French Academy, it would be no innovation, but the revival of a custom which prevailed from its foundation up to the revolution of '89. Me. Vigée Lebrun was the last woman academician.

Under the title "Chronologische Lijst der Ammans van Antwerpen," an extract has been reprinted from the *Annals of the Belgian Archaeological Academy*, which will be of interest to students of the school of Bruges. It is a notice by the late M. Torfs, with annotations by M. le Chevalier Léon de Burbure, on Jean van Eyck, commonly called van Eycke, Amman d'Anvers, in 1431–1437; and Jean van Eyck, the well-known painter, who are possibly one and the same person. The painter was, as is commonly known, *valet de chambre* to Philippe le Bon, and the Amman was probably the Jean van Eyck mentioned as *huissier* to the same prince. But it is worthy of remark that these two men whose names are precisely similar lived at the same time, at the same court, were both favourites of the Duke of Burgundy, and that the Amman is never mentioned after the death of the painter.

The direction of the Dresden Gallery bought, not long ago, as a Holbein, a painting in monochrome of the "Death of Virginia," signed with the monogram "HB." Herr Director J. Hübner has lately made public in the *Illustrirte Zeitung* a woodcut from the work in question. His statement that the monogram, which apparently referred to Hans Bock, disappeared in the process of cleaning incites us to wish for more minute particulars as to the process employed. It is possible to destroy even a genuine inscription.

Music.

The Oratorios of Carissimi. Edited by F. Chrysander. Volume the First; containing Latin Oratorios: *Jephte, Judicium Salomonis, Jonas, Baltazar.* [To be continued.]

The life of Giacomo Carissimi was the most eventful, as well as one of the longest, recorded in musical biography. Greater changes in musical practice are included between the beginning and the end of his artistic career than of any other musician. Born about the year 1580, he might have seen Palestrina; living certainly till 1670—how much longer is uncertain—he might equally have seen Lully, J. Ambros Bach (the father of Johann Sebastian), and Purcell. He probably knew Stradella and Corelli, and he is said to have given some instructions to Alessandro Scarlatti; men, one and all, whose compositions differ from those of Palestrina as widely as the "perfected" Gothic of the fourteenth century differs from the Romane of the tenth, or—a closer analogy—as the English of Dryden from that of Chaucer. To attribute to Carissimi, as has sometimes been done, or to any single composer, the invention of what is now understood by "expression" in music is absurd. The works of his predecessors, "the old masters," abound in expression, "although," as Dr. Boyce has well put it, "not so particularly marked" as in those of the more modern. But to Carissimi may be fairly granted the merit of having, more than any other musician, contributed to the perfecting of modern tonality, without which this same "expression," so characteristic of modern music, would certainly have been unattainable. The works of this great musician, who lived nearly a century, and who would seem to have allowed no day to pass without a "bar," have, for the most part, remained hitherto in manuscript. Collections of them are to be met with in many libraries public and private; in the Bibliothèque Nationale, of Paris; in Christ Church, Oxford; even in the British Museum, so distinguished for its deficiencies in music and musical literature; and in the collection made by the late Abbé Santini of Rome, now, I believe, dispersed—a collection, of inestimable value, which the trustees of the British Museum might have purchased a few years since for a few hundred pounds.

Among the works of Carissimi which have attained the greatest reputation—have been most frequently referred to, and from which extracts have been most frequently made—are his oratorios; a class of composition to which he would seem to have been led to devote his powers both by natural inclination and through association with the disciples of San Filippo Neri—the Oratorians. The earnest, though not of necessity sombre, tone suggested by the places and occasions for which these works were required, and the scope for varied musical expression which their quasi-dramatic structure afforded, must have been congenial to a disposition and a talent like those of Carissimi—the one enquiring, tentative, adventurous, the other fortified by the possession of all the learning of the learned age at the close of which he first saw the light. Of these oratorios, the volume before us—one of a set of *Denkmäler der Tonkunst*, to others of which, in their turns, I hope to be able to call attention—contains four, no one of which has, I believe, ever before been printed entire. In one of these, I have an especial interest. A MS. copy of *Jephte* came into my possession a good many years since, and the study of it so excited my admiration that I determined on the first possible opportunity to give a public performance of it. This I was enabled to do in the year 1850. Besides a chorus, "Plorate Filii Israel," which Händel has transferred bodily to his oratorio *Samson*—an act which renders praise of it superfluous—it contains others, one depicting the flight of the Ammonites, the other the joy of the Israelites after victory, which, though musically less interesting, are scenically much more so. But the glory and wonder of the work, without any reference to its date, are the recitatives and *arie parlanti*, which for "spanning" of "words with just note and accent" have never, and even for pure musical charm have seldom, been exceeded by the productions in the same kind of the greatest modern masters, favoured as they have been by more than two centuries of subsequent experiment. The reader who may suspect this praise to be extravagant has but to turn to the first scene between Jephtha and his daughter after his return from victory (pp. 17–20), or to the lament of the daughter, "Plorate, Colles!" which immediately follows, with its wailing echoes, and judge for himself.

The oratorio following *Jephte* in the present volume, *Judicium Salominis*, is attributed by M. Fétis—he does not say why, or on what authority—to Cesti, one of the most distinguished of Carissimi's many distinguished pupils. From internal evidence I should certainly be inclined to attribute it to a somewhat, though not much, later hand, which might easily have been that of Cesti. The choruses are quite after the manner of his master; so also are the recitatives, though perhaps they are not quite up to the standard of Carissimi. But the work is full of *passages*, which indicate a condition of the vocal art mechanically in advance of any which Carissimi could have known till after he had quite formed his style—an advance involving the

> "Wanton heed, and giddy cunning,
> The melting voice through mazes running,"

which must have first struck the ear of Milton in his Italian travels, and which must have been novelties, even in the Land of Song, as late as the middle of the seventeenth century. The solo parts of the *Judicium Salomonis* abound in *fioriture*, and the solo of the true mother after her child has been restored to her, "Congratulamini mihi, Omnes,"

presents some difficulties even for the best trained modern vocalist.

Baltazar, which follows it, is a more extended work than *Salomon*. Its plan, too, is altogether different, and more after the manner adopted by Carissimi's German-born but Venetian-bred younger contemporary, Heinrich Schütz. The scenes are connected together by narrative, and the choruses, besides being more numerous, as the subject demanded, are more developed, and written for a larger choir. The great composer has naturally brought all his powers of musical expression to bear on the interpretation of the handwriting on the wall. Daniel intones the words he has to interpret on the same interval—a minor third—making each successive intonation of them a tone higher than the last. Even now, when this kind of sequence has been treated in every conceivable manner, and presented with every conceivable orchestral adjunct, this passage cannot fail profoundly to move the susceptible hearer. What must have been its effect two hundred and fifty years ago, when it was, if not absolutely new, in the highest degree uncommon and unexpected!

The fourth and last oratorio in this volume, to which we are promised a sequel, is *Jonas*, unquestionably the most varied and the most beautiful of the four. The recitatives are as interesting musically as they are appropriate to the characters to whom they are assigned and the situations which have suggested them. If the work contain no single piece of part-writing as closely knit—wherein the passages seem as inevitably to grow out of one another—as the "Plorate" of *Jephte*, the closing "Peccavimus, Domine," with its long overlapping phrases, its masculine suspensions, and its eight-part counterpoint—each part moving with the ease and freedom of an independent melody—approaches the "Plorate" very nearly; and proves that, if Carissimi was the first practitioner of a new and necessarily incomplete art, it was from choice, not necessity; and that he might have been equally the last, in point of time, of an old and complete one—*ultimus Romanorum*. In the choruses of a more dramatic character—which are for two choirs, and moreover have an independent orchestral accompaniment—Carissimi has exhibited powers of description and realisation which even a contemporary composer with a hundred models before him might envy. In one of these the terrors inspired by a storm at sea, and in another the confession of the repentant Ninevites, are depicted or expressed in accents not only true to nature, but of themselves beautiful and regular. Carissimi stands alone among musical reformers in having never forgotten that even expression *may* be attained at too great a sacrifice—that of the art through which it is achieved.

John Hullah.

NOTES ON MUSIC.

In his eighth annual concert, Mr. Walter Bache has again considerably added to his claims on our gratitude for the propagation of modern German and especially of Liszt's music in England. The programme almost exclusively consisted of compositions by this master, the *pièce de résistance*, "Les Préludes," No. 3 of the *Poèmes symphoniques*, being repeated by desire. We have spoken about this work on a former occasion (see *Academy*, vol. ii. p. 282), and will add only that the applause of the audience seemed even more enthusiastic and genuine than last year, showing how the great beauties of the composition had gained by a repeated hearing. The principal new feature of this concert was another symphony by Liszt called *Festklänge* ("Sounds of Festivity"). Although an explanatory programme like Lamartine's words to the "Préludes" was not added to this piece, every hearer of moderate imagination could easily discern the fundamental scheme, passing through all the phases of festive delight and enjoyment from the sacred strains of a religious ceremony to the merry rhythms of a dance at a village fair. In this high imaginative faculty consists the chief merit of the work, which otherwise seems to suffer somehow from the pompous noisiness of an occasional composition. Two charming songs without words for pianoforte by Liszt (the one a musical interpretation of one of Petrarch's sonnets), and likewise the *Polonaise brillante* by Weber, arranged for pianoforte and orchestra by Liszt, Mr. Bache rendered with all the delicacy of touch and technical skill which the modern treatment of his instrument requires. The latter work was conducted by Mr. Manns; other orchestral pieces by Mr. Bache.

The most interesting feature of the first Philharmonic concert was the first appearance in England of a German violinist, Herr Burgheer, of Detmold, who, together with his master, Herr Joachim, played the concerto for two violins in B Minor by Spohr. It is in pieces for his own instrument that the considerable merits of this otherwise somewhat antiquated composer show to greatest advantage, and the rendering of the concerto by two of the most accomplished artists of his own school was a rare treat to the refined musical ear. Herr Burgheer played besides with great success Tartini's *Trillo del Diavolo*.

Selected Article.

Die Künstler von Haarlem. Von W. Bode. Zeitschrift für bildende Kunst, March 8.

New Books.

Church, R. W. Civilisation before and after Christianity. Macmillan.

Essays by the Author of "Vera." Smith, Elder, and Co.

Fabre, M. A. Correspondance de Fléchier et de Mme Deshoulières et sa Fille. Didier.

Johnson, C. F. Lucretius on the Nature of Things, translated into English Verse, with Introduction and Notes. New York: De Witt, C. Lent, and Co.

Lucas, Charles. Les Temples et Églises circulaires d'Angleterre. Paris: Thoriss, 1871.

Ménard, René. Histoire des Beaux-Arts. Art antique. Paris.

Schuchardt, Christian, Director a. D. der grossherzoglichen Kunstsammlung zu Weimar. Lucas Cranach des Aelteren Leben und Werke. III. Theil. Leipzig: F. H. Brockhaus, 1870.

Sainte-Beuve, C. A. Nouveaux Lundis. Tome 13ième. Paris: Michel Lévy Fr.

Sainte-Beuve, C. A. Souvenirs et Indiscrétions. Le Dîner du Vendredi. Publiés par son dernier Secrétaire. Paris: Michel Lévy Fr.

Theology.

Short Explanation of the Acts of the Apostles. [*Kurze Erklärung der Apostelgeschichte.* Von Dr. W. M. L. de Wette. Vierte Auflage, bearbeitet und stark erweitert von Lic. Th. Fr. Overbeck, a. o. Professor in Basel.] Leipzig: Hirzel.

Several parts of de Wette's commentary on the New Testament have been issued since his death in a revised form, but this is the first time that an editor has been selected from the later school of critics. The difficulty of the task undertaken by Dr. Overbeck consisted not only in the large accumulation of materials within the last twenty years, but in the necessity of accommodating the work to the very view which de Wette himself controverted. The exposition of the Acts of the Apostles is rightly described by Dr. Overbeck as "the weakest portion of de Wette's *Handbook*." The much praised brevity of the author degenerates here into a meagreness which generally leaves the reader helpless in the face of the numerous questions raised by recent criticism. De Wette was not an opponent of this criticism on principle; he was, in fact, its most useful pioneer; though the editor remarks with much justice, that "when the *Paulus* of Baur, and a little earlier the kindred work of Schneckenburger, came in his way, de Wette was no longer

of an age consistent with full receptiveness for such original works." Besides, the classical work on the Acts by Zeller, which developed and gave a more comprehensive justification to Baur's hypothesis, had not yet appeared. The editor had consequently to choose between substituting a new work of his own, and subjecting that of de Wette to a very thorough revision. He chose the latter, in accordance with the wishes of the publisher. The whole of the original commentary is preserved, but has received many additions and the necessary corrections from the editor. The only place where the fresh matter has entirely excluded the old is in the introductory sections, which are now almost entirely out of date. It cannot, however, be denied that the book has thus become rather difficult to use, and we hope the editor will take the next opportunity of making it altogether, as the larger half of it is already, the organ of his own views.

Dr. Overbeck's work is based on the researches of Baur and Zeller. It is even to some slight extent influenced by the writings of apologetic critics, for though the editor refutes their sophisms at length, he confesses that a "not inappreciable" though "not nearly the best" part of his critical opinions has been derived from the study of their works. But Dr. Overbeck has not stopped short with the results of Baur and Zeller. A number of questions, barely touched by his predecessors, have received either a solution or at least the first careful examination at his hands. It is remarkable that he should have found so much still requiring to be cleared up in the Pauline part of the book. In his theory, too, of the object of the Acts, he deviates materially from Baur and Zeller. Instead of viewing the book as an offer of peace from the Pauline to the Jewish-Christian party, he points out that it already occupies "the characteristic position of the ancient Church in general," and therefore cannot be the result of the simple opposition between the first Christian parties. Against Zeller's view in particular he objects, that it fails to solve the riddle, how the book can be on the one side so decidedly Gentile in its tendency, on the other so weak in its Paulinism (if we may be allowed the word). The view that it was designed for Jewish Christians is refuted by the *national* antagonism everywhere prominent, and forming so strong a contrast to its *dogmatic* Judaism. Under this head we are called upon to notice the prominence deliberately given to the unbelief of the Jews, the external separation of the Christians, and lastly the predominance of the Gentile-Christian element, which is constantly assumed in the Acts. The "political side" of the Acts is also discussed, that is, the endeavour of the writer to recommend Christianity in high quarters, by describing the good understanding between Paul and the Roman officials. On the other hand it is shown that the author has already given up the distinctive theology of Paul, and only clings to his universalism, without basing it on the Pauline conception of the law; that the step however was not taken as a concession to Jewish Christianity, but in consequence of Judaistic influences on Gentile Christianity, and the natural incapacity of the latter to understand the problems of the original Paulinism. The antitheses of the apostolic age have, according to Dr. Overbeck, already lost their original significance, while Gentile Christianity appears "as the legitimate fruit of the primitive apostolic Christianity, not as the original foundation of Paul breaking through the barriers of the primitive church." The latter is, in spite of his separation from his countrymen, described as equally faithful to the law with the elder apostles, and defended against the charge of having been the preacher of apostacy; but this, too, is not a deliberate concession to Jewish Christianity, but rests purely on the assumption that the legal obligation of Jewish Christians was universal in the apostolic age, and was therefore recognised as such by Paul. On the other hand, the first mission to the Gentiles is carried back to the elder apostles, and the public appearance of Paul marks no fresh stage in the development of Christianity. Connected, according to Dr. Overbeck, with this veiling of original differences is the fact that the conflicts of Paul in the Acts are always with Jews, not Jewish Christians. Hence the book is described as the "attempt of a Gentile Christianity, itself strongly influenced by the early Christian Judaism, to explain its relation to the past, especially to its own origin and its founder Paul."

This point of view involves a material advance upon previous criticism, and one which leads of itself to an abatement of that character of interestedness which Baur and Zeller ascribed to the author. Dr. Overbeck, seems, however, not sufficiently to have considered that the parallel evolved between Peter and Paul, the inauguration of the Gentile missions ascribed to the former, and the punctual observance of the law to the latter, cannot be explained from ignorance of the apostolic age, but only from a conscious purpose. This is still more evident from another circumstance, namely, that the Pauline epistles with which the author was certainly well acquainted give an entirely different picture of the party-differences. But the existence of a conscious purpose implies that the Gentile Christianity represented in the Acts of the Apostles had still to struggle for its rights against the attacks of Judaisers, and though not amounting to a proposition of peace to the other side, the book is certainly an apology for Gentile Christianity and its founder in opposition to the attempt of Judaisers to exhibit it as a falling away from the primitive faith. This view of the book would find its complete justification if we could recognise more distinctly the record employed in the composition of the Petrine portion in particular, a record which was probably characterized by an opposition to Paul. Of course the intended apology was facilitated by the standing-point of the author, who, as Dr. Overbeck rightly shows, had no appreciation of the peculiar position of Paul, and saw in him not the apostle of the Gentiles, but, as also in Peter, an "universal apostle."

The editor has devoted particular care to the investigation of the historical sources of the Acts. In opposition to the earlier view, which regarded the speeches and letters as so many documents at the disposal of the writer, he lays stress partly on the peculiarities of style which pervade these as well as other parts of the book, and partly on the close connection between their contents and the general tendency of the work. He points out as the only historical source, for which there is any direct evidence, the narrative of a travelling companion of Paul, whom he supposes to be, not Timothy, but Luke. The passages derived from this source, in which Luke relates his own experiences, and shows that he is an eye-witness by his use of ἡμεῖς (the so-called *Wir-Stücke*), relate chiefly to the journeys of the apostle, and especially those by sea. But Dr. Overbeck clearly shows that this was no mere itinerary or travelling diary, but a detailed description of the apostle's missionary labours, which is distinguished from the rest of the Acts by peculiarities of style and contents, and cannot have proceeded from the writer of that book. Its intermittent use is not to be accounted for by the presence or absence of the narrator, nor by his personal relation to the events, nor yet from the plan of the book. The passages taken from it are not even inserted without alteration, but are sometimes much abridged, and sometimes have to give place to descriptions in the tone of the rest of the Acts. Their source is alluded to at three critical points (xvi. 10, xx. 5, xxvii. 1), an allusion due to the evident wish of the compiler to be himself identified

with the companion of Paul. The commencement of the narrative is lost, as well as a great part of its original contents. As to the question (probably to be answered in the affirmative) whether the first missionary journey of Paul (ch. xiii. and xiv.) fell within its sphere, Dr. Overbeck expresses himself doubtfully (p. xlv, cp. p. lix); but he has taken all the more pains to determine, from xvi. 10 onwards, the sections borrowed from this narrative. These are, with some additions and other alterations, ch. xvi. 10–17, xx. 4–xxi. 16, xxvii. 1–xxxviii. 14; while in xxi. 17, &c., xxviii. 15, &c. the compiler is thought to have connected his own work with the preceding narrative, by expressions borrowed from the latter. This hypothesis, however, is arbitrary. The renewed mention of the arrival in Jerusalem in ch. xxi. 17, may be accounted for upon the supposition that the original text was only excerpted by the compiler; and the same explanation may be given of the ἤλθομεν εἰς Ῥώμην, repeated in xxviii. 16 from ver. 14. The hypothesis of Dr. Overbeck is refuted by the occurrence of the words σὺν ἡμῖν, xxi. 18, which it is too great a licence to remove from the original narrative. The sections xx. 17–38, 33–36, 43 (βουλόμενος διασῶσαι τὸν Παῦλον), are regarded as the interpolations of the compiler; xxviii. 1–10, as an excerpt with additions by the latter. And these are not the only passages in which, according to Dr. Overbeck, the compiler is dependent on the same record. Not a few statements are borrowed from it in the account of Paul's journey in Greece (ch. xvii. and xviii.), though these are thoroughly worked up into an independent narrative. Of course many points of detail may be viewed differently. Dr. Overbeck, for instance, regards xxi. 10–14 as a later addition, partly on the ground of its close affinity to the spirit of the narrative, partly of the "indistinctness of the chronology." Yet the latter may be sufficiently accounted for, if we suppose the compiler in vv. 9 and 10 to be only excerpting a more detailed narrative, while the former is a proof, not that the notice of Agabus is a fiction, but only that the compiler selected and reproduced this scene from the original record. The only new feature is in xxi. 13; and by the removal of this, v. 14 appears in a closer connection with v. 12. It may be added that the same reasons which have induced Zeller and Overbeck to mark xxvii. 21–26, 33–36, as interpolations of the compiler, also apply to verse 31. Be this as it may, it is at any rate one of the editor's distinctive characteristics that he has investigated the relation of the record we have spoken of to the Acts of the Apostles in a more thorough manner than his predecessors, and has conclusively proved that they are by different authors. The only other parts which, in Dr. Overbeck's opinion, are probably derived from a written source (though the precise nature of this is uncertain), are the narratives relating to Peter, and the section viii. 9–24. These, too (as in the narratives of Pentecost, of Cornelius, and Simon Magus), have been largely modified by the compiler. The date of the composition is placed in the times of Trajan or Hadrian; at least the editor wishes "to keep open" the second and third decades of the second century; and the place selected for it is not Rome, but Ephesus.

The most material improvements in the commentary are to be found in the portion relative to the speeches. The theory of their entire or partial authenticity is subjected to a searching examination, and their connection both as a whole and in each of their parts with the peculiar plan of the book distinctly exhibited. See especially the analyses of Paul's speeches at Athens and Miletus, and his three speeches on his trial, together with the entire section in which the latter are imbedded: a masterly analysis, which supplements and develops the critical theory of the book in several essential points. We find also a new view, differing from Baur's, of the speech of Stephen, and of the apostolic decree. According to Dr. Overbeck, Stephen was not really a precursor of Paul, and the apostolic decree was not a compromise offered to the contemporaries of the writer, but an attempt to account for the precepts relating to proselytes still enforced in the Gentile Christian circles, on the one hand, and for the legal strictness ascribed to Paul on the other. Dr. Overbeck, however, opposes the view that these precepts were observed in the Pauline churches, though this view can, at the most, only apply to the purely Gentile Christian churches afterwards founded by Paul (and to these only during the apostle's life), but certainly not to that of Antioch, which has to be considered first in a criticism of the narrative in ch. xv.

In particular points of historical criticism Dr. Overbeck sometimes goes beyond even Baur and Zeller. Thus, he regards the episode of the Hellenists (vi. 1–13, viii. 1–4, xi. 19–30), at least in its present form, as an unhistorical "construction to account for Gentile Christianity;" the Hellenists were to prepare the way for Paul, and yet were not to be entirely severed from the primitive church. He forgets however that according to the Acts it was rather Peter who inaugurated the Gentile mission, and that any other preparation for the Pauline Gospel was thus rendered unnecessary. The compiler therefore can scarcely have invented the Hellenists, but merely availed himself of an earlier notice. The circumstance, adduced by Dr. Overbeck, that the Hellenists first of all act independently, and then appear dependent on Jerusalem, only proves that the latter feature was added by the compiler. The self-consciousness of Paul with respect to his mission by no means proves that he was the first in the field. The novelty of his gospel consisted, not in the admission of Gentiles, but in the religious equality of Gentiles and Jews in the church of the Messiah. But the exhibition of this as the fundamental principle of the Gentile mission requires us to assume that the mission itself was of earlier origin, not to mention the fact, that the elder apostles were not opposed to Gentile conversions in themselves, but only to the significance which Paul attached to them, and the consequences which he deduced. Even the conversion of Cornelius may be historical, though placed in an altogether unhistorical light, and probably in too early a period. If we consider further that Paul only came into conflict with Jewish Christianity fourteen years after his first appearance as an apostle to the Gentiles, and very soon afterwards separated from his companions, we shall arrive at the conclusion that he showed his originality, not in the Gentile mission as such, but in his distinctive gospel of faith in the cross of Christ, the ultimate consequences of which however he can only have developed gradually.

On the other hand, Dr. Overbeck has been the first to explain clearly the Ephesian period, and the significance of the so-called disciples of John. By means of a striking parallel between xviii. 24–xix. 7, and viii. 14–17, he shows that these disciples, who have only received "John's baptism," are no adherents of his, but actual Christians, who, like the Samaritans baptized by Philip, have received the baptism of water, but not that of the Spirit, and were to be first endowed with the πνεῦμα ἅγιον by Paul. The reply in xix. 2, is of course put into the mouth of these Ephesians by anticipation, with reference to the following narrative. The episode of Apollos, however, who, when in Ephesus, preaches only to the Jews, and knows nothing of the baptism of the Spirit, until he is instructed by Paul's companions, is, as the editor shows, closely connected with the narrative which follows, and is designed as an evidence of the superiority of Paul as an actual apostle to Apollos as a mere apostle's assistant. There is also a new and interesting theory re-

specting xix. 23–41, in which Dr. Overbeck sees a final description of Paul's missionary activity among the Gentiles, combining all the points of view which characterize the writer of the Acts. Here too he seems to us to go too far in denying to the narrative all foundation in fact. Whatever objections however may be made on particular points, this commentary is at any rate a scientific production of the first rank, and by far the most important among all the recent works on the New Testament literature which have appeared in Germany. R. A. Lipsius.

Contents of the Journals and Notes.

Theolog. Literaturblatt (Bonn; Rom. Cath.), Feb. 26.—Dietzsch's *Adam und Christus*, rev. by Maier.—Lucht's *Die letzten Capitel des Römerbriefs*, by Langen.—Allies' *Origin of Christianity*, by Kraus.—— March 12.—Kraus' *Kirchengeschichte*, by Funk.—Zingerle's *Chrestomathia Syriaca*, by Röhling. [The reviewer points out the importance of Syriac texts as evidences of the antiquity of Catholic rites.]

Theolog. Tijdschrift (Dutch, Protestant).—Prof. Jowett's translation of Plato, rev. by Prof. van der Wijck. [On the sophist question.]—Contributions to the Criticism of the Synoptic Gospels [continued], by Prof. Loman.—Hugenholtz's *Christendom and Humanity*, rev. by Cramer.—Literary survey.

Dr. Keim, author of the *Geschichte Jesu*, has contributed two papers on the Arrangement of the Acts of the Apostles to the *Protestantische Kirchenzeitung* for February. He thinks the book divides naturally at ix. 31. Its object, to describe the course of Christian missions from east to west, under the conduct of Peter and Paul. The unhistorical element in it is exaggerated; even where this exists the narrative is told in good faith. Place of composition, Rome; time, A.D. 98–117.

Dr. Geiger replies to Hitzig's paper on Beltis and Osiris (Isa. x. 4, according to Lagarde) in *Jüdische Zeitschrift*, 1871, No. 4.

Mr. Crowfoot has completed his retranslation into Greek of the Curetonian Syriac Fragments of the Gospels. Although Dr. Cureton published an English version together with the Syriac text, it is dangerous (more so indeed than some critics are aware) to use this or any modern translation for critical purposes without some knowledge of Syriac. Hence Mr. Crowfoot's attempt. The editor candidly remarks in the preface (p. vi), "Hoc exemplar me denuo exhibuisse vix spero; sed textus, quem propter collationem Graece restitui, ejus structuram quodammodo indicabit." The most valuable portion of the second fasciculus is the attempted retranslations of the three pages of the Curetonian version recently deposited in the Berlin library, viz. John vii. 38–viii. 18; Luke xv. 22–xvi. 12; and xvii. 1–23, for the history of which see Dr. Wright's letter in the *Academy*, vol. ii. p. 468. We regret that Mr. Crowfoot has not appended some justificatory notes to his translation. The first part was reviewed by Dr. Payne Smith in *Academy*, vol. ii. p. 63.

A convenient handbook of ecclesiastical history from a Roman Catholic point of view, dedicated to Bishop Hefele, is being brought out by Dr. F. X. Kraus (published by Lintz at Trier). Commendable though inadequate reference is made to the works of Protestant critics. We are glad to be able to add that Alzog's *Handbuch der Kirchengeschichte* has reached a ninth edition.

A notable example of caution has been furnished by the Swedish ecclesiastical authorities. A commission has been sitting on the translation of the Bible for the last hundred years, without producing more than a tentative revision, which is still exposed to the criticism of scholars.

We believe we may state that M. Renan's *L'Antichrist*, the fourth part of his *Origines du Christianisme*, will appear very shortly.

New Publications.

Crowfoot, J. R. Fragmenta Evangelica, quae ex antiqua recensione vers. syriacae Novi Test. (Peshito dictae) a Gul. Curetono vulgata sunt, Graece reddita, etc. Pars altera. Williams and Norgate.

Frankel, Z. Zu dem Targum der Propheten. Breslau: Schletter.

Philosophy and Physical Science.

The Theory of Political Economy. By W. Stanley Jevons. London and New York: Macmillan and Co.

This book claims to "call in question not a few of the favourite doctrines of economists." Its main purpose is to substitute for Mill's Theory of Value the doctrine that "value depends entirely upon utility." The rate of exchange of two commodities will, when the equilibrium has been attained, be such that the utility to each individual of the last portion of the commodity which he obtains is only just equal to that of the last portion of the other commodity which at this rate he gives in exchange for it. The utility of a commodity is in part "prospective," that is, dependent on the benefit which will at a future time accrue from its possession: and this depends partly upon the difficulty that there might be in obtaining something before that time to supply its place. Though "labour is often found to determine value," it yet does so "only in an indirect manner by varying the degree of the utility of the commodity through an increase in the supply." Bearing in mind what has been said about prospective utility, it is almost startling to find that the author regards the Ricardian theory as maintaining labour to be the origin of value in a sense inconsistent with this last position. But the language of Ricardo on this point was loose with system: and that of many of his more prominent followers differs from his only in that its looseness is not systematic. By a natural reaction attempts have been made by a series of able men to found the theory of value exclusively upon the neglected truth.

Although the difference between the two sets of theories is of great importance, it is mainly a difference in form. We may, for instance, read far into the present book without finding any important proposition which is new in substance. But at length he definitely commits himself: at the end of his Theory of Exchange we read—

> "Labour affects supply, and supply affects the degree of utility which governs value, or the ratio of exchange. But it is easy to go too far in considering labour as the regulator of value; it is equally to be remembered that labour is itself of unequal value . . . . . I hold labour to be essentially variable, so that its value must be determined by the value of the produce, not the value of the produce by that of the labour."

The confusion here implied is not merely one of words. He returns again in his concluding remarks to his attack upon the ordinary theory of the variation of wages in different employments, and says "the wages of a working man are ultimately coincident with what he produces after the deduction of rent, taxes, and the interest of capital." He does not see that, since rent, taxes, &c. are not paid in kind, we must have before us a complete theory of value in order that we may perform this subtraction. He does not speak of the amount of the wages, and the exchange value of the products as varying elements, the variations of each of which affect those of the other. He considers that value is determined absolutely and independently, and that wages are determined afterwards. He goes on:—

> "I think that in the equation,
>
> Produce = profit + wages,
>
> the quantity of produce is essentially variable, and that profit is the part to be first determined. If we resolve profit into wages of superintendence, insurance against risk, and interest, the first part is really wages itself; the second equalises the result in different employments; and the interest is, I believe, determined as stated in the last chapter."

The attempts, here referred to, to give an account of interest independent of any theory of wages or value, is bold and subtle. The reasoning is mathematical; but the argument may be expressed by the following example. Suppose that A and B employ the same capital in producing hats by different processes. If A's process occupies a week longer than B's, the number of hats he obtains in excess of the number obtained by B must be the interest for a week on the latter number. Thus the rate of interest is expressed as the ratio of two numbers without the aid of any theory of value: expressed, but not determined; yet in the passage quoted it is spoken of as determined. The relative pro-

ductiveness of slow and rapid processes of manufacture is but one of the determining causes of the rate of interest: if any other cause made this fall, B's process would be abandoned. The rate of interest affects the duration of the remunerative processes of manufacture no less than it is affected by it. Just as the motion of every body in the solar system affects and is affected by the motion of every other, so it is with the elements of the problem of political economy. It is right and necessary to break up the problem; to neglect for the time the influence of some elements; to investigate the variations of any one element which must, *caeteris paribus*, accompany certain assumed variations in one or more others. Such investigations give results which, even as they stand, are roughly applicable to certain special cases. But this does not justify us in speaking, in general, of one element as determined by another; as, for instance, of value as determined by cost of production, or of wages as determined by value. It is difficult to remember a prominent Ricardian writer who has not attained brevity at the expense of accuracy by employing the former of these expressions. Professor Jevons' use of the latter of them will have done good service if it have called attention to the danger of such parsimony.

The main value of the book, however, does not lie in its more prominent theories, but in its original treatment of a number of minor points, its suggestive remarks and careful analyses. We continually meet with old friends in new dresses; the treatment is occasionally cumbrous, but the style is always vigorous, and there are few books on the subject which are less open to the charge of being tedious. Thus it is a familiar truth that the total utility of any commodity is not proportional to "its final degree of utility," *i.e.* the utility of that portion of it which we are only just induced to part with, or to put ourselves to the trouble of procuring, as the case may be. But Professor Jevons has made this the leading idea of the costume in which he has displayed a large number of economic facts. In estimating, for instance, the benefit of foreign trade, we must pay attention to the total utility of what we obtain by it, as much as to its final utility, which alone is indicated by the rate of exchange. His attack on Mill on this point is worth reading, though it is in parts open to criticism; and though while Mill pleads the difficulty of the subject in excuse of his neglect of the total utility of international trade, Jevons does not overcome the difficulty. Again, the whole advantage of capital to industry—its total utility—cannot be measured by the rate of interest, which corresponds only to its final degree of utility. Again, the final degree of utility to a labourer of his wages diminishes as their amount increases, while the final degree of pain resulting from the labour, at all events after a certain time, increases as the amount becomes greater: consequently, the artisan as soon as his real wages have ceased to be barely sufficient for his support, strikes for shorter times, rather than for the further increase in wages.

Among his more interesting incidental discussions are those on the difficulties Thornton has found in the theory of value, and on the economy of muscular effort. He contributes to the definition of the terms "market," "labour," "capital," "circulating capital," but he does not keep sufficiently distinct the various connections in which each of them is employed. His lucidity serves to render darkness visible; to make us conscious of the absence of a specialised economic vocabulary, perhaps, on the whole, the severest penalty that the science has paid for its popularity. He supplies, indeed, one expression which, with a little more care, might be rendered a useful one. Capital which "consists of a suitable assortment of all kinds of food, clothing, utensils, furniture, and other articles which a community requires for its ordinary sustenance," he calls "free capital," because it "can be indifferently employed in any branch or kind of industry." The term "value," indeed, he considers as hopeless, and he expresses an intention, to which he does not adhere, of avoiding its use.

"Value in exchange expresses nothing but a ratio, and the term should not be used in any other sense. To speak simply of the value of an ounce of gold is as absurd as to speak of the ratio of the number seventeen."

There does not seem to be any greater absurdity in speaking of the value of an ounce of gold, or of a cubic inch of gold, than there is in speaking of the weight of a cubic inch of gold. In each case reference is made to some unit conventionally adopted at some particular place and time. He complains that "persons are led to speak of such a nonentity as intrinsic value": but the examiner, who has asked for a definition of specific gravity, is fortunate if he has not heard of "intrinsic weight." The abuse of a term is not a sufficient cause for its rejection. We cannot afford to dispense with the phrase "the rate of wages," though Ricardo has employed it in a forced sense, which Professor Jevons himself has failed to catch.

He has done good service, moreover, in protesting against Mill's saying:—"Happily there is nothing in the laws of value which remains for the present or any future writer to clear up; the theory of the subject is complete." It is probable that Mill intended this to be interpreted in a very narrow sense; but anyhow, it is unfortunate. As Jevons says, it would be rash to make such a statement about any science. It would be very rash to make it about the law of gravitation. Mill would probably have been more correct if he had stated that, taking into account only questions which have already occurred, there is no one side of the theory of value which does not require for its completion a greater amount of scientific investigation than has, up to the present time, been applied to the whole of political economy—that there is scarcely any question which can be asked with regard to value to which a complete answer is forthcoming. Take, for instance, a question which Professor Jevons has made prominent—What is the influence which a rise in price of hats, owing to an increased demand, has on the wages of hat-makers? Of course one element to be considered is the facilities which exist for introducing new workmen into the trade. How far, then, is this dependent on the number of parents occupied in this and other employments who have been able to give their sons an education sufficiently good to fit them to become hat-makers, but not a much better one. What is the relation between the cost of production of an average skilled labourer and his remuneration? This is but one question out of many. We know, perhaps, in what direction to look for the answers: but the point is that they are not yet formulated. And who can tell what difficulties will have to be overcome before they are formulated?

Professor Jevons has expressed almost all of his reasonings in the English language, but he has also expressed almost all of them in the mathematical. He argues at great length and with much force the applicability of mathematical method to political economy:—

"If there be any science which determines merely whether a thing be, or be not—whether an event will happen, or will not happen—it must be a purely logical science; but if the thing may be greater or less, or the event may happen sooner or later, nearer or further, then quantitative motions enter, and the science must be mathematical in nature, by whatever name we call it."

He insists that mathematics have been successfully employed in physical sciences of which the data are very inexact; and that innumerable possibilities of economical

statistics exist already half tabulated in the books of mercantile houses great and small. His remarks on these and some similar points are singularly good. In general, indeed, he makes but little use of mathematical methods of reasoning. And he has not even fully availed himself of the accuracy which he might have derived from the use of the language. He does not always point out what are the variables as a function of which his quantities are expressed. It is often necessary to understand independently the whole of his reasoning, in order to know whether he means his differential co-efficients to be total or partial; and in several cases he seems almost to have himself forgotten that they are total. He has expressed the fact that "the last increments in the art of exchange must be exchanged in the same ratio as the whole quantity exchanged" by the equation

$$\frac{dy}{dx} = \frac{y}{x}.$$

He does not indicate the existence of any relation between the Δy and Δx, of which he considers dy and dx to be the limits, which can constitute $\frac{dy}{dx}$ a differential co-efficient: the mathematical phrase merely confuses. Some amusement has been derived from the absurd result which is obtained by integrating the equation. But this implies a misapprehension. A point on a locus may be determined by an equation with a differential co-efficient in it. If we integrate the equation, we get not this locus, but some other intersecting it at the point to be determined. An instance of a different kind of inaccuracy for which his making use of mathematical language leaves him without excuse, occurs in his investigation of the influence on the rate of international exchange exerted by a tax on imports. He tacitly assumes that the government levies the tax in kind, and destroys it, or, at all events, consumes it in such a way as not to interfere with the demand there would otherwise have been in the country for it.

We owe several valuable suggestions to the many investigations in which skilled mathematicians, English and continental, have applied their favourite method to the treatment of economical problems. But all that has been important in their reasonings and results has, with scarcely an exception, been capable of being described in ordinary language: while the language of diagrams, or, as Professor Fleeming Jenkin calls it, of graphic representation, could have expressed them as tersely and as clearly as that of the mathematics. The latter method, moreover, is not well adapted for registering statistics until the laws of which they are instances have been at least approximately determined: and it is not intelligible to all readers. The book before us would be improved if the mathematics were omitted, but the diagrams retained. ALFRED MARSHALL.

Samuel Clarke's Life and Doctrine. [*Samuel Clarke's Leben u. Lehre.* Ein Beitrag zur Geschichte des Rationalismus in England. Von R. Zimmermann.] (Academy Reprint.) Wien: in Comm. bei Gerold's Sohn, 1870.

DR. ZIMMERMANN'S careful study of "the one English Aprioriker," as he terms Dr. Samuel Clarke, is a noteworthy exception to the general neglect of English metaphysics—except the single development of Empiricism from Locke to Hume—which prevails among German students of the history of Philosophy. Clarke, indeed, has a closer relation to continental thought than any other English thinker from Locke to Coleridge. His philosophico-theological system was developed in conscious antagonism to Spinoza: and ten years after the publication of this had established his philosophical reputation—just when his reasoned theism had, alas! proved to be heretical theology—he was called upon to defend against Leibnitz the metaphysical principles which he held in common with his friend and master Newton. Dr. Zimmermann has given a careful and impartial analysis of Clarke's system, and an able summary and criticism of the controversy with Leibnitz. In describing Clarke as "ebenbürtig" to his two great antagonists, he does him certainly more than justice. He is a clear and vigorous reasoner, and has a genuine confidence in the completeness of his system: but one finds in him too much of the "crassa Minerva" that runs through English metaphysics: the solid, cautious common-sense that avoids inconvenient inferences from its premises by the inartificial expedient of declining to draw them. Such a metaphysical temper, matched against the iron consistency of Spinoza, or the ever-active acumen and constructive ingenuity of Leibnitz, shows an inferiority of speculative insight for which no dialectical vigour can compensate. Clarke failed to understand the intellectual needs out of which Spinoza's system sprang: and was too uncritical to see the remarkable coincidence (up to a certain point) between that "atheist's" doctrine and his own. His "Self-existent Being," of which infinite space is a *property*, corresponds closely to Spinoza's one "substance" with its attribute extension.

And yet when we come to the real issue between the two thinkers, we find Clarke's most cardinal and characteristic conclusion—from the *contingency* in the material universe to Free-Will in its eternal and necessary cause—scarcely presented in a proper light by Dr. Zimmermann. In the first place, he complains of Clarke's inconsistency of method, in using at this point *à posteriori* argument. But Clarke has never bound himself to adhere to the "high *priori* road:" it is only his German critic who insists on regarding him as a "Vertreter des Rationalismus" in conflict with the "Sensualismus" of Locke. With Locke's system as a whole Clarke seems to have had no quarrel: he acquiesces in his refutation of innate ideas; he only objects to his suggestion of the possible materiality of the soul, and to "some materialists who approved in Mr. Locke's writings nothing but his errors."* Dr. Zimmermann scarcely understands the naïve and confident dogmatism of the disciple of Newton, writing in the full triumph of demonstrated harmony between *à priori* reasoning and empirical observation. No doubt of the absolute correspondence of Thought (in either department) to Things ever entered his head. But, objects Dr. Zimmermann, experience does not inform us of the contingency of its objects: it does not tell us what things might or might not have been, but only what they are. This again is insisting on a separation of methods foreign to Clarke's manner of thought: it is enough for him that the object presented in experience is apprehended as contingent by an intuition as naturally certain as any other, to whatever faculty it may belong: indeed, strictly speaking, this conception of Divine Free-Will is not found in either *à priori* or *à posteriori* cognition of the universe, but in the point of union between the two. And certainly he touches here the radical weakness of Spinozism (and other forms of Rational Pantheism): the unexplained *modus transeundi* from the necessary and eternal Being to the arbitrary determinateness which we find in the world of experience. The defect of Clarke's view (apart, of course, from the general objection to his dogmatic method) is not so much that he applies to this *modus transeundi* the conception of Free-Will—no more appropriate notion having ever been

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* It is curious that on this point Dr. Zimmermann puts to the address of Hobbes an argument obviously directed against Locke (or his disciples). Cf. p. 39.

suggested—as the shallowness of his reconciliation of Divine Free-Will with the principle of universal causation on which his *à priori* reasoning proceeds. And hence his treatment of the category of "sufficient reason," in which Leibnitz tried to transcend the distinction of Final and Efficient cause, is simply unintelligent: he cannot or will not see that the Divine preference for one of two intrinsically indifferent determinations of finite existence is a fact requiring explanation.

Nor does Clarke show himself more appreciative of that other Leibnitzian principle of the "identity of indiscernibles," or, to put it positively, the necessary qualitative diversity of individuals. But in combating this, he gains a controversial advantage which Dr. Zimmermann seems to have overlooked: as Leibnitz certainly contradicts himself, in one place allowing, in another denying, the *conceivability* of two perfectly similar individuals. Cf. Letter iv. § 6—"Poser deux choses indiscernibles, est poser la même chose sous deux noms:" and v. 25—"Je ne dis point qu'il soit impossible absolument d'en poser, mais que c'est une chose contraire à la sagesse divine." And in so far as Leibnitz sets against the conceivability of numerically different indiscernibles their non-existence in our experience, he is certainly open to the charge of inopportune empiricism which Dr. Zimmermann has previously made against Clarke.

As a whole, the monograph is chiefly defective in indicating Clarke's relations to English philosophy generally. I have noticed an instance of this in the supposed antagonism to Locke: whereas in fact there is as much agreement between Locke's proof of the existence of a God, and the more developed and precise demonstration of Clarke, as there commonly is between any two thinkers classed as of the same school.* Again, by presenting Clarke in connection with Herbert of Cherbury, the uncritical character of his dogmatism is missed. In Clarke's metaphysic the methodological side is kept quite in the background: there appears no explicit theory of the criteria of truth. H. Sidgwick.

DISCOVERY OF AN EXTINCT GIGANTIC BIRD OF PREY IN NEW ZEALAND.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—Mr. F. Fuller, while directing some excavations in a marsh on the Glenmark estate, province of Canterbury, South Island, New Zealand, by permission of G. H. Moore, Esq. (whose researches have added so greatly to the evidences of the extinct birds of New Zealand), found, among remains of *Dinornis* exhumed at a depth of five or six feet from the surface, a few smaller bones, including claw-phalanges, which Mr. Fuller recognised as belonging to a large bird of prey.

With two claw-phalanges were found a left femur, a vertebral rib with its anchylosed "epipleural appendage;" and, in a watercourse about two miles from Glenmark, a mutilated right humerus was subsequently discovered, and pronounced by Dr. Haast to be raptorial, and, as well as other and better preserved bones, most nearly resembling the corresponding bones of the New Zealand harrier (*Circus assimilis*, Jardine).

Dr. Haast, F.R.S., the accomplished state-geologist of the province of Canterbury, has communicated an instructive and interesting memoir on these remains to the *Transactions of the Philosophical Institute of Canterbury*. He refers the gigantic raptorial bird of New Zealand, which was twice the size or bulk of the great wedge-tailed eagle of Australia (*Aquila audax*, Gould), to a genus *Harpagornis*, Haast, giving it the specific name *Moorei*, after the liberal partner of Kermode and Co., owners of the Glenmark property. He conjectures, on good grounds, that this huge raptorial bird preyed upon the young or feeble individuals of the genus *Dinornis*, and, with them, became extinct.

Dr. Haast deduces from this discovery an additional confirmation of his belief that the present aboriginals of New Zealand do not possess any traditions about the gigantic Moas, and writes, "that, if trustworthy traditions about the *Dinornis* had been handed down to us, the still more alarming existence of this gigantic bird of prey contemporaneous with the former would most certainly have also been recorded."

I may remark that the individual who, in 1839, submitted to me, with other New Zealand rarities, the fragment of bone which gave the first evidence of great wingless birds in that island, stated that the natives from whom he obtained it had "a tradition that it belonged to a bird of the eagle kind which had become extinct, and to which they gave the name of 'Movie'" (*Proceedings of the Zoological Society of London*, Nov. 12, 1839, p. 169).

I am now, of course, disposed to attach more weight to this tradition than when it rested on a fossil proved to belong to a bird which could not fly, and which was at least as large as an ostrich.

We may suppose the great raptorial species which we now know to have co-existed with the *Dinornithes* to have survived, by reason of its greater powers of escape, some time after the extinction of its principal prey; and the tradition of the great bird "of the eagle kind" may be a consequence of the knowledge of the *Harpagornis* continuing down to later generations of Maories than those who hunted down the huge herbivorous flightless birds. Richard Owen.

British Museum, March 12, 1872.

Scientific Notes.

Geology.

Fossil Bird from the Cretaceous Formation of Kansas.—Professor Marsh reports to the *American Journal of Science* the discovery, during his explorations in 1871, of a remarkable fossil bird in the Upper Cretaceous of Western Kansas. The remains consist of the greater portion of a well-preserved skeleton, at least five feet in height. Although that of a true bird, as is shown by the vertebrae and other parts, it widely differs from any known recent or extinct form of the class, and affords a fine example of a comprehensive type. The femur is very short, the other portions of the legs are elongated, and the metatarsal bones appear to have been separated. On his return, the Professor proposes to describe this unique fossil under the name of *Hesperornis regalis*.

The River Courses of England and Wales.—At the meeting of the Geological Society of London on the 7th February, Prof. Ramsay described the changes in the physical conformation of Britain during the Jurassic and Cretaceous periods, and the relations which the deposits formed during these periods bear to the Palaeozoic rocks of Wales and the northwest of England. The Miocene period of Europe was essentially a continental one, and was closed by important disturbances of strata in Central Europe, one effect of which would be to slightly tilt the secondary formations of France and Britain towards the north-west. In this way he explained the north-westerly direction of many of the rivers of France; and he surmised that at this period the rivers of the middle and south of England also took a westerly course. The westerly slope of the cretaceous strata of England was the cause of the southern flow of the Severn between the hilly land of Wales and the long slope of chalk rising towards the east. The Severn would thus establish the commencement of the escarpment of the chalk, which has since receded far eastward. The author believes that after the Severn had cut out its valley the Cretaceous and other strata were gradually tilted eastwards, causing the easterly course of the Thames and other rivers of Southern and Eastern England. In these and other cases, the sources of these rivers were originally on the chalk near its escarpment; while to its recession, followed by the formation of the oolitic escarpment, its present relation to the river-courses must be ascribed. The author also indicated the relations of the courses of the rivers of the north of England to the general dip of the strata.

The Zoological Provinces of the Jurassic Period.—Dr. M. Neumayr, of Vienna, divides the entire Jurassic deposits of Europe into three groups: a Mediterranean group; one comprising Central Europe; and, lastly, a Russian group. The Mediterranean group, which includes rock-deposits in Spain, the Cevennes, the Alps, Italy, the Carpathians, and the Balkan range, is wanting in many of the beds that are met with, rich in fossils, in the group of Central Europe, inclusive of

* It is worth noticing how Locke is even led to suggest that involuntary approximation to Spinozism (by connecting Extension with Deity) which is a characteristic doctrine of Clarke's metaphysic. Locke, in defending the Vacuum against the Cartesians, finds himself in a dilemma: "Is Space something or nothing?" He does not like to assert that it is *some thing*, and yet, "if there is nothing between two portions of matter, they must be in contact." In this difficulty he finds relief in the conception of God "filling immensity:" so that where there is no matter there is not nothing, but God. (Cf. *Essay*, b. ii. c. xiii. §§ 16, 17, and c. xv. § 3.)

France and England; it is, on the other hand, characterized by the occurrence of vast numbers of species of *Phylloceras* and *Lytoceras*. Corals existed in great abundance in the Mediterranean group, as well as in that of Central Europe, but are not found in the Russian province. The general aspect of the different faunae of these three groups is not sufficiently dissimilar to allow us to assume that they were separated by land. That, no doubt, would have occasioned as entire a difference in the animal life of those parts of the ocean thus divided as is seen to this day at Suez or Panama, or in the Kimmeridge clay of South Germany and of Northern France. The Mediterranean or most southern group abounds in forms of *Phylloceras* and *Lytoceras;* while in Central Europe alone the genera *Oppelia*, *Aspidoceras* are found, and here the reef-building corals find their northern limit. The Russian Jurassic provinces, embracing Northern Russia, Spitzbergen, and Greenland, has likewise a fauna of its own. Neumayr attributes these differences in animal life to climate, which in that period must have been somewhat warmer than the present, for the northern boundary line of corals was then about 25 degrees of latitude higher than it is now. (*Verh. der k. k. geol. Reichsanstalt*, No. 3, 1872, p. 54.)

Physiology.

Phosphorescence.—Professor Pancevi, of the University of Naples, has just published a memoir on this highly interesting subject, in the fifth volume of the *Atti della Reale Accademia delle Scienze fisiche e matematiche*, 1871, under the title "Gli Organi luminosi e la Luce delle Gennatule." It consists of two parts, one anatomical, the other physiological. He notes the existence of special organs which have the power and apparently the function of producing phosphorescent light, and finds that the light is only emitted by the Polyps and the Zooids, while the phosphorescent organs, as he terms them, consist of eight "cordoni luminosi," which are attached to the outside of the stomach of the Polyps and Zooids, and are prolonged in each case as far as their mouth-papillae. These threads (cordoni) are principally composed of a tissue built up of vesicles or cells and possessing all the characters of fat; albuminoid cells are likewise met with in it. This fatty matter generates light, not only by the direct excitation of the Polyps and the Zooids themselves, but by excitation of the whole trunk of the Pennatula. In the latter case the author has made the remarkable discovery that the progress of the light developed in succession over the several parts of a polyp gave a striking indication of the direction, progress, and rapidity of the excitation applied to the Pennatula, and he has found these latter calculable, a fact of the greatest interest to physiologists. Professor Pancevi further states that the phosphorescent substance produces light, after its removal from the body of the polyp, if subjected to mechanical treatment such as friction and compression, or the action of chemical agents, electricity or heat. And this is the case when the substance is extracted, not only from the living animal, but some short time after its death. The author, in his earlier investigations of the phosphorescence of other fatty substances, considered the phenomenon due to their slow oxydation. He believes this holds good in the case of the "cordoni luminosi" of the Pennatula, and thinks it to a certain amount subject to the voluntary powers of the animal. He found similar phosphorescent substances in the epithelium of Medusae, and in Pholas he saw two distinct organs inside the mantle which are furnished with the power of becoming luminous. Some Chaetopteri, Beroe, and Pyrosoma were likewise examined, and a great similarity noticed in all these cases as regards the constitution of the phosphorescent substance. In the spectroscope the light exhibits one broad band like that given by monochromatic light, while, as is well known, the phosphorescent light of *Lampyris* and *Luciola* is polychromatic.

Mode of Increase of the Long Bones.—A paper on this subject appears in the last part of the *Archives de Physiologie*, by MM. Philippeaux and Vulpian. The views generally adopted in regard to the mode of growth of the long bones, both in length and diameter, have been called in question by Wolff and Volkmann in papers recently published; and MM. Philippeaux and Vulpian's researches were undertaken with the object of ascertaining whether their objections are well founded. The doctrine supported by the authority of Duhamel, Hunter, and Flourens, and generally accepted, is that the long bones increase in length by additions to the extremities in the form of new layers between the shaft or diaphysis and the articular portion or epiphysis, while they become broader by the deposition of new bone in the periosteum on the outer surface of the bone. M. Wolff, on the other hand, maintains that the growth of bone is interstitial, and that each part of the bone takes part in the enlargement. He points to the persistence, during growth, of the position and relations of the peculiar and geometrically arranged trabeculae of the cancellous texture constituting the head of the bone, which could hardly occur on Duhamel's theory. He denies Duhamel's statement that a ring surrounding the bone of a young animal comes by degrees to occupy the shaft of the bone, owing to absorption of the old bone and the superposition of new; but contends that the old bone is pressed inwards, and is certainly not absorbed. He further states that when wires are passed through both the epiphysis and two points of the diaphysis, the distance between the two latter augments just as much as the distance between the wire passing through the epiphysis and that through the diaphysis lying nearest to it. MM. Philippeaux and Vulpian oppose M. Wolff's statements. They state that rings encircling the bone, as well as metallic lamellae, interposed between the periosteum and osseous tissue in young animals, do actually cut their way till they are free, or almost free, in the medullary cavity; and they refer to specimens made by themselves in Flourens' laboratory, and now in the Musée Dupuytren, in confirmation of their theory. As regards the separation of metallic threads drilled into the bone, they think that in Wolff's experiments the two wires passed into the shaft of the bone were too near the epiphysis to furnish any satisfactory result. Finally they give the details of a series of experiments conducted under Flourens' direction, in which madder was given to young pigs up to a certain period, when one of the litter was killed, and its bones prepared as objects of comparison with those of the rest, which were killed afterwards at stated intervals up to eighteen months. The bones of these animals, they declare, clearly demonstrate the correctness of the old doctrine, and prove irrefragably that all increase in diameter is due to fresh subperiostitic deposits, whilst all increase in length is caused by the progressive ossification of the osteological elements supplied by the cartilage of conjugation between the diaphysis and the epiphysis. Moreover their experiments incidentally showed that the long bones increase in length more at one extremity (the upper or proximal) than at the other.

Structure of the American Spongilla.—An essay by Prof. H. James-Clark, of Lexington, Kentucky, appears in the current number of the *Monthly Microscopical Journal*. Prof. James-Clark holds that each ciliated body of a sponge is a cephalic member of a polycephalic individual, a view widely differing from the one entertained by Häckel and others, that Sponges are essentially compound Polypi, the afferent and efferent ostioles of the former corresponding with the mouths of the latter; while the branching canals of the Sponges are comparable with similar canals in the polypidom of Halcyonarians; and by implication the cilia-bearing cells of the interior lining-wall of the Zoophyte find their homologues in the ciliated cell-like bodies of the interior chambers of the Porifera. The sponge examined by Prof. James-Clark he names *Spongilla arachnoidea*, from its resemblance to an irregular spider-web. It is a fresh-water species, clinging to the stems of water-plants, and avoiding light. It may grow to be several inches in diameter, is of yellowish-brown colour, and has a filmy envelope or investing membrane enclosing a cytoblastematous basis in which the monads are imbedded, and of which the outer part may be regarded as an internal investing layer. The investing membrane is composed of a diffuse blastema, containing nucleated cells which, however, have no cell-wall. The monad-cephalids, as he calls them, correspond functionally to the tentaculate heads of Polypi. They are collected into groups in the substance of the cytoblastematous mass that differs but little in structure from the outer envelope. They consist of a roundish or oval monad chamber, lined continuously by a stratum of craspedote flagellate monads, identical in structure with those described by James-Clark himself in *Leucoselenia*, and by Carter in *Grantia compressa*. These monads consist of a body resembling an amaeboid cell, to which a collar or cylindrical tube is attached; emanating from the body, traversing the whole length of the tube, and projecting from its orifice, is a single flagellum which vibrates throughout its length, but is most active near the tip; it is non-transparent, and resembles a black thread. Two or three clear contractile vesicles are contained in the body of each monad. The systole and diastole are extremely slow, but the last thread of the systole is abrupt. Arising more or less obliquely from the monadigerous mass are numerous slender slightly curved acicular spicules, which act as props to support the outer investing membrane to which they properly belong. The specimens examined by James-Clark presented no canalicular system, and he attributes its absence to their having been too young.

Chemistry.

The Solubility of Silver Chloride.—In precipitating this chloride from dilute solutions, a point is reached where the silver solution gives a precipitate with a decimal solution of silver nitrate, although a decimal solution of an alkaline chloride will likewise cause a turbidity and the separation of silver chloride. If the liquid be divided into two equal parts, and silver nitrate be added to the one and an alkaline chloride to the other, it will be observed that in the latter case the turbidity is to a considerable degree the greater. By proceeding in this manner, in proportion as silver chloride is thrown down by the successive addition of the decimal hydrochloric acid solution, the turbidity caused by a given volume of the silver liquid in one-half the solution increases, while that produced by a volume of acid decreases; at last a point can be reached where equivalent quantities of the two reagents in equal volumes of the solution produce the same turbidity. Then by cautious addition of the acid reagent an order of things the reverse of the above is observed; the solution becomes more and more turbid

by the addition of the silver solution and less and less so with the chloride, till finally the latter reagent causes no precipitate and that containing silver a strong one. This behaviour of silver chloride being of importance in its bearing on Gay-Lussac's scheme of volumetric analysis, Stas set himself the task of determining the nature of these curious changes (*Comptes rendus*, 73, 998). He finds that silver chloride can exist in four different states: 1, the gelatinous; 2, the caseous or flocculent; 3, the pulverulent; and 4, the granular, scaly, crystalline, or fused condition. The chloride of the fourth kind is insoluble at ordinary temperatures; at any rate its solubility does not reach the limit at which dissolved silver can be detected: this limit the author estimates at $\frac{1}{10000000}$. In boiling water its solubility is proportionally very great, decreasing with the temperature; it cannot be recognised below 15°. The variety most soluble in pure water is the caseous chloride formed by precipitating cold dilute solutions; the solubility, however, decreases as the flocks condense of themselves, or on their conversion by long agitation with water, either pure or acidulated with nitric acid, into the pulverulent form. A solution of flocculent or pulverulent chloride in pure or acidulated water will form a precipitate with a silver salt or with an alkaline chloride. The quantities of silver (as silver salt) and chlorine requisite for the precipitation of the silver chloride are accurately in the ratio of the molecular weights of the silver salt and chloride employed. The quantity of silver and, conversely, the quantity of chlorine required to precipitate a unit of silver or chlorine in the form of dissolved flocculent or pulverulent silver chloride are in the ration of 3 : 1. The presence of salts resulting from the decomposition does not effect the solubility of the silver chloride in pure or acidulated water. The precipitation of flocculent or pulverulent silver chloride from its solution in pure or acidulated water is due to its being insoluble in liquids having in solution an amount of silver or chlorine which is three times that present in the dissolved silver chloride itself. Saturated solutions of granular silver chloride are likewise precipitated by alkaline chlorides and silver salts, the precipitation of a unit of silver or of chlorine as silver chloride in this case also requiring three units of chlorine or of silver; the separation of the dissolved granular chloride, however, is never complete, no matter how great an amount of silver as silver salt or chlorine as alkaline chloride be added for the purpose. From saturated solutions about six-tenths of the chloride can be separated.

The Action of Phosphorus Perchloride on Nitronaphthalin.—In several attempts made by Oppenheim to act on nitro-derivatives of benzol and naphthalin with the chlorides and oxychloride of phosphorus, no change whatever was observed even at high temperatures. L. de Koninck and P. Marquart, in a paper in the *Bull. de l'Acad. royale des Sciences de Belgique*, 1872, No. 2, 122, record a remarkable exception. Between 120° and 150° phosphorus perchloride acts on nitronaphthalin in the following way:—

$$C_{10}H_7NO_2+PCl_5 = C_{10}H_7Cl+POCl_3+NOCl.$$

The chloronaphthalin was readily obtained from the product sufficiently pure for analysis. Phosphorus perchloride has no action on dinitronaphthalin; and nitrobenzol, after an hour's heating with the perchloride, yielded no chlorobenzol. The anomaly noticed above can be traced in other instances. Hydrogen bromide reduces nitrobenzol with the formation of bromanilines, while nitronaphthalin exchanges nitrogen for bromine. Phosphorus pentasulphide acts with violence on nitronaphthalin, but may be boiled with nitrobenzol without effecting any change.

Eulyte and Dyslyte.—These substances, first obtained by Baup in 1851, have been submitted to a very careful examination by H. Bassett (*Journal Chem. Soc.* February, 1872). They are obtained by oxidising with nitric acid citraconic acid, a product of the destructive distillation of citric acid. An oily substance, resulting from the action, consists of a mixture of two neutral crystalline compounds that can be separated only with extreme difficulty, and after many fractional recrystallizations. Eulyte, the more soluble body, separates from warm chloroform in large prismatic crystals with very perfect brilliant faces; they have been measured by Prof. Miller, of Cambridge. Its melting point is 99°·5, and it appears to sublime unchanged. Several analyses gave numbers corresponding with the formula $C_6H_6N_4O_7$. Mr. Bassett's investigation of the proximate constitution of this substance has been attended with considerable difficulties and greatly delayed through want of a sufficient stock of material. Dyslyte is less soluble and less fusible, melting at 189°; it crystallizes well from alcohol, and has the formula $C_8H_6N_4O_6$.

The Distribution of Caesium in the Mineral Kingdom.—Some new sources of this metal have recently been discovered. At the meeting of the Chemical Society on the 7th March a paper was read by Col. Yorke on the water of the hot spring of Wheal Clifford. It had been previously ascertained by the late Prof. W. A. Miller that it contains a considerable amount of lithium. The Colonel finds 1·7 parts of caesium chloride in one million parts of the water: making it ten times richer in this metal than the Dürkheim spring in which Bunsen originally discovered caesium. E. Bechi has published (*Jahrbuch für Mineralogie*, 1872, No. 1, 95) the results of an examination of a beryl from Elba, in which is 0·88 per cent. of caesia. It will be remembered that the island of Elba is the locality of pollux, the mineral that contains the greatest percentage of this metal.

Paraconine.—H. Schiff has continued the study of the alkaloid which he succeeded in obtaining synthetically (*Ber. d. Deut. Chem. Gesell. Berlin*, 1872, No. 2). Butyraldehyde and alcoholic ammonia were exposed to the sunlight of last summer, and, after the removal of what would pass off by distillation, the residue was heated for a day to 130°–150°, and distilled in a current of hydrogen. By treating the distillate with acid and potash, and subjecting the purified material to fractional distillation in hydrogen, a product was at length obtained that passed over between 166° and 170°, and contained the greater portion of the conine. It resembles in most of its chemical characters the natural alkaloid, exhibiting in addition to those already described by Schiff in an earlier paper the reaction with phosphomolybdic acid. Numerous experiments on animals showed its poisonous qualities to be as energetic as that extracted from hemlock. In their boiling points and densities they agree: the coefficient of expansion of Schiff's conine is somewhat greater, and its solubility in water rather less than those of natural conine. The chief physical distinction lies in the artificial conine producing no rotation. The chlorhydrate of the latter base is more readily crystallized; the chloroplatinates are alike in habit and mode of decomposition with water. Its reaction with methyl iodide shows that the artificially formed base contains no hydrogen that can be replaced. The author believes its probable constitution to be represented by the formula:—

$$\begin{matrix} CH_3 - CH_2 - CH = CH \\ CH_3 - CH_2 - CH_2 - CH \end{matrix} \Big\rangle N.$$

The supplement volume of Watts' *Dictionary of Chemistry*, which has just been issued, records the discoveries in pure and applied chemistry and the allied branches of other sciences that have been made since the publication of the fifth volume some years ago. The new volume, as bulky as any of its predecessors, has been prepared with the care and completeness which characterized the others. Many of the former contributors have again aided the editor: of them, Professor G. C. Foster has written the articles on Heat and Electricity; Dr. M. Foster, that on Proteids; and Prof. Roscoe, those on Light and the applications of spectral analysis to terrestrial chemistry and astronomy. Many of the articles on theoretical and practical subjects which are not signed, and are, it is presumed, from the pen of Mr. Watts, are of great value and interest, such as those on the Aromatic Series and Arsenic. Many very recent researches have been incorporated: Gore on Hydrogen and Silver Fluorides, Roscoe on Vanadium, Schiff on Conine, are all to be found here. Weidel's carnine, however, is not mentioned. In the description of so important a compound as hydroxylamine, it is to be regretted that a reference is not given to Lossen's original memoir rather than to a transcription. Minerals in certain cases have met with somewhat meagre treatment; Beustite, for example, is described as "a shining mineral, containing lime, potash, and soda," while of groppite, although the mineral is mentioned, the composition is altogether omitted. In some cases the authors have not selected entirely new material. Of iron are recorded facts that are certainly not new; while some of these (to give an example, the property of iron to remain unoxidised in pure water) appear to owe their presence here to their having been rediscovered and communicated afresh to the Chemical Society.

Attention is directed in *Im Neuen Reich*, No. II., 1872, to the circumstance that in September next half a century will have elapsed since, at Oken's instigation, the *Deutsche Naturforscherversammlung* held their first meeting at Leipzig. It was determined last year at Rostock that the city which had the honour of founding the association should be chosen for the celebration of the anniversary.

We learn from the *Revue scientifique* that it is proposed to organize an International Medical Congress at Vienna, in 1873, during the season that the International Exhibition is open.

Letters from Palermo, Rome, and other towns in the south of Italy, mention a fall of red or blood-coloured rain on the 10th and 11th of March, after atmospheric conditions which had led M. Tarry, of Paris, and P. Denza, to expect such a phenomenon. The particles of sand which cause the colour are found on analysis to be exactly similar to the sand of the African deserts.

New Books.

Behrens, H. Mikroskopische Untersuchungen über die Opale. Wien: Gerold's Sohn.

Benthin, F. Lehrbuch der Sternkunde in entwickelnder Stufenfolge. Leipzig: Fleischer.

Berthelot, M. Traité élémentaire de Chimie organique. Paris: Dunod.

Dippel, L. Das Mikroskop und seine Anwendung. Schluss-Abtheilung. Braunschweig: Vieweg.

Fuchs, C. W. C. Die künstlich dargestellten Mineralien. Haarlem: Loosjes.

Gérard, Ch. Essai d'une Faune historique des Mammifères sauvages de l'Alsace. Colmar: Barth.

Gohren, Th. v. Die Naturgesetze der Fütterung der landwirthschaftlichen Nutzthiere. Leipzig: Hirschfeld.

Harold, E. v. Coleopterologische Hefte. VIII. Leipzig: Rossberg.

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Philology.

The Philoctetes and the Trachiniae of Sophocles. By F. H. M. Blaydes. Williams and Norgate, 1870-1871.

Sophocles: the Plays and Fragments. Edited by Lewis Campbell. Vol. I. Clarendon Press Series, 1871.

Mr. Blaydes' *Sophocles* is one of the class of books that is not pleasant either to read or to characterise when read. With as much conscientious labour as has been spent upon it—or with at most two hours more, to correct several errors of the class intermediate between misprints and careless writing—a competent scholar could have produced a good critical edition of Sophocles, with neat and clear exegetical notes where wanted. If Mr. Blaydes has not done so, it has been for want of knowing what a good critical edition is, not for want of zealous effort to produce one. His notions of the limits of conjectural emendation are very wide—so far, he has a right to his opinion, though other scholars might differ from it. But he has personally collated several MSS. for his edition, and he would not be self-condemned if he had merely come to the conclusion that the MSS. of Sophocles are of so little authority as to leave a wide range of licence: his real fault is that, conceding him as much licence as he will, he has no notion of the direction in which to employ it.

A probable conjecture will account for the reading found in the corrupt text: but Mr. Blaydes' conjectures hardly ever even attempt to do so. In spite of his inspection of several MSS., he has never learnt what constitutes a *facilior lectio:* and as to the other familiar canon, that one should prefer the reading *cujus difficilior interpretatio*, he not only ignores it, but reverses it. If a passage is hard, it is corrupt: any group of words that will make it easy, and that will fill up its place in the metre, is, in his view, a probable conjecture. Peculiar as such principles of criticism are, and inapplicable to the text of any writer, they are especially unhappy when applied to that of Sophocles. For anyone who knows Sophocles well will confess that he is a very difficult writer, and that many of his difficulties arise from idiosyncrasies or refinements of diction: in consequence, an editor who sets to work to sweep away all such difficulties is convicted, *prima facie*, of ignorance of his author:—nor in the present case does a detailed examination do much to set the conviction aside. At any rate, it is safe to say that, if Sophocles had written the simple things Mr. Blaydes makes him write, the dullest and sleepiest of mediaeval scribes would never have written anything else, and least of all what we actually read.

Three instances may suffice, taken from a few pages of the later and perhaps the better of Mr. Blaydes' books, to show how recklessly he indulges in conjecture, sometimes as the readiest way of escape from the slightest difficulty, sometimes, it seems, from mere gaiety of heart. On *Trachin.* 667—

κακὸν μέγ' ἐκπράξασ' ἀπ' ἐλπίδος καλῆς,

it was perhaps worth an editor's while to prove, by a few illustrative quotations, that ἐκπράσσειν in the Tragedians often means no more than "accomplish"; though the fact could be ascertained from a lexicon, even if he had omitted it. At any rate, Mr. Blaydes does quote two passages from Sophocles and three from Aeschylus to prove it, and one would suppose no more was wanted. But he cannot keep his red chalk pencil from correcting Sophocles, as though he were touching up a schoolboy's Iambics: he begins his note, "Perhaps μέγα ῥέξασ'," and *then* goes on to show how needless the conjecture is, by illustrations of the vulgate.

Ibid. 672, he gives one or two illustrations (and here at least illustrations are not superfluous) of the construction οἷον ἦν φράσω . . . . θαῦμ' ἀνέλπιστον μαθεῖν: and then concludes his note, "Qu. οἷον νῦν φράσω": and this he actually puts into the text, heedless of the objection to the long syllable before the cretic; though both here and very often he leaves the vulgate to stand as the heading of the note, when he has introduced in the text an alteration, absurd or otherwise; a practice sufficiently confusing to the reader.

Lastly, in v. 718 of the same play, we have the perfectly simple words πῶς οὐκ ὀλεῖ καὶ τόνδε. On this occurs this note: "καὶ τόνδε] 'Also him?' Hercules. Qu. 'μὸν ἄνδρα."

From the *Philoctetes* it will be enough to cite one choice bit of comparative philology: "From the Greek σάλος comes our English 'swell.'"

At the same time, a man who tries every possible conjecture must sometimes hit upon a right one. In the preface to the *Trachiniae*, we are told that the editor, on arriving at *Antig.* 1037 (for he threatens to do the whole of Sophocles), "was struck first with the singularity of the use of the preposition πρὸς, and then with the gender of the noun ἤλεκτρον, which should be neuter. This led me at once to the obvious correction τἀπὸ Σάρδεων ἤλεκτρον, which I found amply confirmed by the reading, hitherto neglected, of L., τα (supr. ὀν, a. m. pr.) προσάρδεων." This suggestion seems really probable, and though another, which follows on the next page, ποῖος οὐκ ἔσται Ἑλικὼν—"What Helicon?" (for λιμὴν, *O. T.* 420), is in Mr. Blaydes' wildest manner, we may hope that the work will improve as it goes on. It is perhaps as well that the two least interesting plays have been selected for these unhappy experiments.

It is also not to be regretted that Professor Campbell has begun, according to the common order, with the three great Oedipodean tragedies. His edition is one which no one can read without finding his knowledge of Sophocles substantially increased; and this is as high a success as can be expected by an editor or demanded from him, even without his readers being satisfied in all points with the execution, or still less able to agree with him in all details of opinion.

The first point in approaching Sophocles that will demand the study either of a tasteful reader or a judicious editor is, no doubt, the marked character of the poet's style. Anyone who claims to know him at all must have a sense of this character, sound even if rather vague: but most readers of the poet probably think it too subtle and too complicated for its features to be classified on a grammatical basis. This task, however, Professor Campbell has undertaken, in his Introductory Essay on the Language of Sophocles; and it is

here perhaps that the highest merit of the present volume lies. With so many-sided a subject to treat of, it is scarcely possible that any treatment can be quite exhaustive; but to detect omissions in the work would require at least as thorough study as the writer's own, and it is scarcely possible to find fault with the lucid and symmetrical arrangement. One slight defect of execution, however, must be noticed: Professor Campbell undertakes, very properly, to indicate by the letters *lyr.* when a phrase cited comes from a lyric passage: now this mark is several times accidentally omitted.

As to textual criticism, this edition is rather conservative in its general character: which is certainly a relief after the vagaries of Mr. Blaydes, and seems judiciously supported by argument. At the end of the Introductory Essay are a few remarks on "the Peculiarities of Language in Sophocles considered with reference to the settlement of the Text," among which we have this: "We are often justified in saying, Sophocles may have written what we find: he cannot have written what is proposed instead. It has not the Sophoclean colouring; it is like a raw touch on a picture ill restored." But it is of course impossible to quote in detail the treatment of all the corrupt or doubtful passages of the three plays; and with less than this it is scarcely possible to give more than a general statement on the views of a competent editor, applying acknowledged critical principles. It may be noticed that the critical notes are wisely kept separate from the exegetical: and that in the former the connecting words (between the symbols of MSS.) are in English, not Latin.

With the exegetical notes there is one fault to be found: they are too short. They are written too much from the editor's point of view, too little from the reader's. They take for granted a knowledge of the history of the passage commented on, and, to anyone not familiar with that history, and not knowing the various views that have been held, so as to recognise a mere allusion to them, they scarcely amount to a clear and complete statement, first of what the editor thinks it may mean, and then of what he thinks it does. Now it is not required of a first-class editor that he shall write a school-book, suited to the capacity of a student reading Sophocles for the first time: but an edition is less useful than it might be when it requires or presupposes the use of half a dozen others, some of them less valuable than itself.

One other censure it may be allowed to pass upon the book. No one could produce a good edition of Sophocles without possessing a good and sound taste, and Professor Campbell is not destitute of so essential a requisite: but there are a few points, both in the introductions and in the notes, where it may be doubted whether either Sophocles or his commentators have been duly appreciated. The appendix to the introduction to the *Oedipus Tyrannus*, "on the so-called Irony of Sophocles," really amounts to no more than this—"Irony, if understood to imply mockery, is not a proper name for it." This was perhaps just worth saying: but in saying it, the editor seems to deny that it is a real and marked characteristic of the poet. He quotes the alleged instances of it, quotes similar instances from Shakespeare and Tennyson, and then says, "Is this irony or pathos?" But surely it is a form of pathos so distinct from others as to deserve a separate name: if the received name is not the best possible, give us a better, but do not throw doubt on the existence of the thing.

On the *Antigone*, there are some judicious remarks as to the sophistical element which mingles in it with the tragical: but it hardly appears as though the relation had been adequately grasped, either between these two elements, or between the main current of classical sentiment, and the thin vein of romantic passion and play of character that mingles with it. Professor Campbell is not the first editor who assigns v. 572 to Antigone; but he sees that the difficulty of the passage is not cleared up by that single alteration, so that he gives 574 and 576 to the chorus. This, it is true, extenuates the technical objection to the three actors all entering into conversation, and interrupting each other, in the course of a stichomythia, and this in an early play: but, if one may venture an assertion in so delicate a matter of feeling, the Antigone of Sophocles would scarcely have said Ὦ φίλταθ' Αἷμον to his face, and would have been quite incapable of such an apostrophe in presence of an unsympathising audience. The speech just suits the warm-hearted and impulsive Ismene: her kindly feeling towards her cousin and prospective brother-in-law may surely account for the fact that "there is greater bitterness in this line than in any other speech of hers." No doubt τὸ σὸν λέχος in the next line is a difficulty: "the marriage you prate of" is not a very satisfactory explanation, and to make Creon address Antigone if she has not spoken is harsh; but anything is better than to make her speak. Can the words imply a threat to Ismene, πολλήν μιν χρόνον παρθενεύσειν? Creon was quite capable of saying, "Don't trouble about your sister's husband: I shall have enough trouble in finding you one."

In the same play, v. 751, the note begins "τινὰ] *i. e.* σέ:" and this view is supported by argument as "the obvious meaning." Now, in vv. 1231 *sqq.*, it is no doubt right to reject the far-fetched view, that Haemon's motive in drawing his sword was misunderstood: but from his mad act, in presence of the very corpse of his love, and followed even then by immediate repentance, it surely cannot be inferred that he would threaten his father's life deliberately—rather the reverse. Creon no doubt so understands him: but he is in at least as high a passion as his son, and of a more suspicious nature.

The lines 905 *sqq.* are rightly defended from spuriousness, though not from bad taste; but instead of the editor saying simply that the story of the wife of Intaphernes must have become popular in Ionia, because it is "a precarious supposition" that it was derived by one author from the other, one would have liked a reference to *O. C.* 337 *sqq.*, both as a proof that Sophocles was not incapable of an impertinence, and as increasing the likelihood that Herodotus was the direct source of both impertinences. In the latter passage the pedantry is even more gratuitous, though the sentiment is less offensive.

It is ungracious to part with expressions of dissent from a book deserving so much respect: for respect is just the word for the feeling raised by the study of so thorough and honest an edition. So it may be noticed that Professor Campbell seems to clear up one apparent obscurity in the story of the same play, viz. how Haemon got into the vault before Creon, yet not in time to rescue Antigone. He sees a hint at this in the word λιθοσπαδῆ in v. 1216: "In preparing the vault, an opening had been left through which the victim was thrust into the chamber. This opening was then roughly closed with stones. Through there Haemon had passionately torn his way. And the cleft so made by him is the ἁρμὸς χώμυτος λιθοσπαδής."

W. H. Simcox.

The Bacchae of Euripides, with a Revision of the Text and a Commentary by R. Y. Tyrrell, M.A., Fellow and Tutor of Trinity College, Dublin. Longmans.

For interest and importance the *Bacchae* confessedly holds a high place among the extant tragedies of its author. Even Macaulay, in spite of his general depreciation of Euripides,

admitted the transcendent merit of this particular tragedy. The free and flowing, but sometimes inaccurate, translation of Milman has made it accessible to the English reader; and the special editions of Elmsley, Hermann, and Schöne, have contributed largely to its criticism and elucidation.

Mr. Tyrrell's admirable Greek verses in the *Hesperidum Susurri* have already shown that he has one at least of the qualifications required in an editor of a Greek tragedian. His introduction, which includes a disquisition on the religious and moral import of the play, combating the common view that it is a recantation of rationalism, strikes us as the best part of his work, whereas the general excellence of his commentary is impaired by a slight unevenness of execution, while his recension of the text, though often ingenious, is sometimes open to grave objections. It will be convenient to limit ourselves to a notice of some of the points in which Mr. Tyrrell's text differs from the ordinary editions. At line 23 we find a distinct improvement in the transfer of line 54 —*μορφὴν τ' ἐμὴν μετέβαλον εἰς ἀνδρὸς φύσιν*—from a place where it either is otiose or, at the very best, only helps out the slight ambiguity of the previous line. The passage now runs thus:—*κἀκεῖ χορεύσας καὶ καταστήσας ἐμὰς τελετὰς, ἵν' εἴην ἐμφανὴς δαίμων βροτοῖς, μορφὴν ἐμὴν μετέβαλον κ. τ. λ.* This happy alteration is due to Mr. Allen, who is also to be credited with the restoration — *στεφάνωσέν τε δρακόντων στεφάνοις, ἔνθεν ἄγραν θηρότροφον μαινάδες ἀμφιβάλλονται πλοκάμοις* (where the Palatine MS. has *θηροτρόφοι*; the Laurentian *θυρσόφοροι*, which is the common reading).

In line 25 his text is less satisfactory. The passage is generally printed thus:—*πρώτας δὲ Θήβας . . . ἀνωλόλυξα, νεβρίδ' ἐξάψας χροὸς, θύρσον τε δοὺς εἰς χεῖρα, κίσσινον βέλος.* Both the MSS. have *μέλος*, while *βέλος* is due to Henry Stephens, who asserted (falsely, it is alleged) that he found it in his "Italian MSS." We are willing to consider the word as, at the best, a conjecture only; but even then, we cannot help accepting it as a true restoration of the original text. Mr. Tyrrell, however, prints *Κίσσινον μέλος ἀνωλόλυξα*: the verb is thus made to govern *Θήβας* and *μέλος*, the intervening words being parenthetical. Now, firstly, the construction thus gained is harsh; secondly, there is no ground for our annotator's assumption that the Kissian minstrels of Susa, "though generally spoken of as mourners, no doubt sang all kinds of orgiastic strains;" and lastly, beyond the general fact of Dionysus' having passed through Persia, there is no proof alleged of any connection whatever between him and the Kissians in particular. On the other hand, our editor's arguments against *βέλος* fail to convince us: his first allegation is that Euripides never applies *βέλος* to a *thyrsus*; this we admit, but we are defending not the application of *βέλος* to the thyrsus but rather the full phrase *κίσσινον βέλος*, where the epithet may be regarded as one of the well-known "limiting" epithets, of which *πτηνὸς κύων* is an exaggerated instance. The descriptive touch is most natural when we remember that the thyrsus is here mentioned for the first time in the play (and, indeed, for the first time in extant Greek literature). Further, line 733, *θύρσοις ὡπλισμέναι* shows that the poet regarded it as a weapon or missile; and lastly, in the *Dionysiaca* of Nonnus (the authority of which will be admitted by Mr. Tyrrell, who is as fond as Hermann of quoting it) we find, in the 43rd book alone, *κισσοφόροις βελέμνοις, κισσῆεν ἔγχος, θύρσος ἀκοντιστήρ*, and *χερείονα θύρσον ἐάσας δίζεύ σοι βέλος ἄλλο.* When Mr. Tyrrell tells us twice over that *θύρσος* is expressly distinguished from *βέλος* in line 761, he forgets to notice that the contrast in that passage lies between *θύρσος* and *λογχωτὸν βέλος.*

At line 864 we have *ἆρ' ἐν παννυχίοις χοροῖς θήσω ποτὲ λευκὸν πόδ' ἀναβακχεύουσα, δορὰν εἰς αἰθέρα δροσερὸν ῥίπτουσ' ὡς νεβρὸς κ. τ. λ.* The note runs thus:—"I read *δορὰν*" [for the MS. reading *δέραν*] "*the bacchanal fawnskin. ῥίπτειν* . . . . cannot well be applied to the neck." To this we reply that Euripides never uses *δορὰ* as equivalent to *νεβρίς*, but (when *νεβρίς* itself is not used) always prefers a periphrasis, *e. g. καταστικτοὶ δοραί, νεβρῶν δοραί, νεβροῦ δέρας, νεβρῶν παμποίκιλοι στολίδες.* Next, *ῥίπτειν can* be applied to the neck, for Pindar has the phrase *ῥιψαύχενι σὺν κλόνῳ.* Lastly, it is awkward, if not ludicrous, for the chorus in the same breath to compare itself to a fawn and to speak of "tossing the fawnskin into the dewy air."

In line 986, Kirchoff and Mr. Tyrrell independently propose *ὀριδρόμων* for *ὀριοδρόμων.* The latter states apologetically that *ὀρίδρομος* "has the analogy of *ὀρίβακχος* and *ὀριβάτης.*" He might have added *ὀρίκτυπος* and *ὀρίπλανος*, or, better still, have told us that the word, so far from being a vague and shadowy conjecture, has a real existence (in Nonnus, *Dion.* 5, 229), although Liddell and Scott do not happen to say so.

The limits of this notice prevent our discussion of other points of textual criticism (not to mention exegesis) suggested by Mr. Tyrrell's book; but we cannot lay it down without commending it to scholars as an interesting addition to the literature of the subject. J. Edwin Sandys.

Stamm's Ulfilas, neu herausgegeben von M. Heyne. Fünfte Auflage. Paderborn: Schöningh.

This work has received so many improvements and additions from its latest editor, Dr. Moritz Heyne, that it has in its present shape little more than the title in common with the first edition of 1858. In the first place the text has undergone a thorough revision, based on the results of Uppström's labours, whose accurate study of the difficult Gothic MSS.—most of them palimpsests—enabled him to introduce many hundred corrections into the received text. The fact that all of these corrections have been incorporated into the text of the present edition alone gives a high value to the work for advanced scholars no less than beginners, for whom it is mainly intended. The interests of the critical student of Gothic are also consulted in the various readings of the Milan MSS. and the marginal glosses of the *Codex Argenteus*, given at the foot of each page. The text is followed by a full, though, of course, not exhaustive, glossary, and a grammar, comprising phonology, flexion, and syntax, of which the two first sections have in the present edition been entirely recast, and brought up to the present state of Teutonic philology; the syntax, however, has been left in its original form, which, although brief, is clear and accurate, and gives all that can be required by the majority of students. The glossary is followed by a very useful appendix—a list of over fifty words, which in consequence of Uppström's corrections will have to be expunged from the dictionaries. The latest addition to the Phonology is Westphal's important "Auslautsgesetz," of which Dr. Heyne gives a brief abstract.

The only fault to be found with the book is the omission of the Vienna runes and the Gothic distich, which, although corrupt and of comparatively small value, ought to have been added for convenience of reference.

After looking through such a work as this—so unpretentious in form, so thoroughly scientific in execution—we cannot help thinking that the high character of German philology is mainly attributable to the excellence of the text-books it puts into the hands of beginners, who are thus trained to a methodical and intelligent habit of study from the very outset. Henry Sweet.

Pantchatantra; ou, Les Cinque Livres, recueil d'apologues et de contes, traduit du sanscrit par Édouard Lancereau, membre de la Société asiatique. Paris, 1871.

Professor Benfey, in the introduction to his translation of the *Panchatantra*, has so exhaustively treated the literature of this remarkable Sanskrit book that he has left but a few scattered gleanings for those who succeed him. Every story is there carefully traced through its various subsequent forms; and his translation, though based on Kosegarten's edition, has corrected its not unfrequent errors by a collation of new MSS. Still his valuable book is hardly adapted for the general reader. Its very fulness makes it rather wearisome; and M. Lancereau has done good service in giving us its general results in a compact and readily available form. His preface gives a short sketch of the various versions and imitations which gradually naturalised these old apologues in every literature; and in his notes to his translation he adds brief references to the different books, where the reader will find a reproduction of each several story, and many of these references are added from his own reading. His translation is accurate; and the whole volume will be of great service to any one who wishes to trace the literary history of any particular apologue.

The only fault which we have to find with the book is that M. Lancereau has confined himself too much to the "Einleitung." Thus he has omitted to take advantage of the additions which were given by Prof. Benfey and some of his contributors in the *Orient und Occident*, and he never refers to the former's reviews in the *Ausland* for 1858 and 1859. Benfey has there shown (cf. *O. u. O.* ii. 169) that with regard to the cycle of stories in the *Panchatantra* and other similar collections there are three distinct "moments" in the history of their transmission. Their origin is generally Buddhist, and it is in Buddhist books that we are in most cases to look for their oldest forms; they were thence adapted by the Brahmans and incorporated in their Sanskrit literature; and it is from these Indian adaptations that they have spread westward over Europe. M. Lancereau omits all notice of these points, and treats the *Panchatantra* too often as the original source, and not as merely one of the incidental stages of transmission.

In the third volume of *Orient und Occident*, there was a very interesting paper by Benfey, and another by Bastian, on the Siamese version of the *Panchatantra*, the *Nonthuk Pakkaranam*, i. e. *Nandaka-prakaranam*, or the history of the bull Nandaka, which is a version of the first two books of the Hindu collection;—only there it is the merchant's bull Sanjívaka which is left in the forest, and Nandaka continues the journey with his master, while in the Siamese version the names are reversed. Benfey remarks: "diese siamesische Bearbeitung des *Pantschatantra* wird wahrscheinlich auf die Geschichte dieses Werks ein neues Licht werfen, und es ist sehr zu wünschen, dass Hr. Dr. Bastian sie vollständig veröffentliche." No reference to this version is to be found in M. Lancereau's notes. Dr. Bastian in his paper gives a translation of the Siamese version of "The Sandpiper and the Sea" (Lancereau, i. 13), "The Grateful Beasts and the Ungrateful Man" (the second fable in Benfey's appendix to the first book, from the Berlin MS.), "The Wicked Tiger" (which is partly connected with the fourth fable of the fifth book), "The Ape and the Sparrow" (Lancereau, i. 18, 19), and "The Foolish Friend" (Benfey's appendix to the first book, story 12). With regard to the eighteenth and nineteenth fables of the first book, "Les Singes et l'Oiseau," and "Le Passereau et le Singe," M. Lancereau has himself remarked that the latter fable "n'est qu'une seconde forme de la précédente;" and Benfey had conjectured in his introduction, p. 271, that it was a later interpolation, as it is omitted in *Somadeva* and the Arabic version, and is transferred in several of the MSS. to the fourth book, just as it is inserted in the *Hitopadeśa* in the third. It is also omitted in the Siamese version, and Benfey remarks in a note: "die von mir an dieser Stelle ausgesprochene Vermuthung findet in der vorliegenden Mittheilung ihre Bestätigung." The Siamese fables frequently differ widely from their Sanskrit form, but their variations are often of great interest.

M. Lancereau had probably finished his work before the publication of Prof. Benfey's letter in the *Academy* for August 1 (vol. ii. p. 387), or he would no doubt have alluded to the important Syriac translation of *Kalilah and Dimnah*, so fortunately discovered by Prof. Bicknell, in August 1870, in the episcopal library at Mâridîn. We await the publication of this invaluable MS. with the liveliest interest. If, as Prof. Benfey hopes in his letter, we should be able by its means "completely to restore the Sanskrit form of the original in all essential points," it would throw a ray of light on the history of these apologues at the very point where it is most enveloped in obscurity.

E. B. Cowell.

DISCOVERY OF THE OLDEST RECENSION OF THE PANCHATANTRA.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—You were good enough to insert in one of the numbers of your journal for last August (vol. ii. p. 387) a notice of the discovery of the Syriac version of the Indian original, the first five sections of which have been preserved in Indian literature under the name of the *Panchatantra*. May I ask you to accord a place in your widely circulated journal to the following account of another discovery scarcely, if at all, inferior in interest to the preceding.

In my work on the *Panchatantra* (vol. i. p. 5, and preface, pp. xviii, xix) I called attention to the importance of the southern recension of that collection, and remarked that the variations of this from the older recension, as preserved to us in the effluents of the Pehlevi translation (sixth century A.D.), are, comparatively speaking, excessively slight, and that therefore the very considerable transformations which the MSS. of the *Panchatantra* hitherto known exhibit must have taken place posterior to the date of the southern recension.

This view was founded in the main upon Dubois' translation of the *Panchatantra* (*Le Panchatantra ou les cinq ruses. Fables du Brahme Vichnou Sarma &c.* Paris, 1826), but owing to the character of this translation (cf. vol. i. p. 5, of my work) could not be raised to the rank of a certainty.

Through the kindness of Mr. A. Burnell, who has rendered such eminent services in the collection and investigation of Sanskrit MSS. and works, I have been put in possession, a few days since, of a MS. of the southern recension, which in the fullest manner confirms the view which I had ventured to express.

In the fables and tales, this recension agrees perfectly—with a few quite insignificant exceptions—with the Arabic version, and makes it not improbable that it assumed the form which it exhibits in the MS. before me, not very long after the Sanskrit original came to Persia.

In the first book, it contains but one story which is not to be found in the Syriac and Arabic texts; and one fable is transposed. In both cases it agrees with the *Hitopadesa*, the close affinity of which to this southern recension I have called attention to in more than one passage of my book. But the agreement of the *Hitopadesa* with the MS. before me is far greater than I could have suspected with the materials then at my disposal. Apart from the changes which the editor of the *Hitopadesa* has permitted himself to introduce, he seems to have taken mainly this southern recension as his basis, and in this way we obtain a new piece of evidence for the determination of the date at which the latter must already have existed. The publication by Aufrecht of Ujjvaladatta's commentary on the *Unâdi-Sûtras*, which mention the *Hitopadesa*, has proved beyond a doubt that the latter is older than the time of Ujjvaladatta (twelfth–fifteenth century A.D.); and hence it follows that the recension of the southern *Panchatantra* which forms its basis is older still. If this be true, the date of this

recension would fall between the sixth and about the twelfth century of our era.

To turn to the second and fourth books: the MS. before me agrees in every particular as to the stories with the Arabic text. The third book shows a variation, which it again shares with the *Hitopadesa*. A further variation from the Syraic and Arabic texts agrees with the other recensions of the *Panchatantra* known to me. This together with another variation in the fifth book form, so to say, the link which serves to unite the southern recension, which we must regard as the oldest, with the other and later versions.

It is not necessary to trace these relations further in detail at present, as the introduction to the edition of the Syriac version, which we hope soon to be able to publish, will explain the whole matter fully. At the same time it is not unlikely that either the writer of these lines or some other scholar in this field may be able to publish an edition of this oldest, and undoubtedly most important, recension of the *Panchatantra*.

Göttingen, March 16, 1872. TH. BENFEY.

RESEARCHES IN TANJORE.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—Since my last letter I have made several discoveries in the Palace Library here. Among MSS. of Sanskrit books already known I have found two *Grantha* copies of the rare *Harshacarita;* one of these contains only the beginning, the other ends abruptly with a short 8th chapter like the MS. described by Dr. Hall (*Vāsavadattā*, pref. p. 53); it therefore is likely that this curious romance was never finished. Both MSS. begin with the second half of the second verse quoted by Dr. Hall; they are old for palm-leaf MSS. (seventeenth century), and are very correct.

In the same place I have found a palm-leaf MS. of the hitherto unknown medical treatise, the *Bhela Saṁhitā*, which closely resembles the *Caraka-S.* This MS. has been copied from a defective original, but what is left of this ancient* treatise is very interesting.

There are in the same library many new lexicographical works, some of which are attributed to *Harsha*, *Bāṇa*, and other well-known writers. They mostly seem of little value, and of doubtful authenticity. There is however a *Bhoja nighaṇṭu* (*Nāmamālikā*), which is most likely the real Kosha referred to (I cannot say quoted) by later commentators. It contains in three sections and about 320 *slokas* synonymous names for the gods (*Indra*, *Agni*, *Varuṇa*, *Siva*, &c.), and their belongings, for celestial and for terrestrial objects. The MS. (which is in the Telugu character) is far from correct.

The names of the early dramatists mentioned in the *Mālavikāgnimitra* are given in *Kāṭavema's* Commentary (also in the same library), as *Bhāsa*, *Saumilla*, and *Kaviputra*, or *Bhāsa*, *Kaviputra*, and *Saumilla*.

Elsewhere I have found MSS. of the *Vaikhānasa pravarakhaṇḍa*, and of Sāyaṇa's commentaries on the smaller *brāhmaṇas* of the *Sāmaveda*.

When my edition of the *Sāmavidhāṇa* (which has long been nearly printed) is finished, I hope to undertake editions of the *Ārshcya* and *Devatādhyāya brāhmaṇas*.

The Madras government has directed me to examine a large collection of copies of inscriptions in the Telugu country; I hope to find some historical facts in them. The inscriptions of S. India seldom give any other date than the year of the king's reign; but as they exist in countless numbers, and often refer to contemporary kings of other parts of India, it must be often possible to restore the real dates. Sir W. Elliott has done this already in several cases, and with important results.

The most serious impediment to progress in this way arises from the numbers and size of the inscriptions. The one round the shrine of the great Siva temple in this place covers about half an acre of wall; it records donations by a king named *Keppā Kesari Varman*, a name quite unknown to local tradition, and another good proof of the entire worthlessness of the local legends (*Māhātmya*).

You will have seen already the first numbers of the Indian Antiquary, edited by Mr. Burgess. Dr. Jaeschke has finished the first part (120 pp.) of his great Tibetan Dictionary. Dr. Gundert's admirable Malayalam Dictionary will be finished in the course of a year, and then it is to be hoped that a real Tamil Dictionary may be undertaken by some competent scholar. Mr. C. P. Brown's Telugu Dictionary leaves nothing to be desired. I have happily been successful in my endeavours to induce the learned Basel missionaries to bring out a Tulu Grammar. This interesting Dravidian dialect, which must soon become extinct, is of the greatest importance for Dravidian comparative philology. This grammar is already in the press. It will include a select vocabulary.

Tanjore, Feb. 29, 1872. A. BURNELL.

* It is mentioned by the *Caraka-S.* as one of the authentic medical *Saṁhitas*.

Contents of the Journals.

Hermes, vol. vi. pt. 3.—M. Haupt: Coniectanca. [Emendations of places in Plutarch's *Morals* and the *Metamorphoses* of Apuleius.]—A. Luchs: On Plautus. [On the scanning of *nescio*, with remarks on the text of sundry passages.]—W. Dittenberger: Roman names in Greek Inscriptions and Literature. [The present article is principally on the Greek mode of representing the Latin *u* and *v*. The writer maintains that *ο* = *ŭ* is older than *ου* = *ŭ*, discusses the instances in which *u* is represented by the Greek *υ* or *ε*, and enumerates the equivalents of *qu*. The consonant *v*, when not entirely omitted, as in Βοίλλαι, is shown to be expressed by either *ου* or *β*, *β* being, during the imperial period, pretty common, though it never entirely supplanted the older equivalent: the occasional use of the diphthongs *αυ*, *ευ*, *ου*, for the Latin *av*, *ev*, *ŏv*, is explained as due to the gradual approximation of Greek pronunciation to the modern usage. This highly interesting essay concludes with some remarks on the Greek representatives of the Latin *ns*, and on the tendency to assimilate Latin names to familiar Greek words.]—H. Jordan: The Templum Deae Syriae at Rome.—Th. Mommsen: Fragments of Johannes of Antioch and Johannes Malalas. [The Greek text with an important historical commentary.]

Revue Critique, March 2.—The philological articles in this number are reviews (anonymous) of Uricoechea's *Gramatica de la lengua chibcha* and Haag's *Vergleichung des Prakrit mit den romanischen Sprachen;* the former work receives very high commendation.——March 9.—"X." notices L. Dindorf's *Historici Graeci Minores*, and "P. M." (=Paul Meyer) *The Theory and Practice of Creole Grammar*, by J. J. Thomas, whose labours here find a competent and at the same time most appreciative critic.——March 16.—E. Tournier, in a careful article on W. Dindorf's *Lexicon Sophocleum*, pronounces the book to be an improvement on Ellendt, and less indebted to him than might be supposed; pointing out, however, marks of haste, and also omissions which give the work the air of being a *plaidoyer* in favour of Dindorf's edition of Sophocles.—The number concludes with a notice, by E. Sayous, of Ujfalvy's *Langue magyare*, Budenz's *Ugrische Sprachstudien*, and *Die finnisch-ungarischen Sprachen und die Urheimath des Menschengeschlechtes*, by D. E. D. Europaeus.

Zeitschrift der d. morgenl. Gesellschaft, vol. xxv. No. 4.—Linguistic studies in ancient Arabic, by Dr. Blau, part i. [On the original form and prevalence of the article.]—Extracts from Dschâmi's Love-poems, by Fr. Rückert [continued].—Report on a collection of Indian coins, by W. Pertsch.—Semitic loan-words in Egyptian, by Dr. Lauth. [Cook's essay in Murray's *New Bible Commentary*, vol. i., should have been mentioned.]—The physician's song, *Rigveda*, x. 97, by R. Roth.—On the antiquity of the Cassel MS. of the Bible (Kenn. 157), by Dr. Zunz.—Extract from letters of Dr. Prym and Dr. Kiepert.—Bibliographical notices: *Bibliotheca Indica*, 1865–1870, rev. by A. W.—Tegner, *De vocibus primae declinationis Wearumque declinatione*, by Nöldeke.—Wright's *Apocryphal Acts of the Apostles*, also by Nöldeke.—Stade, *Ueber den Urspung der mehrlautigen Thatwörter der Ge'ezsprache*, by L. K.

Journal Asiatique, No. 67.—Extracts from the Paritta, texts and commentaries in Pali, by M. Grimblot, with introduction, translation, notes, and notices by M. Léon Feer.—Royal chronicle of Cambodge, by M. Fr. Garnier.—Memoir on the ancient history of Japan, according to the Wen hien tong kao of Ma-touan-lin, by M. d'Hervey de Saint-Denys.—De Goeje's *Bibliotheca geographorum arabicorum*, rev. by M. Barbier de Meynard.—Assyrian tablets, translated by M. Oppert. [Papers and translations epitomised by Menant. Valuable astronomical identifications. A mistake in the first translation, through not noticing a tablet in Inscr. iii. 55. Anu and Bel are names given to the moon from the 1st to the 5th day, and from the 10th to the 15th; consequently the rendering "in the hour of Anu" and "Bel" must be amended.]—Paspati's *Études sur les Tchinghianè*, &c., by M. Belin.

ERRATA IN No. 44.

Page 107 (*b*), line 33, for "general" read "gradual."
,, ,, (*b*), line 59, for "pompéinne" read "pompéienne."
,, 108 (*b*), line 66, for "Polter" read "Potter."
,, 111 (*b*), line 21, for Lat. 70° 40′ read Lat. 73° 40′.
,, 117 (*b*), line 27, for "imitated the Talmud of Jerusalem" read "imitated the Talmud of Babylon."
,, 118 (*a*), line 26, for "thrice" read "twice."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 46.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of The Academy *cannot undertake to return communications which are not asked for.*

The next number will be published on Wednesday, May 1, and Advertisements should be sent in by April 27.

General Literature.

Lord Byron. Von Karl Elze. Berlin: Oppenheim, 1870.

Lord Byron: a Biography, with a Critical Essay on his Place in Literature. By Karl Elze. Translated with the Author's sanction, and edited with Notes. John Murray, 1872.

This German biography of Byron with its English translation appear in England at an appropriate time. Moore's *Life* of the poet, first published in 1830, is now just ceasing to be copyright, and we may expect to see it shortly in a variety of cheap forms. It had remained as yet the only English biography of Byron having a certain completeness of scale and execution, and an authoritative character. It is richly laden—but, in its quality of biography *ab extra*, overloaded—with Byron's own letters and memoranda. These, first-rate of their kind, might very well be now separated from Moore's connecting and sometimes interfering narrative, and re-issued compendiously for general perusal. Moore's proper handiwork would then remain to speak for itself; and, whatever its merits of intention and performance, would certainly not satisfy all the demands of a Byronic student of the present day; and meanwhile the allegations put forth by Mrs. Stowe have deflected the centre of gravity of all materials relating to Byron, and require to be assessed, and, so far as yet possible, disposed of.

Professor Elze has produced a very readable narrative, of just about the right size: it is not lengthy, nor yet curt, but sets forth the remarkable and interesting career of Byron on a scale commensurate with the greatness of the poet. Of Byron's own writing, in the way of letters or memoranda, there is hardly a trace here, so that no biography could in this respect be more diverse from Moore's. The German professor shows a familiar current acquaintance, not only with that book, but with Byronic memoirs and materials in general. This indeed is no more than might have been fairly expected from a writer so well-read in English literature: the preface of his translator refers to previous works in which Professor Elze has proved his knowledge in this line—a *Selection from the British Poets*, *Reminiscences of a Tour through England and Scotland*, a critical edition of *Hamlet*, editorship of the *Year-book of the German Shakespearean Society*, a *Life of Walter Scott*. The last-named writer seems to share with Byron, to an extent scarcely warranted, the admiration of the professor, who speaks of Shakespeare, Milton, Byron, and Scott, as "four poets of unsurpassed genius"—reckoning in, however, the prose romances of Sir Walter as a part of his poetic performance. The final chapter is "On Byron's Place in Literature," and shows an amplitude of scope such as we expect from a critical-minded German. The remarks on Byron as the creator in literature of that great factor in modern thought which is termed "Weltschmerz" are remarkably sound and telling: and it is curious for the English reader to be informed, though probably not far from the truth, that, amid the immense influence that Byron's poems have had all over Europe, the country in which they have produced least effect is England itself. In other respects this estimate of Byron's poetry is capable and pointed, without, perhaps, advancing anything that is very novel, or that transcends in keenness other studies from competent hands. Preceding this chapter is another on "Characteristics of Byron," holding a very even balance between the good personal qualities and the bad—such, for instance, as generosity and stinginess: Professor Elze is ready to believe in the first, without denying or dissipating the evidence in support of the second. Nevertheless it may be that, as regards the main typical image of Byron which the author has before his mind's eye, he is somewhat too much disposed to reject *à priori* such allegations as would tend to disfigure or remould it, and to determine that so-and-so is not true because it cannot and must not be true.

Naturally, the transaction to which the biographer would be most likely to apply this questionable test of truth is the mutual relations between Byron and his half-sister, Mrs. Leigh, or what is termed "The Stowe Scandal": and I think his resolute predisposition (however unconscious of any unfairness) to scout the whole story has not failed to leave a trace amid the many points of argument, of more or less cogency, that he brings forward to refute the allegations. That he disbelieves and contests the story is of course no matter of complaint, nor yet of surprise: everybody would wish to disbelieve it, most people appear to do so, and perhaps not even Mrs. Stowe herself would venture to say that the charge is *proved*—certainly we should dissent from her if she did so. Of all direct arguments for disbelieving it—apart from its inherent or antecedent improbability, which, I fancy, along with its unpleasantness, weighs rather too much with Professor Elze—the strongest appears to be the tenor of the letters addressed by Lady Byron to Mrs. Leigh about the time of the separation; letters which have been published in the *Quarterly Review* and elsewhere, and which do undoubtedly create a strong presumption that the lady who wrote in such terms could not have believed that the sister-in-law whom she was addressing had committed incest with the writer's husband. But it is not the less true that Mrs. Stowe, in her later book named *Lady Byron Vindicated*, has grappled with this difficulty; and has suggested—regarding the dates of the letters, ascertained or surmisable, and the degree of moral responsibility which Lady Byron may probably have imputed to Mrs. Leigh at the relative dates—considerations which sensibly diminish the weight of the letters in question as telling against the Stowe narrative. Professor Elze, in the body of his work, reproduces these letters of Lady Byron, with his own comments as to their inconsistency with the charge of incest: in a note at the end of his volume (the book *Lady Byron Vindicated* having appeared meanwhile) he continues the same line of argument, but he says not a syllable of the theory advanced by Mrs. Stowe in explanation of the letters. This is hardly fair: at any rate it is not the way to convince the reader who is tolerably *au fait* with the details of the controversy. The translator pursues a still simpler plan. What Herr Elze had said about the matter in the body of the book appears in its place, but the note has wholly vanished: it is neither translated where it occurs in the original nor incorporated with the text. The translator therefore simply ignores what Mrs. Stowe had found to say in reply to the evidence adduced in confutation of her original narrative. The American lady may well opine that the silence of the German as to one of her most important points, and the

silence of the Englishman as to her entire rejoinder, are a testimonial to the strength of her position. We should have preferred a different kind of testimonial; a resolute encounter with all the arguments or inferences put forward by Mrs. Stowe, and a demonstration, if practicable, of their fallacy or feebleness. That such a demonstration may still be forthcoming, we think extremely conceivable: that it has yet been supplied, we do not consider. The nearest approach to what is wanted is to be found in the letters written by Lady Byron's solicitors, Messrs. Wharton and Fords, and by Lord Wentworth: but even these letters, giving the amplest extension to their terms, only refer the real demonstration to the documents left by Lady Byron in charge of her trustees, and as yet unpublished—perhaps never to be published.

It is observable that Professor Elze, strongly as he opposes the charge of incest, expresses his conviction that this same was the dark and shrouded accusation against Byron which his wife communicated, at the very time of the separation in January or February 1816, to her counsel, Dr. Lushington. He also brings out, with more relief perhaps than it had received hitherto, the fact that rumours to the like effect were at that same time current in society, as accounting for the separation. Indeed, that this was so can hardly be doubted by any one who reads the letter of Shelley to Byron, dated September 29, 1816, and lately printed in the *Quarterly Review:* "Kinnaird . . . informed me that Lady Byron . . . . was living with your sister. I felt much pleasure from this intelligence. I consider the latter part of it as affording a decisive contradiction to the only important calumny that ever was advanced against you. On this ground, at least, it will become the world hereafter to be silent." Now, if in 1816 Lady Byron accused her husband of the incest (or of attempting incest), the charge communicated by her to Mrs. Stowe cannot have been, as some have surmised, an insane or hypochondriacal hallucination of her after years, consequent possibly upon a supposed resemblance to Byron borne by Mrs. Leigh's daughter Medora, in character or otherwise; and, if in 1816 rumours of so abnormal an offence as incest were rife in society, it is difficult to see on what this could have been founded, unless on something patent to society in the conduct of Byron or of Mrs. Leigh—for as yet Lady Byron divulged nothing save to her counsel (though Herr Elze seems to doubt this), and the poet himself had not so much as published *Manfred*, now regarded by some persons as symptomatic. The letter of Shelley above cited may, in this connection, be very heartily welcomed by the vindicators of Byron and Mrs. Leigh. Shelley had then just returned to England from some months of intimate communion with Byron: he knew *Manfred* in MS., and himself, in the following year 1817, published his poem of *Laon and Cythna*, developing the connubial passion of a brother and sister as something guiltless in its essence. That Shelley, under these conditions, should write to Byron a private letter in which the rumour in question is treated as a mere utter calumny, and a refuted calumny too, seems to be one of the strongest items of evidence yet produced on that side of the debate. Before leaving this topic, I may notice that one observation of Herr Elze has a very inconsequent air. He says: "Lady Byron . . . employs, in the above-mentioned remarks on Moore's *Life and Letters*, the following words: 'If the statement on which my legal advisers (the late Sir Samuel Romilly and Dr. Lushington) formed their opinions were false, the responsibility and the odium should rest with *me only*.' This scarcely admits of any other interpretation than that she knew the facts she had stated, not from her own personal observation, but only as communicated to her through a third person; so that ultimately the warp of this woof may turn out to be mere feminine gossip." But why should Lady Byron's assertion of her own sole responsibility in imparting a certain onerous secret to her counsel indicate that to herself the secret had been betrayed or hinted by some one else? Surely the not unnatural inference is wholly in the contrary direction—so far as *any* inference can legitimately be formed on this collateral point.

Among other occurrences of Byron's life, one that is treated with more than common fulness and interest by Herr Elze is the poet's connection with carbonarism and revolutionary movements in Italy. His slips in matters of detail do not appear to be numerous, though every now and then some such can be discerned. The name of the mother of Allegra was not "Miss Jane Clermont" (p. 204 of the translation), but Miss Jane Clairmont, ordinarily called by her friends "Claire Clairmont." The suggestion (in which Elze himself does not, however, believe) that Byron caused Allegra to be buried in England in order that the mother might have the opportunity of visiting her grave seems to be thrown out in ignorance of the fact that Miss Clairmont was then still living in Italy, which has since continued to be her home. Herr Elze demurs to the statement that Shelley avowed himself an atheist: "dass er sich, wie erzählt wird, wirklich mit Atheismus gebrüstet hat, ist wol nicht sicher verbürgt." This is not correct: for Shelley, not to speak of graver utterances on the subject, signed his name in the visitors' album at Montanvert with the addition—

Εἶμι φιλάνθρωπος δημωκράτικός τ' ἄθεός τε.

Admirers of Shelley may with pleasure see the testimony borne by our author to the great influence which the works of that transcendent poet exercised in Germany at the date of the "Young Germany" movement, when Byron also was at the acme of his fame: "let it not be forgotten," he says, "that the poetry of Shelley, at that period, interested and inflamed the youth of Germany in a hardly less degree than Byron's." There is another point connected with Shelley which is persistently mis-stated by all sorts of writers, and by Herr Elze among them, and which it may be worth while to try to rectify here. Leigh Hunt (see his *Autobiography*, p. 320, edition of 1860) gives an account of the burning of the body of Shelley in August 1822, and of the demeanour, on that occasion, of Lord Byron and himself, in which there was nothing to reprehend. He then adds, "Yet see how extremes can appear to meet," &c.; and proceeds to record his own and Byron's unseemly conduct on the same spot on some other and subsequent occasion. "On returning *from one of our visits* to this seashore, we dined and drank: . . . we sang, we laughed, we shouted," &c. Elze follows a multitude to do evil, and represents the riotous merriment to have ensued immediately after the cremation, "when he [Byron] drove back with Hunt through the pine-wood to Pisa."

It remains to say a few words regarding the mode in which the translation from Professor Elze's work has been executed (apparently by the same gentleman who appends the initials "R. N." to an English rendering of some German verses with which his appendix concludes). The translation is on the whole correct and fluent. Now and then, however, a sentence is lumbering, or even sometimes ungrammatical—as the statement (p. 101) that "Byron . . . laid down on the deck": and throughout the translator assumes the right of deviating from his original in detail where he thinks fit. In many instances, this is not only allowable but advantageous: he omits some item of needless particularity for the English reader, or supplies some useful emendation or *addendum*. But this is not always the case. For example,

on p. 171, he omits a statement made by Elze (in summarising the book *Medora Leigh*) to the effect that Lady Lovelace gave Medora a sisterly reception in Paris; on p. 174, he misses, presumably through mere squeamishness, Elze's reference to Caligula's incestuous love for his sisters, appositely inserted to explain why some one had likened Byron to Caligula. Perhaps the same feeling has induced the translator to cancel, from p. 168, Elze's observation (pertinent though it is to the serious argument here in hand) that Byron, in his various love-affairs, was more seduced than seducer: and a still less manly or creditable motive may have dictated the omission, in the same context, of the German author's denial, also wholly pertinent to his argument, of the general immorality of continental married life. This is not the sort of translating to which an author of repute like Professor Elze deserves to be subjected (though indeed it appears that he saw the English version as it was passing through the press), nor by which reasonable British readers would wish to judge the work of a foreign admirer of one of their great poets.

I may add that the characteristic words of one of Byron's least refined mistresses—"Vacca *sua*, eccellenza"—which are correctly quoted by Elze, should not have been altered into "vacca *tua*": this, if not a mere slip in printing, is an attempted correction which only betrays ignorance of Italian usage and idiom on the part of its concoctor.

Even less approvable than the omissions just mentioned is the detraction in which the translator, in his preface, indulges regarding the venerable and noble-natured Trelawny, found worthy to be loved by Shelley; and not only regarding him, but the various other writers of Byronic memoirs, with the one exception of Moore. Moore's *Life*, as I have already had occasion to observe, is as yet copyright, the property of Mr. Murray: the same publisher produces the translation of Elze's work: and the proverb, "Vous êtes orfèvre, Monsieur Josse," may recur to the memory of some readers.

We have, however, to thank the translator very heartily for a considerable body of apposite and interesting information which he has added in his appendix: as on the Byron lineage, and the taint of illegitimacy in it towards 1540; on the early poems of Lord Byron; and on his character as recorded in the personal narratives of the Rev. Mr. Harness, Lord Broughton, Mr. Finlay (who startled Byron in 1823 by his marked resemblance to Shelley), and Lord Harrington. A portrait of Byron at Cambridge, by Gilchrist (not particularly well engraved), and a facsimile of Byron's very first letter, dated November 8, 1798, when he was not much less than eleven years old, also enhance the interest of Mr. Murray's volume. W. M. Rossetti.

Sicilian Folk Songs. [*Canti popolari siciliani*, raccolti ed illustrati da Giuseppe Pitrè. Preceduti da uno studio critico dello stesso autore.] Vol. 2. Palermo, 1871. [*Canti popolari delle Isole Eolie e di altri luoghi di Sicilia*, messi in prosa italiana ed illustrati dal Prof. L. Lizio Bruno.] Messina, 1871.

I pointed out the importance and interest of Pitrè's collection of popular songs in No. 15 of the *Academy*. The present continuation possesses the same qualities in the same or even a greater degree, as it contains not merely lyrical productions, but other materials as well, including those of a ballad character. The separate sections contain *Ninni* or *Canzuni di la naca*, lullabies or cradle-songs; *Jocura*, songs for children or nursery-rhymes; *Orazioni e Cosi di Diu*, invocations and prayers; *'Nnimini*, riddles; *Arii*, longer or shorter songs of seven or eight verses, subdivided into *Canzuni ad arii*, or simple lyrical airs, and *Storii ad arii*, or songs with a narrative foundation; *Storii e Orazioni*, ballads and sacred legends; *Contrasti o Parti*, longer poetical encounters or duels (the shorter ones are called *sfide* or *dubbii*, and consist of a single question with the answer); *Satiri*, or satires; *Canzuni murali*, moral or religious songs; and finally, *Muttetti di lu palio*, songs in praise of successful racehorses. I will proceed to give a few short samples of the various contents of the volume. A nursery-rhyme runs:—

"Varvarutteddu;
Ucca d' aneddu;
Nasu affilatu;
Occhi di stiddi;
Frunti quatrata:
E te' ccà 'na timpulata."

("Little chin, Mouth like a ring, Pointed nose, Eyes like stars, Square brows, And there's a pat on the cheek.") Like the Scotch: "Brow brow brenty, Ee ee winky, Nose nose nebby, Mouth mouth merry, Chin chin chucky, Catch a flee, catch a flee." Every one knows too the English: "Eye winker, Tom tinker," &c. Another Sicilian child's song is:—

"Babbalucieddu, nesci li corna,
Nesci li corna ca veni tò nanna;
Veni tò nanna cu 'na menza canna,
E t' assicuta finu a la muntagna."

("Little snail, put out your horns, Put out your horns, for mother is coming, Mother is coming with half a stick, And will chase you as far as the hills.") So the Scotch: "Snail, snail, shoot out your horns, And tell us if it will be a bonnie day the morn;" and the English: "Snail, snail, come out of your hole," &c.

Amongst the *Orazioni*, we find prayers of a kind which are doubtless offered up in all parts of the world, and by a very interesting portion of the human race, namely, by maidens who wish for a husband. In Sicily, of course, the intercession of the saints is invoked, in the following terms:

"Sant' Antoninu,
Mittitilu 'n caminu;
San Pasquali,
Facitilu fari;
Santu 'Nofriu gluriusu,
Beddu, picciottu e graziusu."

("Saint Anthony, send us [a wedding], Saint Pascal, bring it to pass, Glorious Saint Onuphrius, let him be handsome, young, and agreeable.") These *Orazioni* or invocations are addressed to all kinds of supernatural beings, from God to the souls of departed criminals (see *Academy*, ii. p. 58), and they contain petitions for a bridegroom, for the punishment of a faithless lover, for an easy delivery as readily as for the return of an absent son, for a fortunate number in the lottery, for the death of the evil spirits in the body (!), for protection against lightning, &c. &c. They form a very remarkable class, distinguished by their superstitious foundation from the *Cosi di Diu*, or purely religious morning and evening prayers addressed to God, the Virgin Mary, and the guardian angel, and referring to the welfare of the soul. They are also distinct from the *Orazioni* or sacred legends which appear in a later section, to which I now turn. This is the most extensive of any (pp. 114–378), and contains nothing but narrative poems of a secular or religious nature, the latter being by far the most numerous and the longest, and generally relating to the Virgin Mary. Many of these are very interesting, and have received poetical treatment in other languages; amongst the others, I may mention those relating to famous robbers and their deeds, from which it appears that the sympathies of the people incline to the side of these heroes in a way not altogether suitable to moral principles. At the same time some allowance should be made for the oppression under which the lower classes were formerly

suffering in almost all countries, and from which they are not even yet completely relieved, so that it is scarcely surprising to find the robbers objects of envy for their free life in the woods and mountains, and of admiration as standing protests against all kinds of oppression. Robin Hood and the Klephts in the popular poetry of modern Greece are represented in exactly the same light. The officials and servants of the government on the other hand are the objects of the bitterest hatred to the Sicilian populace, so that in their songs even the inhabitants of Hell refuse to associate with *sbirri*, or to permit their entrance, in a way that reminds us of Dante's "Chè alcuna gloria i rei avrebber d' elli."

Of a very different nature is the poem *La Baronessa di Carini*, which tells how the Baron of Carini slew his daughter Catherine on account of a secret love affair with her cousin Vincenzo Vernagallo, in the year 1563. This is one of the best creations of Sicilian popular poetry, of almost unequalled beauty, and full of the most passionate tragedy strikingly set forth. There is a special edition of this poem, with an introduction and glossary by Salvatore Salomone-Marino (Palermo, 1870), which I have noticed in the *Götting. Gel. Anz.* for that year (No. 26). I pass over various other attractive poems in this and other sections of Pitrè's collection, and only pause for a moment at the *Muttetti di lu palio*, as in spite of their simplicity they must have some interest for friends of the turf. They belong, in respect of their metre, to the class of poems called *Ciuri* (*Academy*, ii. p. 59), and are sung by successful jockeys in honour of their horses as they pass through the crowd of spectators after the race. Some of them date from an early period, and are preserved in localities where no races are now held. Here is an example :—

> "E vaja, via !
> E la bedda mirrina
> Pri pigghiaricci l' acula ô patruni,
> Vulau comu lu ventu e junciu prima ! "

("Away, away, The gray mare, To win the prize for her master, Flew like the wind, and arrived the first !") The prize here mentioned consists of a gilt wooden eagle (acula), hung with large silver coins. Another is :—

> "E loria loria !
> Nta quantu cavaduzzi cc' è 'n Sicilia
> Lu cavaduzzi mio porta vittoria."

("Hurrah, hurrah, Amongst all the horses that are in Sicily, My little horse wins the day !") This is the last in the collection, and is followed by charming melodies for thirty-one of the songs, and finally by a short glossary, containing those words which have not been explained in any of the numerous notes on the text. Pitrè has thus neglected nothing which could contribute to the intelligibility of his valuable collection, which offers a faithful mirror of the life, thought, and feeling of the Sicilian people. There remain, however, a good many difficulties in the language of the songs, which a reader who has not made himself at home in it will be glad of other help to overcome. This is offered, as regards the Sicilian dialect in general, and its variations from the forms of the *lingua illustre*, by Prof. Lizio Bruno's *Canti popolari delle Isole Eolie*, which contains a literal translation of all the songs into the literary language, and so makes it possible to obtain a tolerably complete mastery of those peculiarities. As to the special difficulties of vocabulary in the collections of Pitrè, Vigo, Salomone-Marino, &c., they will nearly all be met by the admirable *Nuovo Vocabolario Siciliano compilato da Antonio Traina*, which will soon be completed, and which I noticed at length in *Gött. Gel. Anz.* 1871, No. 26.

I must add a few words concerning Lizio Bruno's work. Besides the translation just referred to, he has also compared in detail the style and matter of each of the hundred *Canzuni* in his collection with the popular songs of other Italian provinces ; a comparison which, he observes, is of the greatest importance to our knowledge of the true character of popular poetry, and proves to demonstration that the songs of different places retain a closer relationship than is generally believed, in spite of all their migrations and meltings into each other which modify their external features. Bruno also brings forward instances of more artificial poetical compositions, to show that the chasm which separates them from those of the people is not so profound as it appears, since the source of true beauty does not lie in painful effort, but in the spontaneous inspirations of the heart. And certainly some of his remarks on this subject supply food for reflection, which must tend to diminish our faith in the fertility of the human mind and the apparent abundance of its ideas. Perhaps, however, Bruno has been tempted by his extensive reading to multiply illustrations beyond what is necessary to establish his point. His critical and exegetical explanations are valuable and instructive, but he would have done better to omit the etymological remarks, and especially all the Greek etymologies ; Diez's *Etymologisches Wörterbuch* does not appear to be much studied in Sicily. As to the poems themselves, they are almost exclusively love-songs, and many of them excellent of their kind. I quote the forty-fourth and the forty-eighth, with Bruno's Italian translation, to serve as a key to the Sicilian :—

> "Su' ricivutu 'nto 'n palazzu d'oru,
> Posu li pedi e non passu cchiù ananti :
> Li porti e li finestri sunnu d' oru,
> Li ciaramiti di petri-domanti.
> Ccà intra siti vu', caru tisoru,
> È ccà lu Paradisu cu li Santi !
> Cridu chi la rigina è vostra soru,
> Lu figghiu di lu Re lu vostru amanti."

("Son ricevuto entro un palazzo d' oro. Poso i piedi (mi fermo) e più innanti non vò. D' oro sono le porte e le finestre ; Di pietre-diamanti le tegole. Quà dentro ci siete voi, caro tesoro : È quì, coi santi, il Paradiso. Credo che la sorella vostra sia la regina, E il figlio del Rè l' amante vostro.")

> "O frunti-spera, facci d' un giardinu,
> Sciuri chi t' haju avutu 'ntra lu senu,
> Ssu to' nasuzzu è un vero gersuminu,
> Ssa to' buccuzza lieva ogni vilenu.
> Coddu di 'na carrabba cristallinu ;
> Curpuzzu d' ogni grazia ripenu ;
> Unni posa ssu pedi damascinu,
> Fa sciäuru di ruosi lu tirrenu."

("O fronte-spera, o visu di un giardino, O fiore che ho tenuto nel mio seno È un vero gesmino questo tuo nasetto. Questa tua boccuzza toglie ogni veleno. Collo di una guastada di cristallo ; Corpicciuolo di ogni grazia ripieno, Ovunque posa questo tuo piede damaschino, Odora di rose il terreno.")

The beginning of No. 2. is noticeable, because it contains a mythologic allusion, a thing very rare in Italian popular poetry :—

> "O bella siti 'n 'acula suprana,
> E siti un pocu grazziusa e fina :
> Nascisti 'nta li braccia di Tiana," &c.

("O bella, voi siete un' aquila sovrana, E siete un po' graziosa e fina. Nasceste fra le braccia di Diana," &c. ; but it would perhaps be better here to read "'un pocu," *i.e.* "non poco," instead of "un pocu") ; and likewise the end of No. 4, on account of its expressive thought :—

> "Cu bascia sta tò bucca zuccarata,
> No sputa, pi non perdiri a ducizza."

("Chi bacia questa tua bocca inzuccherata, Non sputa per non perdere la dolcezza.")

These specimens, as well as those taken from Pitrè's first volume, illustrate sufficiently the character, or, in other words, the abundant flow and brilliant colouring of Sicilian love-songs. The length of the narrative poems in this second volume precludes citation, but what has already been said may suffice to draw attention to the popular poetry of Sicily in general, or to these collections of it in particular.

Felix Liebrecht.

The Story of the Plébiscite. From the French of MM. Erckmann-Chatrian. Smith, Elder, and Co.

In the works of MM. Erckmann-Chatrian there are displayed many of those finer qualities of art which the few admire and the many disregard. Not, however, on account of these qualities, but on account of the quite negative merit of harmlessness joined with that faculty of style which in literary slang we term "readableness," did their works receive early notice and achieve early popularity in England. The public, which might well have fastened upon works with less claim to respect, happened to find pleasure in these; and to that fortunate accident we owe the possession, in comely English garb, of some half-dozen novels which sketch for us provincial France with the faithful minuteness of Jan Steen and the luminousness of Peter de Hooghe. Beyond provincial France—nay, beyond one country-side in all that field—MM. Erckmann-Chatrian rarely wander. The circle of their thought and work is almost as confined as is that of Jane Austen, though of course it is essentially different. It is at the same time more intensely localised, for while she knows few differences between Derbyshire and Hampshire, they mark the differences between villages almost adjacent, and one might profitably follow their stories with an ordnance map in one's hand and a *Guide-Joanne* at one's side to supplement the particulars they supply. If the thing they do were done less perfectly, one would tire of it—this ever renewed narrative of the peasant farmer, peasant soldier, peasant woman around Phalsbourg—just as, were they but less perfectly presented, one would tire of Miss Austen's squires' daughters, country gentlemen, and managing mammas. Like most true artists, MM. Erckmann-Chatrian recognise the limitations of their genius—whether consciously or instinctively, one does not greatly care—and if, in their case, the result on the one hand is an approach to monotony, such as is wholly avoided by the universal genius of Balzac, the result on the other hand is a fidelity quite incompatible with the universal audacity of About. About, brilliant always, is veracious chiefly when his story moves within the lighter circles of Imperial Paris. Wandering into the country, his pen remains amusing and caustic; but notwithstanding the accumulation of detail which his industry heaps up, he lacks the simple accuracy which MM. Erckmann-Chatrian appear to attain almost without an effort.

It is difficult to criticize *The Story of the Plébiscite* with any assurance of impartiality; for not only has it, in common with many another work of the same authors, a political mission, but it is political from end to end; and even if one can lay aside political prepossessions in discussing a work which deals with the Republicans of 'Eighty-nine and the Imperialists of the First Empire, it is hardly possible that they shall have no weight when one discusses a work which vehemently praises or vehemently blames the actors in the most exciting struggle of one's own time. It may be urged that praise and blame are both dramatic, since they are expressed not by the authors in their own persons but by the characters of the story. But this plea, if ever made, will have to be disallowed when it is remembered that every wise and good man of the story is a French Republican, while every scheming time-server is an Imperialist. Apart from this fact—which, if it be intentional, makes *The Story of the Plébiscite* a missionary labour, and, if it be unintentional, shows in this treatment of a contemporary theme all lack of that insight wide and profound which gave to *Hohenstiel-Schwangau* its immense and abiding value—apart, I say, from this fact, which mars the book, however it came there, *The Story of the Plébiscite* is a chronicle hardly less instructive than fascinating. The village life of Rothalp—treated in the earlier chapters—is painted in clear outline, with pure colour that will not fade. Its delightful freshness should be a relief to the novel reader. Soon, however, the village story merges into a chronicle of the war. The war, and not the village, is the main theme of the book. There is no elaborate analysis of character; yet the *sketches* of character are firm and true. Of these, the most important is that of the narrator—a dull, good miller, who voted "Yes," and saw the error of his ways when his wise cousin from Paris argued with him. This cousin, George, is in the present book the incarnation of good sense: he reminds one, therefore, of that other incarnation of good sense, Chauvel, the Protestant colporteur, in the *Histoire d'un Paysan.* The miller's wife and their son Jacob are slighter sketches. Grédel, the daughter, whom the narrating miller loves but little, but whom the reader will admire much, is a healthy, spirited, and unfamiliar figure; and there is real art in the way in which we are enabled to see her good qualities through a medium adverse to their display. There is wit as well as art in that sketch of the *sous-préfet* who enquires of the village mayor, "What is the spirit of your population?" and so interprets the answer that he may in his own turn report to the *préfet* the thing which is desired at head-quarters.

The Imperialists have M. Sardou, who writes *Rabagas*, that they may laugh and be re-assured: why should they not smile also when MM. Erckmann-Chatrian, from the other side, paint piquant portraits of the *sous-préfets* of the Empire? They may do this undoubtedly; and, notwithstanding differences, they may thank the authors of *Waterloo* and the *Conscrit* for having added by this *Story of the Plébiscite* to the long list of vivid, spirited, and simple narratives which on readers who seek mental refreshment rather than mental exercise confer a pleasure and a boon.

With here and there an exception, the translation, now reprinted from the *Cornhill Magazine*, is in good and facile English; and the pictures, by Du Maurier and Hubert Herkomer, are, in the true sense, illustrations.

Frederick Wedmore.

The Bacchae of Euripides, translated into English Verse, with a Preface, by James E. Thorold Rogers. James Parker and Co.

The *Bacchae* are one of the standing problems of literary history, and Mr. Rogers' contribution to its solution is the most characteristic part of his pleasant little volume. His attempt is too ingenious not to be interesting, though the interest is partly the interest of an anachronism. He refuses to believe that a man who has thought out life so clearly as he assumes that Euripides had done can radically change his convictions at the age of seventy-five unless his faculties have been impaired: consequently he is induced to conceive the play as an insincere but splendid parable whose moral is that superstition is the only and the precious check on despotism. Such a parable would have been quite in place at the court of Archelaus; but, after all, the suggestion reminds us of Warburton, who found the Eleusinian mysteries in the Sixth Book of Virgil. The writer has been led to an extreme solution by disregarding the circumstances which attenuate the problem. If Euripides had been a thorough-

going rationalist, he would have come into collision with the homely mysticism of Socrates. In fact Greek paganism scarcely presented sufficient resistance to rationalism to consolidate it. No doubt Euripides' opinion of the received mythology was lowered by his fondness for dwelling on the obvious fact that it was used as a political machine of no creditable kind. But he probably remained a sincere polytheist just as Voltaire remained a sincere theist, though both rather preferred to keep at a distance from the objects of their belief, whose names were so often taken in vain in the society in which they lived. And of course Euripides gained more by transcendentalising anthropomorphism into nature-worship than Voltaire by substituting an abstract First Cause for the personal God of Christianity. Then we have to remember that the character and position of women was a subject which always had a strong though painful fascination for the woman-hating Euripides: in the Bacchic ecstacy (which, as Mr. Rogers points out, he probably witnessed for the first time in Macedonia), he found their consolation and emancipation. Nor would it be surprising if Euripides under new and stimulating conditions experienced, like Gentz, in his passion for Fanny Elsler, the strange phenomenon of a second youth: and it would be more satisfactory to find the explanation of the character of Cadmus here than in the cheap hypothesis of dotage. But whatever the true theory of Euripides' conversion, it did not involve such a break with his past as to warrant us in throwing doubt on his sincerity. Its modern analogue would be not a veteran socialist giving in his cohesion to ultramontanism, but a veteran man of letters admitting the pretensions of spiritualism. This reminds us of another mistake which runs through all the contrast between Euripides and Aristophanes; Mr. Rogers seems to assume that the division between the old and new school at Athens was mainly horizontal, whereas it was mainly vertical; all the questions of the day did not resolve themselves into questions of class politics. But the preface contains much instructive matter, though the main positions are questionable. The translation maintains an uniform level of manly elegance and vigorous fidelity. It may be read with pleasure, at least without effort, by itself, and with respect in the presence of the original. It is less rich and musical in language and metre than Dean Milman's, but it is free from the appearance of occasional feebleness; it looks decidedly more accurate, and upon the whole it is more accurate. The grim humour of the two last scenes between Bacchus and Pentheus is better brought out. The attempt to naturalise Greek choral metres in English is made with creditable taste and judgment; but the result is tame.

G. A. Simcox.

PROFESSOR MAURICE.

Professor Maurice, who died on Easter-day, had perhaps a more important part than any of his contemporaries, except Dr. Newman, in accomplishing the transformation of religious thought in England, which had been prepared by Coleridge, and foretold in language too pregnant to remain unfulfilled. Looking back on his influence on speculation (which practically came to an end when that of *Essays and Reviews* began), we see that what he really effected was to deprive the traditional orthodoxy of the *prestige* of superior reverence and sanctity, to prepare a piety, what some might call, in his disciples at any rate, a pietism, which would continue to exist fearlessly and helplessly in the presence of criticism until criticism was ready to absorb it in the shape of moral earnestness, and perhaps to retain it in the shape of simple energy. Coming as he did to Anglicanism with the desire to complete what was positive in Unitarianism, he was led to deprive the popular theology of all its elements of resistance, while he retained for himself and his disciples all that conduced to fervour or repose. In many respects the completest of his works is the *Kingdom of Christ*, which has long been out of print. Here he applied to all the competing systems of the day a single criticism—each rested on a true idea which it destroyed in attempting to express it, while the Church of England, which expressed nothing, embraced them all. There is no real inconsistency between this point of view and his eager championship of the Athanasian symbol; creeds are at once the best foundation and the best substitute for theological science. The antithesis between faith *in* persons and in propositions *about* them is in itself important, but it has little value for dogmatic theology; if propositions *about* the object of faith are impossible *à fortiori* a conscious relation *with* that object must be impossible, any truth to be communicable must pass through the sphere of consciousness before it transcends it. In his *Theological Essays*, Mr. Maurice dealt with the Incarnation, the Atonement, and the doctrine of Future Punishment, and it is by his treatment of these that he exercised most influence and is still best known. His principal addition to the early Alexandrian doctrine of the Incarnation was suggested by his Unitarian antecedents; he pointed out that the benevolent deity of Socinus was rather too like a god of Epicurus. It would be useless to attempt to state his doctrine of the Atonement; so far as it could be stated, it was a repetition of obvious and inadequate solutions; he attempted to escape from their inadequacy by transcendentalising the abstract idea of sacrifice till it became unmeaning. He was more fortunate in pointing out that the idea of eternity transcended mere temporal everlastingness more certainly than it included it; in this way he gained some relief for the sympathies of mankind, though at the expense of the grand conception of a really final consummation of all things, and, while he escaped the deadening comfort of mere universalism, he forfeited the advantage of its immense logical plausibility. His controversy with the late Dean Mansel was a long *ignoratio elenchi*, the more regrettable because the *docta ignorantia* of the *Bampton Lectures* was really the substratum of a homely mysticism which rested Christianity on historical facts corresponding to the permanent needs of man, and had no temptation to buy a respite from historical criticism by translating individual desires into the supposititious intuitions of the human race. This tendency pervades and disfigures Mr. Maurice's numerous Biblical works, for though he was sufficiently influenced by Coleridge to attach himself to the contents of the Bible rather than to the authority of the writers, he carried the impulse no further. This was natural, as in Coleridge himself historical criticism had been secondary to doctrinal mysticism, and so it may be said that Mr. Maurice has completed the work of Coleridge by carrying all his principal suggestions into the sphere of practical edification in which they have borne and are bearing their full fruit.

G. A. Simcox.

LITERARY NOTES.

The current number of the *British Quarterly Review* contains a very intelligent appreciation of Matthew Arnold's poetry. His relations to Goethe and Wordsworth are well marked. Though he imputes his own method to Wordsworth, it is true that the master took up nature into his own mind, while the disciple escapes from his own mind into nature. It was also worth while to point out that the keynote of his poetry is resistance to the despondency which springs from intemperance and perplexity; and that, except in the *Sick King of Bokhara*, he has seldom, if ever, found a definite positive subject adequate to the mood he wished to express, so that the completeness of his elaborate poetry is purely internal, and cannot be measured by any objective standard. The reviewer commits himself to the opinion that the value of the unrhymed poems is purely rhetorical; as rhetoric he sets them very high.

In Westermann's *Monatshefte*, for February, there are two or three unpublished letters of Schiller's; the first (July 1788), written in a horrible mixture of Italian and German characters, relates to the first representation of *Don Carlos*. Schiller agrees with an anonymous critic that the play is too long for acting, but rather than leave out parts for the stage, he would take it from the stage altogether. The last, undated, is to

Nicolai, who has admired *Tell*, to its author's surprise, as he was formerly a foe to what was called "Kraft- und Original-Genies"; Schiller is grateful for his reviewer's compliments, but begs that another time his title of "Hofrath" may not reappear quite so often.—The same journal contains a series of papers by J. Berger, on Snow Crystals, and the illustrations (in March) of the frost "window-flowers" are very carefully executed.—Freiherr von Maltzan sends the legend of a miraculous spring in Arabia (about 15° N. and 46° E., but no European has visited the spot), in which the natives bathe, and he who wishes for hot water exclaims, "Oh, Mesaud (the name of the presiding Djinn), hot!" and he who wishes for cold says, "Oh, Mesaud, cold!" and to each the water flows as he desires. On enquiry it appeared that the different requests had to be preferred on different sides of the stream, but it was heresy to suppose this condition had anything to do with the marvel. The spring flows from the spot where a serpent disappeared, which had been hatched in the bosom of a poor man (he could not even borrow a hen), from a stone egg which had been sent by some saint in answer to his prayers for help.

In the *Revue des deux Mondes* (April 1) M. Amédée Thierry continues his interesting series of *Recits*, of which the present number is devoted to the Council of Chalcedon.—M. Renan follows his hero de Nogaret down to the destruction of the Templars.

The proprietors of the *Revue des deux Mondes* are going to publish a history of the Review, with notices of its chief contributors, and of their papers, from the correspondence in the editor's office. It would be well if the proprietors of the *Edinburgh* and *Quarterly* would follow the example. It is very useful to know what articles are by Southey, Sir F. Palgrave, &c.

Art and Archaeology.

The Marlborough Gems catalogued, with Descriptions and an Introduction by M. H. Nevil Story-Maskelyne, M.A., F.R.S. London, 1870.

As a careful catalogue compiled with knowledge abreast of the time, Professor Maskelyne's work is a contribution to archaeology which will be valued all the more that ancient engraved gems have been too rarely subjected to serious treatment. Its value in this respect is enhanced by an introduction in which two questions of unusual interest are dealt with, the nature of the stones employed by the Greek and Graeco-Roman engravers, and the growth of the art of gem-engraving in ancient times. Speaking with the authority of a mineralogist by profession, his statements on the former question will be received with just the assurance which was wanting in most previous writers. With regard to his sketch of the features by which successive periods of the art are distinguished, we have found it, short of the complete demonstration which could only be given in a work of large compass, all that could be desired. He ought, perhaps, to have made more of what appears to be both a new and very convenient way of accounting for the almost total absence of gems bearing the stamp of the age of Pheidias, by assuming that the impulse given to the pursuit of ideal beauty by the example of Pheidias was felt only by the great artists of the day, those of weaker calibre, such as gem-engravers, continuing in the meantime the severe careful style in which they had been trained, until a new school arose, with obvious peculiarities and exaggerations easily imitated. In the history of vase-painting we have the same phenomenon, a rigid, minute, elaborate style, uniformly attributed to the age immediately before Pheidias, or more correctly Polygnotos, the great painter, his contemporary, then an apparent blank followed by a style at first severe, but quickly becoming bold and free. Gem-engravers, being, it is probable, men of higher artistic attainments than vase-painters, were presumably more under the influence of the guiding spirit of their time, and it may have occurred more frequently than we suppose that one or other of them approached the ideal of Pheidias, as in the figure of Sappho on a burnt cornelian, in the British Museum, which for purity of feeling and exquisite workmanship has perhaps no rival among existing gems. There are also a few pastes which suggest, as Prof. Maskelyne observes, the sentiment of the age of Perikles. But straining our limits of the Pheidiac style so as to admit the greatest possible number of gems, we have still only a few to set between the hundreds of scarabaei apparently possessing all the characteristics of the previous age and an equal number of splendid gems of the later style. It may certainly be that the immense sacrifices made then by private individuals for the common good and the intense interest of all classes in public affairs withdrew to some extent the patronage of the wealthy from work of this kind. On the other hand, if it can be shown—and it is a notorious fact—that even the metopes of the Parthenon executed under the eyes and direction of Pheidias betray strong marks of the former age, it will be better to assume that, as we descend in the grade of artists, the power was proportionately less of rising to the occasion presented by him. In this case, we must imagine the gem-engravers retaining and working out further the style in which they had been trained. It should also be observed that a taste for elaborate rigid archaic work endured in basrelief as well as in vase-painting till long after it had passed away as a living style, was revived, if it did not in some measure continue uninterruptedly, in the time of Augustus, and retained favour with successive emperors and private patrons. The question, however, does not so much concern the attractiveness of archaic work as the extreme difficulty which ordinary artists must have experienced in seizing the spirit of Pheidias, and of this perhaps no better proof could be advanced than the frieze from the temple of Apollo at Phigaleia, now in the British Museum, the work, it is believed, of Iktinos, the architect of the Parthenon. The perfect freedom in the treatment of the figure and of the drapery which Pheidias introduced is taken full advantage of, but the calm ideal beauty which was his great charm is exchanged for wild movement. And again in the sculptures from the temple of Victory at Athens, executed perhaps in his lifetime and certainly in the presence of his work, it is barely possible to trace his influence. Treasures of gems may yet be found in Greece which will revolutionise our ideas, but in the meantime the facts seem to bear out Prof. Maskelyne's theory.

The Marlborough gems were collected in the course of the seventeenth and eighteenth centuries, before Etruscan tombs had yielded their treasures, and before excavations in Greece had brought to light any important example of the early style of art. They were collected at a time when nothing higher in sculpture was known than the Apollo Belvedere or the Laocoön group, and so it happens that a collection still priceless in the eyes of many is of little consequence in the history of ancient art.

In the otherwise accurate descriptions of the gems we notice a mistake (No. 168) arising from a misunderstanding of the word *Kriophoros*, which was applied to Hermes as a guardian against pestilence, not as a "god of herds." The title appears to have originated in a tradition of his having driven away a pestilence from the town of Tanagra, by carrying a ram on his shoulders round the walls, an event commemorated by a statue of him in the act. As god of herds, he was called *Nomios* or *Epimelios*. It is also a mistake, we think, in the arrangement of mythological sub-

jects, to separate Demeter from Persephone. To the Greek mind they were the inseparable τὼ θεὼ or αἱ διώνυμαι θεαί.

ALEXANDER S. MURRAY.

ART NOTES.

The sale of the Persigny collection on April 4 excited great expectations, which resulted in disappointment. The sale took place at the Hôtel Drouot, the two great rival auctioneers M. Escribe and M. Pillet co-operating on the occasion; but the prices obtained were less than moderate. "Departure for the Army," by Terburg, put up at 60,000 francs, was knocked down for 5000 francs; and this appears to have been the highest sum reached for a single picture. The pseudo Raphael went for 2000 francs, and Vanloo's "Portrait of Maria Leckzinska" for 3600 francs; but the English pictures fared even worse. Sir Joshua Reynolds' "Portrait of the Prince of Wales" was knocked down at 3200 francs; his "Portrait of a French Lady," 460 francs, and "Portrait of an English Lady," 500 francs. Gainsborough's "Portrait of a Boy" went for 210 francs. The sum total realised by the sale of sixty-eight pictures was under 53,000 francs.

The unrivalled exhibition of a special class of Turners, in the gallery of the Burlington Fine Arts Club in Savile Row, is prolonged pending the completion of arrangements for a prospective Holbein exhibition by the same society. No pains have been spared, by the amateurs to whose zeal this collection is due, in the effort to make it as complete as possible, and to arrange and catalogue it in the way most serviceable for reference and instruction. Its staple feature consists in a complete series of the *Liber Studiorum*, with each plate exemplified in two or more (and sometimes as many as eight or nine) stages, from the first strongly bitten etching of outlines to the final expression of the mezzotint as dictated by the science or caprice of the master, in toning, filling-in, touching, and retouching. But still more interesting than this central series are the adjuncts which are appended to it, in the shape of some beautiful examples of the unpublished plates designed but not included in the *Liber;* nine original drawings for plates both published and unpublished of the *Liber* class; and two screens full of specimens of a rare and almost priceless order of mezzotints, of which the destination is unknown (as was the existence until after Turner's death), and which bear some resemblance to the *Liber* by their scale and subject, but are printed in black colour instead of brown. Altogether, we have here a unique and inexhaustible field of study, for which the best thanks of all who care for such things are due to the gentlemen by whom it has been contributed and organized.

The direction of the Louvre is about to repossess itself of the gallery on the river side which during the Empire was diverted from the purposes of the museum to those of the Tuileries. The necessary works will be rather costly, so meanwhile the new gallery intended to receive the Byzantine pictures of the Campana collection is being finished. It is situated on the second floor of the wing of the Colonnade. Two new pictures have been hung in the course of the present month. One is said to be a superb Roger van der Weyden, representing the descent from the cross. This fine work was bequeathed to the Louvre last year by M. Mongé Misbach. The other picture, left by M. Jules Vallé in 1870, is "The Denial of Peter," by Lenain.

The museum at Lille is becoming more and more important. Almost every month we have to chronicle fresh acquisitions. Poussin's sketch (oils) for "Le Temps enlevant la Vérité," two fine portraits by van der Helst, and a magnificent portrait of a woman by Franz Hals, have quite recently been acquired for the collection.

An active movement is going on at Bruges in favour of uniting all the scattered art-treasures of the town in one great central collection. If this project takes effect, it will at last become possible to study the works of Lancelot Blondeel, of Pourbus, of the two van Oost, and the numerous unknown treasures which are at present buried in the different municipal establishments, such as the Béguinage, the Pottery, the Bogaerde School, and the Damme Hospital.

M. Léon Cogniet is about to sell all his studies and pictures.

The cases containing the fragments brought from the Temple of Diana at Ephesus have now been deposited in the British Museum, and are in course of unpacking. Amongst the recent acquisitions of the Museum is a head of Alexander the Great (*ronde bosse*), which was unearthed some time since in Sicily. It is a very distinguished piece of work, and appears to be a late (Alexandrian ?) reproduction of a contemporary bust.

Mr. Watt's diploma picture of "The Murder of Abel" is unfortunately in too unfinished a state to admit of its appearing on the walls of the Royal Academy exhibition. He will, however, be well represented by several portraits, all good examples of his hand, and by "Daphne" a very refined and finished rendering of a poetical conception. Mr. Leighton contributes a thoroughly successful portrait of the Rt. Hon. Sir Edward Ryan, secretary of the Dilettante Society, in which he has vigorously attacked the difficulties of artificial light, but in which chief attention will be concentrated on the admirably solid and expressive painting of the head. There are yet three pictures by this painter—"A Leader of Condottieri;" "After Vespers," essentially a very pretty picture of a lovely girl with eyes full of dreamy exaltation; and "Summer Moon." The last is truly a pictorial poem: two young women have fallen asleep curled against each other; through the circular opening above their heads we see the blue of a southern night. Every sweeping line of drapery, every shade of colour, combine in one lovely harmony. Mr. Millais, besides the pictures by him already mentioned (see *Academy*, vol. iii. p. 107), sends two Scotch landscapes, very brilliant work, but hardly so interesting in subject as the "Chill October" of last year, "A Portrait of the Marchioness of Westminster," and "Portraits of Three Young Ladies playing Whist with Dummy." Some portraits which have been sent in by M. Laugée deserve attention, not only on account of their workmanlike execution, but because his sitters look like ladies, not like women perplexed "by the burden of an honour unto which they were not born." It is pleasant to see among the younger painters evidence of growing interest in the poetical side of their art. Mr. Frank Dicey has taken a motive from the Song of Solomon, "Come, my beloved, and let us go and dwell in the villages." His picture is very carefully worked and thought out, and has much distinction of style. The girl leans back as she stands against her companion, who lifts his hand to gather fruit from the overhanging vine. The sentiment of languorous enjoyment characterzing southern life pervades both figures.

The city of Nottingham has just been selected by the Lords of the Committee of Council on Education as a fitting centre for the establishment of a Permanent Exhibition of Fine and Industrial Art for the Midland Counties, this being the first permanent provincial exhibition in connection with the South Kensington. It will be held provisionally in a suite of rooms in the Exchange Hall, and is to be opened at Whitsuntide, Mr. Cole having been to Nottingham to give the committee his advice as to the arrangement and management. South Kensington will send paintings and other objects of art on loan, and collectors generally are invited to contribute, a call which will doubtless readily be responded to, as the display at the Derby Exhibition in 1870 showed the richness in art-treasures of the Midland Counties.

Dr. Charles Maclean has accepted the appointment of music director and organist at Eton College.

Contents of the Journals.

Gazette des Beaux-Arts.—The present number contains—"Journal de mes Fouilles" (first article), by M. Beulé. The scientific results of these investigations, which date from twenty years back, were made public by M. Beulé, in his work on the Acropolis of Athens. What he now prints are the lively notes in which he chronicled day by day his glimpses of hope and moments of discouragement whilst the excavations were in progress. The first article leaves us in July 1852, at the time when works begun by him at his own private cost had become a matter of public interest, and were taken up by the French

government.—"Curiosités du Musée d'Amsterdam." This article is a notice, by M. F. de Tal, of Kaiser's valuable reproductions in facsimile of engravings by unknown masters of the fifteenth century.—"Encore un mot à propos du Cenacolo de San Onofrio," by Émile Maruéjouls. M. Maruéjouls adduces proofs and arguments in favour of the attribution of this work to Raphael. Passavant peremptorily rejected it, but Passavant was often exceedingly hasty and rash in passing judgment, and the evidence on the other side of the question merits attention.—"Les Palais brulés" (fourth article), by M. Ed. Fournier.—"La Caricature et l'Imagerie en Europe pendant la Guerre de 1870–1871" (second article), by M. Duranty.—"Les Dessins de Parmesan," by M. Émile Galichon. This notice is accompanied by various illustrations, one of which, "Femme tenant une victoire à la main," after a drawing in the collection of M. Galichon, is a very fine example of Parmesan at his best.—The number closes with an article on the destruction of art monuments at Strasburg, by M. E. Muntz.

Bullettino dell' Instituto (February) describes the excavations going on at Capua along the old road that led to Mount Tifata. The tombs were rifled of their bronze urns in Roman times (Sueton. *Jul.* 81), but the pottery (mostly of Greek workmanship) remains.—Henzen gives at length a military diploma, the second part of which has been just discovered, and which slightly rectifies Mommsen's view as to the time of Trajan's holding the Tribunician power—a well-known difficulty in chronology.

Im Neuen Reich (No. 11, 1872) contains an account of the mosaic found at Pesaro, probably of mediaeval date, but with the remains of an ancient one below it. An attempt is made to restore the inscriptions on it, and what seem to be a hexameter and pentameter in leonine verse—perhaps of the twelfth century.—A discussion follows as to the position of Germany relatively to the Church question.

New Publications.

C. S. C. Flight Leaves. Cambridge: Deighton, Bell, and Co.

Cobbe, F. P. Darwinism in Morals, and other Essays. Williams and Norgate.

Ferrucci, Aloisii Chrysostomi, Civis Romani Electa Carmina. Leipzig: Brockhaus.

Fétis, F. J. Histoire générale de la Musique: depuis les temps les plus anciens jusqu'à nos jours. Tom. 3ième. La Musique chez les peuples de l'Asie mineure et de la Grèce. Paris: Didot.

Mitford, Mary Russell, Letters of. Ed. by H. Chorley. 2 vols. Bentley.

Vaughan, R. B. The Life and Labours of St. Thomas of Aquin. Longmans.

Physical Science.

Contributions to the Parthenogenesis of the Arthropoda. [*Beiträge zur Parthenogenesis der Arthropoden.* Von C. Th. E. von Siebold. Mit zwei lithographirten Tafeln.] Leipzig: Engelmann, 1871.

In the year 1856, it will be remembered, Professor von Siebold published his first memoir* on this phase of animal physiology, when it was shown that for certain butterflies as well as the bees the apparently well-established law of bisexual generation was not true, and that these insects produced a progeny without intercourse. Although this memoir was not the first to treat this important question at great length—a discussion of the question of this mode of generation in Aphides having arisen in the middle of the last century—it caused a great stir among naturalists, and gave rise to a general controversy on the question. Little, however, need be said respecting the history of this question, as there appeared at the time in England an excellent essay by that marvellously fertile author, Mr. G. H. Lewes, in his *Seaside Studies* (second edition, 1860, pp. 296–340), wherein the history of parthenogenesis was written and criticized with great ability and judgment.

In his first work the Munich professor already enumerated some cases of parthenogenesis which he had set aside for further investigation. He now illustrates the method in which one of the commonest wasps of Southern Europe is propagated, and fully disproves the views of all those who, like the members of the French Academy or the late Professor Schaum, of Berlin, M. Plateau in Belgium, and many others, doubted the correctness of former investigations, more especially of those made on bees.

The wasp which served as an object for the professor's investigation was *Polistes gallica*, an insect of rather common occurrence in South Germany, thereby providing him an excellent example by which to test the accuracy of his views. This, however, was not to be accomplished without great exertion and long sustained observation. Whoever reads the chapter of his book which treats of *Polistes gallica* will be struck with the amount of time, exertion, perseverance, and devotion, which must have been expended in working out the question. We read of extended experiments made and immense numbers of cases most accurately examined, so that the generalisations rest upon the broadest possible bases. In like manner another hymenopterous insect, *Nematus ventricosus*, was studied, and yielded equally important and confirmatory results. Other insects, like *Vespa solsatica*, *Psyche helix*, and *Solenobia triquetella* and *lichenella*, are more briefly, though not less accurately, considered, and very great care has been bestowed on the following Crustaceans: *Apus cancriformis* and *productus*, *Artemia salina*, *Limnadia Hermanni*, and some *Daphnidae*.

To give a striking instance of the extent of Professor v. Siebold's labours, it may suffice to direct attention to the statistical notes on Apus, found on pages 174 and 175. Professor v. Siebold wished to determine the exact number of males among the far more abundant females. He collected Apus from twenty-one different localities, the whole number amounting to 13,000 specimens. Among these were found only 319 males! In their selection every specimen had to be examined separately, as the general aspect of male and female is similar, and only a slight difference to be observed at one of the extremities. Professer v. Siebold, moreover, measured each individual of this community in order to test the statement of Professor Kogubowski, who contends that the males are invariably smaller than the females.

To those who have not studied zoology, that branch of science may appear rather dry and uninteresting where to attain scientific results we have merely to count, to measure, and to classify. Though such prejudice is even widely spread, it should not be forgotten that each science and art, to yield results of importance and of wider bearing, has to be pursued laboriously along such dry and uninteresting tracks. The critic, on the other hand, gathers from Professor v. Siebold's labours material whereon to base conclusions of a broader bearing, and finds in the methods in which he conducted his experiments a model for all those who shall be disposed to follow the same lines of biological research.

This element in Professor v. Siebold's book must be especially commended, since it cannot be doubted that the investigation of the habits and life of animals is now cultivated less than it was some fifty and more years ago, and much less than the present state of biological science requires. Mr. Darwin has revived it to a great extent, but through Mr. Darwin also has arisen the necessity for his followers to deal with these studies. It is very gratifying, therefore, to meet with another zoologist, especially a man of Professor v. Siebold's reputation, who continues to cultivate with such special care the investigation of physiological nature, and to blend therewith comparative anatomy, the counterpart of biological research.

* *Wahre Parthenogenesis bei Schmetterlingen und Bienen.* Ein Beitrag zur Fortpflanzungsgeschichte der Thiere. Von C. Th. E. v. Siebold. Leipzig: Engelmann, 1856.

We find then in this work not only the proofs that parthenogenesis is an established fact amongst many animals, but meet with excellent and highly important anatomical descriptions of the structure of the sexual organs and the formation of the egg in Insects and Crustaceans. As the title of the book does not indicate that it considers these subjects, it may be well to direct attention to these points.

According to Professor v. Siebold's observations there are in the ovary of *Polistes* vitelligenous cells and true ova, and the latter received from the first a considerable amount of vitellus. Each ovary consists of several tubes, each tube of a changing number of egg-compartments. The egg-compartment is composed of several vitelligenous cells and one egg-cell. There is around these an epithelium and a tunica propria, and this tunica propria is in its turn surrounded by peritoneal tissue, muscular fibres, and tracheae, which connect the different portions of the organ to each other and to the peritoneal tissue of the heart. At the other end *the ovary is free, though not in continuation of the oviduct*, their union being only produced by peritoneal tissue.

As regards the formation of the ovum, v. Siebold comes to the following important conclusions: 1. The place where the germ-cells are first developed is the upper part of the ovary-tubes. 2. These germ-cells, differentiated somewhat later into vitelligenous cells and egg-cells, do *not* move further down in the tunica propria of the ovary, but the tunica propria, together with its epithelium, moves by a remarkable process of growth downwards in the peritoneal tissue, enveloping the ovary-tubes, and thus carries its contents with it. The egg-cell and vitelligenous cells, increasing in size, form single egg-compartments, which by and by become surrounded completely by the tunica propria with its epithelium. The latter at last separates the egg, when ripe, completely from the upper part of the ovary-tubes, and becomes changed into the chorion—the vitelline membrane being a product of the egg already in the ovary; the tunica propria surrounding the compartment also separates from the remaining part of the ovary, and eventually detaches the egg also from the vitelligenous cells of the same compartment, their last union being made by a channel which, after separation, is transformed to the micropyle. 3. When the lowest compartment has attained a ripe condition, the egg passes from the peritoneal envelope to the oviduct, freeing itself at the same moment from its connection with the mass of vitelligenous cells hitherto attached to it. 4. The external surface of the egg, which has passed into the oviduct, changes very quickly, in so far as the tunica propria, which still surrounds it, is concerned; it becomes gelatinous, is broken up, and envelops the chorion as a sort of sticky matter. 5. The vitelligenous cells belonging to this egg generally remain at the lower end of the ovary, and undergo a process of degeneration. The tunica propria enclosing them undergoes the same disintegration as that of the egg, whilst the vitelligenous mass, which greatly resembles the corpus luteum of Vertebrates, passes between the peritoneal envelope and the tunica propria of the next egg-compartment, and finally reaches the very top of the ovarian tubes.

We cannot discuss here in any detail the specialities of these processes as described by v. Siebold; we would merely remark that, if v. Siebold's statements be proved by further investigations to be correct—and they are still at variance with the observations of other eminent zoologists—their bearing on general morphological questions will be of very great importance.

Another point of a very striking nature is the way in which the egg in Apus is formed. Siebold gives an account of it on pp. 187–193. The ovaries are composed of a great mass of follicles, each of which opens through a short conduct into a general and broader one, the orifice of which lies close to the eleventh pair of feet. Each follicle is composed of four cells, one egg-cell and three vitelligenous cells. The former thrives, the latter waste away; but, strange to say, the egg is not developed from the elements of one follicle, but by the union of the contents of two or three of them! This union takes place in the general oviduct, and it is here also that a chorion is formed round this yolk-mass, for thus it must be called. The eggs are then extruded and fall to the bottom of the little pond the animal lives in. This example of the formation of an egg from the elements of a great number of cells—not from those representing a single cell, as is usually the case—is most striking. It would be of the highest interest to endeavour to trace similar characteristics among allied forms of Crustaceans.

On pp. 223–238, Professor v. Siebold makes some concluding remarks on the questions treated in his book. He does not discuss the entire relation of parthenogenesis to other modes of propagation, but encourages the hope that light may be thrown on another problem, that of sexual differentiation in the egg—some of the parthenogenetic insects producing males only, others only females. This is undoubtedly one of the most interesting questions in the whole range of biology, and its solution would be of the highest importance in its bearing on many of the ideas and superstitions of common life.

It is, moreover, very desirable that we should be enabled to form a correct idea of advantages or disadvantages attending parthenogenesis as a mode of propagation. Teleology in its old sense having been abandoned by exact science, there are nevertheless abundant reasons for revising teleological investigations in their applications to the Darwinian theory. Each fact in physiology and morphology is capable of an explanation consistent with the theory of natural selection, and this is demanded by modern science. And parthenogenesis, alternate generation, paedogenesis — yea, more than all, the common process of bisexual generation—are as yet vast problems considered from the point of view of the theory of natural selection. It is even highly probable that those who see in parthenogenesis a phenomenon irreconcilable with the views of rational physiology, may yet find that, from the Darwinian point of view, ordinary propagation offers a problem beset with still greater difficulties, and demanding still more profound thought for its complete elucidation. This difficulty presented itself already in his time to a man who was by no means easily puzzled with anything that came within the grasp of his genius—Kant, who, in writing from Königsberg on March 30, 1795, to Schiller, says:—

"So ist mir nämlich die Natureinrichtung: dass alle Besamung in beiden organischen Reichen zwei Geschlechter bedarf, um ihre Art fortzupflanzen, jederzeit als erstaunlich und wie ein Abgrund des Denkens für die menschliche Vernunft aufgefallen, weil man doch die Vorsehung hierbei nicht, als ob sie diese Ordnung gleichsam spielend, der Abwechslung halber, beliebt habe, annehmen wird, sondern Ursache had, zu glauben, dass sie nicht anders möglich sei,—was eine Aussicht in's Unabsehliche eröffnt, woraus man schlechterdings nichts machen kann, so wenig wie aus dem, was Milton's Engel dem Adam von der Schöpfung erzählt: '*Männliches* Licht entfernter Sonnen vermischt sich mit *weiblichem* zu unbekannten Endzwecken.'"

Anton Dohrn.

Scientific Notes.

Geography.

Arctic Exploration.—Great things are in preparation for the attack of the unknown region surrounding the North Pole during the coming summer and autumn. From Dr. Petermann we learn that eight continental expeditions are being fitted out, by Austria, Sweden, Norway,

and France. Foremost among these is the Austrian, under the leadership of Lieutenants Weyprecht and Payer. The remarkable results of the trial voyage made by these explorers last season have excited such an interest in the Polar question in Austria, that from the Emperor, the government, and societies downwards, all classes have eagerly contributed towards the fitting out of a more complete expedition. A sum of about 17,500*l.* has already been raised; a screw steam-vessel has been purposely built at Bremen; and everything is in readiness for the start at the end of June. The plan of the voyage is that projected by Lieut. Weyprecht (see *Academy*, vol. iii. p. 71); and the ship is provisioned for three years' absence. It is proposed to spend the first winter off the northmost cape of Asia; to employ the second summer in the exploration of the Central Polar region; and in the third season to penetrate to Behring Strait, and thence to an American or Asiatic harbour. The vessel is of 220 tons burden, with the rig of a three-masted schooner, and has engines of 95 horse-power. Besides the leaders, the expedition will be accompanied by two officers of the marine, named Brosch and Orel, a surgeon, machinist, two chamois-hunters and glaciermen from the Alps, and sixteen picked seamen. Graf Wiltschek, a warm supporter of the cause, will operate with the expedition for the first season in a vessel provided at his own cost, and will also be accompanied by scientific men. He will also establish a provision depot for the use of the chief expedition on the farthest land of Novaia Zemlia.—Again, an expedition led by Nordenskiöld, under the direction of the Royal Swedish Academy, contemplated since 1861, is to be undertaken this year. Its plan is unfortunately almost identical with that conceived by Parry, and which he proved to be impracticable. It is that of wintering on the northmost islets of Spitzbergen (the Seven Isles), whence by the aid of fifty reindeer an over-ice journey northward will be attempted.—Two Norwegian steamers, navigated by Captains Jensen and Svend Foyn, enterprising whale fishers, will follow the course of the Austrian vessels towards the Siberian seas. Numbers of specially built steam-vessels have this year been added to the Norwegian fishing fleet; and, instructed by Professor Mohn, of Christiania, the masters of these vessels may be expected to add greatly to their meteorological observations of past years.—The latest news of Captain Hall's American expedition is of date September 5, on which day Upernivik, the highest station on the West Greenland coast, was left for the higher north.—Nothing has been heard of the French expedition under Octave Pavy since its departure from San Francisco for Eastern Siberia; but a second French voyage, instigated by M. Ambert, to whom the inheritance of M. Lambert has descended, is about to begin in a vessel from Havre. The objects of this voyage are not only to be geographical and scientific, but "practical results will also be aimed at, such as the taking possession of new lands, whale fishery, and fishery of other sorts."—Rumours are afloat of an English expedition, with which Captain Sherard Osborn's name is connected. Parry's "farthest" is still the most northerly point yet reached on our globe. Let us hope that the honour of surpassing his achievement will belong to one of his countrymen, not to a foreigner.

Of great importance in connection with this subject, and in their bearing on the movements of currents in the Arctic seas, are the examinations of the drift-woods collected according to Dr. Petermann's instructions by the recent German expeditions to East Greenland, Spitzbergen, and the seas east of it. In the hands of well-known German botanists these numerous fragments of wood and bark prove to be chiefly of northern origin; the extreme thinness of the yearly rings in the section of the woods showing that their habitat has been on the outmost limits of tree growth. Larch is the most frequent, and the specimens of it are clearly traceable to Siberia. The pines may either be Asiatic or from Northern Europe. A few pieces examined are however undoubtedly of more southerly origin.

The Ruins of Zimbaoe in South Africa.—On September 5, 1871, the South African explorer Carl Mauch visited the ruins of an ancient and mysterious city in the highland between the Zambezi and Limpopo rivers, long known by native report to the Portuguese, and situated in a land which from its gold and ivory has long been identified by some authorities as the Ophir of Scripture. Letters describing the ruins are published in the *Mittheilungen*. Zimbaoe lies in about lat. 20° 14′ S. long. 31° 48′ E. One portion of the ruins rises upon a granite hill about 400 feet in relative height; the other, separated by a slight valley, lies upon a somewhat raised terrace. From the curved and zigzag form still apparent in the ruined walls which cover the whole of the western declivity of the hill, these have doubtless formed a once impregnable fortress. The whole space is densely overgrown with nettles and bushes, and some great trees have intertwined their roots with the buildings. Without exception the walls, some of which have still a height of 30 feet, are built of cut granite stones, generally of the size of an ordinary brick, but no mortar has been used. The thickness of the walls where they appear above ground is 10 feet, tapering to 7 or 8 feet above. In many places monolith pilasters of 8 to 10 feet in length, ornamented in diamond-shaped lines, stand out of the building. These are generally 8 inches wide and 3 inches in thickness, cut out of a hard and close stone of a greenish-black colour, and having a metallic ring. During the first hurried visit, Mauch was unable to find any traces of inscription, though carvings of unknown characters are mentioned by the early Portuguese writers. Such however may yet be found, and a clue be thus obtained as to the age of the strange edifice. Zimbaoe is in all probability an ancient factory, raised in very remote antiquity by strangers to the land, to overawe the savage inhabitants of the neighbouring country, and to serve as a depot for the gold and ivory which it affords. No native, mud-hut dwelling tribe could ever have conceived its erection.

Yellowstone National American Park.—Following a recommendation made by the Committee on Public Lands, the Congress of the United States has approved an Act by which a large area of country situated in the western territories of Montana and Wyoming is withdrawn from occupancy, settlement, or sale, and is dedicated and set apart for ever as a National Park or pleasure-ground. The region was first surveyed in 1871, by a party under the leadership of Dr. F. V. Hayden, United States geologist, and proved to contain groups of natural curiosities unequalled perhaps in any other portion of the globe. The reserved tract is a square of 55 miles by 65 miles (embracing an area comparable with that of Yorkshire), surrounding the head lakes of the Yellowstone and Madison rivers. Forest-covered spurs of the Rocky Mountains, of from 10,000 to 12,000 feet in elevation, hem the valleys in on every side, and are snow-covered on their summits throughout the year. The whole region has been within comparatively modern geological times the scene of the greatest volcanic activity of North America. Hot springs and geysers (compared with which those of Iceland are insignificant), thickly spread along the margins of the lakes and on the river banks, represent the last stages—the vents or escape-pipes—of these remarkable manifestations of internal force. "All these springs are adorned with decorations more beautiful than art ever conceived, and which have required thousands of years for the cunning hand of nature to form." On issuing from the lake the Yellowstone forms an upper and lower series of falls, and then enters a grand cañon, through which it rushes for upwards of ten miles. The park will be henceforth under the exclusive control of the Secretary of the Interior, who will as soon as practicable make arrangements for the preservation of its wonders, and their retention in their natural condition. The withdrawal of this tract from settlement will be regarded by the entire civilised world as a step of progress and an honour to the American nation.

Zoology.

Venomous Fish.—It is generally known that the wounds inflicted by the weevers (*Trachinus*) of our coasts and by the sting-rays are rendered poisonous by a mucous excretion adhering to the spines of the head, back, and tail of these fishes; and a most perfect poison-organ, analogous to the poison-fang of snakes, was described some years ago by Dr. Günther in two fishes (*Thalassophryne*) from Central America. Dr. Le Juge has found at the Mauritius another still more dangerous kind of venomous fish; it was long known to ichthyologists under the name of *Synanceia verrucosa*, and is readily recognised by its monstrous appearance, the head being deeply pitted, and the body scaleless and covered with warts. It is by no means scarce, being found throughout the Indian Ocean, and known at the Mauritius as the "Laffe." There are thirteen spines in the dorsal fin, each provided at its base with a bag containing the poison, and with a pair of deep grooves along which the poison is guided to the wound. As in all the other fishes of this kind, the poison-apparatus is merely a weapon of defence, and comes into action when the fish is seized or trodden upon. The action of fish-poison upon the human organism appears to be less rapid than that of snakes; though patients who neglect to apply remedies similar to those used for snake-bites expose themselves to serious consequences, which may even terminate fatally. In one case a fisherman died on the third day from a severe wound. Dr. Le Juge mentions that the fishermen of Mauritius successfully apply poultices of the leaves of a composite plant, *Microrhynchus sarmentosus*. (*Transact. R. Soc. of Arts and Sciences of Mauritius*, 1871.)

Immigration of some Animals to Mauritius and Reunion.—Dr. Vinson reports that about five years ago a French ship, *Le Saint Charles*, Captain Leymarie, landed at Reunion a cargo of seedlings of the sugar-cane from Java. A kind of lizard, previously unknown in the island, was observed among the young plants; one of them was caught, while others escaped and scattered themselves about the neighbourhood, where they rapidly increased in numbers, and are at present perfectly naturalised. Dr. Vinson considered it to be the *Calotes versicolor*, which must however be a mistake, as this lizard is not found in Java; it is more probable that it is a species of *Bronchocoele*, perhaps *B. cristatella*.—A fine butterfly (*Papilio demoleus*), a native of the east coast of Madagascar and Natal, made its appearance in Mauritius at the commencement of the year 1870, and since that date many specimens have been caught. Another butterfly, *Junonia rhadama*, from Madagascar, has become very common in the same island since the years 1857 or 1858, whilst others, such as *Vanessa cardui*, that were common

thirty or forty years ago, are now becoming more and more scarce. (*Transact. R. Soc. Maurit.* 1871.)

Fishes of China.—The twelfth volume of the *Verhandelingen der K. Akademie van Wetenschappen in Amsterdam* contains a very important memoir by the well-known Dutch ichthyologist, Dr. Bleeker, "Sur les Cyprinoides de Chine." The author gives a list of some fifty species belonging to the family of *Cyprinidae* or carp-like fishes, which have been described by his predecessors; and he has been able to add about twenty more to this number, from collections made by the French travellers M. Daubry and the Abbé David on the Yantsekiang, and preserved in the Paris Museum. He expresses a belief that this number, great as it is, barely represents one-half of the Cyprinoids actually inhabiting the fresh waters of the Chinese Empire. The forms resemble rather Japanese and European types than those from tropical parts of Asia; but as our knowledge of the fish fauna of China increases, differences between the northern and southern parts will appear more definite. The memoir is beautifully illustrated by fifteen double plates, apparently representing the specimens of the natural size. The founder of Chinese ichthyology is unquestionably the late Sir John Richardson, who gave very detailed reports on the fishes collected in China by Vice-Admiral Sir Edward Belcher, and by Messrs. Reeves, father and son, the latter having supplemented their collections by a very valuable series of drawings. Their reports were published in the year 1843 or earlier; and it is a remarkable fact that no more recent collections of importance have been brought to England, although the number of English residents and travellers in China has increased greatly since that time.

The Skin of Rhytina forms the subject of an interesting treatise by Dr. A. Brandt in No. 7 of vol. xvii. of the *Mémoires de l'Académie imp. des Sciences de St.-Pétersbourg*. All hitherto known of the integuments of this extinct boreal Manatee is contained in Steller's account; he described them as rough and furrowed like the bark of a tree, whence the German name "Borkenthier." The truth of what Steller had said is fully confirmed by the discovery of a piece of skin, found by Dr. Brandt amongst corals in a store-room of the St. Petersburg Museum. A more minute examination has convinced the author that the rough appearance is caused by the ravages of a sea-louse (*Cyamus rhytinae*) about an inch in length, which had lived parasitically in vast numbers on the animal's sides. Under normal conditions the skin of the whole body is smooth; this is evident from the circumstance that the skin of the back appears always to retain its smoothness; this part is frequently raised above the surface of the water, and the *Cyami* are unable to thrive when exposed to the air, while they are not unfrequently picked off by sea-birds. Bristle-like hairs are to be found over the entire body. The skin was greatly valued by fur-hunters in Kamtschatka for making a very durable and light sort of boat for crossing from one Aleutian island to another.—Dr. Murie has written some commentatory notes on this treatise in *Ann. and Mag. Nat. Hist.* (April 1872). He does not entirely agree with Dr. Brandt as regards the cause of the roughness of the skin, thinking it probable that the skin was normally characterized by innumerable larger and smaller wavy grooves and ridges, and that the parasites could have caused but a limited amount of irritation.

New Theory of the Rattlesnake.—It has long been urged as an objection to the theory of natural selection that the tail-appendage of the rattlesnake must be injurious to the animal by attracting to it the notice of its enemies. Professor Shaler has however observed that the noise of the rattle is scarcely distinguishable from the sound made by an American species of Cicada; and he conjectures that the object of the rattle is to attract within reach of the snake the birds which naturally feed upon the Cicada. This he considers to be the explanation of the mode in which birds are seen to flutter round a rattlesnake, without calling into play the unreasonable theory of fascination. A formidable objection to the universality of the principle of natural selection is thus removed. Professor Shaler's paper will be found in the *American Naturalist* for January.

Another species of *Pedicularia*, a genus of Mollusks living parasitically on corals, has been discovered by M. Nobillard; he found it at Mauritius on an *Oculina*. (*Transact. R. Soc. Maurit.* 1871.)

The *Sitzungsberichte der Akademie der Wissenschaften in Wien* for 1871 contain the following zoological papers:—Vol. lxiii.: A Manzoni, "Supplemento alla Fauna dei Bryozoi Mediterranei," first contribution, pp. 73–82, with 3 plates; and J. L. Fitzinger, "A Synopsis of the Species of *Vespertilionidae*," pp. 203–295, and of *Bradypus*, pp. 331–405.—Vol. lxiv. (July) contains a Synopsis of the species of *Dasypus*, by the same writer (pp. 209–276).

Botany.

The Geographical Distribution of Compositae.—Mr. G. Bentham read a paper on this subject at two recent meetings of the Linnean Society, in continuation of his paper on the structure of the same order of plants (*Academy*, vol. iii. p. 73). The genera and species of this largest order of flowering plants are about equally distributed between the Old and New World; of the genera about 410 are found in the former and 430 in the latter; of species, about 4400 in the Old World and a rather larger number in the New. Not quite 70 species are common to the two hemispheres, and these mostly belong to the extreme northern regions; a few are common to New Zealand and Antarctic America; not more than a dozen tropical species are found in both the Old and New World, and some of these are coast plants. The form which Mr. Bentham looks on as prototypic, and possibly ancestral to the whole order, includes a few closely allied genera, distinguished by their regular corolla, belonging rather more to the American than the Old World distribution, being found in Chili, with an outlying genus in St. Helena. Other types, apparently of great antiquity, are found in Africa, Australia, and Western America. Since the separation of the Indo-Malayan and Australian regions from one another, there appears to have been a continuity of races of Compositae across the Tropics from south to north. The paper, which enters exhaustively into the distribution of the various tribes and more important genera, will be published in the *Journal of the Linnean Society*.

New Parasitic Plant of the Mistletoe Family.—Professor Asa Gray records in the *American Naturalist* for March the discovery in the State of New York of a new species of *Arcenthobium*, a small kind of mistletoe belonging to the order Loranthaceae. It was found in two localities parasitic in great abundance on a black spruce; the limbs of the trees affected were very much distorted, every twig bristling with the little parasite; and some trees seem to have died through its absorption of their sap. The curious part of the discovery is that a plant of this sort, growing on the boughs of the spruce trees in such quantity as to distort and even destroy them, and in three adjacent counties of a long and fully settled region, has been hitherto entirely overlooked; and then, when discovered, found about the same time by two independent observers at considerable distance from each other.

The Uses and Origin of the Arrangements of Leaves in Plants.—Dr. Chauncey Wright reprints from the *Memoirs of the American Academy* an elaborate and important paper bearing this title. The author's object is to attempt to explain, on the principle of natural selection, the existence of the modes of phyllotaxis most frequently actually found in nature. These consist of two principal general forms; the verticillate and the spiral, of which the latter is by far the most complicated. In the case of the spiral arrangement, the angle of divergence between the two leaves next to one another on the stem is expressed by the general form of the fraction

$$\cfrac{1}{a+\cfrac{1}{1+\cfrac{1}{1+\ \&c.\ \&c.}}}$$

a being 1, 2, 3, or 4. It is found, however, that certain only of these fractions are met with in the spiral arrangement, while some of those are of much more frequent occurrence than others. An elaborate series of calculations has for its object to show that the particular forms of spiral arrangement actually found in nature are those which possess the greatest advantage for the plant by so arranging the leaves and branches that they have the most perfect distribution, so as not to interfere with one another in drawing nutriment both from the stem of the plant and the surrounding atmosphere.

A letter from Tübingen announces the death of Professor Hugo von Mohl, which occurred on the morning of the 1st of the present month. He was born at Stuttgart on the 8th April, 1805, the youngest of four celebrated brothers; and in 1835 became professor of botany and director of the botanic garden of the university of Tübingen; during the interval he has added greatly to our knowledge of vegetable physiology.

New Publications.

Arbeiten aus dem physiologischen Laboratorium der Würzburger Hochschule. Herausg. von A. Fick. Würzburg: Stahel.

Claus, C. Die Metamorphose der Squilliden. Göttingen: Dieterich'sche Buchhandlung.

Clebsh, A. Zum Gedächtniss an J. Plücker. Göttingen: Dieterich'sche Buchhandlung.

Dubois, C. F. Planches coloriées des Oiseaux de l'Europe et de leurs Œufs. 106 livr. Brussels: Muquardt.

Ferrière, E. Le Darwinisme. Paris: Germer-Baillière.

Müller, Hermann. Anwendung der Darwin'schen Lehre auf Bienen. (Separat-Abdruck.) Bonn.

Naval Science. No. I. Edited by E. J. Reed. Lockwood.

Ulrich, W. Internationales Wörterbuch der Pflanzennamen. 4. Lieferung. Leipzig: Weissbach.

Wolpers, J. P. Newton's Mathematische Principien der Naturlehre. Berlin: Oppenheim.

History.

The Decline of the Roman Republic. By George Long. Vol. IV. London: Bell & Daldy. Cambridge: Deighton, Bell, and Co.

The history of Rome after the Social War is so full of anomalies that we are certain to misconceive it when we try to represent it to ourselves by the help of analogies drawn from a comparatively normal state of things. We cannot resolve the chaos into a struggle between an impoverished populace and a corrupt oligarchy, which found its happiest issue, in the absence of a strong and healthy middle class, through the establishment of a democratic despotism: the empire had its democratic side; but of all the emperors of the first two centuries, Nero was the only demagogue. Augustus, Tiberius, Domitian were conservative to the verge of reaction. The fact is, that after the slaughter of Gaius Gracchus the assembly was practically reduced to the condition of a puppet: it had been proved that the voters could not use their enormous powers so as permanently to better their own condition; and yet those powers were in excess of their capacity, and they retained them unimpaired; and after the restoration under Sulla the senate was a puppet too. Sulla saved the nobility, but he stultified them. It is clear from Cicero's early speeches that out of Rome the men of order were upon the whole on the side of Marius, in spite of his excesses, and that the following of Sulla contained a very large proportion of cosmopolitan adventurers. He filled up the senate with these: and throughout his reorganization of the state favoured the senate, but did nothing for the nobility as such. In fact it did much against them; for the multiplication of quaestorships and praetorships was really a contrivance for pouring a constant stream of "new men" into the senate, for the great families of Rome were not fruitful. Both the senate and the assembly were instruments which might still be used with effect to decide the battle between the real forces of the time. Perhaps it would be hardly too much to say that the proximate cause of the collapse of the republic was that Caesar was confronted by a senate which had all the weakness, all the unpopularity, and none of the strength of a compact oligarchy.

It was this which paralysed Cicero, the only politician of the day who was at once loyal, public-spirited, and intelligent. His career was a series of real humiliations, chequered with pasteboard triumphs, because he neither did nor could observe the late Mr. Cobden's maxim to look at the force behind him as well as the end before him. He was always compromising his personal position for the public good and drawing back to save his personal position when he found he could not serve the public. This is the adequate explanation of his conduct about the Campanian domain; in 56 B.C. Caesar, Pompeius, and Crassus had been drifting apart; Pompeius was discredited, and the populace was inclined to set up Crassus against him. If the senate's *esprit de corps* had been stronger, if it had not been disgracefully weak, it was quite a feasible enterprise to break up the Campanian commission. As two hundred senators attended the congress of Lucca, it was useless for Cicero to press his motion; but it is strange that a historian who expresses so few opinions as Mr. Long should blame him so strongly for making it. Mr. Long seems to write, if I may be pardoned for saying so, too much under the dominion of the common prejudice, that the three confederates were the effective rulers of the Roman empire; it would be as reasonable to say that the empire was governed in the fifth century by the tribes of barbarians who were encamped within it. The confederates had an exceptional position in the state: they could carry most of their measures, but they were liable to occasional defeats; they could not always protect their dependents. Important resolutions like the confiscation of Cyprus were carried through without consulting them; much of the routine of administration went on without their interference. Mere city partisans were as important in politics as ever; as Mr. Long points out, Cicero owed his restoration to the energy of Milo. It is quite possible that, if the senate had been patient, firm, and united—if Cicero had enjoyed the ascendency of Lord Lyndhurst—the old constitution might have weathered the storms of another half-century, and that the final transformation which now seems inevitable might have been wholly different. Pompeius, who hankered after the monarchy, judged it impossible to reign in spite of the senate and nobility, or to extort their sanction: Caesar, who certainly regarded the senate and the nobility as an incubus upon the Roman world, was far from having determined to seize the monarchy for himself at the time of the congress of Lucca, unless we suppose that he had determined to betray his confederates.

For dealing with so confused a period, there are undeniable advantages in Mr. Long's method of writing history, though every volume renews our surprise and regret that a writer so industrious, so impartial, and so accurate should either not possess, or, possessing, should so completely and so pertinaciously suppress, the other qualities which it is natural to desire in a historian. Still a *précis* of all the evidence, however dry, is sure to bring something to light which writers of more insight leave in the shade. No other history gives quite sufficient prominence to the fact that after the congress of Lucca it was the influence of Caesar far more than of Pompeius which kept the senate quiet; certainly none shows so clearly that the final rupture was due simply to the shortsighted, disloyal selfishness of Pompeius, who drifted himself and forced the senate into a ruinous conflict rather than give up the preposterous pretension of putting Caesar back in a position where he could patronise him.

The chapters on Roman affairs are not the largest part of the volume, but they are the most valuable and suggestive. It is difficult to see what purpose is served by translating all the notices of the Britons and Germans in ancient writers, even to their pragmatical remarks: if there are materials for constructing an intelligible picture of ancient British or German society, the writer should have done much more; if there are not, it was hardly worth while to do so much. Mr. Long adheres to his former opinion that in both his invasions of Britain Caesar landed at Deal; he regards it as an insoluble question whether he sailed from Wissant or Boulogne. He repeats more than once an enquiry, which is surely superfluous, as to where Caesar got his information about what Vercingetorix planned or said: he could question his other prisoners, he could question Vercingetorix, who was doubtless glad to talk. Mr. Long takes the execution of the Gallic leaders from Dion without comment or acknowledgment: he rejects the picturesque and theatrical details of his surrender, which are equally probable, and rest on the same authority. In general he scolds Dion whenever he goes beyond Caesar; he follows him sulkily when he supplements Cicero; it is after all only natural that such a painstaking writer should be irritated by Dion's peculiar kind of cleverness. Much use has been made for the Gallic campaigns of the topographical and other illustrations collected by the author of the *Histoire de César* and others. Mr. Long exercises an independent judgment upon previous writers; but when he follows at all, he follows servilely: writing from the *Histoire de César*, he is led to speak of "the Auvergne;" writing from Hirtius, he is led to speak of Gallic customs in the present tense: the only Gallic name he has ventured to de-Latinise is Cominus, who, after a chapter or two, is cut down to Comin.

G. A. Simcox.

Droit Musulman. Recueil de Lois concernant les Musulmans Schyites. Par A. Querry. Tome premier. Paris: Maisonneuve, 1871.

The present book is composed mainly for practical purposes. The author, M. Querry, French consul at Tabriz, intends to provide for the wants of European agents residing in Muhammadan, and more specially in Shiite, countries by furnishing them with a complete *Corpus Juris Muslimici.* Speaking of the difficulties which this class of men frequently experience in consequence of their imperfect knowledge of Muhammadan law, he says: "These difficulties are particularly severe when between Europeans and natives there arises one of those differences which according to the treaties must be decided by the tribunals of the country. In Turkey the institution of the mixed tribunals has to some degree diminished these inconveniences; but in Persia there is no court of justice, and, since the matter of dispute is there always referred to the minister of foreign affairs, it happens frequently that the European agent finds it an embarrassing task to discuss or to refute an objection based on the law of the country." It must be stated, however, that there exists already a work which we consider as a reliable guide for our officials in the East in all such emergencies: we mean the compendium of Shia law by N. v. Tornauw. But as it is written in Russian or German, most of them will not be able to use it. In order to fill up this gap in literature, M. Querry has undertaken to translate a standard work on Shia law, without altering anything in its original order and without any omission. For this purpose he has chosen the *Sharâ'i-al'islâm* by Najm-aldîn Ja'far le-Alî Almuhakkik (who died A. H. 676), the most famous law-book in all Shiite countries. This first volume contains the first half in two books: I. the 'Ibâdât, in ten parts (purification, prayer, poor-rate, &c.); and II. the 'Ukûdât, in nineteen parts (sale, pawn, wills, marriages, &c.). The whole is very well arranged, being distributed in single paragraphs, in order to facilitate reference.

It does not seem to have come to the knowledge of the translator that a considerable portion of this work, the text of which was edited in Calcutta, 1839, has already been translated into a European language; at all events, he does not mention it in the preface. Of the eight books contained in Neil B. E. Baillie's *Digest of Moohummudan Law*, part ii. (see *Academy*, vol. ii. p. 318), the first seven are translated from the same Sharâ'i-al'islâm; the books 1, 4, 5, 6, occur already in this tome premier of M. Querry. Mr. Baillie selected those parts which are most important for Anglo-Indian lawyers and judges; he did not translate them in their entirety, but omitted such passages and portions which in his opinion served less the immediate purpose, whilst M. Querry translates the original as it is.

Comparing the two translations with each other, without having the text at hand, we are happy to say that on the whole they agree very closely, and that the one proves the accuracy of the other. Still, there are many differences, on the character of which it would not be possible to pronounce except on the authority of the Arabic text. If, for instance, the paragraphs in the law of marriage 55, 60, and certain passages in paragraphs 37, 38, 57, are wanting in Baillie's *Digest*, we cannot say whether he has omitted them or whether that copy from which M. Querry translated was interpolated. There are, however, differences of greater consequence, in fact, different interpretations of the same words. And nobody who ever tried to disentangle the intricacies of the style of Arabic lawyers will wonder that such things should happen even to men who are so well prepared for their task as Mr. Baillie and M. Querry. We may even go so far as to maintain that in certain cases, in consequence of the ambiguity of Arabic forms, it is impossible to find out with complete certainty the meaning of the author. If, for instance, he does not add an interrogative particle, how is one to know whether his words are to be interpreted in a positive or interrogative sense? And on such difference of interpretation the fortune and life of people may depend.

In the chapter of the treaty of marriage, Almuhakkik says on p. 647: "De même, si, le mandataire s'adressant au père de la femme en ces termes: 'J'ai épousé ta fille au nom d'un tel,' le père répond par *oui*, le mariage est valide." The same words are translated by Baillie (*Digest*, p. 3) in a somewhat different sense: "If one person should say to another, 'Hast thou married thy daughter to such an one?' and the person addressed should answer, 'Yes,' whereupon the husband should reply, 'I have accepted,' there would be a valid marriage."

M. Querry translates on p. 648, § 54: "Au cas, où, de deux personnes, l'une seulement déclarera être unie en mariage à la seconde, qui nie le fait, le mariage sera présumé valide dans les cas à la charge du déclarant, à l'exclusion de celui qui nie l'acte." The same passage is understood by Baillie (p. 5) thus: "If one of them should make such a declaration (that is, should declare to be married to some person who denies it), judgment for all the effects of the contract is to be given against him or her only, to the exclusion of the other."

In the law of wills, on p. 617, § 62, M. Querry translates: "Si le testateur a légué une somme quelconque sans désigner le légataire, le legs sera consacré à des œuvres générales de bienfaisance." This is quite irreconcilable with Mr. Baillie's translation (p. 238): "If a man should make a bequest for several purposes, of which the executor has forgotten one or more, he should dispose of it in some good or proper way."

If a person has bequeathed an undetermined part of his property, one interpretation assigns to the legatee the tenth of the third of the whole property. So, M. Querry (p. 617) quite correctly, because only one third of the property is at the free disposition of the testator; whilst, according to Mr. Baillie, one tenth of the testator's estate is assigned to the legatee. So there is a difference of $\frac{1}{10}$ and $\frac{1}{30}$.

We could give a very long list of similar discrepancies. Not having the original before us, we cannot judge who is right or wrong, but from this comparison it results of necessity that both translations are insufficient guarantees for a conscientious lawyer, if he does not consult the Arabic original in all cases on which the two translators diverge. There is a class of literature which is beyond the limits of the translator's skill, and we are very much inclined to reckon Muhammadan law-books as belonging to this class. They can be commented and transcribed, but at all events many of them, if not all, can never be translated.

The question, therefore, arises how to make a practical handbook of Muhammadan law for all those who want this knowledge, and who cannot study the Arabic originals. We should propose for this purpose to translate as well as possible some accredited text of the law, and to add copious extracts from numerous commentaries of good renown. We ought to adopt the system of the Arabs themselves, whose law-literature is nothing but *one* commentary. Thereby we should obtain two results: First, any lawyer not conversant with Arabic would be able to penetrate into the interpretation of the original as far as any Arabic philologist, European or native. And these commentaries *can*, in fact, be translated, because one helps to elucidate the other. Secondly, the student would become familiar with the Eastern mode of reasoning, with the methods of argumentation of the greatest lawyers of the East. This process may seem somewhat long, troublesome, and expensive, but we maintain that it is the

only one by which it would be possible to provide for all the wants of the most conscientious and scrupulous jurisdiction. The nearest approach to a handbook of this kind is Hamilton's *Hedâya*. Ed. Sachau.

Intelligence, &c.

A new history of Russia, by Professor Bestushev Rumm, has been now published at St. Petersburg (Koshanchikov). The same has published a complete edition of the *Historical Monographies and Researches* of the famous writer and scholar (*in russicis*) Kostomorov, and many translations of great historical works (Motley, Louis Blanc, Tocqueville, &c.).

Altpreussische Monatsschrift, Jan.-Feb.—Lohmeyer shows that the "amberland" of which Pytheas, the early traveller from Marseilles, heard, was probably the Frisian coast and islands, and not the Prussian coast on the Baltic, which the Romans afterwards arrived at by an exploring expedition overland from Carnuntum (close to Vienna).—An account is given of the new MS. (found at Lemberg) of the *Chronicle of Oliva* (close to Danzig), which contains some interesting particulars of the Black Death in Edward III.'s time, the plague which changed the character of the middle ages.—A notice of the German translations of Dante follows.

New Publications.

Höfner, M. J. Untersuchungen zur Geschichte des Kaisers L. Septimius Severus und seiner Dynastie. Erster Band. 1. Abtheilung. Giessen: Kicker.

Hook, W. F. Life of Archbishop Parker. (Lives of Archbishops of Canterbury.) Bentley.

Monumenta Historiae Wormiensis. Bd. V. 1. Abth. Codex Diplomaticus Wormiensis. Hrsg. v. C. P. Woelky. Leipzig: Peter.

Publications de la Section historique de l'Institut royal grand-duchal de Luxembourg. Année 1870–71. Luxembourg: Bück.

Raabe, A. H. Geschichte u. Bild von Nero. Nach den Quellen bearbeitet. 1. Hlfte. Utrecht: Kemink u. Zoon.

Tischendorf, P. A. v. Das Lehnwesen in den moslemischen Staaten, insbesondere im osmanischen Reiche. Leipzig: Giesecke u. Devrient.

Urkunden u. Aktenstücke zur Geschichte d. Kurfürsten Friedrich Wilhelms von Brandenburg. 6. Bd. Politische Verhandlungen. III. Hrsg. v. B. Erdmannsdörffer. Berlin: Reimer.

Philology.

Cornelii Taciti Germania. Erläutert von Dr. H. Schweizer-Sidler. Halle, 1871.

This very interesting edition is, as Dr. Schweizer-Sidler iuforms us in his preface, a forestalment, for the use of schools, of a more comprehensive revision of the *Germania*, intended to form part of a new edition of Orelli's *Tacitus*. Probably no living scholar is better fitted than Dr. Schweizer-Sidler for such a work, which requires a combination of the resources of exact Latin scholarship with those of Indo-Germanic philology and antiquities. The introduction is short, but not so short as to preclude the editor from expressing his inclination to attribute the *Dialogus de Oratoribus* to Tacitus (p. viii). With regard to the *Germania* he is (p. ix) perhaps not quite indulgent enough to the old theory that Tacitus intended it as a mirror in which his countrymen might behold and consider the vices of their own civilisation. It cannot, indeed, be proved that this was the exclusive or even a principal object of the work: but there is considerable internal evidence to show that such an idea was not absent from the historian's mind. As the style of Tacitus savours of poetry and declamatory exercises, so his views of law, politics, and morality, are often not so much those of a statesman as of a member of an embittered literary and philosophical coterie. In common with other eminent writers of his age, he was driven by circumstances to take up, more or less, the attitude of a satirist. Witness such scholastic observations as "aurum et argentum propitiine an irati di negaverint dubito" (*Germania*, 5); "faenus agitare et in usuras extendere ignotum, ideoque magis servatum quam si vetitum esset" (*ib.* 26). The remark at the end of c. 19, "plusque ibi boni mores valent quam alibi bonae leges," gives the tone to much of the disquisition on the social and moral state of the Germans; and the chapters on marriage (19), on slavery (25), on interest (26), and on funerals (27), contain, as our editor himself acknowledges in his notes, much obvious innuendo.

The chief interest of the notes is the constant application to Tacitus' work of the latest results attained in the study of old German history, literature, and antiquities. Since the death of Jacob Grimm, the names of many scholars have been conspicuous in this field, notably those of Zeuss, Wilder, and Müllenhoff, of whose works Dr. Schweizer-Sidler has made considerable use, with great profit and interest to the reader of the *Germania*. Among the most interesting notes may be mentioned that on the homage paid to women by the Germans (c. 8); on the *comites* and the degrees of the *comitatus* (c. 13); on the words expressive of relationship (c. 20); and on the names of the seasons (c. 26). The difficult word *principes*, which Tacitus (not improbably from want of exact knowledge) seems to use vaguely, Dr. Schweizer-Sidler declines to take in so strict and limited a sense as was put upon it by Waitz. The *pagus* he thinks consisted, not of a hundred houses, but of a hundred *gentes*, each consisting of ten houses: see notes on cc. 7 and 12.

Something might, we think, be added to the notes in the way of interpretation and analysis of language. In c. 3, in the passage "sunt illis haec quoque carmina, quorum relatu . . . . accendunt animos," the editor suggests that "haec" may stand for "illa." But Tacitus, in c. 2, has been speaking of "carmina antiqua," the songs in which the records of the race are enshrined: do not the words "haec quoque carmina" refer by contrast to this passage? "They have these (martial) songs as well." In c. 7, "unde feminarum ululatus audiri, unde vagitus infantium," we do not see why "audiri" should not stand as historical infinitive, when Virgil, whom Tacitus is so fond of imitating, writes, "hinc exaudiri gemitus iraeque leonum" (*Aen.* 7, 15). If emendation be required, "audieris" would be a less violent change than "audias," to which the editor inclines. In c. 13, "haec dignitas, hae vires, magno semper electorum iuvenum globo circumdari, in pace decus, in bello praesidium;" and 16, "eosque (specus) multo insuper fimo onerant, suffugium hiemis et receptaculum frugibus," some notice is due to the construction of the cognate accusatives *decus* and *suffugium*, which, if we mistake not, is rare in Latin prose, and in any case requires explanation in a school edition.

We may further notice several poetical, if not strictly Virgilian, expressions scattered up and down the *Germania*, most of which have been overlooked both by Orelli and the present editor. Comp. c. 2, "Mannum, originem gentis," with Virgil, *Aen.* 12, 166, "Aeneas, Romanae stirpis origo;" c. 5, "silvis horrida," with *Aen.* 8, 348; c. 6, "missilia spargunt," with Virgil (copying from Ennius), *Aen.* 7, 687, 8, 695, &c.; c. 14, "bellatorem equum," with Virgil, *Georg.* 2, 145, &c.; c. 20, robora parentum liberi referunt," with Virgil's "invalidique patrum referunt ieiunia nati," *Georg.* 3, 128 (is *referre* in this sense ante-Virgilian?); c. 29, "limite acto," with "ardens limitem agit ferro," *Aen.* 10, 514; the description of the goddess Herthus, in c. 40 ("invehi populis arbitrantur"), with the description of Cybele, *Aen.* 6, 785, "invehitur curru Phrygias turrita per urbes;" c. 44, "velis ministrantur," with "velis ministrat," *Aen.* 6, 302; and the curious periphrasis, "naturam sucini" (= *sucinum*), in c. 45, with Lucretius' "naturam inolentis olivi" (2, 850) = *olivum*.

We conclude with expressing a hope that Dr. Schweizer-Sidler will not confine his efforts to this edition, but will one day devote a work of wider scope to the treatment of the

general connection of the Latin language and antiquities with those of the other branches of the Indo-Germanic family.

H. Nettleship.

Inscriptiones Hispaniae Christianae. Ed. Aemilius Hübner. Berlin: Reimer, 1871.

This volume is, as will readily be inferred from its title, a corollary to the second volume of the Berlin *Corpus Inscriptionum*. Professor Hübner has conferred no slight benefit upon the public in proceeding so quickly from the larger to the smaller work. He has felt it his duty, he tells us in his preface, that the editor of the one should be the editor also of the other, and rightly judges that the collection will be a useful one, even though the inscriptions "do not contribute much to the advance of the study of Roman antiquities." This feeling deserves grateful recognition; for he might not unnaturally have set aside these Christian monuments belonging to an obscure branch of mediaeval history, as alien from his own studies. In this case we might have had to wait for a long period before any such collection was made, and should hardly at any time have found an editor in whose sagacity in detecting the frauds that beset this subject and in whose complete knowledge of the material we could have reposed equal confidence. It would seem indeed almost impossible that this small volume can contain all the Christian inscriptions of Spain and Portugal up to the tenth or eleventh century, nor are the readings given in every instance incapable of amendment. Incompleteness and uncertainty are in fact defects incident to all such undertakings: but one constructed on a solid work manlike plan such as the present will in the future only require addition and correction, and can never become obsolete.

Our readers will no doubt be glad to have some general outline of the volume, and some indication of the chief points of interest in it. Both these matters are dealt with clearly and succinctly in the preface, which seems intended, with the index, to supplement the otherwise rather too scanty notes.

The inscriptions follow in general the geographical order of the larger volume, but are not rich enough in number to require more than a division into three parts. The first, Lusitania, is represented by forty-four inscriptions; the second, Baetica, by ninety, while Tarraconensis, Asturia, and Gallaecia have only sixty between them—the northern provinces being very scanty in their yield. Next follow a small number of inscribed tiles, bricks, and rings (*instrumenti domestici inscriptiones*). Then we have the *tituli recentiores* of the ninth and tenth centuries, with a few of the eleventh, and the *falsae vel suspectae* in two divisions, according as they claim the earlier or the later date. Lastly come the *indices* in numerous divisions, and a clear and very useful map marking accurately the relative positions of all the places represented in the text. As to this latter part, it is to be noted as a real want that there is no verbal index—a want, too, that very much mars the usefulness of the second volume of the *Corpus*. Without such a help it is often difficult to prove a positive conclusion, and almost impossible, however much we may wish it, to prove a negative. One might have hoped that the recognised utility of his verbal index to the volume edited by Professor Mommsen might have induced Professor Hübner to make these volumes of his own editing equally complete.

As to *matter*, sepulchral inscriptions—which are always the most numerous—here number three quarters of the whole. The rest chiefly record consecration of churches or the presence of certain relics. The few that remain belong in some way or other to church interiors, two only being upon profane edifices. A few Greek and a few Jewish are scattered through the book. In point of *date* none are earlier than the fourth century, and of the earlier division about half are dated by the Spanish era, calculated to begin 38 B.C. Not only is the significance of this epoch obscure, but the meaning of the word and the way of writing it is disputed. It is stated (Orell. ii. p. 374) to be first found upon Christian inscriptions of the fifth century, and is almost always written *era*, though here we have once *iera* (No. 222, saec. x), and *aera* is sometimes found (No. 44, aera 548, and in four others of less certain genuineness). The oldest explanation suggested by Isidore (*Orig.* v. 36, 4) is as follows: "Aera singulorum annorum est constituta a Caesare Augusto, quando primum censum exegit ac Romanun orbem descripsit. Dicta autem aera eo quod omnis orbis aes reddere professus est reipublicae." This cannot be right, but the derivation from the plural of *aes*, used as a feminine singular in the sense of "item" and then "element of calculation," had long possession of the field, and is still defended by Wieseler (Herzog, *Encyl. Theol.* word *aera*). Ideler, among others, has accepted the suggestion that connects it with the Gothic *jer*, the German *Jahr*, and our *year*. We should have been glad of Professor Hübner's own opinion on this point, and hope that he will think it worth his while to discuss it in a future number of the *Ephemeris Epigraphica*.

Of the *names* of persons mentioned in these inscriptions we have five classes, viz. ordinary, provincial, Greek, Biblical, and Gothic, &c. Of the provincial names, those peculiar to Spain seem to be *Acisclus*, *Armiger*, *Bracarius*, *Cerevella*, *Cuparius*, *Eburinus*, *Granniola*, *Lilliolus*, *Salvianella*. The first of these—the name of a well-known saint of Corduba—seems to represent the pick of a *fossor* or stone-cutter; the others are not difficult to understand.

The *formulae*, of which we find in the preface a considerable list, do not show very remarkable divergence from those usual in other places. It would have been as well to notice that the phrase *accepta poenitentia* (33, 43, 54) means "having received absolution." It is remarkable amongst other smaller points that the term *requievit* belongs to Lusitania and the adjoining parts of Baetica, while *recessit* is almost confined to the rest of Baetica. The terms *famulus* (or *famula*) *Dei* or *Christi* are common throughout, but almost peculiar to, the Peninsula. Of *Scripture quotations* we have only two, the famous words of Job (xix. 25, 26; No. 95), *credo quod Redemptor meus vivet et in novissimo die de terra sussitabit pelem meam et in carne mea videbo Dominum;* and the curious legend upon a gem, *os non cominuetis es eo* (No. 208; John xix. 36, cp. Exod. xii. 46). As to these, it should be remarked that the first agrees very little either with the old Latin or the Vulgate, though more like the latter. A similar epitaph is found in the cloisters of S. Paolo fuori le mura at Rome, which, like this, reads *Credo* and *Dominum* for the first and last words, but otherwise follows the Vulgate. The latter is the text of the Vulgate, where the old version has *confringetis* [*in eo* is a misprint for *es* or *ex eo*, praef. p. x]. To the formula of prayer, *ut pro tuo promisso et sublibamine* (*i.e.* sublevamine) *mereamur ingredi paradisi ianue* (No. 96), should have been added the versicles, on a paten (*Auctarium*, p. 120, No. 230), which should, of course, be supplemented as below—

Da pacem Domine in diebus nostris quia non est alius qui pu[*gnet pro nobis nisi tu Deus noster*].

The *sepulchral poetry* is, as far as metre goes, worse even than the pagan of a late date. We have here some of the earliest known instances of rhymed or Leonine verse, the first of a certain date really rhymed being No. 123, aera 680, A.D. 642, though not mentioned in the preface. The first four lines will show the average character of the metre, which

here as elsewhere disregards accent only more rarely than quantity:

Haéc cavá saxá—Oppiláni cóntinent mémbra
Cláro nitóre natálium — gestú abitúque conspícuum
O'pibus quíppe póllens—et árturum víribus clúens
Iácula véhi precípitur—predóque Bacceis destinátur.

So far it is possible to make a sort of accented verse, on the principle that no word may have more than *one* accent, or metrical ictus. But what can we make out of the following,

In procinctum belli necatur—opitulatione sodalium desolatur—?

We must only notice a few more points raised in the preface before proposing for consideration a few emendations in the text. The *grammatical* results which accrue from these inscriptions are not very striking. They certainly prove (as the editor remarks, p. xii) the non-existence of any supposed peculiar Spanish Latinity. There are traces even of a better orthography than might have been expected. Nevertheless, besides the ordinary depravations common at an earlier date, there are rather numerous instances of the palatal pronunciation, which according to Isidore may have begun first in Spain, and to which modern Spanish tongues are particularly adapted. Such are *baptidiatus*, *iudigsium*, *Sciprianus*, *septuazinta*, *sussitabit*, *Zacob*.

The number of unusual grammatical forms is not large. To those noticed in the preface and index we should add *annibus*, No. 139. The term *numero* = "in large numbers" was perhaps also worthy of remark, No. 140—

hic sunt reliquiae numero Sanctorum (n. n.) et aliorum numero Sanctorum.

In the appendix of *recentiores*—which appear to be separated on no very definite principle from the earlier ones—the form *Kal. Magii* for *Maii* (No. 258, aera 1077) might have been noticed. What, again, is *prilula* (No. 213, date A.D. 1000) in the line—

Piscator obiit prilula feritus—?

The following observations, amongst others, have occurred to me on a careful reading of the *text* of this volume. No. 125 (at Corduba), which Prof. Hübner finds obscure in parts, loses most of its difficulty if written out into the following incondite and incomplete hexameters:—

Crux veneranda hominum redemptio semper,
In qua Christus pendens homines redemit cunctos;
Teque ingestantes possident caelum.
Nunc melius gaudemus Christi morte redempti,
Dum caelum et paradisum Sina acipit homo.

Teque ingestantes receives light from No. 268 ☩, *crucis alme fero signu; fugie demon. era* (M)LXXXXVIIII [here 1089 is a misprint for 1099]. *Paradisum Sina* would almost seem to be a confusion in the writer's mind for *Sion*.

No. 126 is a list of relics of saints in St. Peter's Church, also at Corduba. First come the names of the five martyrs referred to by Prudentius as the glory of that city, in his well-known hymn (περὶ στεφάνων, 4, *de martyribus Caesaraugustanis*)—

Corduba Acisclum dabit et Zoellum
Tresque coronas—

the three being Faustus, Januarius, and Martialis. Then follow three uncertain lines. In these the letters RITA and CTT appear to be readable. Instead of *CARITAtis* in the first, which is, I believe, unknown as the name of a saint, I would suggest *LeocRITiae*, and in the second *PerfeCTI*—both *Leocritia* and *Perfectus* being recognised as martyrs at Corduba, the first on March 15th, the second April 18th.

In connection with this, I would take No. 175 from Acci (*Guadix*), near the head of the Guadalquibir, as Corduba is about halfway down its course. Here, in deciphering a similar inscription, Prof. Hübner has not shown his usual acumen. He is puzzled by the name *Sā Babile*, though *St. Babylas*, Bishop of Antioch, will be familiar to all readers of St. Chrysostom, while others will remember that the scene which took place at the removal of his bones from the precinct of Apollo at Daphnae, at the order of the Emperor Julian, was no small element in the dissension between him and the excitable inhabitants of that city (Amm. Marc. xxii. 12, 13; Soz. *H. E.* v. 19, &c.). In the next column of the same (l. 7, 8), we should certainly read *F[austi Ianu]ari et Martialis*, the "tres coronae" of Prudentius, and almost as certainly in the next line, *septe]m dormientes in E[pheso*, instead of the queer . . . *m dormiente sine e* . . . , though the change from genitive to accusative is a curious but not unexampled solecism (cp. the first lines of the epitaph of *Oppila* quoted above, No. 123). The next names are, of course, *Gervasi et Protas[i* (not *Servasi* . . *te*, &c.), the martyrs of Milan, unknown indeed in themselves, but famous for the miracles wrought at their translation by St. Ambrose—remarkable indeed as some of the best attested of ecclesiastical miracles (see, for instance, S. Aug. *Conf.* ix. 7). In their case, we may remark, as well as in that of St. Babylas, it was the translation which brought their relics into repute. In the next line but one we should probably supply *Scōr Ferre[olōr*. The space will not admit of more than one name; and we know that two Ferreoli were honoured in the neighbouring province of Gaul, one at Vesuntio on June 16th, the other as patron of Vienne, whose rather striking "passio" may be read in Ruinart, ed. Ratisbon. p. 489 sq.

In No. 142 the sense might be restored by a better punctuation. I should propose to write—

Haec tenet urna tuum venerand(um) corpus Vincenti, abb(at)is,
Set tua(m) sacra(m) tenet anima(m) caeleste sacerdos
Regnum, mutasti in melius cum gaudia vite,

instead of making *caeleste sacerdos* a vocative. And in the next line—

Martiris exempla signat quod membra sacrata
Demonstrante Deo vatis hic repperit iudex,

instead of *signant*—☧ being the monogram for *at*, and *NT* as in *demonstrante* for *ant*. *Exempla* is probably for *exemplar*, final *r* being not uncommonly lost in *late* Latin, as in *Marma* in the *Carmen Arvale* of the third century, *mate*, *pate*, *Alexande*, *soro*, *uxso*, &c. (Schuchardt, *Vok. d. Vulg.-Lat.* ii. p. 390. I do not quote *Maio*, *Mino*, *censento*, *rogato*, from *early* Latin, as these seem rather to indicate a loss of final *s*.) The meaning is very obscure, but seems to be, "The poet's finger, after finding the sacred limbs by God's guidance, marks (by these lines) the martyr's example"—*signat* being used somewhat in the sense which it is in Virgil with regard to Caieta's burial-place,

Et nunc servat honos sedem tuus, ossaque nomen
Hesperia in magna, si qua est ea gloria, signat.

A little lower down we may punctuate—

Sic simul officium finis vitamque removit,
Spiritus adveniens Domini quo tempore Sanctus
In regionem piam vexit animamque locabit.

This part of the inscription seems to be an epitaph of the finder of the relics, apparently a priest of the church, whose bones are perhaps joined with those of St. Vincent in the next line, as efficacious in freeing from purgatorial fires—

Omnibus hiis mox est de flammis tollere flammas.

In the ring, No. 204, I would suggest KIPIω, as the interpretation of the curious monogram apparently on the seal or gem; cp. No. 149, l. 10—

Hic valeas Kirio sacrata ut altaria Christo.

In the later series, in No. 219 (an epitaph of Abbot Samson, aera 928), a note is wanted on the lines, which I would thus arrange—

Cuius in urna manent hac sacra membra, inaula
Personat esperio illius famine fota.

Here *inaula*, which the MS. copy rightly writes as one word, *ināla*, is a superfluous compound, meaning "nave of a church," just like *inatrium* for *atrium*, *incurtis* for *curtis* ("court"), *indamnum*, &c., though I am not aware that *inaula* is elsewhere found.

The curious poetical touch, such as not rarely shines out in the midst of many a very commonplace epitaph, seems to mean, "Though he here lies buried, the church still rings with the doctrine of his native (*Esperio* = *Hispanico?*) eloquence." A similar touch is found in the earlier and more metrical epitaph No. 165—

Hunc cause meserum—hunc querunt vota dolentum
quos aluit semper voce manu lacrimis.

In No. 239, in the monastery of St. Stephen *de Riba de Sil*, a few miles from Orense, is a very barbarous epitaph to a bishop who had turned monk, which thus begins—

En quem cernis cavea saxa—teget compago sacra
Presul Isauri—per omnia inlustrissimi viri.

Cavea saxa is merely a modified form, of no particular gender, of *cava saxa* (No. 123), or *saxea cava* (No. 130), signifying a sarcophagus; and *compago sacra* appears to do duty for an accusative, as we might say, "the sacred frame;" but *Presul Isauri* should surely be *Presulis Auri.*, or *Aurie*, *i.e.* Bishop of Orense; for the line below—

Sinens cathedra predicta—agglutinans se norma monastica

shows that the name of his see has been mentioned. Auria is the mediaeval Latin name of Orense, the Amphilochia of Strabo, and the Aquae Calidae Cilinorum of Ptolemy. Curiously enough, no notice of this place is taken under any of these names in Dr. Smith's *Dictionary of Ancient Geography*, and it would seem not to have occurred to Prof. Hübner.

These remarks will show that there is still something to be done for the text. Our space will not allow us to give any extended criticism of their historical data. English readers familiar with Mr. Foulkes' recent essays will be interested in two inscriptions connected with the name of Reccared. The first is from Toletum (*Toledo*), No. 155:—

† *In nomine dni consecra | ta eclesia scte Marie | in catolico die pridie | idus Aprilis anno feli | citer primo regni dni | nostri gloriosissimi Fl(avii) | Reccaredi regis era* DCXXV [A.D. 587].

It is worth while to observe the date of the consecration and the position of this church. We must, no doubt, consider *die pridie* a pleonasm, as it occurs not unfrequently, *e.g.* Nos. 45, 120, 121, &c., and *in catolico* will then designate the Catholic as opposed to the Arian quarter. As to the date, Reccared began to reign in the preceding year 586, and immediately proceeded to make vigorous profession of the faith for which his brother Hermenegild had been a martyr (see Milman, *Lat. Christ.* bk. iii. ch. vii.). The famous third synod of Toledo, in which Spain generally became Catholic, did not indeed take place till 589; but Gregory of Tours has preserved the memory of an earlier synod held in this very year 587, at which the king declared his personal conviction, grounded particularly on the fact that miracles were worked by the Catholics and not by the Arians (*Hist. Franc.* ix. 15; Hefele, *Councils*, § 286). An event like this, probably taking place also at Toledo, would be a natural occasion for such an effort as the dedication of a new cathedral. A similar inscription from Granada records the consecration of three churches, the last of which runs thus—

Item consacrata est eclesia sci Vincentii | Martyris Valentin(i) a sco Lilliolo Accitano pontfc | XI Kal. Feb. an. VIII *gl. dni Reccaredi regs er.* DCXXXII [A.D. 594].

Hec sca tria tabernacula in gloriam Trinitatis [indivise] cohoperantibs scis aedificata sunt ad inl. Gudilin[va?. . .] | cum operarios vernolos et sumptu proprio.

This is another not uninteresting evidence of the impetus given to the Catholic party under Reccared's rule. The word *indivise* (or *indīvise?*), which Prof. Hübner has failed to conjecture, seems clearly suggested by the broken letters of his facsimile—a proof, if any were wanted, of the usefulness of such aids.

We must now take leave of this interesting volume. We cannot help hoping that in a future edition a verbal index will be added, and that some one learned in Spanish church history will take the trouble to collect whatever still remains unedited, and to add illustrations such as a detailed study of the martyrologies and histories of councils would abundantly supply.

JOHN WORDSWORTH.

The Funeral Inscriptions of Attica. [Ἀττικῆς ἐπιγραφαὶ ἐπιτύμβιοι ἐκδιδόμεναι ὑπὸ Στεφάνου Ἀθ. Κουμανουδῆ.] Athens: 1871.

PROFESSOR KUMANUDES has long been known as one of the most active and accurate of Athenian archæologists. The present work cannot be more suitably praised than by placing it in the same rank with Professor Michaelis' recent work, *Der Parthenon*, as a model of clear and compact arrangement of a large mass of material. Boeckh's *Corpus Inscr. Graec.* contained hardly 500 Attic funeral inscriptions, and very few of these had been seen by Boeckh himself: the present work contains nearly 4000, a large proportion of them (those marked by an asterisk) being edited from the personal examination of the writer. An introduction is prefixed, which, besides being a treatise on Athenian sepulchral monuments, contains also an explanation of the editor's aim and method. He tells us that in printing all the inscriptions in cursive Greek only his purpose is to render the book as inexpensive and accessible as may be. He considers no uncial text short of an actual facsimile of the stone to be worth the additional expenditure of space and of trouble: he urges the wider employment of facsimiles, which are of the highest importance, in works of a more sumptuous character, and for a different class of readers. One cannot but sympathise with this view; and yet the orthography of the old Attic alphabet can scarcely be represented without uncials: τυχὲν (= TYXEN = τυχεῖν), ἀνέρ (= ANEP = ἀνήρ) are novelties to which the eye does not easily become reconciled. Moreover, uncial copies are useful in representing mis-spellings and other mistakes of the sculptor; and it is surely possible, as the work of MM. Le Bas and Waddington especially shows (*Voyage archéologique*), to employ such a variety of uncial type as shall fairly represent to the reader the successive changes and local peculiarities of Greek palaeography.

The number of inscriptions discovered of late years in Attica (to look no wider) is enormous, and it will take time to bring them all together in a new *Corpus*. As a contribution to that end, Prof. Kumanudes puts forth this collection of all known Attic funeral inscriptions. He arranges them in nine classes: (1) Epitaphs of soldiers slain in battle, and honoured with a public funeral; (2) Epitaphs

of Attic demesmen, arranged in the alphabetical order of the demes, and within each deme in the alphabetical order of the names of the dead; (3) Epitaphs of ἰσοτελεῖς; (4) Boundary-marks (ὅροι) of tombs; (5) Epitaphs of foreigners resident in Attica; and (6) of persons whose nationality is not discoverable; (7) Metrical epitaphs wherein an injury to the monument has effaced the name of the dead; (8) Christian epitaphs, which curiously enough never mention the nationality of the departed, possibly in view of a heavenly citizenship; (9) Fragments; to which are added all the Latin funeral inscriptions as yet discovered in Attica, and their number is strikingly few as compared with other parts of the Graeco-Roman world. The editor's Prolegomena are very interesting. His remarks on the orthography, punctuation, and especially on the restoration of Greek inscriptions, are thoroughly sound: so are those on the present state of archaeology in Greece. It is gratifying to find a Greek telling his countrymen some home-truths, and confessing that even Lord Elgin's dismantling of the Parthenon has but been the means of multiplying a hundred-fold the lovers of Greek antiquities. The most valuable portion of the Prolegomena is an account of the various kinds of Attic tombstones—στῆλαι, slabs, pillars, &c. This is too full to be more than referred to here: enough to state that Prof. Kumanudes has made a valuable addition to what had already been done for this subject by Baron Stackelberg's splendid work (*Die Gräber der Hellenen*, Berlin, 1837); by Friedländer (*De Operibus anaglyphis in monumentis sepulchralibus Graecis*, Regium Bov. 1847); and by Pervanoglu's useful treatise (*Die Grabsteine der alten Griechen*, Leipzig, 1863).

Passing to the body of the work, we find that to each inscription is prefixed (wherever possible) a notice of the shape of the monument, of the kind of marble composing it, the place where it was discovered, the works in which the inscription has been published, its probable date, and the place where the monument at present may be found. Beyond these references there is but little in the way of commentary, excepting occasional foot-notes on matters of importance. Thus on p. 243 is a note confirming the opinion that the frequent occurrence of the graves of Milesians in Attica affords no ground for supposing a Milesian deme. The editor remarks of this class (1) that he scarcely finds 20 that are anterior to the Roman period; (2) that the epitaphs of females are far more numerous than of males (144 to 96); (3) that these monuments are found not only in the vicinity of Athens, but also in various more distant demes.

This general absence of commentary would be possible only in the case of funeral inscriptions, which present few occasions for individual remark: and the general conclusions which the editor has gathered from his extensive study of this class of monuments have been thrown by him into the Prolegomena. Such are his remarks (p. ιη') on the disputed meaning of the vase often sculptured on Attic tombstones: we are gratified to find him establishing conclusively that this symbol does imply that the person buried below died unmarried. In a note on p. κβ' he states that the common formulas χρηστός (χρηστή), χαῖρε, or χρηστὲ χαῖρε, are never found upon the graves of any Attic demesmen; and that even on those of strangers buried in Attica the expression (elsewhere so common) χρηστὲ (χρηστή) καὶ ἄλυπε (or φιλόστοργε) χαῖρε, never once occurs. On p. κγ' various mis-statements are corrected respecting the manner in which the wives and daughters of Attic citizens are designated upon tombs; and again (p. κδ') he demurs to the hasty opinions which have been ventured respecting the banquet-scenes so often represented in relief upon Greek funeral monuments. We are glad to see a severe stricture upon M. Lenormant (pp. ιβ' and 99) recalled in the appendix (p. 446).

The type and paper are such as appear to be usual in Athenian publications, but they are scarcely worthy of the book. The printing is usually correct, but in No. 9, l. 2, the omission of the word φίλην spoils the hexameter. The alphabetical arrangement employed throughout renders reference easy: two useful indices, however, are appended, one of matters worthy of remark, the other of geographical names. Of the 174 demes (the number given by Strabo), 127 are here to be found mentioned; of the 47 which remain, at least 23 are known to us from other inscriptions or from ancient authors (p. 458). E. L. Hicks.

Demosthenes de Corona: with English Notes. By the Rev. Arthur Holmes, M.A. Rivingtons, 1871.

This edition of the masterpiece of Demosthenes reflects credit on the editor of the *Catena Classicorum*, and will be very useful to students, for whom a good commentary on the oration, within a reasonable compass, has long been wanted; in spite of the somewhat exaggerated compliments paid by Mr. Holmes to his predecessors. The plan of the book is good, embracing so much prefatory history as is necessary for the comprehension of the speech, with a clear and vigorous review of its general character, and notes long enough, as a rule, to make the orator's meaning clear without embarrassing the student by undue prolixity.

Mr. Holmes has a genuine admiration both for the character and the oratory of his author. Upholding the perfect honesty of his policy, he even defends him from the common charge of deviation from truth in the course of this speech, maintaining that it would have been absurd in Demosthenes to attempt to deceive his audience by palpable falsehoods. His theory is that both the antagonists, to suit the critical and artificial taste of their audience, had recourse to quibbles, but not to absolute falsehoods: Aeschines raking up clauses of laws practically if not actually obsolete; and Demosthenes answering him by quoting equally obsolete clauses of exceptions and exemptions. His occasional bad taste and coarseness Mr. Holmes very fairly attributes to the general decadence of the age, rendering it necessary that he should in some degree accommodate his style to the low calibre of the Athenian courts of justice.

The notes do not profess to deal with varieties of reading, except where they materially affect the sense of any passage; but such exceptions might with advantage have been a little multiplied. An instance of this is found in the well-known passage where Demosthenes protests against the general virulence and unfairness of Aeschines' proceedings (§§ 12–16): on which, however, Mr. Holmes' comment is on the whole deserving of the highest praise. He grasps its meaning, thoroughly explains the somewhat complicated connection, and translates vigorously and correctly; but in the last clause of § 13 he entirely ignores the variety of punctuation, ἐμὲ δ' εἴπερ ἐξελέγξειν ἐνόμιζεν, αὐτὸν οὐκ ἂν ἐγράψατο, which, though probably wrong, is adopted by Dissen, and is the more worth noting as it entirely changes the meaning of a very difficult passage. On § 65 he is again silent as to a probable error of Dissen's, in defending the very weak interpolation of οὐκ, which Mr. Holmes says is supported by no editor but Reiske. In § 220 he adopts the reading χώραν, in spite of its acknowledged difficulty, without any mention either of the alternation ὥραν, found in several MSS., or of Schäfer's conjecture, ὥραν, which is supported by Dissen. In § 221 the reading μηδὲν παραλείπων might with advantage have been noticed; and in § 228 we miss all allusion to the old reading ὑμᾶς ὑπάρχειν ἐγνωσμένους,

which is found in almost all the MSS., though necessitating an unparalleled interpretation of ἐγνωσμένους.

In the explanatory notes some similar omissions are noticeable. In § 28 the expression ἐν τοῖν δυοῖν ὀβολοῖν is explained at almost unnecessary length, but no clue is given as to what is much more difficult to understand—the exact meaning of the clause in which it stands, and whether it is to be attributed to Demosthenes or his opponent; whether it expresses the insignificance of the whole question, or raises a supposed objection that Demosthenes was crippling the revenues of the state, by depriving it of the two obols which these ambassadors would each have paid for entrance. In § 130, οὐδὲ γὰρ ὧν ἔτυχεν ἦν, though rightly explained, is a sufficiently remarkable attraction to call for grammatical analysis. So in § 135, the genitive absolute, referring to the direct object of a transitive verb, seems worthy of a note; and in § 262 Schäfer is somewhat misrepresented as misinterpreting the passage, since his explanation, that Aeschines was thrashed for robbing orchards, really rests upon a different reading, which Mr. Holmes ignores, ὥσπερ ὀπωρώνης ἐκεῖνος ἐκ τῶν ἀλλοτρίων χωρίων; which entirely changes the force of the allusion. There are also several technical words on which a word or two of explanation would have been of use, such as χρηματίζειν, ἕνη καὶ νέᾳ, βακτηρία, σύμβολον, while, considering the important bearing of the subject on the speech, a somewhat fuller account of the whole system of the trierarchy could not have been considered out of place.

Of actual mistakes very few instances have been detected. We cannot but think that in § 198 Mr. Holmes has missed the meaning of ἐνευδοκιμεῖν, which may be compared with ἐνευδαιμονῆσαι and ἐντελευτῆσαι in Thuc. ii. 44; so that it should be rendered not "as regards reputation," but "the man by whom the misfortunes of Athens were set apart *as a field wherein to gain glory for himself.*" In § 219 ἀναφορὰν is probably not "something to fall back upon," but "room for throwing the blame on some one else." And this would have been apparent from the parallel quoted by Mr. Holmes himself from Aeschines, had he given it in its integrity. In § 259 there seems no reason to suppose that νεβρίζων contains any idea of Aeschines' wearing the fawn-skin himself, as that was a dignity (see below, § 265) to which he had scarcely attained. And on § 195 Mr. Holmes assigns no reason for rejecting Schäfer's very adequate interpretation of ἅ γε μηδὲ πεῖραν ἔδωκε, whereby ἅγε is made the subject: "Quae nec usum sui dederunt." These, however, are but pardonable blots in a really good edition of the speech, and we may look with satisfaction on the other hand not only to a careful digest of previous commentaries, but to several new and valuable suggestions; such as that in γέρρα ἐνεπίμπρασαν in § 169 we may see a burning of the hurdles that fenced in the ordinary space for the popular assembly, as the speediest method of preparing for a monster meeting. It is also right to draw attention to the careful analysis of the meaning of the various particles throughout the speech.

J. R. King.

Machberoth Ithiel, by Jehudah ben Shelomoh Alcharizi. Edited from the MS. in the Bodleian Library, by Thomas Chenery, M.A. Williams and Norgate.

Y'hudah el-Ḥarizi was the last of that splendid galaxy of Hebrew poets in Spain to which Gabirol, Y'hudah hal-Levy, and the two ben Ezras also belonged. He was the author of an imitation of the Maqâmat of el-Ḥariri, under the title of Taḥk'moni, and previously to this of a Hebrew translation of the same work. Any one who has the slightest knowledge of *Ḥariri* in the original, or even of Rückert's masterly German adaptation, will appreciate the difficulties encountered by him in this translation. Professor Chenery, of Oxford, observes with great justice in the preface (p. ix):—

"The contest is not a fair one. The Hebrew language cannot rival the Arabic in the latter's own dominion. That high-flown metaphorical diction, which has become so associated with Arabic composition that it does not offend even European scholars, educated to a more severe taste, surprises rather than gratifies when it is attempted in the language of the Bible. As a literary feat Alcharizi's composition in this book is marvellous."

The late Silvestre de Sacy, in his edition of *Ḥariri*, passed a high eulogium on Ḥarizi's translation, and published one of the chapters as a specimen. Only three other chapters have been published since his time. The present editor presents us with the twenty-seven Maqâmat contained in the Bodleian MS., in which, however, the commencement of the first is wanting. The MS. is written in rather careless Yemen characters, and is in many places pale and defective. Probably few scholars but Prof. Chenery, whose translation of the first part of the Maqâmat is well-known to Arabic students, would have attempted the delicate task of deciphering it. It is certainly not an easy piece of Hebrew composition. The poetical passages, and the abundant synonyms, may cause perplexity to the ordinary student, especially as the text is only pointed in a very few cases. Foot-notes, at least in the most difficult passages, would not have been out of place.

There are two prefaces, an English and a Hebrew. In the former, the editor gives a sketch of Ḥarizi's life and works, with references to the biographical authorities. In the latter, which is really a fine piece of style, an attempt is made to fix the period when Jewish writers adopted the Arabic metres. There is one passage in it (see p. 11) which sounds like an echo from the times of Ḥarizi, where the editor chastises in severe terms "the rich men" (Jews?) of England, whose only aim is material pleasure, and who completely neglect a literature which cannot enrich them. May it not be a *vox clamantis in deserto!*

Ad. Neubauer.

Intelligence.

The notices of lectures to be given at the university of Strasburg in the term beginning on May 1 include one by Professor Max Müller, of Oxford, who "will be so kind as to lecture in the summer semester on the 'Results of Comparative Philology.'" MM. E. Reuss and Heitz, of Strasburg, and Laqueur, of Lyons, have also consented to lecture, as well as some professors of the former Faculté de Médecine. Fifteen hundred students are said to have already inscribed their names.

The German Philological Congress is announced to take place at Leipzig at the latter end of May.

The Russian *Journal of Public Instruction* (*Journal Ministerstva Narodnago Proseshchenio*) is now publishing a critical study on Persius' *Satires*, with the Latin text, a Russian translation, and a very complete commentary.

New Publications.

Ascoli, G. J. Vorträge üb. Glottologie. 1. Bd. Uebers. von Proff. Bazzigher u. Schweizer-Sidler. Halle: Buchh. d. Waisenh.

Biblia veteris Testamenti Aethiopica. Ed. Dillmann. Tom. ii. fasc. ii. quo continentur libri regum iii. et iv. Leipzig: Brockhaus' Sort.

Goldziher, Ign. Zur Charakteristik Gelâl ud-dîn us-Sujûtî's u. seiner literarischen Thätigkeit. Wien: Gerold's Sohn in Comm.

Herbst, W. Johann Heinrich Voss. Bd. I. Teubner.

Lepsius, C. R. Die Metalle in den aegypt. Inschriften. Berlin: Dümmler in Comm.

Praetorius, F. Grammatik der Tigriñasprache in Abessinien. 2. Hälfte. Halle: Buchh. d. Waisenh.

Unger, R. Emendationes Horatianae. Halle: Pfeffer.

Wolff, M. Muhamedanische Eschatologie. Leipzig: Brockhaus in Comm.

ERRATUM IN No. 45.

Page 129 (*a*), line 21, after "xx. 17–38," insert "xxi. 10–14, xxvii. 3 (φιλανθρώπως κ. τ. λ.), 21–26."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 47.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Wednesday, May 15, *and Advertisements should be sent in by May* 11.

General Literature.

GOETHE AND HIS MOTHER.

W. Goethe. Les Œuvres expliquées par la Vie. 1749–1795. Par A. Mézières. Didier et Cie, 1872.
Frau Rath. Briefwechsel von Katharina Elisabeth Goethe. Von Robert Keil. F. A. Brockhaus, 1871.

IT cannot be said that either of these recent contributions to the mass of Goethe literature adds materially to our knowledge of the poet or his surroundings. M. Mézières' book is pleasant to read, clearly conceived, lucidly expressed, and touches with intelligent sympathy upon a variety of points which possess an inexhaustible interest for the students of Goethe's writings. But the main idea of the work, so far from being new, is one which English and German biographers have worn, if anything, rather too threadbare, and it would have been more original to collect the purely imaginary characters and episodes in Goethe's poems than to arrange once more his life and writings in parallel columns with the familiar passage from *Wahrheit und Dichtung* as a motto. The other publication is tantalizing in a different way; the writer has some valuable new matter to communicate, and there was useful work cut out for an editor in collecting and arranging all that had already been published in scattered and inaccessible periodicals, &c. relating to or from the hand of the most *genialisch* of women. Unfortunately Herr Keil has trusted to the inherent interest of his subject and to the fact that he had some new letters from and to Frau Goethe to communicate; and he has simply not edited the book at all. He has reprinted some of the letters which were already known, but not all; he has printed new ones without giving an account of how they came into his possession, though he must have been aware of the importance of an authentic pedigree for the MS. letters, since he denounces those published by Bettina Brentano as in the main presumable forgeries; and, finally, he has not been enabled to give his work the completeness which it is certainly time for it to receive, if ever, by incorporating all the letters of his heroine which are known to exist, as, for instance, her very interesting correspondence with Lavater.

About Goethe's childhood and youth, Margaret and the *Mitschuldigen*, Aennchen and *Die Launen der Verliebten*, M. Mézières does not attempt to say anything new, for the simple reason that there is nothing to be said. The Sesenheim episode—the desertion of Friederika and the reflection of Goethe's self-reproach in the picture of Marie and Weislingen in *Götz von Berlichingen*—naturally introduces his judgment on the degree of blame which attaches to the poet who so often "loved and rode away," and on what is called Goethe's egotism in general. M. Mézières compares the stoicism with which he closed his heart against Friederika's tears to that with which he compelled himself to ascend the spire of Strasburg Cathedral and to witness surgical operations. "S'il paraît quelquefois très-dur pour ceux qui se sont attachés à lui, il a commencé par être plus dur encore pour lui-même." This side of his character is not exactly hard to understand, and yet it is almost a psychological paradox that, after going out of his way to suffer acute nervous pain of one kind in order to deaden his acutely painful sensibility, he should yet be able at once and without practice to face the immediate moral suffering of a separation from Friederika, when he had but to be faithful to her to secure the quiet mind which he started by preferring to the ease and comfort of the moment. In fact Goethe's stoical conduct was the logical consequence of his Epicurean tastes. He would bear pain for the sake of learning not to mind it, or in order to escape the danger of it at a future time; Kästner wrote of him a little later: "He has strong affections, but great command over them;" and it is by the strength of his affections only that the degree of his self-command is measured when that self-command is alleged as a proof of his coldness of heart. M. Mézières, who, like most of his biographers, has rather a *tendre* for Friederika, does not excuse his treatment of her, but he thinks a prophetic instinct made her lover choose rather to be true to his real and stable self, to the Goethe of the Memoirs, than to any of the charming girls towards whom, as has often been pointed out, the Goethe of the Memoirs is really as cold as the youth of Frankfort and Strasburg tried to be. The story of the real and the ideal Lotte is pleasingly told, and the artistic merits of *Werther* as a romance appreciatively set forth: it is also plausibly suggested that as much of the relations between Albert and Lotte as is unjust to Kästner may be borrowed from Goethe's experience of another *ménage*, that of Maximiliane de la Roche (Bettina's mother) and Brentano, in which he also played the dangerous part of supernumerary in a matrimonial duet.

In explaining his works from his life there is a certain temptation to give undue prominence to the works which can over those which cannot be so explained; and it may be thought that M. Mézières dwells in consequence too long upon both Clavijo and Stella; the former from the autobiographical point of view is only a replica of Weislingen with another Marie very like the first, but the poet seems to be more nearly reconciled to himself, as he allows Carlos to make out a very strong case in favour of prudential selfishness. In *Stella*, where Mr. Lewes failed to discover any biographical element, M. Mézières detects an exposition of the drawbacks to marriage in the abstract suggested by the author's proposed marriage with Fräulein Schönemann (Lili). Again, unlike Mr. Lewes, he believes Lili to have been the object of a serious passion, and all the more on that account is he obliged to magnify Goethe's reluctance to make a final sacrifice of his liberty. He treats the extremely accommodating principles of all the ladies in the play and some of their remarks, which are unmotived, if not actually out of character, as expressing or illustrating the writer's own view that constancy was a virtue—in women. But taken in connection with the poet's actual personal experience, there is another view possible. The husband in *Stella* is the same as Weislingen and Clavijo, only his desertion takes place after marriage instead of before, and the piece may almost be read as a justification of Goethe and his other heroes for refusing to put themselves in a position where the temptation to a worse offence than their own might have become irresistible. In *Iphigenia* and *Tasso*, M. Mézières tries, but without much success, to recognise the portraiture of Frau von Stein, the ruling influence in Goethe's life when they were commenced. In the latter work alone something of Goethe's surroundings may be

traced; the court of Weimar has lent some of its features to that of Ferrara, but Goethe's relationship to it at a time when he writes calmly to his mother that the best proof of his contentment with his situation is that he cannot even imagine one for which he would exchange it, is very unlike that of his melancholic hero; and though Frau von Stein was obdurate, she was not, like Eleonora, on a pinnacle of earthly greatness beyond his reach. Of course just then Goethe and Tasso made love in similar language, and before his flight into Italy Goethe was in a depressed, agitated mood which could be idealised into something befitting real misfortunes, but something more than this is meant in the cases where his works are manifestly "parts of a long confession," and if *Torquato Tasso* in any sense represents the emotions of the first Weimar period, it is not Goethe's love for Frau von Stein, but his love and longing for Italy, for art, for more light and harmony in his self-consciousness, that are shadowed forth in his hero's sighs.

M. Mézières very wisely declines to enter into unprofitable speculations as to what would have been the effect on Goethe's writings if he had not gone to Weimar, but the natural order of his book calls attention to the comparative cessation of the productive impulse before the Italian journey, and to its altered direction immediately afterwards, both of which facts it would have been within his province to explain; the rather that his conception of Goethe's character does not exclude a regret—the only regret possible in the face of his colossal achievements—that the fixed convictions and principles of art which he brought back from Italy had not been reached before the wild inspired madness of the young man "Goethe or the Devil" had burnt away half its strength. *Wilhelm Meister* and *Faust*, in which the two Goethes are most nearly one, do not come into the present volume, a sacrifice in some ways to chronological method, for their biographical interest is of course connected with the date when separate passages were composed, not when the complete work was published. Amongst the poems inspired by Christiane Vulpius, M. Mézières omits to mention *Der neue Pausias*, a graceful tribute to her original profession; and he is perhaps rather inclined to over-estimate the depth of the passion with which she inspired Goethe, for the unusual tone of sincerity and *abandon* in the poems of this date may be explained as showing, not that the feeling to be expressed was stronger than before, but that the poet was no longer afraid of being mastered by it if he admitted its strength. Of the subsequent marriage, M. Mézières, who is always on the side of morality, simply says, "Il aurait mieux fait de commencer par là."

The Frau Räthin, Goethe's mother—Frau Aja, as her correspondents prefer to call her—occupied a larger space in the German literary world than is generally recognised. She was not merely the mother of her son, she was the woman who explained to his admirers how such a man could come into being; her house is the place of pilgrimage —*Casa Santa* is its regular name in the letters—for all that is illustrious, by birth or intelligence, throughout Germany. No man, woman, or child has ever left her presence with a discontented face; and many a celebrity who had been gradually repelled from the more exacting personality of the son remained through life on a footing of filial friendship and devotion to the mother. The writing-desk which she clears out once a month, and never without laughing, is "like heaven, all class distinctions are done away with in it; high and low, the pious and publicans and sinners, all form one heap. The good Lavater's letter lies quite peaceably by the actor Grossmann's, and so on." She has a certain round table, of which the fame seems to show that she neglected none of the material aids to social success; and her phrase, the "tyrant's blood," for the good Rhenish vintages shed for her guests, met with a wide acceptance equally flattering to her invention and its subject. She seems to have possessed at once and by nature the Olympian serenity of mind which Wolfgang only conquered after many struggles and conflicts, in which, perhaps, just the tenderest bloom was knocked off his moral sensibility. Both were resolved to make whatever sacrifices were necessary to keep their minds clear and their imaginations untroubled by ugly visions, but Frau Aja somehow never found it necessary to sacrifice anything that even looked like a duty to a friend to this paramount duty to herself. The characteristic trait noticed by Mr. Lewes, that her servants were forbidden to tell her bad news, even if it were true, for she was sure to hear of it soon enough, is remarkable as the exact opposite of the animal curiosity which developes into the *Schadenfreude* of (generally feminine) gossips; and the remarks that follow on the danger of *coddling* the mind are a degree further from being applicable to the mother than to the son; there was a degree less of conscious effort in her conduct, though the object kept in view by both was identical, viz. to avoid mental suffering as a simply unprofitable distraction.

There are many signs in the correspondence that Frau Aja's intellectual gifts were held in as high esteem as her unalterable good humour. The Grand-duchess Amalia of Weimar writes with a packet of journals published "for private circulation" during a summer holiday:—"The authors are Hätschelhans" (the name generally given to Wolfgang in the confidential letters), "Wieland, Herder, Knebel, Seckendorff, and Einsiedel. Frau Räthin's world-renowned connoisseurship will easily enable her to identify the author of each piece." And Wieland (who, like Merck and all who had been admitted within the charmed circle of intimacy at *Casa Santa*, addresses Frau Aja as an adopted son), besides asking her opinion on his own works, entrusts her with a delicate editorial commission. Klinger, one of the *Sturm und Drang* brotherhood (of whom Wieland asks, "Is it better with the youth, or does he still swill lion's blood?"), offers to send a tragical tale for insertion in the *Mercur*, of which Wieland is editor, who, anxious not to incur the odium of rejecting the work, begs his correspondent to look at it first and tell him if it is good for nothing, that he may make an excuse to the author if so. Besides all tributes from without, and besides the fact that a sufficiently comprehensive culture is required in order to appreciate *all* Goethe's writings, as we cannot doubt his mother did; her own letters, heedlessly composed and spelt pretty much as Providence pleased, would of themselves go a long way to explain the dictum of Duke George of Mecklenburg: "It has never surprised me that such a woman should give birth to a Goethe."

The letters are generally short, homely in style and language, and absolutely free from literary pretensions:—"What does the woman want with me?" she exclaims, when Madame de Staël is in Frankfort; "I have never written an A-B-C-book in my life, and my good genius will preserve me from doing so in future." And yet Goethe himself could not be more sublimely superior to the chatter of the clever Frenchwoman: "I felt as if I had a millstone round my neck." "It was all very nice so long as they would let me stay away." Even her denunciations of wit are amusing: "Wit, wit! it always reminds me of a *draught*; it's cooling, but it gives one a stiff neck." Is this Frau Aja or George Eliot? Unfortunately none of Frau Goethe's letters to Wieland seem to have been preserved, but one is not inclined to quarrel with the editor for having nevertheless printed as many of the answers as he could procure; they are amusing in themselves, and they help to complete our

idea of the person addressed. Some letters from and to the Grand-duchess Amalia are new, and they help to establish still more firmly the strange and edifying truth, that all through the relations between the grand-ducal family and the house of Goethe, the former never ceased to feel themselves the party obliged and benefited. Of course it is lucky for the ghost of Karl August that this was so; posterity would have torn him limb from limb if he had failed in any one particular of the respect due to the genius that deigned to harbour at his court; but the fame of a Maecenas is always so modest that one has to be careful not to underrate the merits of the duke. M. Mézières expatiates very judiciously on all that his character gained under the influence of intercourse with his illustrious mentor; but the fact remains that he chose Goethe for his friend in defiance of all Weimar when a boy of eighteen, a conclusive proof that it was not from Goethe he acquired the gift for which Goethe praised him fifty years later, "of discerning men's talents and characters, and assigning his right place to each." One or two of his letters to Frau Rath are printed in this volume, downright and rugged in tone, but thoroughly affectionate. Two very interesting letters from Goethe himself refer to their visit to Frankfort, just before the *genius-journey* to Switzerland in 1779. He gives his mother the minutest instructions for her domestic preparations; the attendants and servants are to have mattress-beds, but for the duke and Goethe only a *Strohsack* each; no lustres in the duke's room, he would laugh at them; four courses, neither more nor less, for dinner; and so on. The letters of Frau Rath to her grandchildren, to Friedrich von Stein, the boy whom Goethe almost adopted, and to her friend Unzelmann the actor, have been already published in different places, but there are four rhyming epistles to Fräulein von Göchhausen, for the sake of which all the editor's sins of omission and commission may be forgiven him. The writer declares:—

> "Aber als mich meine Mutter gebar,
> Kein Poetengestirn am Himmel war;"

but all the pieces show a remarkable facility of composition, and on p. 231 there are some lines—if we had space to quote them—that have a maternal likeness to some of Mephistopheles' tirades.

If the collection of Frau Goethe's letters had been complete, we should have earnestly recommended the work to the consideration of translators, though it must be admitted that the language of the free-spoken Frankfort dame might present some difficulties; the English, for instance, for *Potzfickerment* has still to be invented. H. Lawrenny.

Dante's Divine Comedy. [*Dante's Göttliche Komödie nach Inhalt und Gedankengang übersichtlich dargestellt.* Mit biographischer Einleitung. Von Dr. Rudolf Pfleiderer.] Stuttgart: 1871.

The object of this book, like that of Miss Rossetti's *Shadow of Dante*, reviewed in the *Academy* of December 15, 1871 (vol. ii. p. 551), is to give educated persons a more accurate knowledge of the *Divine Comedy*, and thus to extend its popularity, and increase the number of its readers. The difference between the two mainly arises from their being intended for different classes of persons, Miss Rossetti's being rather suited to beginners, while that of Dr. Pfleiderer presupposes a knowledge of, and interest in, many of the questions which arise from a study of the poem, and aims at establishing certain views of his own. Thus, while the method of both is nearly the same—to give a brief life of the poet, general prefatory remarks to the whole poem, and an analysis of its three sections, with special introductions to each—the English volume is the more readily intelligible, owing to its simplicity and the useful diagrams that accompany it, and the German, on the other hand, is far fuller and more exhaustive. Both introduce numerous quotations from the poem itself, for which purpose, as Miss Rossetti has made use of the translations of Mr. W. M. Rossetti and Mr. Longfellow, so Dr. Pfleiderer has availed himself of that of Streckfuss, and in one or two passages of those of Schlegel and Philalethes (the king of Saxony). The first of these, which is in rhyme, is admirably suited for the purpose from its spirit and vigour; and its weak point, that it is in imperfect *terza rima*, is less noticed in isolated passages: a complete reproduction of the rhyme of the original has not yet been accomplished in German, as it has in English by Mr. Cayley and Mr. Ford, though we are glad to see that such a translation, from the pen of Herr Notter, is in course of publication.

In his sketch of Dante's life, the writer has excellently pointed out what distinguishes Dante from all other great poets: the combination in his person of the character of idealist and artist with that of practical man of the world. Had he not been the sweet singer of the *Vita Nuova*, absorbed in his romantic love for Beatrice Portinari, and at the same time the Florentine patriot, deeply involved in all the struggles of his country, the *Divine Comedy* could never have been produced, or, at least, would have wanted that universality and that union of the real and the ideal in which its greatness largely consists. And, in like manner, his relation to his age is a twofold one, which only a man of the highest genius could occupy; that age itself wearing a twofold aspect, checkered with strange contrasts of light and darkness, marked by examples of extraordinary piety and extravagant crime, and, in the midst of profound ignorance and wild confusion, producing vigorous growths in art and literature, and developing the germs of political organization. In the midst of these discordant elements we see the figure of Dante, "facing, like a Janus, at once backwards and forwards." The representative of his time, in all its beliefs and conceptions of things, he is at the same time the prophet of the coming age. He is a sincere and orthodox Catholic, but, not the less, half a reformer. His political views are both limited by and pass far beyond the circumstances which surround him. Like the seers of the Old Testament, he finds in the present the means of embodying and representing laws of permanent application.

Towards the end of the volume, Dr. Pfleiderer has given an excellent *résumé* of the various views that have been taken of the purpose and meaning of Dante's great poem—a survey from which we may learn how immense has been its influence on the intellectual life of succeeding generations. With the earlier interpreters the moral and theological aspect is almost exclusively predominant, even to the ignoring of the literal meaning. In later times another one-sided mode of interpretation has also sprung up in Italy, and for the most part found its home there, according to which the political side of the poem assumes overwhelming importance. It is in Germany, during the last half-century, that a less exclusive and more qualified view has arisen, admitting at once three elements, the personal, the moral, and the political; though here again two schools are to be found, according as the greater prominence among these is assigned to the moral and religious significance—on which side are to be found the great names of Witte and Philalethes—or to the political, which is ably represented by Wegele. Our author claims to be himself the first to place the three in a co-ordinate position, and to put clearly forth the unity of purpose in the poem, by finding a common point in which the three may be combined. This is the person of Dante; so that the poem is to be regarded as the mirror of his

experience in life and thought; and its outline, in particular, represents the history of his sin, his conversion, and the mode of his renewal. But beyond this he sees in himself human nature personified, and finds in his own struggles the representation of their struggles, and in his own progress towards salvation the way which they also have to follow; thus excluding the didactic tendency, which is essentially unpoetical. In the first instance, it is the men of his time of whom he stands forth as the embodiment; and thus the politico-historical side of the poem is introduced, explaining the means of their temporal renovation; afterwards, in a still wider application, it is mankind at large, whose eternal restitution is to be brought about in the same way as his own was; and the consideration of this involves in its universal aspect the moral and theological significance of the story. Therefore it is that he relates his vision for the instruction of men, in accordance with the injunction laid upon him by his forefather Cacciaguida in the *Paradiso* (canto xvii.)—

> "Rimossa ogni menzogna,
> Tutta tua vision fa manifesta,
> E lascia pur grattar dov' è la rogna;
> Che, se la voce tua sarà molesta
> Nel primo gusto, vital nutrimento
> Lascerà poi quando sarà digesta."

In this way the poem in every sense deserves the appellation of "The Soul's Epic." At the same time, in the course of its development, we must expect to find that now one, now another, of these meanings will take the most prominent position, and not unfrequently one will overlie the other: it is from the latter of these results that the manifold application of certain passages arises.

This view of the *Divine Comedy*, Dr. Pfleiderer proceeds to apply to that most difficult subject, the allegory which it embodies. In this likewise he finds a corresponding threefold character. Thus, in interpreting the *Selva*, he applies it, first, to Dante's own youthful errors; next, to the sinfulness of mankind; finally, to the confusion of his own time, arising from political aberrations and false relations of Church and State. Similarly, when he defines the position of Dante's two guides, Virgil and Beatrice, these characters are made to represent respectively—first, his favourite poet and master in the poetic art, and his first love, the thought of whom had led him to heavenly things: secondly, reason and revelation—Virgil being described as saying of his own function (*Purg.* xviii.), "quanto ragion qui vede, dirti poss' io;" while some things which are attributed to Beatrice, especially the circumstances of her appearance in the Terrestrial Paradise, are not less than blasphemous, if she is to be regarded as a mere woman, however glorified: thirdly, the temporal institutions necessary to human welfare, and especially the Empire—Virgil, as the author of the *Aeneid*, being the poet of the origin of the Roman empire, and consequently being constantly represented in the *Inferno* as laying special stress on offences against the state; and, the primary means of man's eternal welfare, divine grace, quickening the soul. Now in estimating this and every other view of the allegory in Dante, we ought always to bear in mind two things—on the one hand, that from the character of the poet's mind, and from what we find in his prose writings, we have reason to expect every kind of refinement of meaning in his poem; to which it should be added that in his epistle dedicatory to the *Paradiso*, addressed to Can Grande della Scala, he expressly attributes to the poem a moral and allegorical meaning: on the other hand, that it is easy to find a recondite meaning where there is none, and to engraft theories of our own on Dante's writings. In the present case, making all allowance for the former of these, we cannot help feeling that Dr. Pfleiderer, notwithstanding the completeness of his scheme, has erred too much on the side of ingenuity in assigning to Virgil a political character; in fact, in one place (p. 179) he seems somewhat to be sensible of the difficulty of it, because he is forced to include under the temporal institutions of which Virgil is the representative, the outward and visible functions of the Church, which he has not mentioned elsewhere. Still, we think that in this portion of his work, as well as elsewhere, Dr. Pfleiderer has done good service to the study of Dante; and we regret that he has not given us his views on the intricate allegory of the exceedingly difficult 32nd canto of the *Purgatorio*, which, strange to say, has been passed over entirely unnoticed.

H. F. Tozer.

Varnhagen von Ense's Biographische Portraits. Leipzig: Brockhaus.

Ludmilla Assing, opening once more the inexhaustible Pandora box in which her late uncle's manuscripts are contained, has presented us with a new series of biographical essays written by Herr Varnhagen at different periods of his life. For students of a certain phase of North German literature and society, the representatives of which were attracted by Rahel's sentimental *esprit* and her husband's birth and position, the opinions and troubles of Thoreff, the great physician or quack as the reader may take it, and of Caroline von Fouqué, the wife of the author of *Undine*, and herself a popular novelist, may be of some importance. The only portrait of general interest, however, which the volume contains is that of Clemens Brentano, one of the leaders, and, as far as mere poetical power is concerned, decidedly the most gifted representative of the romantic movement in Germany. The material afforded in the sketch of his professorial character, and several of his letters addressed to Rahel, is the more valuable, as our sources for the knowledge of his character and literary career have hitherto been so extremely scanty. Besides the contrast between the characters of the diplomatic man of the world and the eccentric poet, as it became soon but too evident when they met at Töplitz in 1811, and which is still recognisable in every line of Varnhagen's account, is highly amusing and equally characteristic of both parties concerned. Varnhagen, in his capacity as literary amateur, had seen enough of the "Sturm and Drang" of contemporary poets not to be shocked by a moderate amount of extravagance and quaintness of manner. Still the childish braggadocio and sometimes heartless vein of freak and foul-mouthed gossip, which in Brentano subsist together with the most high-minded enthusiasm for the beautiful, were quite a puzzle to the experienced diplomatist. After relating a particularly unpleasant trick played him by the poet, our author adds in despair: "I observed this sudden transmutation with amazement, and began to see what an unsafe customer I had to deal with." This same whimsicality, systematized and thoroughly affected as it was in most cases, contained at the same time the fatal germ of destruction for the noblest aspirations of Brentano's life and works. Occasionally it intruded even into the sanctissimum of his catholic mysticism, the sincerity of which it displays in a rather dubious light. Varnhagen relates the following amusing anecdote:—Brentano's sister Bettina discovered in a picture of St. Peter, which he pretended was drawn by himself exactly after the vision of the well-known stigmatized "Nun of Dutmar," an old tobacco-pouch, which was connected with various jokes of former times, and which now served as a wallet to the saint. When he found himself discovered, the poet heartily joined in the merriment of his sister. This fickleness of character, although not impairing our admiration for his genius, must have made personal intercourse with the poet a matter of extreme difficulty. Once Varnhagen was obliged to resort to personal chastisement, which had at once the desired

effect; the poet replying to this severe treatment with great meekness: "You will be my best friend, like Görres, who has also boxed my ears." The letters to Rahel form a sort of commentary to Varnhagen's sketch, and are quite in the character of their writer, a mixture of sensual religious mysticism and childish silliness, interrupted by passages full of deep poetical beauty, and a kind of melancholy humour to be met with only in the works of German romantic poets, and which might be expected from the creator of Ponce de Leon and the "schöne Annerl." F. HÜFFER.

NOTES ON LITERATURE AND ART.

The controversy respecting the Polish or German extraction of Copernicus seems to be very nearly decided, in an anonymous and temperate pamphlet on the former side of the question, reviewed in the *Allgemeine Zeitung* for April 5. As the name of a village in Upper Silesia in the thirteenth century, and as a family name at the present day, Copernik, sometimes spelt Kopernik, Kopernak, Kopiernicki, is not infrequently met with, and referred etymologically to the Sclavonic Kopr, Koper, *anethum graveolens* with the common termination *ik*. It was always known that the astronomer's father resided at Cracow before moving to Thorn, and the evidence, all presumptive, in favour of his having been a German immigrant counts for very little against the un-Teutonic sound of his name. His wife, Barbara Watzelrode, it is admitted, was of German parentage, and the only point still undecided is whether Barbara's mother was of the same stock as her husband, since otherwise a trifling advantage would rest with the Polish patriots.

J. Frohschammer writes to the *Allgemeine Zeitung* (April 8) on "Philosophy and Darwinism," objecting to the latter its want of a sound speculative foundation and its compatibility with the common theory of creation, and hinting at the superiority of the abstruser German philosophy with its promise of a transcendental Pantheism.

The German papers have been commenting on the supposed inaccuracy of a statement relating to the manuscript of Humboldt's *Kosmos* which appeared in a French publication; such a MS. had been presented by Professor Buschmann to the King of Prussia for the Royal Library at Berlin, with a very dutiful letter; and it was not generally known that the second MS., a fair copy, with the last corrections of the great author, had also been presented by the same person to Napoleon III. (with a still more dutiful letter, explaining that Humboldt's "heart was ever French"), and accordingly is still to be found at the National Library of Paris. Humboldt wrote in the Italian hand, and with lines that slanted so much from left to right that, to keep them straight, as he grew older, he gradually shortened them almost to a single word, so that each page of the white quarto paper on which he wrote was divided into a number of slender columns.

In an article by W. Lang in a recent number of *Im Neuen Reich*, on "Danteliteratur in Deutschland," it is remarked that notwithstanding the numerous contributions to the subject, and especially the translations of the poem which are constantly appearing in Germany, the *Divine Comedy* is not, nor is likely to be, a popular book in that country. Dante holds a very different position in respect of German culture from Homer and Shakespeare. This, the writer remarks, is not wonderful, because of the antiquarian research required to understand the poem, and the need of the reader's throwing himself into a point of view essentially different from his own. It is also suggested that the multiplicity of ideas and interests which Virgil and Beatrice represent detracts from their reality, and causes us to follow their guidance with less confidence. The fact that modern Italians have found no difficulty in making Dante their great political poet, notwithstanding the apparently anti-national tendency of his views, is explained by pointing out that the circumstance of the princes, who would preside over the empire in Dante's scheme, being German is a mere accident to him; he only regards them as Roman; and though they have their relation and their duties to the whole world, yet the care of Italy is their especial function.

M. Didier has just brought together in one volume the articles on Prudhon which M. Charles Clément has contributed at different times to the *Gazette des Beaux-Arts*. The work has been fully completed by the author, and is accompanied by thirty fine engravings, reproducing the painter's most capital works, several rare etchings by him, and some of his principal drawings. M. Charles Clément is continuing his study of modern French painters; and the *Gazette* will publish in its next number the commencement of an important work on Léopold Robert. M. Clément was the intimate friend of the late Aurèle Robert, and has had the opportunity of acquiring from him much private and valuable information concerning the life of his brother Léopold.

The portrait of M. Thiers, on which Mlle. Jacquemart has been for some months past engaged, will be exhibited at the coming Salon.

M. Émile Vernier was entrusted by M. Corot, some time back, with the task of reproducing several of his paintings, in a set of lithographs published by M. Marion, the director of the *Libraire artistique*. These are now exhausted, and M. Vernier has just completed a second and more important series, in which will figure "Le Matin," "Le Soir," "Sodome," "Le Marais," "Le Berger," "La Toilette." The new issue will thus represent the genius of Corot in each of its various forms.

The Archaeological Congress of France will be held this year at Vendôme, and will commence June 18. A statue of Ronsard will be inaugurated during the sitting of the congress. A retrospective exhibition of the art-work of the Vendômois is in course of organization, and will be opened at the same time.

The Italian papers announce an open competition for a statue in white marble representing Joseph Mazzini in proportions somewhat larger than life. This statue is intended to replace the bust which was deposited at the Capitol on the 17th March, 1872. The competition will close on the 18th June this year. Designs are to be sent to 81, Via della Croce, Roma.

Three terracottas, once in the Praun'sche collection at Nürnberg, and now the property of Professor Hähnel, of Dresden, have been offered for purchase to the British Museum. They are said to be from the hand of Michelangelo. The sum asked is 3000*l*. The subjects are Morning, Day, and Night. It is not possible to speak positively as to their merits or authenticity from a brief inspection of the photographs which have been forwarded to England. If they are really the first thoughts for the figures of the Medici tomb, they should undoubtedly be secured.

Im Neuen Reich (No. 14) contains four hitherto unpublished letters of Niebuhr's, written from Rome, 1816–19, to the Minister v. Altenstein. They are valuable, as showing the impression made on him by the movement then inaugurated by the young German artists in Rome. The paintings of Cornelius, Philip Veit, Overbeck, and Wilhelm Schadow, in the Casa Bartholdy, excite his eager hopes, and he earnestly urges their claims to encouragement and aid from the government. He succeeded in obtaining some small sums for them, and even helped them himself as far as his means allowed. He urged the appointment of Cornelius in 1817, as the fitting person to start afresh the Düsseldorf Academy of Art, and eventually obtained for him (1819) an invitation to Berlin with the commission to decorate the theatre in fresco. But the letter reached Rome a month too late; Cornelius had already departed for Munich, and had there engaged to carry out the works of the Glyptothek. The letter from Cornelius to Reimer, appended at the end, contains nothing specially worth notice.

The well-known art-student and collector Baron R. v. Retberg, of Munich, has recently brought out a catalogue of Dürer's etchings and engravings chronologically arranged. This book,

which is the result of many years' labour, is a most valuable contribution to Dürer literature. It offers not only a completely new arrangement of the known materials (Bartsch and Heller are arranged according to technic or subject), but in every instance where written date fails us, carefully stated critical proof is given. The catalogue is prefaced by a sketch of the life of the master, in the form of a convenient summarised table. It had been intended to bring out the volume in time for the Dürer exhibition, which was projected at Nürnberg in 1871, but the war delayed its publication, and also deprived the exhibition of much of its contemplated importance. The *Germanische Museum* is at this moment busied in the endeavour to bring together a collection of all Dürer's known works, either in originals or in accurate copies.

A third edition of Karl Heideloff's *Die Ornamentik des Mittelalters* has just been brought out with a critical, revised text by Professor Bergau.

The number of sales which are taking place in every direction, and which are too important to be left without comment, is almost unprecedented. At the end of March the sale of the Gsell collection at Vienna realised about 2,500,000 frs. French pictures came well to the front. The "Troubadour" of Couture went for 46,000 frs., little bits by Diaz fetching 4000 and 6000 frs. a piece. It is said that a well-known London dealer bought up a lot of canvasses of "all sorts," and the Viennese are delighting themselves with the thought of the number of copies the English are going to swallow.—M. Riocreux's collection of porcelain and faïence, which was sold by auction on March 30, also merits notice. One of the principal pieces was a dish signed on the reverse, "1530, M. G. da Gubbio." The subject in the centre was "Romulus and Remus suckled by the Wolf." The colouring is polychrome with metallic ruby reflections. This went for 700 frs.; an Urbino bowl from the Pasolini collection for 112 frs. The specimens of Nevers and Rouen pottery went comparatively low. For example, a "Flambeau appliqué" (an arm issuing from the mouth of a mask), which was an extremely rare example of Nevers, obtained but 36 frs.—A large portion of the work of Androuet Ducerceau came to the hammer in the second week of April, at the Hôtel Drouot, amongst the effects of the late M. Vaudoyer, the well-known architect. This excessively rare collection was secured for the Berlin Museum, in spite of the zeal of a French amateur, who ran the biddings up to about 5000 frs.—The apparently low prices given at the Persigny sale are now explained by the fact that many of the attributions were incorrect, and a considerable portion of the paintings were either damaged or repainted. The consequence was that a few good things went for less than their real value, so disastrous was the impression produced on amateurs by the close neighbourhood of more than doubtful work. Amongst others may be cited "The Fool," attributed to Velasquez, but probably by the hand of some follower or pupil. This picture, really remarkable in itself, fetched but 750 frs., and was certainly worth more. It became the property, together with the Reynolds ("Prince of Wales"), of M. Maurice Cottier.—The Regnault sale, paintings (19), water-colours (20), drawings (83), studies, sketches, &c. (42), realised 141,031 frs. The principal sums were: for a "Panneau décoratif," 25,000 frs.; "Sortie du Pacha à Tanger," bought by M. Haro, 10,000 frs.; a water-colour drawing, "Cour mauresque avec laurier-rose," 6300 frs.—The two first days of the Gillott sale at Christie and Manson's produced 73,236*l.* Some of the highest prices were as follows: "Hampstead Heath," by Linnell, 1660 guineas; the "Woodlands," Linnell, 2500 guineas; "Roast Pig," by Webster, 3500 guineas; "The Wooden Walls of Old England," Stanfield, 2700 guineas; "The Bay of Naples," by W. Müller, 2000 guineas; "The Chess-players," W. Müller, 3950 guineas. This picture, which is perhaps the artist's *chef-d'œuvre*, excited a keen competition between Mr. Addington and Mr. Agnew, who eventually carried it off. Turner's "Going to the Ball" and "Coming from the Ball, San Martino, Naples," fetched respectively 1700 and 1500 guineas. These pictures are in his later manner. "Checkmate Next Move," by Mr. Horsley, was knocked down to Mr. Cox for 1600 guineas. That portion of Mr. Gillott's collection which represents the early English school came to the hammer on the 26th and 27th April; and the third part, including the old masters and watercolours, will be sold on the 3rd and 4th May.

A remarkably fine specimen of Fortuny's work is now on view at M'Lean's gallery in the Haymarket. The subject is the interior of a Moorish court of vast size. Two culprits lie already in the stocks, while a third is struggling hopelessly with the executioner, and from an inner recess a solemn assemblage look down on the proceedings. The foreshortening is very fine; and in spite of the small size of the figures, the character of Eastern attitude is given with that simple truth which is most unapproachable. A ray of light, clear as day, streams across the picture; and every shadow is full of the most subtle pulsations of colour, the key-note of which is given in the blue-green edge of a motionless pool of water which sleeps, full of glassy reflections, to the left in front. There is no touch of poetry or sentiment, but an air of brilliant and absolute certainty characterizes the whole with a daring charm.

New Publications.

Hugo, Victor. L'Année terrible. Paris: Michel Lévy.
Kinkel, G. Euripides u. die bildende Kunst. Berlin: Ebeling u. Plahn.
Lanetti, V. Degli studi, delle opere e della vita del pittore Sebastiano Santi. Lettura. Venezia: Longo.
Pfizmaier, A. Kunstfertigkeiten und Künste der alten Chinesen. Wien: Gerold's Sohn.
Westphal, R. Geschichte der alten u. mittelalterlichen Musik. 1. u. 3. Abth. (Plutarch üb. Musik.) Leipzig: Leuckart.
Wille, Eliza. Johannes Olaf. 3 Bde. Leipzig: Brockhaus.

Theology.

The Book of Job. [*Das Gedicht von Hiob.* Hebräischer Text, kritisch bearbeitet u. übersetzt, nebst sachlicher u. kritischer Einleitung, von Adalbert Merx.] Jena: 1871.

This volume, as its title indicates, is not a commentary. The author, who has already distinguished himself in other departments of Semitic study, does not appear ambitious to add to his already well-earned reputation, that of a Biblical commentator; though, if there is one book of Scripture which more than another stands in need of detailed treatment, it is the Book of Job. Dr. Merx, however, has undertaken a task which is even more difficult and important than a commentary. He has endeavoured, with the aid of the ancient versions, and in particular of the LXX, to present the original text of Job in a revised and amended form, and certainly no more acceptable service could be rendered to the student of the Hebrew Scriptures than a successful attempt to do so.

The revised text, which, with a translation, forms the principal part of the volume, is preceded by an introduction, in which the author discusses, with distinctness and brevity, the usual questions as to the subject-matter, form of composition, age, &c. of the poem, on which so many conflicting opinions have been expressed. It must suffice to remark here that he considers the Book of Job to be an ideal history, in which the chief personage (*'Ijjôb* = "the antagonist") is the embodiment of the writer's doubts and antagonism to the received faith, while his three friends are the representatives of that faith, and of the writer's efforts to cling to it and overmaster his sceptical thoughts. A sublime and overpowering revelation of Jehovah brings the conflict to a close. With regard to the revision of the text, the author endeavours (1) to show its necessity, and (2) to point out the principles on which it should proceed. He by no means withholds from the Jewish doctors the due meed of applause for the singular care with which the sacred text has been handed down through so many generations; but at the same time he most justly observes that, besides the question whether the Jewish doctors have faithfully transmitted the text anciently received by them, there is

another of still greater moment, viz.: What was the state of the text when they received it? It is not sufficiently considered that the extraordinary precautions which they adopted for the purpose of preserving the text unchanged must have had the effect of perpetuating old errors, as well as preventing the intrusion of new ones. Unquestionably all the books must have suffered, some to a greater, some to a less extent, between the time of their original composition and the age when their transmission began to be an object of anxious care to the Jews. This is evident not only from a comparison of the traditional text with the most ancient versions, but also from a comparison of various parts of that text with one another, as, for example, the corresponding sections of Chronicles with the text of Samuel and Kings. When, therefore, in our study of the Hebrew Scriptures, we stumble, as we not unfrequently do, on passages from which it is impossible to extract any suitable or even intelligible meaning without having recourse to the most arbitrary treatment, we ought not to keep out of view the possibility of our embarrassment being occasioned by a corruption of the original text, though, indeed, there are scholars who seem prepared to take all sorts of liberties with the grammar and lexicography of the language, rather than sanction the slightest deviation from the Masoretic tradition. Dr. Merx gives examples from Job and elsewhere of textual errors arising from the interchange, the repetition, and the omission of letters. Under the last head he adduces Job xxvii. 18, "He buildeth his house as a moth," כָּעָשׁ, for which he would read, on the authority of the Greek and Syriac, כָּעַכָּבִישׁ, *as a spider* (comp. viii. 14); and he accounts for the change to the present text by supposing the existence of a blemish in the original MS., thus—כע ≡ ש.

The *principles* of revision on which Dr. Merx proceeds are in theory extremely simple. First of all, by comparison of extant MSS. he would endeavour to reach as close an approximation as possible to the text of the archetypal MS., from which they have all been derived. The text thus obtained he would set down as one codex. Then, from the ancient versions, chiefly the LXX and Peshito, he would do his best, by the careful study of their language and spirit, to reproduce, in the case of each disputed or difficult passage, the consonantal texts which lay before their translators. To these texts, also, he would assign the rank of ancient codices. And by comparison of the codices thus obtained from the versions with that obtained from the MSS. he would restore the true text. To purely conjectural readings he would have recourse only in extreme cases, when all other means of emendation have failed. With regard to the relative importance of the codices just mentioned, he assigns the first place to that derived from the LXX, as being, in his opinion, more ancient than the others. To the old Syriac version he assigns a middle place, both chronologically and with respect to the character of its readings, between the LXX and Masoretic texts; and for its use in textual emendation he lays down the following rules:—(1) The reading, in which the LXX and Syriac concur, is the more ancient. (2) The LXX is to have the preference, but not very decidedly, even though the Masoretic reading is confirmed by the Syriac. (3) If the Masoretic and LXX concur against the Syriac, the latter is at once to be rejected, unless the internal evidence in its favour is very decisive. The Vulgate and Targum, being both founded on the traditional text, are naturally of inferior value as aids in its reconstruction, except in those cases in which they depart from it and agree with the LXX and Syriac.

It will thus be seen that the main principle on which the author proceeds in his revision of the text of Job is that the LXX represents an older and better text than the Masoretic. We believe very few indeed will be found to concur with him in this opinion. In fact, he does not himself venture to carry out the principle to its legitimate results; for it is usually to the emendation of the text only in vexed passages, and not always even in these, that he applies it. Everywhere else he adheres to the traditional Hebrew text against the LXX. But if the LXX text be older and more reliable than the Masoretic in obscure passages, must it not also be so in passages which are not obscure, but in which nevertheless it deviates from the Hebrew? One would imagine it must be so. And, therefore, if the Masoretic text is accepted as a general basis for the revised text (and the author does so accept it, usually following it even where it differs from the LXX), consistency requires that it should have the preference throughout, except in those cases in which it can be shown that the readings suggested by the LXX are superior, not as LXX readings merely, but on other grounds.

Independently, therefore, of the practical difficulties which must be encountered in making the attempt to revise the text of Job on the author's principles, and of which no one is better aware than the author himself, we must express our conviction that the principles themselves are erroneous, and that the adoption and application of them cannot be expected to lead to a satisfactory result. This conviction, we must add, has been quite confirmed by an examination in detail of the author's revised text, which we can by no means accept as a nearer approach to the original form of the text than that of our Hebrew Bibles. We fear that the chief blemishes in the present text date from a period anterior to the age of the earliest version, and cannot now be amended otherwise than by critical conjecture. At the same time we heartily commend the spirit in which the author has undertaken so difficult a task, and the praiseworthy modesty with which he speaks of the result of his labours.

Our space does not permit us to examine Dr. Merx's views of the so-called strophical arrangement of the poem, which also bear (somewhat unfortunately, we think) upon his reconstruction of the text. D. H. Weir.

Intelligence.

Mr. Sanday, of Trinity College, Oxford, well known to our readers by his articles on Keim's *History*, has published the first-fruits of his researches into *The Authorship and Historical Character of the Fourth Gospel.* Those who are best prepared to agree with his conclusions will appreciate the fairness and simplicity with which they are defended. The work is, in fact, remarkable for more reasons than one. First, on account of the thoroughness with which the author has examined the most recent works on the subject, whether English or German, conservative or liberal in tendency. We almost fear that he has carried his laudable desire to be abreast with the latest investigations to an extreme, and that he has injured the effect of his book by too exclusive a consideration of Keim and Sir R. Hanson. Secondly, because of his frank acceptance of the fact that the external evidence is insufficient to decide the question at issue, and his consequent limitation of the enquiry to the evidence supplied by the Gospel itself. Chapter after chapter is analysed, and the psychological verisimilitude of the details brought into bold relief. The circumstantial precision of the narrative is thus found to be so great that "Shakespeare himself, if he had been born after the taking of Jerusalem, could not have written the fourth Gospel as it is" (p. 295). The assumptions of the work are those of a sober orthodoxy. Inspiration is a (supernatural) "heightening of natural faculties;" the miracles of the Gospels are accepted as in the gross "historical," without enquiring too closely into the quality of the evidence. It seemed desirable to address this warning to the reader, in his own interest as well as that of the author. It would be unfair to Mr. Sanday to infer from the studied moderation of the title of his work, and from his adoption—at least in part—of the method of "liberal" criticism, that he is without an opinion on the graver matters which underlie such researches as the present. And it would be unfair to his readers to allow them to suppose that he has done more than touch the outskirts of the question at issue. To be complete, the book should

contain an examination into the antecedent probability that the biographies of the founder of the Christian religion contain a legendary accretion. Mr. Sanday not only ascribes the fourth Gospel to St. John, but implicitly denies that it contains any legendary matter (p. 273). This involves a similar denial with regard to the other Gospels, which no antagonist could accept without demanding a proof. Objection may and doubtless will be offered to many of Mr. Sanday's "psychological" arguments, some of which have a strong likeness to the century, and might possibly have been modified by a more special knowledge of Old Testament criticism. We notice, however, that he accepts "the second Isaiah" (p. 40) as a distinct part of the Old Testament Scriptures. This implies some thoughtful study of the subject, though it follows naturally from the psychological point of view at which the author has placed himself. A review of the work will follow.

A valuable discovery has been made, in the episcopal archives at Coire (Grisons), of two fragments of an old Latin version of St. Luke, which had been stuck on the inside of the cover of a book. They contain Luke xi. 11–29, xiii. 16–34. In the new number of the *Studien und Kritiken*, Prof. Ranke gives the two most important columns, containing Luke xiii. 16–25 ("alligavit Satanas—foris stare dicen[tes]"). He remarks that the text agrees most closely, especially in its omissions, with that of the Codex Vercellensis (saec. iv.). Either the MS. from which it is taken was a copy of that codex or else both MSS. were derived from one and the same source. Vercelli is only thirty (German) miles from Coire.

The Society for Biblical Archaeology has lately received a rich present for its library, in the shape of an ancient Pentateuch-roll, dating apparently from the tenth century. This MS. is the only copy of the Pentateuch as used by the Aden Jews, descendants of the pre-Mahometan inhabitants, which has yet reached this country. The council of the society hope soon to exhibit the roll to the public, with a detailed examination of its philological and archaeological peculiarities.

Contents of the Journals.

Zeitsch. f. wiss. Theologie, vol. xv. No. 3.—Justin's Relation to the Acts of the Apostles, by Fr. Overbeck. [Seeks to show that Justin, like the Acts, belongs to a stage in post-apostolic gentile Christianity when the genuine Pauline doctrine had lost much of its purity.]—Peter in Rome and John in Asia Minor, by A. Hilgenfeld. [Conservative; against Lipsius on the one hand, and Scholten on the other.]—On the Contradiction between 2 Tim. iv. 20 and Acts xxi. 29; or, On the Imprisonment of the Apostle Paul, by H. Lucht.—Luther's Birth-year again, by H. Holtzmann.—Notices of books.

Theological Review, April.—On the Development of Opinion in the Early Christian Church, as indicated by a comparison of the different books of the New Testament. Part II. By the late J. J. Tayler. [A charmingly written popular, but not at all superficial, essay.]—Theism, Atheism, and the Problem of Evil, by Moncure D. Conway.—St. Paul and the Nero-Legend, by C. J. Monro. [Nero the veiled, and Vespasian the unveiled Man of Lawlessness; Vitellius "the restraining agent."]

Journal of Philology, No. 7.—Notes on three passages of Exodus, by W. A. Wright. [1. Ex. iii. 14, "I AM, because I am." 2. Ex. xxii. 4 (5). Read אֶת־הַבְּעֵרָה, and render, "If a man shall set on fire . . . and shall put the burning fuel so that he burn up the field," &c. 3. Ex. xx. 4, 5; תְּמוּנָה, not "likeness," but "shape," or "form." Render, "And as to any form . . . thou shalt not bow down to them."]

New Publications.

Cremer, H. Biblico-Theological Lexicon of New Testament Greek. Transl. by D. W. Simon and W. Urwick. Edinburgh: T. and T. Clark.

Delitzsch, Fr. Commentar zur Genesis. 4. Auflage.

Havet, E. Le Christianisme et ses Origines: l'Hellénisme. Paris: Lévy.

Keil, C. F. Biblischer Commentar. Jeremia-Klagelieder. Leipzig: Dörffling u. Francke.

Knobel, A. Der Prophet Jesaja. 4. Aufl. Bearb. v. Dr. L. Diestel. Leipzig: Hirzel.

Paul of Tarsus. By a Graduate. Macmillan.

Sanday, W. The Authorship and Historical Character of the Fourth Gospel. Macmillan.

Schrader, Eb. Die assyrisch-babyl. Keilinschriften und ihre Resultate für das A. T. Giessen: Ricker.

Vaughan, R. B. The Life and Labours of St. Thomas of Aquin. Vol. II. Longmans.

Physical Science.

Exotic Butterflies; being Illustrations of New Species. Parts 1–80. By W. C. Hewitson. Van Voorst.

Equatorial Lepidoptera, described by W. C. Hewitson. Van Voorst.

Lepidoptera Exotica; or, Descriptions and Illustrations of Exotic Lepidoptera. By A. G. Butler. Parts 1–11. Janson.

Cistula Entomologica. Parts 1–4. By A. G. Butler. Janson.

A Synonymic Catalogue of Diurnal Lepidoptera. By W. F. Kirby. Van Voorst, 1871.

Catalog der Lepidopteren des Europäischen Faunengebiets. Von Dr. O. Staudinger und Dr. M. Wocke. Dresden: 1871.

We have here strung together several recently published works upon the beautiful insects constituting the order Lepidoptera, commonly known under the names of butterflies and moths, with the view of calling attention to the wonderful increase in our knowledge of those tribes which has been made during the last quarter of a century. Looking still further back, we remember the time when exotic Lepidoptera were almost entirely neglected by our entomologists. The great collectors of the last century, especially Drury and Francillone, had passed away, and Mr. Haworth's collection may be said to have been the sole accessible private depository of the traditions which Fabricius had left behind him. McLeay's famous collection was locked up, and it was in Mr. Haworth's cabinet that we were able to find references to the wonderful volumes (seven in number) of drawings of exotic butterflies made during the last quarter of the eighteenth century by Mr. Jones, so constantly referred to by Fabricius, from which, indeed, from time to time, Donovan professed to publish copies of rare species only to be found represented in those delineations. After the death of Samouelle, Edward Doubleday was appointed one of the entomological assistants at the British Museum, and his strong bias for Lepidoptera led to the arrangement and increase of the national collection in a very marked degree, whilst the publication of the fine work on the genera of diurnal Lepidoptera which he commenced, the plates of which were drawn by Mr. Hewitson, extended the taste for these beautiful objects far and wide, which has been further fostered by the publication by the latter of these gentlemen of a series of volumes, of which the title is given at the head of our list, containing most admirable representations of new exotic species. Hence, at the present day, the number of amateurs of exotic butterflies is so greatly increased that many collectors have been despatched to different quarters of the globe to search for specimens. The gigantic collections formed on the Amazons by Mr. Bates and in the Malayan Archipelago by Mr. Wallace have also contributed to swell the lists to a great extent; but still so endless are the productions of nature that even within the last two or three years Mr. Buckley, after less than a twelve months' visit to the eastern slopes of the northern portion of the Andes, brought home a collection of butterflies in which from 150 to 200 new species were contained, most of which have been described by Mr. Hewitson in the second work on our list. In like manner a collection of butterflies, amounting in number to about 50,000 specimens, has recently arrived from Costa Rica, formed by Dr. van Patten, containing about 50 new species, of which the descriptions have been partially published by Mr. Butler in his little periodical work, the *Cistula Entomologica;* the same author having also contributed materially to our knowledge of new exotic species by his work *Lepidoptera Exotica*, in which figures are given which, considering that they are printed in chromo-lithography, in many instances give very characteristic representations of the various objects they are intended to delineate. Many other entomologists, both at home and abroad, are engaged in the

delineation and description of new species, both British and exotic, of butterflies and moths, so that scarcely a periodical devoted to zoological subjects now appears without containing fresh materials towards our knowledge of these tribes.

The fifth work on our list has been already (although too shortly) noticed in our pages. It is a most carefully compiled catalogue of all the species of butterflies of which descriptions had been published almost to the date of its own appearance. It consequently contains the most recent summary of the diurnal portion of the order, being confined to the butterflies, of which it enumerates 7,700 species, not including many named varieties which have been considered as distinct by different authors. In the British islands we possess only 66 species of butterflies; but in Staudinger and Wocke's catalogue (the sixth work on our list) we find that the number of species of butterflies belonging to the European fauna amounts to 456, whilst the number of nocturnal Lepidoptera or moths amounts to about 2800. In this work these authors consider it to be "une erreur, conduisant même à des conséquences absolument fausses, de prendre les limites de la géographie politique pour cadre quand on veut considérer un certain ensemble en histoire naturelle." Their catalogue consequently contains species found in a great part of the north of Asia as well as the Holy Land and north of Persia, and also the mountainous regions of the north-west of Africa, and the Madeira and Canary islands; but it is in the tropical and subtropical regions, especially of the New World, that the great mass of diurnal Lepidoptera is found.

The great additions to our collections of exotic species to which we have already alluded have made us acquainted with the peculiar fact, that certain species common and quite uniform in their appearance and characters in certain given localities, are found in a slightly modified, but persistent, form in other regions, and this peculiarity has given rise to great uncertainty in the nomenclature of the species, some authors contending that these local forms are to be treated as absolutely distinct, whilst others maintain them to be only varieties of the previously known types or races. Let us take, for instance, the gigantic types of the sub-order which, from their size, have well been named *Ornithopterus* (bird-winged), and which are natives of the East; of these we find *Papilio Priamus* made up in Mr. Kirby's catalogue of not fewer than seventeen local forms, which have been named *Priamus*, Linn.; *Panthous*, Linn.; *Richmondia*, Gray; *Cassandra*, Scott; *Euphorion*, Gray; *Pronomus*, Gray; *Poseidon*, Doubleday; *Cronius*, Felder; *Boisduvalii*, Montrouz.; *Oceanus*, Felder; *Arruana*, Felder; *Urvilliana*, Guérin; *Triton*, Felder; *Pegasus*, Felder; *Archideus*, Felder; *Lydias*, Felder; and *Croesus*, Wallace. (The last-named insect is the one which is described by Mr. Wallace in his *Travels* as having so greatly excited him when he first observed it—and which was sold at 10*l.* per pair when first received in England—that it threw him into a fever for several days.) There is also in India and the adjacent districts and islands a series of very elegant butterflies, of which *Pap. Paris* is the type, distinguished by having their wings powdered with golden-green atoms; they in like manner exhibit permanent variations of no higher specific rank than those of the *Priamus* group in their respective districts, and yet we find each of them in Mr. Kirby's catalogue given as distinct species. So, again, looking at the genus *Papilio* in Staudinger and Wocke's catalogue, consisting only of seven species, we find *Papilio Xuthulus* of Bremer given as a variety of *P. Xuthus* in the text, but in the appendix we are told "bona est species, sec. Felder," whilst the Syrian *P. virgatus* of Butler is doubtfully considered as a variety of *P. Podalirius*.

This diversity of opinion, leading, as may easily be conceived, to endless disputes as to the specific names to be given to this or that presumed species or geographical variety, or sub-species or race, as it has been variously called, may at first sight appear of a trifling character, but very little reflection will show that it involves problems of very wide application, amongst which the modification of form, the evolution of species, and even the question of the unity of the human race, may be mentioned.

"Von viel grösserer Bedeutung sind die Localvarietäten oder Racen, von mir mit *v.* (varietas) bezeichnet. Manche derselben werden sogar als eigene Arten betrachtet, und lässt sich hierüber gar nicht streiten, da dies ganz von den mehr oder minder *Darwinistischen* Ansichten des Einzelnen abhängt."*

Hence it may be safely inferred that the careful investigation of the extent of variation exhibited by the individuals of these sub-species, the modes in which they differ, *inter se*, the possibility of their effecting prolific breeds when crossed together, and other such enquiries, upon the spot where the insects occur, must be made before we can arrive at a satisfactory conclusion (even if then) as to the extent and limits of each species. In the meantime it may be suggested not only that, until such result has been obtained, each clearly distinct local and permanent variety should be named, but that, wherever possible, names should be given which should indicate in some way or other the connection of the local form with the type of the species. This has, indeed, been partially attempted by using prefixes, as in the case of *Charaxes Jasius* and *Epijasius*, or identical terminations, as in *Papilio Protesilaus*, *Autosilaus*, *Agesilaus*, *Macrosilaus*, *Telesilaus*, *Penthesilaus*, &c., or by forming anagrams from the name of the type species.

And this brings us to the consideration of another difficulty which threatens, at the present day, to become a very serious stumbling block in the way of science, namely, the perpetual change in the names, not only generical (as might more reasonably be expected), but also specific, even in the case of species well defined and universally admitted as such. The binomial system of nomenclature, introduced by Linnaeus, is now adopted throughout the animal and vegetable kingdom by nearly every naturalist, and the rule recognised is that the first name given (with a satisfactory description) to a species shall thenceforth be its permanent designation. Now this at first sight seems to be a very simple rule, but its working is not so. For instance, a description of an insect may be a very good one, taken, however, from an extreme variety, and which, not agreeing with the ordinary type of the species, has misled a subsequent writer into describing the type under a different name; when, however, the previous description of an accidental variety is found, it is immediately said that it must supersede the latter. So, when a description is found in some obscure work of a species which has for half a century or more been universally known under a name published subsequently by some well known writer, we are now told that we must take up the first name, and in this manner the nomenclature of the science is perpetually shifting. As examples: the two common European swallow-tailed butterflies of Europe are known throughout the scientific world under the names of *Papilio Machaon* and *Podalirius*, but Rennie, having discovered that Retzius (as he fancied, previous to Linnaeus), had given to the former the name of *Papilio Reginae*, resuscitated the latter name, whilst even Staudinger and Wocke in their catalogue before us have given the name of *Papilio Sinon* to *P. Podalirius*, Poda in 1761 having described it under the former name, before Linnaeus first gave it, as they thought,

* Staudinger, pref. p. xxii.

in 1763, the latter. This is a striking instance of this system of *resurrection*, as it has been termed, holding, as the species does in their system, the conspicuous position of the head of the whole of the Lepidoptera. Mr. Kirby, who has adopted this system of hunting out old names to a greater extent than any previous author, quotes these dates (or rather he quotes Linnaeus under the year 1764), and consequently he ought to have given *Podalirius* under the name of *Sinon*, which he has not done, and ludicrously enough Staudinger and Wocke subsequently discovered that Linnaeus in fact employed the name of *Podalirius* in the 10th edition of the *Systema Naturae* in 1758, and have, consequently, in their appendix been obliged to restore the latter name. Now the use of names is but supplementary to a knowledge of the objects designated, and although it may be true that "Nomina si periunt, perit et cognitio rerum," the laws of nomenclature have their limits as well as the laws of any other kind of property, and as undisturbed possession of an estate for a certain number of years is held to bar all previous claimants so I do not hesitate in suggesting that, where a name has been universally adopted for a species for a certain number of years (say 25), no previous name may be restored. In fact, in such case I entirely agree with the dictum quoted by Mr. Lewes, that "Communis error facit jus."

I. O. Westwood.

Scientific Notes.

Physiology.

The Action of Galvanic Currents on Nerve and Muscle.—Professor L. Hermann contributes a long paper on this subject to the 6th part of *Pflüger's Archiv*, in the course of which he shows that living muscle offers very much greater resistance to an electric current passing in a direction across the fibres than to one transmitted along them, the average difference being as 7 : 1. In muscles which have passed into the condition of *rigor mortis*, this difference almost entirely disappears. In living muscle the specific resistance in the longitudinal direction (taking that offered by mercury as unity) is about 2,330,000, and in the transverse direction about 15,134,000. A similar difference in the amount of resistance offered to the passage of a current in these directions is noticed in the case of the nerves, the ratio here however being somewhat less, namely about 5 : 1. The absolute specific resistance of nerve in the longitudinal direction is 2,554,000, and in the transverse direction 12,586,000, that of mercury being taken as 1. The longitudinal resistance of the nerve is augmented by heating it to 50° C. (122° Fahr.), the transverse resistance simultaneously diminishing. At the boiling temperature, however, the longitudinal resistance rises to that possessed by the living nerve. Professor Hermann connects these differences in the resistances offered by the longitudinal and transverse section of the nerves with the different polarizability of the sheath and nucleus of the fibres, and gives numerous and elaborate mathematical formulae bearing upon the subject. He also describes a new universal commutator.

The Relation of Uric Acid to Muscular Action.—M. A. Sawicki gives the details of a series of experiments on man, which show that the quantity of the acids excreted by the kidneys depends to a far greater extent upon the quantity and quality of the food ingested than upon the amount of exercise taken (*Pflüger's Archiv*, part vi.).

The Vagus, the Sensory Nerve of the Heart.—K. Gurboki (*Pflüger's Archiv*, part vi.) shows that in the frog the vagus is the sensory nerve of the heart, by the following experiment:—The vessels of one or both lower extremities of a frog are first ligatured, and the animal is then poisoned with woorara, the thorax and pericardium are opened, and the posterior surface of the auricle irritated with a sponge dipped in acetic or, still better, in sulphuric acid. Each time that the spot in question is irritated, reflex contractions occur in the posterior extremities. If, however, the vagi have been divided, no contraction occurs, showing that these nerves constitute the paths along which the sensory impulses exciting the contractions are transmitted.

Peripheral Distribution of Non-Medullated Nerve-Fibres.—Dr. Klein, of the Brown Institution, continues the publication of his researches on this subject in the April number of the *Quarterly Journal of Microscopical Science*. He calls in question the correctness of Dr. Beale's statements regarding the "ultimate nerve-fibres," maintaining that such fibres correspond to the *coarser* non-medullated fibres, which are rendered visible by the mode of preparation that he, Dr. Klein, has employed. From this *coarser* plexus spring a number of finer nerve-fibres, still provided at rare intervals with nuclei, forming a rather dense plexus, that in the case of the arteries resembles a perivascular sheath. From these fibres, again, still finer ones may be traced, which no longer exhibit nuclei, and enter the wall of the vessel itself.

Histology of the Nerves.—M. Ranvier, in a paper in Brown-Séquard's *Archives de Physiologie*, describes a peculiar feature in the microscopical character of the nerves, which, he says, has hitherto been entirely overlooked, or has only been very imperfectly recognised. On examining very fresh nerves, he finds that they present a series of annular constrictions placed at regular distances about a millimetre apart. As it is almost impossible to tease out perfectly fresh nerves into thin constituent fibres, he macerates them for a very short time in picrocarminate of ammonia, osmic acid, or nitrate of silver; the cylinder-axis of the nerves becomes stained with picrocarminate of ammonia or nitrate of silver, whilst the white substance of Schwann remains uncoloured. When a nerve-fibre is exposed to the action of these agents, it becomes stained at each constriction, showing that the white substance of Schwann is absent at these points. With perosmic acid, on the contrary, the white substance of Schwann blackens, whilst the cylinder-axis remains for a time unchanged: a nerve-fibre macerated in this acid exhibits a clear part at each constriction, but is blackened elsewhere, giving therefore confirmatory evidence that the white substance is not present at these points. It appears, then, that the nerve is divided into a series of segments by the presence of regularly disposed constrictions, and that at these constrictions the sheath of Schwann is either absent or reduced to an extremely thin layer, the cylinder-axis coming into proximity, if not immediate contact, with the external sheath. A small mass of protoplasm or nucleus is found at some point along the length of each internode, and usually at an equal distance between two adjacent constrictions. This has led M. Ranvier to suggest that each node was originally a cell, and that the fibres are composed of nerve-cells placed end to end and attached to one another by a thin cementing layer.

The Nerves of Taste.—M. Lussana, in the journal where the foregoing observations occur, contributes a paper on the nerves of taste, in which he shows, from pathological cases, that the sense of taste in the forepart of the tongue is not derived, as has always been supposed, from the fifth nerve, since the branches of this nerve may be entirely paralysed, and yet the taste be perfectly preserved. He likewise refers to cases in which the taste was entirely lost, while the sensitiveness to tactile impressions was undiminished in all the parts supplied by the fifth nerve; on the other hand, the sense of taste in the forepart of the tongue is lost after section of the facial nerve near its origin. M. Lussana therefore considers that the gustatory nerves of this part are due to the fibres from the facial contained in the *chorda tympani* which joins the gustatory branch of the fifth nerve, and not to the fifth itself.

Transversely Striated Muscular Tissue in Acari.—J. H. L. Flögel states that he has been able to determine the presence of transversely striated muscle in a species of *Trombidium*, by placing the whole animal for an hour or two in a one per cent. solution of perosmic acid, washing it in water, and then dissecting it in a very weak solution of glycerine. The transverse striae are very wide apart; each fibre appears to be composed of a semifluid substance, which remains uncoloured in perosmic acid, and is filled with denser columns, the fibrils.

Germination of Cryptococcus.—Hallier complains, in the last part of his *Zeitschrift für Parasitenkunde*, of the unreasoning opposition that has been offered to his views on the germination of the lowest forms of fungi. His present paper is devoted to the proof of the capability of germination of cryptococcus, and he considers the following propositions to have been satisfactorily demonstrated. 1. The yeast of beer germinates whenever it is placed under favourable conditions. 2. As long as the germ-tubes and their branches grow in a moist place, rod-like germ-cells are constricted off at their extremities. 3. Beer-yeast consequently belongs to the mould fungi (*Schimmelpilze*), of which it constitutes a one-celled form, and is in no way connected with the *Ascomycetae* of Reess, on which point Dr. Reess has fallen into an error, pardonable enough considering the difficulty of the investigation. 4. Smut (*Ustilago carbo*, Tulasne), when its germ-tube grows in spots moistened with distilled water, behaves itself exactly like the germ-tube of yeast, that is, rod-like cells are constricted off from the extremity of every fibre. 5. The parasite found in the urine of typhus patients, when placed in a nitrogenized solution of sugar and other fluids capable of undergoing fermentation, buds like cryptococcus, and increases in the same manner. 6. Moreover, cryptococcus cells germinate under favourable conditions, and their germs comport themselves like beer-yeast when placed on a moist bed. 6. The germ-cells of Haubner's skin-fungus of the horse behave like those of yeast under similar conditions, that is, in fermentable fluids they develop cryptococcus-cells, which, under favourable circumstances, germinate and constrict off elongated cells from the ends of the fibres.

On Epilepsy artificially produced.—It is well known that M. Brown-Séquard has performed experiments which prove that by sec-

tion of certain columns of the spinal cord of the guinea-pig, and of certain of its nerves, as the sciatic, zones or regions of the skin are so affected that on causing an irritation of these parts by pinching or pricking the animal is thrown into an epileptiform state. These experiments have lately been repeated and varied by M. Westphal, who finds that a slight tap on the head of a guinea-pig causes an attack of epilepsy either immediately or after the lapse of a minute. The blow, it should be mentioned, must not be a severe one, or the animal will die, either with or without convulsions, from arrest of the respiratory movements, the heart continuing to beat for some minutes. After a little time an epileptogenic zone is developed on the head. The duration of the epilepsy thus produced is from six weeks to six months. The two young ones of a female thus rendered epileptic also presented a zone the excitation of which was followed by epileptic attacks. If the skin of the head is divided, and the exposed bone percussed, an immediate attack is the result; the attacks therefore are not occasioned by any irritation or excitation of the integuments. M. Westphal attaches much importance, in a pathogenic point of view, to the little haemorrhages that occur in the white substance of the *medulla oblongata* and of the spinal cord, especially to the latter, because, according to Brown-Séquard, lesions of the cervical portion of the spinal cord are always followed by epilepsy in the guinea-pig, while lesions of the *medulla oblongata* do not produce this disease in such animals as survive the injury. At the conclusion of his work, M. Westphal mentions two cases of non-traumatic epilepsy in men in whom an epileptiform zone was formed. (Brown-Séquard's *Archives de Physiologie*, March 1872.)

Geology.

The Geology of East Greenland between 73° and 76° Northern Latitude.—The valuable collections of rocks and fossils brought home by the German Polar Expedition of 1870 have been examined by F. Toula and Dr. Lenz, of Vienna, who have just published their report (*Verh. der geol. Reichsanstalt*, No. 4, 1872, p. 71). It appears that that portion of the continent of Greenland lying between 73° and 76° 30′ is formed of crystalline rocks; the islands along the coast consist in part only of the primary rocks, being covered in places with others of the Mesozoic or Cainozoic period. Some of these islands, like Shannon, are in part only of volcanic origin; the majority, however, Pendulum and Sabine islands, for instance, are chiefly composed of dolerites, anamesites, and basalt-tufas. The basalt stretches from N.E. to S.W., begins at Shannon, and, crossing Pendulum and Sabine islands, forms the important peninsula between False Bay and Tyrol Fjord, traverses Jackson Island, and proceeds thence to the east coast of Greenland. The basalt covers vast areas, but real eruption cones are nowhere observed. The anamesite exhibits the characteristic columnar structure. Miocene beds are met with in several districts; between the southernmost point of Hochstetter promontory and Cape Seebach it forms a low hilly country, at the base of a ridge of crystalline rocks, and consists of a yellow sandstone with casts of a *Cytherea*-like bivalve; on the south-eastern side of Sabine Island it occurs as quartzose sandstone with *Taxodium distichum miocaenum*, *Populus arctica*, and *Dyospyros brachysepala*. These beds evidently belong to the same horizon as the Miocene strata of Western Greenland, Iceland, and Spitzbergen. The Miocene beds between Cape Albrecht and Cape Borlace Warren contain lignite. Mesozoic rocks are met with on the eastern and southern shores of Kuhn Island; the Jurassic deposits of this locality are composed partly of marls and sandstones, and greatly resemble those in Russia. The coarse sandstones and breccias of the southern shores of the island, which contain coal, belong to the middle Dogger (inferior oolite). The Jura of Kuhn Island rests on the crystalline rocks of a lofty mountain-ridge, which, capped with ice and snow, separates the two groups of Jurassic beds. The marl of the eastern portion of Kuhn Island is partly formed of the *Ancella concentrica*, Fisch., which characterizes the Russian Jura, as well as casts of *Cyprina*, three species of belemnites, and two of ammonites, all of which have allied forms in the Russian Jura. The Dogger beds (lower oolite) containing coal, on the south coast of Kuhn Island, perhaps belong to the same horizon as the coal-bearing Jura of Brora and of the islands of Mull and Skye; *Goniomya Vscripta*, Sow. sp., a *Myacites modiola*, *Avicula Munsteri*, Gdf. sp., were obtained from this deposit. The occurrence of Rhaetic beds on the south coast of False Bay is of very great interest; they were identified by *Rhynchonella fissicostata*, Suess, and other characteristic fossils. Palaeozoic rocks are in all probability represented by a series of red, brown, bluish, and greenish calcareous shales and veined limestones on the north side of the Kaiser Francis Josef Fjord. Among the more prominent of the crystalline rocks are various kinds of gneiss, at several places showing stratification. Another deposit worthy of notice is a dolomite with traces of graphite, which occurs in gneiss in False Bay.

The Purbeck Beds of Southern France.—At a recent meeting of the Société géologique de France, M. Hébert stated that in the Mediterranean Jura of France, between Grenoble and Yenne, in Savoy, M. Lory had found vast deposits of limestone, overlying the white limestone with *Terebratula moravica*, which contain freshwater deposits exhibiting the characters of the Purbeck beds. This confirms what Zittel said some time ago, that the Purbeck beds and the upper Tithonian were formed during the same epoch.

The Origin of the Wealden Formation.—At the meeting of the Geological Society of London, held on the 20th March, Mr. C. J. A. Meyer directed attention to the probable origin of the Wealden beds of the south-east of England. He doubted the correctness of the view which derives them from the delta of a single river, regards them as a fluvio-lacustrine rather than a fluvio-marine deposit, and attributes their accumulation to the combined effect of several rivers flowing into a wide but shallow lake or inland sea. The evidence adduced in favour of this theory is mainly as follows: the quiet deposition of most of the sedimentary strata, the almost total absence of shingle, the prevalence of such species of Mollusca as live in nearly quiet waters, the comparative absence of broken shells such as usually abound in tidal rivers, and the total absence of drift wood perforated by Mollusca in either the Purbeck or Wealden strata.

The Habitat of Brachiopoda in Former Epochs.—J. Fuchs, of Vienna, in the columns of the *Verhandl. der k. k. geol. Reichsanstal.* (No. 6, p. 1), calls attention to the fact that, contrary to the habits of existing kinds of Brachiopoda, now found at great depths, the extinct species of former epochs lived on shallows and shores. He illustrates this remarkable fact in the Pliocene of Sicily and Calabria, consisting of two deposits, a chalky marl with an abundant fauna, identical with the present Mediterranean fauna, and a littoral deposit with oysters, *Pecten*, *Balanus*, &c., as well as enormous numbers of Brachiopoda, which are collected in vast banks, and which are entirely wanting in the deep-sea deposit. The same phenomenon is observed in the basin of Vienna, where the large *Terebratula* occurs, not in the deep-sea deposits, but invariably in the littoral zone, associated with *Balanus*, *Patella*, *Clypeaster*, &c.; the same feature presents itself in the Crag of England and the Tertiary of Doberg, near Bünde. Deposits of Mesozoic and Palaeozoic periods no less strikingly illustrate this fact. We may mention the Brachiopoda deposits of the Quader sandstone, the Stramberg coralline limestone, the Nattheim coral Rag, the middle Lias of Fontains-Étoupefour, the Hierlatz beds, and the Cassian bed, and, among the Palaeozoic rocks, the *Stringocephalus* limestone, Wenlock rocks, &c. In all these strata we find Brachiopoda associated with large corals, bivalves with thick shells, and phytophagous Gasteropoda, and rarely, if ever, do we meet with them in the deep-sea deposits of these formations.

Age of the Rock-Salt and Sulphur Deposits of Sicily.—By the researches of S. Mattura (*Memorie per servire alla descrizione della carta geologica d'Italia*, publ. del R. Comitato geologico del Regno, vol. i. p. 53, 1871) it appears that these beds belong to two different horizons, the first being most probably of Oligocene age ("Mioceno inferiore" of the author), and the latter belonging to the true Miocene. It is, moreover, probable that the marine deposits of the Miocene were separated into two portions by a freshwater deposit and a stratum bearing gypsum and sulphur.

Corundum of North Carolina.—Corundum has long been known to occur in Franklin Macon Co., N. C., in large loose masses. Through the energy of Colonel C. W. Jenks the masses have been traced to their source in veins in the Blue Ridge about 2500 feet above the sea-level. The chief vein, four feet in width, is made up of crystalline masses or isolated crystals of corundum, of a fine blue, greyish-white, or red colour, mixed more or less with the crystallized chlorite occurring with it. (*Am. Jour. Sc.* April, p. 301.)

Two New Ornithosaurians from the Cretaceous of Kansas.—In the *American Philosophical Society's Journal* for March, D. Cope describes two new species of Ornithosaurian, which resemble in their vast dimensions the pterodactyles of the English chalk and greensand. The specimens consist chiefly of portions of the anterior limb, of metacarpals and phalanges. Some of the phalanges of the claw-bearing digits are remarkable for their comparatively large diameter, a peculiarity stated by Seeley to characterize the species of his genus *Ornithochirus*.

The Cretaceous Fishes of Kansas.—The same author, in the January number of the above journal, gives a list of all the fishes of the Cretaceous period of Kansas, which shows the remarkable synchronism existing between the chalk formations of Kansas and England. Out of twenty-five genera of fishes only three are peculiar to Kansas.

A New Fossil Butterfly.—According to the *American Naturalist* for March 1872, p. 179, S. H. Scudder has discovered a new species (and genus) of butterfly from Aix. It is preserved in the Marseilles Museum, and has been named *Satyrites Reynesii*, after the director. The specimen mainly consists of the two fore-wings, the venation of which is very perfectly preserved. Though nearest to the East Indian *Debis*, it has the form and general appearance of *Portlandia*.

A Giant Trilobite.—At a recent meeting of the Geological Society of France (*Revue scientifique*, March 30, 1872) M. Bayan showed a trilo-

bite from Angers, which has a length of not less than from 70 to 80 centimetres, or a size nearly double that of the largest known specimens. M. Bayan believes it to be allied to the genus *Lichas* and the species *L. Heberti*.

Chemistry.

Oxidation of Gases with Chromic Acid.—E. Ludwig (*Ann. der Chemie*, April 1872, 47) has published the results of his investigation of the oxidizing action of this acid of some of the gases. The gas to be examined was collected in a eudiometer over mercury, and the concentrated acid introduced in a ball of dried plaster of Paris. Carbonic oxide is converted at ordinary temperatures into carbonic acid, and can subsequently be determined by absorption with potash; the author suggests the employment of this reaction for the detection of carbonic oxide in gaseous mixtures. 20 cc. of the oxide were converted into acid in from eight to ten hours at ordinary temperatures, and in three hours at 35° C. Hydrogen will take oxygen from chromic acid: 35·8 cc. of this gas in contact with the acid were reduced to 16·5 cc. in forty hours at 17° C., and in eighty-six hours had been completely converted into water. Marsh-gas undergoes no change, not a trace of carbonic acid being detected in it after a week's exposure to the concentrated acid. Chapman and Thorp have previously shown that at higher temperatures chromic acid converts ethylene into carbonic acid and water; at ordinary temperatures, however, formic and probably acetic acid are also produced. When the reaction is complete, the gas will have expanded one-third of its bulk, and be found to consist of carbonic acid only. Had all the carbon of the ethylene been oxidized to carbonic acid, the volume of the gas would have been doubled.

Conversion of Albuminoids into Urea by Potassium Permanganate.—The accuracy of the results of Béchamp's observations on this question having recently been doubted, E. Ritter (*Comp. rend.* 73, 1219) repeated Béchamp's experiments, and has arrived at the same conclusions as that observer. Albumen, fibrin, and glutin were in part converted into urea; 30 grammes of albumen gave 0·09 gramme of urea, the same amount of fibrin only 0·07 gramme; while the like quantity of glutin furnished about 0·3 gramme; in the last case Ritter observed a second crystallized product, which he is now investigating. During these operations of oxidation a moment arrives when heat should be applied and permanganate added with great caution, lest the reaction go too far.

Conversion of Cane Sugar into Grape Sugar by the Action of Light.—Early last year E. M. Raoult (*Compt. rend.* 73, 1049) placed equal volumes of a solution of 10 grammes of white cane sugar in 50 grammes of water in two tubes, which were sealed after their contents had been boiled for a short time. They were both exposed to the same temperature for five months, one in darkness, the other in the light. At the end of this period both solutions were perfectly clear and free from germs; the contents of the former tube gave no turbidity with alkaline copper solution, the liquid in the latter a strong reaction, one half the sugar having been changed into glucose.

Bytownite.—An examination of some microscopic sections of this compact non-crystalline substance has convinced F. Zirkel (*Mineral. Mittheil.* No. 2, 61) that it can no longer be regarded as a distinct member of the felspars. Though presenting to the eye the appearance of homogeneous structure, he finds it made up of four distinct minerals: a triclinic felspar, the crystals of which are sometimes ¾ mm. in length, tufts of crystals of hornblende of various shades of green, granules of quartz and of magnetite. The structure throughout is micro-granitic, without a trace of matrix not identical with one or other of these minerals. Bytownite has a constitution similar to that of the kugel-diorite of Corsica, and accords in chemical composition in a remarkable way with it, as well as with a so-called anorthite-augitic rock from Carlingford. All these agree in a low percentage of silica and alkalies, a large proportion of lime, and very large amount of alumina. The microscope, however, has shown that bytownite is not a mineral species, but a mixed crypto-crystalline rock, which will have to be excluded from the classification of the felspars proposed by Tschermak, who placed it between labradorite and anorthite.

Isuretine, a Base Isomeric with Urea.—A paper by W. Lossen and P. Schifferdecker, on the mode of formation and chemical characters of isuretine, is published in *Zeitsch. der Chem.* vii. 594. This base is produced when an alcoholic solution of hydroxylamine is left in contact with strong hydrocyanic acid for two days. The mixture is then evaporated at about 30° to 40° C. and allowed to cool, when isuretin separates in large crystals that can be recrystallized from moderately warm spirit. 190 grammes of hydroxylamine nitrate gave about 60 grammes of isuretin, or half the theoretical amount. During the preparation of its salts, of which the hydrochlorate, sulphate, picrate, and others, have been minutely studied, the temperatures of the solutions had to be kept as low as possible, to prevent decomposition and formation of ammonia salts. When heated alone, it decomposes with energy, yielding ammonium carbonate and ammelide. Hot water also destroys it, urea and biuret being among the products of the action. The authors are as yet unable to assign a rational formula to their new base; they conclude, however, from the rapidity of its decomposition at higher temperatures, as well as from the readiness with which it colours iron chloride and reduces silver solutions, that isuretine is still a derivative of hydroxylamine. Should this be the case, they give a preference to the following formulae:—

$$C\begin{cases}NH\\NH.OH\\H\end{cases} \quad \text{or} \quad C\begin{cases}NH\\O-NH_2\\H\end{cases}$$

The Changes in Colour of Manganese Chloride.—The chloride of this metal, when in solution, develops hues as varied as its oxides do. According to F. W. Krecke (*Journal für prakt. Chem.* 1872, 106), a solution of the rose-coloured crystals in from ten to twelve pints of water is, whether cold or boiling, devoid of colour; when evaporated, it becomes bright red, the tint increasing in depth with the concentration of the liquid. During evaporations at temperatures above 70° the redness attains its greatest intensity when the liquid contains 15 per cent. of salt. With further concentration an orange tint makes its appearance, and as soon as 20 per cent. of salt are contained in the solution, it becomes of a bright yellow, resembling that of weak potassium chromate. If it now became cold, the yellow changes to the original rose colour. Analysis demonstrated that by the original change from rose to yellow no combined acid was evolved, the yellow solution having the composition indicated by the formula $MnCl_2 + 28H_2O$. Further evaporation between 70° and 100° C. develops a green colour, which finally rivals that of a strong solution of a nickel salt; this again on cooling changes to yellow, and eventually recovers its rosy tint. Here, it appears, a little acid, about 1·6 per cent., is liberated, the decomposition beginning when the solution contains 36·9 per cent. of manganese chloride, and possesses a composition represented by the formula $MnCl_2 + 12H_2O$. The green colour is not a result of the loss of acid, but is due, the author observes, to the presence of anhydrous chloride in the solution.

Chemical Constitution of the Leaves of Ampelopsis hederacea.—The leaves of the Virginian Creeper are known to give a very strong acid reaction, but beyond the determination of the presence of tartaric acid in them by Wittstein very little is known of their chemical characters. They have recently been examined by E. von Gorup-Besanez (*Ann. der Chem.* 1872, parts 2 and 3, 225). In leaves gathered in June he found acid potassium tartrate, neutral calcium tartrate, and calcium sulphate, gum and sugar, probably a mixture of levulose and dextrose. The ash contained 24·6 per cent. of potash, 34·4 per cent. of lime, 8 of phosphate of iron, and 5·8 of phosphoric acid. Other leaves, gathered in September, had a somewhat different composition. Though the crystals deposited from their extract were found to be calcium tartrate only, the liquid contains pyrocatechin (oxyphenic acid), and the lime salts of malic and glycollic acid. *Vitis vinifera* is the only other plant in which the latter acid has yet been found. As Hoppe-Seyler has shown that pryocatechin is formed when carbon hydrates are heated with water under great pressure, as well as by treating them with acids, the discovery of this substance in the living plant is not without interest to the physiological chemist.

Devitrification.—Benrath attributes the many failures which have attended enquiries into the change that glass undergoes by long exposure to the temperature at which it becomes soft to the imperfect removal of the unchanged glass from the crystals that were examined. He finds (*Der Naturforscher*, 1872, No. 9, 70) that hydrofluoric acid acts more easily on transparent than devitrified glass, and has used this reagent to separate them. A comparison of the composition of a specimen of plate-glass before and after etching showed that, though the percentage of silica in the residue had but slightly changed, that of lime had considerably increased. A specimen of the same glass, after devitrification and treatment with hydrofluoric acid, lost but little of its lime, while the percentage of silica had increased 8·6 per cent. The author assumed therefore that devitrification consists in the separation of more acid and consequently denser silicates from the melted glass. To test this, a very acid glass of the formula $NaO,CaO,8SiO_2$ was prepared, and readily devitrified. When cold, its mass was chiefly made up of small spherular bodies, from which the less abundant transparent portions could easily be detached. The former by the above treatment yielded crystallized silicic acid. The separation of silica in this form, as well as that of felspar, was also observed in basic devitrified glasses. The author regards this modified glass, not as a mixture of several silicates having three or four equivalents of acid, but as a solution of silicic acid in a glass, probably of the composition $RO,2SiO_2$.

Physics.

The Heat-Spectra of the Sun and Lime-Light.—The discontinuity of the solar heat-spectrum was first determined by Sir John Herschel, who with a flint-glass prism threw a spectrum on paper blackened with soot and moistened with alcohol, and estimated the

thermal effect of the spectrum by the time of drying. He observed that the moistened surface dried in a series of four distinct spots. Fizeau and Foucault also noticed the existence of bands in the ultra-red rays; later observers, however, who have investigated the distribution of heat in the solar spectrum delineate the heat-curve as continuous. M. Lamansky (*Phil. Mag.* April, 1872, from *Monatsberichte Akad. Wiss. Berlin*), during his experiments on this subject, noticed that, beginning from the line D and advancing towards the ultra-red end of the spectrum, the deflections of the galvanometer, corresponding with the heat-effects, become, though not proportionately, stronger until they attain a certain maximum and then diminish; this takes place four times, and shows that the ultra-red rays are interrupted in three places by breaks or bands. These bands have a corresponding position in spectra produced either by a glass, bisulphide of carbon, or rock-salt prism, and differ only in becoming broader when the prism used has a greater dispersive power. The breaks or bands are not equally wide; the first is much more sharply separated from the second than the second from the third. Parallel experiments with rock-salt apparatus—made the one in the morning and the other about noon—show that the breaks become somewhat narrower with increasing altitude of the sun. They were also rather deeper on the days when the relative moisture of the air was greater. M. Lamansky does not consider the observations sufficient to warrant our ascribing these bands to atmospheric absorption. In all the experiments it was observed that the heat-effect of the solar spectrum after attaining its last maximum sinks suddenly. A similar examination of the lime-light spectrum showed that there was no break of continuity as in the solar spectrum, and that the position of maximum heat-effect is much farther from the end of the visible red in the former than in the latter. In other words, with the feebler sources of heat the intensity of heat-effect attains its maximum for rays of greater wave-length than is the case with more powerful sources of heat.

Absorption-Spectra of Gases and Vapours.—M. Gernez (*Comp. rend.* 1872, Nos. 10 and 12) finds that all more or less coloured gases are capable of yielding absorption-spectra if only a sufficient thickness be examined. For this purpose he encloses the gas in a long tube terminated with parallel glass plates, and transmits a ray of light from a Drummond lamp along the axis of the tube, the ray on emerging being examined by the spectroscope. In this way the spectrum of chlorine, enclosed in a tube 468 decims. in length, exhibits a number of fine lines that commence a little beyond D and extend nearly to the violet, which is entirely absorbed. Chloride of iodine, in a thickness of 30 centims., furnishes a spectrum very different from that of chlorine, but analogous to those of bromine and iodine. Sulphur vapour was examined by heating sulphur in a porcelain tube 50 centims. long, closed by parallel glass plates. As soon as the sulphur vaporises, it produces a gradual extinction of the spectrum, commencing in the violet and extending to the red, no lines being visible. On continuing the heating, however, the vapour begins to allow other rays than the red to pass, and as the yellow, green, blue, and violet portions of the spectrum reappear, a series of lines commencing in the violet and extending to the green become visible. Selenious acid gives a system of absorption-lines lying chiefly in the violet and blue.

The Specific Heat of Carbon.—An important paper on this subject appears in the *Ber. der Deut. Chem. Gesell. zu Berlin*, of April 22, 1872, p. 303. It was held by Dulong and Petit, as a result of their experiments on twelve of the metals, that the product of the atomic weight and specific heat, in other words, the so-called atomic heat, had the same value, about 6·5, for all elements. Later observers have remarked striking departures from this law, and a comparison which H. F. Weber makes in the paper alluded to of the numbers obtained by Regnault, de la Rive, Kopp, and Wüllner, as representing the specific heat of carbon, clearly demonstrates that the different allotropic modifications of this element have very different specific heats, no one of which obeys Dulong and Petit's law, while the values assigned by these physicists to the specific heat of any one modification greatly differ. This he attributes to the fact that the specific heat of carbon in all its modifications varies with the temperature in a degree that would scarcely be supposed. By experimenting on two large diamonds he finds that the specific heat of carbon increases with the temperature to a degree surpassing any other substance, the specific heat of diamond being trebled by a rise of temparature from 0° to 200° C. The research was conducted in the physical laboratory of Prof. Helmholtz, in Berlin.

The Sun's Rotation.—The rate of the rotation of the sun has been measured by Zöllner and Vogel with the aid of Zöllner's reversion spectroscope (*Revue scientifique*, March 30, 1872). The sun turns from west to east, his eastern edge moving towards the earth, the western from it. The rays emitted by the eastern edge ought, when examined with a prism, to be found to be more refrangible than those of the western edge. The displacement of F was carefully determined, and found to be about one-hundreth of the distance between the two sodium lines. This is a variation of refrangibility corresponding with a velocity at the solar equator of 2·59 kilometres per second.

On the night of the 15th–16th March, Prof. R. Luther, of Düsseldorf, observed another minor planet (118) Peitho. He gives the following data:—Düsseldorf mean time: 1872, March 15, 14h. 18m. 59·6s. R. A. in time: 12h. 7m. 26·73s. North Dec. + 10° 17′ 26·5″. *La Revue scientifique* for April 15 records the discovery of two more planets, one, of the 11th magnitude, by M. Paul Henry, of Paris; the other, also of the 11th magnitude, by M. Borely, of Marseilles.

New Books.

ANNUAIRE MÉTÉOROLOGIQUE de l'Observatoire de Paris pour l'an 1872. Paris: Gauthier-Villars.

ANNUAIRE pour l'an 1872, publié par le Bureau des Longitudes. Avec des notices scientifiques. Paris: Gauthier-Villars.

BAYLE, D. L'Electricité appliquée à l'art de la guerre. Le Mans: Monnoyer.

BOWRING, Sir J. The Decimal System in Numbers, Coins, and Accounts. New Edition. Stanford.

CHEVREUL, M. D'une erreur de raisonnement très-fréquente dans les sciences du ressort de la philosophie naturelle qui concernent le concret, expliquée par les dernier sécrits de Chevreul. Paris: Firmin Didot.

COHN, F. Die Entwickelung der Naturwissenschaft in den letzten fünf und zwanzig Jahren. Breslau: Kern.

EICHWALD, E. v. Analecten aus der Palaeontologie und Zoologie Russlands. Leipzig: Voss.

EICHWALD, E. v. Geognostisch-palaeontologische Bemerkungen über die Halbinsel Mangischlak und die Aleutischen Inseln. St. Petersburg: Buchdruckerei der K. Ak. der Wiss.

FITTIG, R. Das Wesen und die Ziele der chemischen Forschung und des chemischen Studiums. Leipzig: Quandt.

HANKEL, W. G. Ueber die thermoelektrische Eigenschaften des Schwerspathes. Leipzig: Hirzel.

KÖLLICKER, A. Anatomisch-systematische Beschreibung der Alcyonarien. I. Abtheilung: Die Pennatuliden. Frankfurt: Winter.

KÖLLICKER, A. Morphologie und Entwickelungsgeschichte des Pennatulidenstammes, nebst allgemeinen Betrachtungen zur Descendenzlehre. Frankfurt: Winter.

LAZARUS, M. Psychologischer Blick in unsere Zeit. Berlin: Dümmler.

MANTEGAZZA, P. Quadri della natura umana. Milano: Bernardoni.

MAUTHNER, L. Vorlesungen über die optischen Fehler des Auges. I. Abtheilung. Wien: Braumüller.

NICHOLSON, H. A. A Monograph of the British Graptolitraae. Blackwood.

TRÊMEAU DE ROCHEBRUNE, A. Études préhistoriques, anthropologiques et archéologiques dans la Charente. Livr. I. à 5. Paris: Savy.

History.

1. **History of Greece from the Taking of Constantinople by the Turks to the Present Time.** [*Geschichte Griechenlands von der Eroberung Konstantinopels durch die Türken im Jahre* 1453 *bis auf unsere Tage.*] Von Karl Mendelssohn-Bartholdy. I. 1870.
2. **History of Italy from the Foundation of the Reigning Dynasties to the Present Time.** [*Geschichte Italiens von der Gründung der regierenden Dynastien bis zur Gegenwart.*] Von Dr. Hermann Reuchlin. III. 1870.
3. **History of Spain from the Outbreak of the French Revolution to the Present Time.** [*Geschichte Spaniens vom Ausbruch der französischen Revolution bis auf unsere Tage.*] Von Hermann Baumgarten. III. 1871. Leipzig: Hirzel.

THIS valuable collection of separate works on the modern history of existing states, has been in continual progress ever since it was started about fourteen years ago. Each particular country being in the hands of an author, who either derives the knowledge of its institutions, or, perhaps, even his acquaintance with the leading statesmen from a personal residence, or from the most intimate connection with them—these works are likely to retain a permanent importance as specimens of conscientious contemporary historiography. Their bias is unquestionably on the side of progress. Yet, nevertheless, the principles of a sound scientific method prevail so far, that the losing side comes in for its full share of objective elucidation in the narrative.

The critical application of the sources, parliamentary and diplomatic, official documents and private letters, printed and manuscript materials, ought to be adhered to, on principle, with the same rigidity as if a period of ancient history were to be reconstructed with the help of some recently discovered inscriptions. The demand for books of political instruction like these, in a country with rising and progressive prospects, is best evidenced by the market they find; not any longer exclusively among scholars, but among a general public, deeply interested in its own destinies and the parallel development of the neighbouring countries.

For our purposes it will be sufficient to refer to the three additions which have been made to the collcetion in the course of the last twelve months, viz. vols. xv., xvi., and xvii., each of them connected with one of the countries forming the three southern extremities of Europe.

Professor Mendelssohn, the eldest son of the great musician, though still reckoned among the young historians of Germany, has already distinguished himself by a rapid succession of publications, chiefly in connection with the recent history of Germany and Austria, and by a more detailed production in the shape of a biography of Count Capodistria. The late Professor Gervinus, eminent in so many branches of political and aesthetical literature, first drew his attention to the history of modern Greece, which Dr. Mendelssohn himself has visited three times since 1860. It appears from his short introductory remarks, that no works or materials whatever, which have been published on the subject in Greece, Germany, England, France, and even Russia, have escaped his notice. In mentioning them he is fond of adding some short pointed observations on the individual value of these productions, *e. g.* on Tricoupi's, Philimon's, and Finlay's writings. Baron Prokesch-Osten's *Geschichte des Abfalls der Griechen* has been reviewed at large by him in *Sybel's Zeitschrift*, vol. xviii. Our author has a decided talent for gleaning much curious matter, which others who went before him had left untouched. Not satisfied with admission into the record offices at Vienna and Berlin, he owes the opportunity of inspecting some of the most secret documents, both originals and the copies of letters of a more private nature, to the friendly confidence he has met with among the Greeks themselves.

The title of the work, only the first volume of which is now before us, has the fault of promising too much. The narrative does not really begin with the conquest of Constantinople in 1453, but rather with the first symptoms of national insurrection among the Greeks, when Catherine II. was waging her first war against Turkey, which led to the humiliating treaty of Kutshuk Kainardji in 1774. Hence the first chapter of but fifty-eight pages is nothing but a well-sifted and highly readable essay on the degraded condition of the people during their long period of humiliation under the despotic sway of the Turks, on the rise of their vernacular language and literature, their manners and customs, their popular traditions and religion, on *clephths* and corsairs. In this essay the ingenious but questionable theory of Falmerayer, as to the Slavonic origin of the modern Greeks, is once more refuted, as i tought to be, on historical as well as linguistic grounds.

The main subject, beginning of course with Rhigas, with Ali Pasha of Janina, with Prince Ypsilanti and the Hetaerists, is arranged with great skill over the bulk of the volume. The author writes in a fluent and even fascinating style, so much so that the reader will follow with pleasure and advantage the disclosure of the various nurseries from which the revolution sprang, its increasing relations with the European powers, the politics, whether separate or combined, of the latter, the state of parties, and the first constitutional attempts of the Greeks themselves. The many extraordinary scenes, once so exciting to the generation which is now fast passing away, are well told. From Mesolonghi and the noble exertions of Lord Byron, which brought on his early death, we accompany the author to the "untoward event," the battle of Navarino, which concludes the volume. The author is stern in his condemnation of the ruinous egotism displayed on various occasions by the Greek rivals, the Philhellenes from the different European countries, or among the leading politicians in Russia, England, France, and Austria. Most important and hitherto unknown details on these points, in the shape of extracts from the diplomatic correspondence preserved at Vienna, are added in the appendix. From the indefatigable activity of the author it is to be expected that he will soon complete, in another volume, the story of the conclusion of the memorable struggle, and sketch as impartially as possible the vicissitudes under which its offspring, the present kingdom of Greece, has hitherto existed.

The first two volumes of Dr. Reuchlin's—a descendant by-the-by of his namesake the great humanist and contemporary of the Reformation—work on Italy, published in 1859 and 1860, have long been without a continuation. They threatened indeed to stop short with the second defeat and abdication of Charles Albert in 1849. For several years the rising of Italy, and the success of a national and united policy in that country, were nowhere so unpopular as in the south of Germany, especially in Würtemberg, where Austrian sympathies predominated largely down to the great catastrophe of 1866. The author, a frequent visitor in Turin and Milan, Florence and Rome, and on intimate terms with the chief patriots and statesmen — Cavour, Pallavicino, Ricasoli, and others—hints that his Suabian countrymen used to deride him as the "Cavourle," the little Cavour. However he has always been busy at work with his favourite subject. Two more long residences in Italy, among his best informed and influential friends, have provided him with a great amount of trustworthy matter, probably of more direct value than the average of official state-papers seems to be. After the way had been smoothed by a number of articles in some of the leading newspapers, in several historical and political journals of Germany, Dr. Reuchlin has given us at last a new instalment of his work. The stout volume contains hardly more than another decade, in which, moreover, Naples and Sicily are for the present omitted. Upper and Central Italy and Piedmont appear in the foreground. The new gathering of strength for a single great object, Cavour's first ministry, his coalition with the Emperor Napoleon, the war of the year 1859, the treaty of Villafranca, the condition of Modena and Parma, of the Papal States and Tuscany, and the severe crisis which led in January of the following year to Cavour's second and last government,—all these subjects are treated in succession most circumstantially, but in intimate connection with each other. The author promises to relate, in a fourth volume, the end of the Bourbons in Naples, and the first epoch of the Italian kingdom down to the autumn of 1866, trusting "that by the fall of Napoleon many an Italian mouth will be unlocked." Unfortunately Dr. Reuchlin is a rather heavy and clumsy writer, so much so, that his great advantages are to a certain extent neutralized by a certain incapacity of arranging his materials. In spite of the author's good humour and great affection for the prosperity of Italy, the reader cannot help wishing that so much excellent instruction had been given him in the plainest and most natural manner possible. Of course the usual difficulties of the historian are considerably increased by the politics of a country, which, until very recently, had many separate

centres of public life, which at all times were powerfully influenced from abroad. Even the peculiar nature of diplomacy, which in that country is so often akin to conspiracy, requires from an historian more than common literary power. But, nevertheless, though the author will not find many patient readers to peruse his book from beginning to end, he has provided the student and the politician with an admirable store-house for the period in question, full of the soundest information, and based upon an amount of reading among the most out-of-the-way papers, journals, and pamphlets, which very few other friends of Italy can have acquired to the same extent.

Professor Baumgarten had published a remarkable book on Spain, at the time of the French Revolution, before he undertook his present work, which, as many will agree, may be designated as the very best of the collection. In his second volume he narrated the events down to the year 1825, when the absolute government of Ferdinand VII. had been restored by the help of the French, but at the cost of nearly all the colonies and of the vital organs of the state itself. Besides the printed literature in the respective European languages, the author had the dispatches written from the Court of Madrid by the Prussian diplomatic residents at his disposal, and spent part of the year 1868 in Spain. He could thus observe with his own eyes certain changes for the better, which the country is unquestionably undergoing since 1820; and he, moreover, derived inestimable information from politicians and literary men, who were active either at the time or had been so at an earlier period. On the other hand, it is not to be wondered at, that the Spanish Record Office, under the Narvaez government, was closed against him. All short-comings, however, with regard to materials—a complaint most characteristic of Spanish affairs in general, witness the writings of the late Mr. Richard Ford—are most agreeably compensated by the good taste, finished style, and straightforward judgment, in which Dr. Baumgarten's work excels.

The third and last volume, which we wish most especially to recommend, treats mainly of the sad and tumultuous events which the Spanish nation had to endure between 1825 and 1840. Through a wilderness of apostolic conspiracies and liberal pronunciamientos, we accompany the most despicable Bourbon king to his wretched end, which was the signal for the outbreak of a war disastrous beyond comparison, civil and dynastic at the same time, an ordeal in which the old and the new elements to all appearance annihilated each other. Approaching the subject with somewhat of doubtfulness, we must confess that we never have read a more attractive account of the struggle between the Carlists and Christinos, the monotonous cruelty and ineffective results of which seem hardly worthy of the labours bestowed upon them by a conscientious historian. Yet the reader will soon accord the same praise to the five chapters in which the Basques are introduced with their ancient fueros and most primitive institutions. It is only such a race that can produce a party leader and military genius like Zumalacarrégui, by whose extraordinary discipline and example the cause of Don Carlos was chiefly supported through the successive campaigns of seven years. The awful trial of strength, which amid the listless attention of Europe or with the hesitating help of some few governments like the English Whig Cabinet, was ultimately decided in favour of Isabella II. and her mother, did not issue merely in a negative solution. Our author now and then very adroitly uplifts the veil for a view both retrospective and prospective. In his opinion King Ferdinand himself, on his return from captivity in 1814, destroyed most culpably the very conditions of Roman Catholic monarchy in a country which before all others has ever been founded on orthodoxy and royalism. During the period of the civil war whatever had been left of old Spain was swept entirely away, whilst the resuscitation of a new national and political life has met with more checks than prospering chances. Don Carlos, as our author intimates, rushed inevitably on his ruin, owing to "the perversity of his principles and aims, and their glaring incompatibility, not only with the civilization of Europe, but with any other possible prospect for Spain."

After bringing down his narrative to Cabrera's capitulation in 1840 (in which, by-the-by, as a young military adventurer, one of the heroes of 1870–71—General von Goeben—was involved), Dr. Baumgarten in another chapter sketches the course of national development during the last thirty years. He shows no mercy either to the Moderados or the Progresistas, because neither of them allowed Spain to right herself by the expression of the free will of the nation. He condemns Espartero because he wielded his thoroughly despotic sword, however necessary it had become, not only without any genius whatever, but chiefly as the mere head of a party. By his fall in 1843, argues Washington Irving, then American Minister at Madrid, the degraded country was saved from the last state of anarchy. But what have the interminable changes led to after all? In fact, there have since been only two governments of any duration, those of Narvaez and O'Donnell, both of which, in spite of their reactionary and intolerant tendencies, had to succumb ultimately to the hostility of the camarilla and the court clergy. The result of the revolution of 1856 has been a comparatively quiet and prosperous period, till the year 1863 brought a return of the former chaos. R. Pauli.

The Pope of Rome and the Popes of the Oriental Orthodox Church. By the Rev. C. Tondini, Barnabite. Longmans, 1871.

The object of Father Tondini's book is professedly controversial. He desires to contrast the practical working of the principle of "monarchy," as exhibited in the Roman papacy, with the patriarchal or episcopal government of the Oriental and especially of the Russian Church, which he regards as the one essential difference between the two communions. For we are glad to observe that, in common with many leading theologians on both sides, and with the recent Munich Congress, he is fully convinced "that the much vexed question of the *Filioque* concerns terminology rather than dogma, and is susceptible of an amicable solution. The main design of his argument is to show that "the Oriental Orthodox Church is divided into several separate and independent *papacies*," and that the actual result is a system as purely Erastian as that under which the Church of England is administered. But, while the author's aim is controversial, it is fair to say that his argument is based on a careful analysis of facts, derived from original sources, which are here for the first time brought together within so small a compass. And the facts have an importance of their own, apart from the theological merits of the argument they are intended to subserve. The increased interest felt in the subject of late years in this country, which found expression in the warm welcome accorded to the Greek Archbishop of Syra, gives additional value to such a collection of statistics. And it is chiefly to this aspect of the work that we are anxious to direct the attention of our readers; who will be able to draw from the facts their own conclusions, which may or may not symbolize in all respects with that of the author.

The principal divisions of the Oriental Church were the Russian, under the government of the "Holy Synod" of

St. Petersburg; the four patriarchates of Constantinople, Alexandria, Antioch, and Jerusalem, and the Greek Church proper, ruled, since 1833, by the Synod of Athens; its members numbering in all about eighty millions, of whom fifty-six millions belong to the Russian Church. Practically therefore the chief interest centres in the Russian Church, though it is the youngest of the Orthodox communities, and is now wholly independent of the primatial see of Constantinople, as well from its numerical preponderance as because the Czar stands in the same sort of political relation to the Orthodox Church generally as the French sovereigns during the last few centuries have assumed towards Catholicism. But while in theory the episcopate under the four patriarchs form the governing body of the Orthodox Church in Russia, since the reforms of Peter the Great this principle has been virtually superseded. Peter, of his own authority, and not without some remonstrance on the part of his clergy, by an ukase of Jan. 25, 1721, abolished the patriarchate of Moscow, which had been established with the sanction of the four ancient patriarchs of the East, and substituted for it, as the supreme legislative and judicial tribunal for the whole Russian Church, a synod of twelve members, only three of whom were bishops, the remaining nine being made up by three archimandrites, three hegoumens, and three protopopes —all simple priests. Catherine II. limited the number to six, and through later modifications it now consists entirely of bishops, except that the Czar's confessor and the head chaplain of the army and navy are *ex officio* members. But the Synod, however composed, represents not the inherent authority of the episcopate, but the delegated authority of the Czar, just as the Judicial Committee represents the English Sovereign. As the legal code expresses it, "the imperial authority acts in the administration of the Church by means of the Most Holy Governing Synod appointed by it." An elaborate oath is exacted of the members of this "spiritual college," binding them to unconditional submission to the Czar, and to the obligation of promoting his service and interests to the utmost of their power—not unlike the oath required of Catholic bishops to promote the *Regalia Sancti Petri*—and also containing an express acknowledgment that the Czar is "the supreme judge of this spiritual college." The Czar therefore exercises the same supreme jurisdiction over the Russian which the Pope exercises over the Western Church, but, as he makes no claim to infallibility, his *doctrinal* power is allowed by Father Tondini to be strictly limited by the dogmatic canons of the ancient Councils; the *disciplinary* canons he can alter or abrogate at pleasure. As it is expressed by Schnitzler, a writer quoted with respect by our author: "S'il s'agissait d'être juge dans un débat sur des matières de doctrine, l'Empereur renverrait l'affaire au Saint Synode ou réunirait un Synode spécial, et dans un cas majeur il enverrait prendre l'avis des quatre Patriarches d'Orient. Il ne se réserverait à lui-même directement que l'exécution de la décision rendue, de la sentence prononcée." The author hardly appears to appreciate the full force of this distinction when he describes the supremacy of the Czar as in all respects equal with that claimed by the Popes, at least in view of the recent Vatican decrees. However the Czars formally style themselves, "Heads of the Church," and every Russian bishop is obliged to present annual reports to the Governing Synod of the state of his diocese, as Roman Catholic bishops are bound every three years for a similar purpose to visit the *limina apostolorum*. That the Czar should have the absolute appointment of all the bishops does not seem a very important distinction. Catholic sovereigns and governments exercise the same right wherever the Church is in any sense established, and even the Protestant king of Prussia has an absolute veto on any nominee who is not a *persona grata* to himself. It is more strange that Russian priests should be ordered to reveal any treasonable plot disclosed in confession, and that on the ground of our Lord's injunction (Matt. xviii. 17), "Tell it to the Church." The state of things in Turkey and Greece is not substantially different. The Synod of Nauplia, composed of all the Greek bishops, in 1833 acknowledged the King as the supreme head (ἀρχηγὸς) of the Hellenic Church, where, however, he interferes much less than the Czar does in Russia. The Sultan appoints and can depose the four Patriarchs of the Byzantine Church, and to him, according to the Encyclical issued by them in 1848, are referred such "extraordinary and difficult questions" as they cannot settle among themselves. So far the author must be held to have made out his case, that in none of the three principal branches of the Oriental Church do the bishops really constitute, as according to orthodox doctrine they ought to constitute, the supreme authority.

It is also, we think, clearly made out that the various branches of the Orthodox Communion have no such external and governmental unity as exists under the jurisdiction of the Papacy. But when the author ridicules the complaint of Greek theologians, that "the doctrine of a visible head of the Church destroys her unity," he seems to us hardly to have grasped the point of the criticism. What they mean is probably, what some high Catholic authorities and some popes have themselves admitted or affirmed, that the centralising policy of the mediaeval popes contributed materially to bring about and perpetuate the separation of East and West, and this view is confirmed by Tondini's avowed conviction that the difference hinges exclusively on the form of Church government. We cannot enter here on the wide and much vexed question of ecclesiastical "jurisdiction," about which various opinions have been advocated by Catholic theologians, who are by no means agreed in regarding the divinely ordained government of the Church as a pure monarchy. Lacordaire, for instance, insists on its combining and harmonizing the three typical forms of government, monarchy, aristocracy, and democracy. Nor does history altogether bear out the assertion of the "patent fact" that the extreme claims of papal prerogative are the surest if not sole guarantee for the authority and independence of the episcopate. Certainly very opposite statements were made by many bishops at the Vatican Council. But the real interest of Tondini's book lies, as we said before, not in his theological opinions or even in his controversial application of the argument, but in the mass of statistics not generally accessible which he has collected in a brief and readable volume. For controversial purposes it should be read in connection with such works as *Janus* or Schulte's *Die Stellung von Concilien, Päbsten und Bischöfen.*

H. N. Oxenham.

Intelligence and Contents of the Journals.

M. Michelet has began a continuation of his great history under the title of *Directoire—Origine des Bonaparte.* There are some curious details on the mode in which Bonaparte was enabled to obtain the necessary supplies for the army of Italy in 1795. The author's main object, however, is to describe the growth of the "military system" and its long struggle with the "industrial systems" of England. The preface contains some notices of his own life, and it is needless to say of Michelet that his aversion to England still displays itself vividly and is sometimes extremely absurd.

Literarisches Centralblatt, March 16.—Notices the publication of Conrad Justinger's *Chronicle of Berne*, one of a series of old Swiss chronicles now being critically edited; and the conclusion of Rossbach's *Geschichte der Gesellschaft*, the 4th part contains the history of the rise of the Middle Classes, especial attention being devoted to England.—— March 30.—Notices Paul Meyer's *Les derniers Troubadours de la Pro-*

vence and the *Vie de S. Alexis*, both valuable for French philology.——April 13.—Notices the concluding volumes of Winter's *History of the Cistercians in North East Germany*, and criticizes unfavourably Klippel's *Life of General von Scharnhorst*.——April 20.—Reviews Tourtal's *Dispatches of Ridolfi*. Ridolfi was Florentine Resident at the Imperial Court during the Diet at Ratisbon in 1641, but we get little new information from him.

The Growth of the English Constitution from the Earliest Times, by E. A. Freeman, contains the substance of some lectures delivered at Leeds and Bradford. Mr. Freeman's object is to give in a popular form the results of his researches into our early history, and stress is laid on two favourite ideas—that of the continuity of our history, and that of the revival in later times of early institutions which had perished after the Conquest. The unwritten rules of our constitutional law are also considered, and it is shown how important they have tended to become of late. Every one knows that in theory the prerogatives of the Crown are as great as ever, while practically the real power is in other hands. The error of many writers on the constitution has been that they have looked merely to the outward forms and not regarded the living forces that act through those forms.—We should notice also Mr. Freeman's address as President of the Somersetshire Archaeological Society, in which he shows the importance of connecting local enquiries with the general history of the country. We might point to his own account of York and Exeter and Lincoln, in the 4th volume of the *Conquest*, as illustrating his meaning. Similarly in an address to the Historical Section of the Archaeological Institute, at its annual meeting held this time at Cardiff, he illustrates from local knowledge the succession of races in Great Britain, the fusion of which has made the English nation.

Altpreussische Monatsschrift, February-March. — Contains an account of the MSS. illustrating the history of "Preussen" (Prussia in the narrower sense) in Prince Czartoryski's Library at Paris; a document of the Teutonic order in 1316—one of our earliest original documents in German; a full account of the tumuli opened in the district (Wulfstan's report to King Alfred is the earliest description we have of the mode of interment among these tribes), which is worth comparing with Canon Greenwell's explorations in Yorkshire; some extracts from unprinted Russian chronicles; and a notice of the original MS. of Copernicus' *De Revolutionibus Orbium Coelestium*.

The newly discovered fragment of John of Antioch, published by Mommsen (*Hermes*, vi. p. 322 ff.), from Professor Geppert's transcript of the MS. in the Escurial, contains an account of the death of Odoacer after his surrender to Theodoric, confirming a previous conjecture on the subject by Professor Felix Dahn, who announces his intention of shortly discussing the whole passage. Ten days after the capitulation, Theodoric sent for Odoacer to his palace; as he entered, two men seized his hands as if about to make a request; this was to be the signal for assassins from the next room to enter, but their resolution failing, Theodoric himself ran his rival through with his sword, exclaiming as he withdrew it, "the wretch (τὸ κακὸν) had not even a bone in his body." Odoacer's widow, "Sunigilt," was starved to death in prison, and their son, Thila, put to death on his return from banishment.

The 17th volume of the *Transactions of the South Slavonic Academy* (*Rad Academije Tugoslavenske*) contains an interesting dissertation of Dr. Racki on the origins of the Croatian kingdom; and the second part of Prof. Tagic's study upon the Progress of Slavonic philology in the last years. Prof. Tagic has been recently appointed by the Russian government Professor of Philology at the University of Odessa.

Theolog. Literaturblatt, March 12.—Notices the conclusion of Caravita's *I Codici e le Arte a Monte Cassino*.—A. von Reumont has a very full account of Adolf Trendelenberg's *Kleine Schriften*, especially as regards the account of Machiavelli and his object in writing *The Prince*.

New Publications.

Archiv für Oesterr. Geschichte. 47. Bd. 2. Hälfte. Wien: Gerold's Sohn.

Beer, A. Die Zusammenkünfte Josefs II. u. Friedrichs II. zu Neisse und Neustadt. Wien: Gerold's Sohn.

Chéruel, A. Lettres du Cardinal Mazarin pendant son Ministère. Tome Ier (Déc. 1642—Juin 1644). Paris. (Collection de Documents sur l'Histoire de France.)

Cooper, Thomas, The Life of. Written by himself.

D'oksza, Th. Histoire de l'Empire ottoman depuis sa fondation jusqu'à la prise de Constantinople. Tome Ier. Constantinople.

Du Mesnil-Marigny. Histoire de l'Économie politique des anciens peuples de l'Inde, de l'Égypte, de la Judée et de la Grèce. 2 vols. Paris: H. Plon.

Elgin, Letters and Journals of James, Eighth Earl of, Governor of Jamaica, Governor-General of Canada, Envoy to China, Viceroy of India. Edited by Th. Walrond, C.B. With a Preface by A. P. Stanley. Murray.

Freeman, E. A. The Growth of the English Constitution from the Earliest Times. Macmillan.

Herminjard, A. Correspondance des Réformateurs dans les pays de langue française. Tome IV. Basel: Georg.

Hookham, Mrs. The Life and Times of Margaret of Anjou. 2 vols. Tinsley.

Leblan-Davau. Recherches historiques et statistiques sur Auxerre, ses Monuments et ses Environs. (Auxerre, 1871.) Paris: Dumoulins.

Levi, L. History of British Commerce, and of the Economic Progress of the British Nation, 1763–1870.

Löserth, J. Die Geschichtsquellen v. Kremsmünster im xiii. u. xiv. Jahrh. Wien: Braumüller.

Michelet, J. Histoire du xixième Siècle. Directoire—Origine des Bonaparte. Paris: Baillière.

Molesworth, W. N. History of England from 1830. Vol. II. Chapman and Hall.

Paz-Soldan, M. F. Historia del Perú independiente. Primer periodo, 1819–22. Hâvre.

Rossbach, J. J. Geschichte der Gesellschaft. 5. Theil. Der vierte Stand und die Armen. Würzburg: Stuber.

Salinas, Ant. Le Monete delle antiche città di Sicilia. Palermo.

Segur-Dupeyron, P. de. Histoire des Négociations commerciales et maritimes de la France aux xviiième et xviiiième siècles, considérées dans leurs rapports avec la politique générale. Paris: Thorin.

Sickel, Th. Zur Geschichte des Concils von Trient (1559–1563). Actenstücke aus österreichischen Archiven. Wien: Gerold's Sohn.

Statistica del Regno d'Italia. 5 vols. Milano.

Waddington, W. H. Fastes des Provinces asiatiques de l'Empire romain depuis leur origine jusq'au règne de Dioclétien. 1ère partie. Paris.

Philology.

Scaenicae Romanorum Poesis Fragmenta secundis curis recensuit Otto Ribbeck. Vol. I. Tragicorum Fragmenta. Leipzig: Teubner, 1871.

That a second edition of the fragments of Latin tragic poetry should appear within twenty years of the first is another indication of the increasing attention which the early literature of Rome is still attracting to itself, indeed a very strong one; for, as poetry, these remains are so slight, and, as compared with the corresponding fragments of the Greek tragedians, so poor and inartistic, that the reader of them, even when helped by the lucid arrangement and beautiful typography of the edition before us, is obliged to summon to his aid all the adventitious interests of a yet new subject to carry him through the volume. With this admission, this new edition of the *Fragmenta Tragicorum* may be considered an interesting, as it is beyond doubt a very valuable, accession to our knowledge of early Roman literature; and it may perhaps be said that the light which these fragments throw on Latin philology alone is enough to compensate for their tediousness as poetry. Add to this the palæographical interest of disentangling the more and more resolvable perplexities of the authors by whom they are quoted, and the gradually increasing conviction which the careful study of those authors produces, that much which at first seems doubtful or insoluble in these venerable remains may, and probably will, find a clear and almost certain solution in the hands of the carefully trained scholars of the present generation. This is especially true of Nonius, the largest contributor to the collection, but it is likely to be more true than it is as yet of Varro, Festus, and the Grammarians; and we can hardly fail to see why it is that works like this command a steady sale, and pass rapidly into a second and third edition. There is besides the eminently German (it can hardly be said to be an English) virtue of working up all the available materials which the industry of ancient and modern scholars places within the editor's reach; M. Ribbeck's second edition in this respect is a proof of the goodness of his first. In the nineteen years

which have elapsed since the work was originally published, the most eminent scholars of Germany, Ritschl, Bergk, Mommsen, Haupt, Fleckeisen, Bücheler, Corssen, and a host of others, have either themselves emended the fragments or contributed new facts or statements which help to elucidate them. It is sad to find few or no English names, only one or two French, among them: yet we venture to think that Latin philology has received a new impulse among us, and almost hope that, if a third edition shall, as is very likely, ever be forthcoming, it will contain at least some English contributions of consideration.

The present edition differs from the first mainly in two points, its increased bulk and the absence of any discussion as to the place of the fragments in the dramas to which they belonged. Ribbeck reserves this for a separate volume; but it is to be hoped that where plausibility is all that can be looked for, he will allow the temperate and rarely extravagant views which the essay in his first edition contains to remain substantially as they were. He has followed this course consistently in retaining the fragments in the same order and numbering as in the first edition; a saving of time of incalculable value to the student, and which, as a principle of economy, is worth a great deal. By way, however, of supplementing his book, M. Ribbeck has prefixed a Corollarium of lxxviii pages containing a further discussion of the more doubtful fragments, with the suggestions of Bücheler, Usener, and Adolf Kiessling; some of these seem to bear marks of haste, though they add no doubt to the interest of the book: generally the results of the Corollarium are to leave undecided what was undecided before.

Nor is it possible to speak with entire satisfaction of the conclusions at which M. Ribbeck has arrived in constituting his text. It is true that the apparatus, which is at once clear and full, enables any one who will take the trouble to form his own conclusions on the data furnished by the MSS.; and it is equally true that where new words are inserted to satisfy the demands of the metre, these words are distinguished by brackets from the rest. Nor can it be denied that the large proportion of undoubted senarii and septenarii justifies the preference which in common with most editors M. Ribbeck shows for those metres; and the restitutions which he has effected on this hypothesis are not few, and in some cases, we think, beyond dispute. Yet there are places where the MSS. point as unequivocally to other rhythms, bacchiac, cretic, or, as in spite of M. Ribbeck we must think, saturnian. We shall give specimens of each, beginning with the last. Nonius gives a line from the *Ajax* of Livius Andronicus thus—

Praestatúr virtúti laús; gelú set múlto
Ocius uenio tabescit,

i.e. probably—

Ócius uento . . . tabéscit,

a passage which seems clear enough to justify the inference that the early writers for the stage mixed saturnians with the other exotic rhythms. Att. 558, *heu Mulciber Arma ignauo inuicta es fabricatus manu*, is reduced by Hermann to senarii by inserting *ergo* after *arma*. It is easier to suppose them cretics. The line from Ennius' *Iliona*, fr. iv. Ribb.—

Age asta, mane audi, itera dum eadem istaec mihi,

must be, as Fleckeisen constitutes it, bacchiac; and this is, if I am right in so conjecturing, the metre of part of a much disputed passage quoted by Nonius, 407, 22, in illustration of *tenacia*. It is written in the MSS. as follows: *ducet quadrupedum iugo inuitam doma infrena et iuge valida quorum tenacia infrenari minis*, i.e.—

dúc et quádrupedém iugo,
Inuítam doma ínfrena et íunge,
Válet equorúm tenácia ínfrenarí minis.

The first of these verses is either a short trochaic line or the end of a longer iambic or trochaic verse; the second is composed of three bacchii; the third is apparently cretic, if we may suppose the two last syllables of *tenacia* slurred into one, or for *infrenari* read *frenari*. Another passage in Nonius from the *Lycurgus* of Naevius, which runs as follows: *nam ut ludere laetantis inter se uidimus praeter amnem creterris sumere aquam ex fonte*, and is given by M. Ribbeck as trochaic—

Namque ludere ut laetantis inter sese uidimus
Propter amnem, aquam creterris sumere ex fonte . . . . .

more naturally divides into two bacchii with an anacrusis—

nam ut ludere
Lae | tantís intersé uidimus praeter ámnem
Cre | terrís sumere aquam éx fonte;

and the same metre is perhaps traceable in a fragment of the *Neoptolemus* of Attius, i. Ribb. Nonius gives it as follows: *quid si ex Graecia omne illum par nemo reperiri potest*, which M. Ribbeck reduces to iambic senarii—

quid si ex Graecia
Omni illius par nemo reperiri potest?

but which is with less violence written—

quid si éx Grae | cia
Omni íllum par nemo reperíri potest?

where *illum* for *illorum* is an old conj. of Voss, and suits the passage grammatically as well as *illius*. It is no doubt an indication of the difficulty of settling such metrical points that a line which bears on its front so clear an impress as—

Quamquam ánnisque et aétate hoc córpus putrét (Pac. 340)

was at first considered by M. Ribbeck to be a truncated senarius, and that Ritschl, who determined it to be bacchiac, as it surely must be, arranged it by the help of the newly revived *d* (*actated*) as possibly also a senarius.

This brings us to a further point of criticism. Ritschl's lately published pamphlet on the final *d* has had more than what we consider a desirable influence on the editor of the fragments. After all Ritschl's arguments we still look upon the introduction of this final *d*, whether abl. or acc., with distrust. It is worth while to examine this with some minuteness, and we therefore write out at length such of the lines in which this final *d* is reintroduced, as far as we have at present examined, in M. Ribbeck's volume.

Liv. 26. *Ego puerum interea ancillae subdam lactantem meae.*

Ribb. *interead;* in his first edition he supposed a syllable lost at the beginning of the line; metrically this is less harsh; *interead* not only makes a singularly unrhythmical line, but is without any MS. support.

Pac. 39. *Qui se icit quam illum eumpse lapidem, qui ipsa icta est, petit.*

Sed for *se*, Ritschl: yet *se* is very often written for *sese* in the MSS. of Nonius, and so Voss here, and Ribb. in his first edition.

Pac. 150. *Sed ne incertat dictio: quam rem expedi.*

Med for *ne*, Bothe; but *ne* is not certainly even *me*, much less *med:* and if it were, we cannot be sure that we have a complete senarius.

Pac. 225. *Quid tandem? ubi ea est? quod receptat? exul incerta uagat.*

Quod receptast? Ribb. accepting *quod*, on Ritschl's suggestion, for *quo:* yet even if *receptast*, the conj. of Bergk, is

right, confusions of *quo* and *quod* are too constant to make any argument in defence of a final *d* derived from this passage of weight.

Pac. 237. *Qua super se interfectum esse Hippotem dixisti.*

Ribb. reads *sed*, and inserts *tu* before *esse*, inverting the position of *Hippotem* and *dixisti*. Little as we can approve of L. Müller's—

Qua super se interfectum esse dixisti Hippotem,

we approve as little of M. Ribbeck's *sed*. The line seems to be, as M. Ribbeck himself thought in his first edition, a cretic tetrameter, reading *dixti Hippotem*.

Pac. 248. *Pariter te esse erga illum uideo ut illum te* (*ted*, Ribb.) *erga scio.*

315. *Postquam defessus perrogitando* (*-dod*, Ribb.) *aduenas.*

These two cases are to some extent on a level; the insertion of the final *d* is an easy, even a natural, expedient; very probably it was so written by Pacuvius: at any rate, *te erga* is impossible, even if *perrogitando* is allowed to stand as a hiatus. Yet other hypotheses are also possible, e.g. *te erga rescio*, *perrogitando'st*, or even as Umpfenbach and Bücheler: at any rate no one can say that these instances, and they are the strongest we have met with, *prove* the final *d* in the Latin Tragics. Equally disputable are other archaisms introduced without necessity, e.g. *quamde* in Att. 267—

Melius pigrasse quam properasse est nefas;

where *quam* is perhaps a corruption of *quando* or *quoniam*; *lumpis*, Pac. 244, for the MS. *lymphis*: not that such forms *may* not be orthographically correct for the time of Pacuvius; but that M. Ribbeck's work ought to speak authoritatively, and authority in such cases is incompatible with anything like considerable deviation from the MSS. On the same principle M. Ribbeck, we should have thought, would have done better in retaining what look like remnants of ancient constructions. Thus in Pacuv. 330, *qui tibi in tutela est traditus* is quite archaic, like Cato's *ponere*, *condere*, &c. with *in* and an ablative; cf. Virgil's *Mandet humo solita*; and so in Att. 494—

Cum somno in segetem agrestis cornutos cient,

the simple abl. *somno* should have been kept, even if Catullus' *fallaci excita somno* is not enough to defend it. Again, why should *super satis agere*, Pac. 72, be altered into *semper satis a.*, when the combination *satis superque* recurs so often? or the substantival infinitive, *Concertare ac dissentire partem da(t) cursum aequiter*, "to dispute and disagree in part (? that part should dispute and disagree) gives free course on both sides," be tortured into—

Concentare ac dissentire parti ac da cursum aequiter?

In the immediately following passage, Pac. 75, may not the MSS. reading *domitum imperium*, "the tyranny to which they are broken in," be right? and in Pac. 102—

Ossuum inhumatum aestuosam auram,

does not *auram*, "vapour," suit the sense better than *aulam*, "a pot"? It may be said that in Pac. 114, *hymenaeum fremunt Aequales, aura resonit crepitu musico*, Euripides'—

Ἀργεῖαί τε νῦν
ὑμνοῦσιν ὑμεναίοισιν· αὐλεῖται δὲ πᾶν
μέλαθρον (*I. T.* 355),

points to *aula* (Scaliger) as a more than probable correction; still the four words of the former fragment ought to be judged by themselves; a principle, we think, scarcely estimated at its full value by M. Ribbeck. In Pac. 161-3—

quo tamen (? *quo iam me*) *ipsa orbitas*
Grandaeuitasque Pelei per penuriam
Stirpis subaxet,

where Ribb. reads *penuriam*, *subauxit*, it may be a question whether *subaxit* = *subegerit* is not more in conformity with *per penuriam*: particularly as *subaugere* seems to have no existence. In Pac. 194—

Sed haec cluentur hospitum infidissimi,

where L. Müller proposes *heic* = *hi*; it seems more likely that *haec*, "these parts," is genuine.

In the well-known fragment from the *Iliona* (197–201), *suspenso somno*, the reading of the best MSS. is in complete accordance with the language of other writers; sleep as a god is represented as hovering lightly over the sleeper, or transferred to a state of somnolence, the same word naturally passes into the idea of a light sleep, ready, so to speak, to take wing with the least disturbance. In 200, where the MSS. give *neu relliquias semiassi reis denudatis ossibus*, after Haupt's obviously true emendation, *sireis*, there can be little doubt that the whole line ran, as Bentley in part suggested—

Neu relliquias semiessi sireis denud. ossibus.

Another fragment of the same play—

Fac ut coepisti hanc operam mihi des perpetem, oculis traxerim,

is, with the change of *coepsti*, too good a verse to be altered: *oculis traxerim* would seem to mean, "let me drink it in with my eyes," like *haurire oculis*, &c.

Enn. *Eum.* 132—

Tacere opino esse optumum et pro uiribus
Sapere atque fabulari tute noueris,

needs only an *ut* before *tute* to make the sense intelligible: "I consider it best to be silent, and to show such wisdom as one can, and only to speak in accordance with one's own knowledge."

Enn. 360—

Animus aeger semper errat, neque pati neque perpeti
Potest,

pati, not *poti*, must be right: "it can neither bear nor bear out."

These remarks are offered with profound deference to the eminent scholar whose contributions to Latin philology are so well known and so undeniable. In works like that before us the method may be said to be half the battle; and M. Ribbeck's editions of the Latin Tragic and Comic fragments were among the earliest specimens of that distinct arrangement of text, authorities, and critical apparatus, which has since become *de règle*. If we have ventured to question some of the conclusions of this new edition of the Tragic fragments, it is with a deep sense of the immense profit which every careful reader must derive from its learning and research, the felicitousness, nay certainty, of many of its emendations, in a word the impress of thoroughness and mastery which it displays throughout. In such men doubts mean so much that they are almost better than other people's certainties: that M. Ribbeck's second thoughts seem sometimes less probable than his first is a sure indication of the progress, to which no one has contributed so largely as himself, of the study in its multifarious departments of Latin philology.

R. ELLIS.

THE MANUFACTURE OF INSCRIPTIONS.

THE pretended discovery of "another Moabite stone," purporting to be set up by Moses in honour of himself, was published by Mr. Lumley in the *Times* one day, and contradicted by him the next. It was at once pointed out to him that the monument in question had already been published and philologically explained in the Quarterly Statement No. VI. of the Palestine Fund (1870), and *Zeitsch. d. d. morg. Gesellschaft*, 1871, p. 429, &c. But how are we to account for the differences between that simple Nabataean sepulchral inscription, which no doubt has not been copied with perfect accuracy, and the copy brought home by Mr. Lumley, but deciphered in utter contempt of philological

principles? It is obvious that only one stone with such an inscription can be in existence; and not less so, that if it was found in Umm-er-resās (and this is quite certain), the same inscription cannot have come to light in Medeba, a place which is certainly a good distance off. But there is another point equally certain, viz. the original identity of the characters of both the inscriptions. We only find some slight alterations in the form, and the mode of connecting and separating single characters. We also find the characters distributed in six lines in the new copy, whereas the genuine monument presents only four lines. A copy revised in accordance with the original one of Bechnam has only a few indistinct marks on a fifth line. But when Shapira's explanation of the stone is exploded, we naturally ask, whence comes the stone seen by Mr. Lumley at Shapira's house, 36 inches by 18, close granite, with a six lines' inscription? Clearly there is a monument in existence, manufactured probably by Shapira as an article of trade. A clever fraud for Jerusalem, but clumsy enough for any one who knows inscriptions! There is no misunderstanding here, as some might be inclined to think, for this is not the only suspicious inscription which has passed through the hands of Shapira. When M. Ganneau lately discovered a stele with a Greek inscription, forbidding non-Israelites to enter the inner court of the temple, and thus harmonizing beautifully with Josephus, Shapira soon afterwards produced a similar though smaller stone of the same purport, which was asserted to have been found on the same spot. He refused however to allow a "squeeze" to be taken on account of pending negotiations for its sale. A third stone in the possession of the same man is much more suspicious. The characters are said to agree with those of the stone of Mesha—and of course it is quite possible that other stones of the kind exist—but we are told that, according to Shapira, the Beduin, who is said to have brought the stone, refused to mention the place of its discovery. The monument, which is 2½ feet long, 1½ foot broad, and 8 inches thick, contains four lines with 86 letters. The first three lines are said to contain the 117th Psalm. As if psalms were ever engraved on stone! Our own thoroughly trustworthy correspondent writes: "I have already had people in Jerusalem pointed out to me who know about the manufacture of this stone. The characters have been well scratched in; but the stone has lain in a kind of lye, so as to get an antique appearance." Lately, too, I received two more "squeezes" of newly discovered Nabataean inscriptions. On examination, the one (you can see traces of the *stone* on it!) which passed through Shapira's hands stands in the same relation to the genuine inscription as his copy from Medeba to the genuine inscription of Umm-er-resās.

These facts seem to establish the existence of a flourishing manufactory of inscriptions in Jerusalem. Whether Shapira is the only partner in the concern or not is uncertain; but we feel bound to address a warning to scholars, and particularly to travellers in Palestine. Mr. Lumley is not the only person who has been deluded by Shapira, for a letter from Jerusalem in the *Athenæum* for March 9 refers apparently to several of his forgeries as "very interesting and valuable inscriptions." Being personally acquainted with Shapira, we can state that he embraced Christianity from purely sordid motives. His character is just suited for a forger of inscriptions, as also his half-scholarship and his Jewish-German. The want of tact exhibited in various quarters in the tragic history of the Moabite stone begins to bear fruit. Beduins go in quest of inscriptions; then pashas extort them from them out of avarice, and play the part of harem-guardians of Semitic monuments; and the last result is now before us—the convenient though clumsy system of forgery.

Albert Socin.

Intelligence.

The well-known traveller Captain Burton feels called upon to correct some omissions and misstatements in the current accounts of the Moabite stone. In the *Athenæum*, April 13, he gives a *résumé* of the palaeographical, linguistic, and historical peculiarities of the inscription, and flings an undeserved taunt at the scanty band of English scholars. He boldly asserts that "short vowel-points appear in parts of the inscription," and that, among other "shades of meaning" (!) there is a dual termination *-im*, and a plural *an*; refers Isa. xiv. and xv., "the so-called Isaiahnic writings," to the reigns of Uzziah, Ahaz, and Hezekiah; and contemptuously dismisses the historically important narrative in 2 Kings iii. His second paper (*Athenæum*, April 20) opens with a list of articles, &c., on the inscription, which, except its incomplete supplement, is borrowed without acknowledgment from Dr. Wright. The author then examines one by one the statements of Dr. Petermann in the German Oriental *Zeitschrift* for 1870 with a fullness and authority which would carry conviction were it not for his undisguised anti-German bias. Both articles are full of misprints. We have to thank the author for the information that M. Ganneau is quite willing to part with the stone, but that complications have arisen with the Comte de Vogüé.

A new work, by Dr. Richard Volkmann, on the rhetorical systems of the Greeks and Romans (Berlin: Ebeling and Plahn), contains an exhaustive collection of the material furnished by the Greek and Roman rhetoricians, Aristotle, Cornificius, Cicero, and Quintilian, also the grammarians and scholiasts, their precepts being illustrated by numerous examples from the Attic orators and Cicero. The work endeavours to show that the rhetoric of the ancients is not an arbitrary *olla podrida* of absurd and pedantic rules, but a thoughtful and refined structure of great perspicuity, and which may be of importance even to our own time. Another publication of the same firm is an essay by the younger Kinkel, *On Euripides' Relation to Art.*

New Publications.

Ahlwardt, W. Bemerkungen üb. die Aechtheit der alten Arabischen Gedichte, mit besonderer Beziehung auf die sechs Dichter, nebst Beiträgen zum richtigen Verständniss Ennābiga's und 'Alqama's. Greifswald: Bamberg.

Belloguet, Roget de. Ethnogenie gauloise: Mémoires critiques sur l'origine et la parenté des Cimmériens, des Cimbres, des Ombres, des Belges, des Ligures et des anciens Celtes. 1ière partie: Glossaire gauloise. Paris: Maisonneuve.

Bergmann, F. W. Sprachliche Studien. (3. Serie.) Leipzig: Brockhaus.

Bertram. Ilmatar. Comedia Turanica. Esthnisch u. Deutsch. Dorpat: Gläser.

Beunans Meriasek. The Life of St. Meriasek. A Cornish Drama, with translation and notes, by Whitley Stokes. Trübner.

Brugsch, H. Grammaire hiéroglyphique, contenant les principes généraux de la langue et de l'écriture sacrées des anciens Égyptiens.

Brugsch, H. Index des Hiéroglyphes phonétiques, composé et appliqué à son Dictionnaire hiéroglyphique.

Chi-king; ou, Livre des Verses. Traduit pour la première fois en français par G. Pauthier. (Bibl. orient.) Paris.

Doolittle, Justus. A Vocabulary and Handbook of the Chinese Language: romanised in the Mandarin Dialect. Vol. I. Trübner.

Dowson, J. A Grammar of the Urdu or Hindustani Language. Trübner.

Düntzer, H. Homerische Abhandlungen. Leipzig: Hahn'sche Buchhandlung.

Eichhoff, F. G. Hymnes du Rigvéda imités en vers latin. Pp. 6. Paris: Maisonneuve.

Eucken, R. Ueber die Bedeutung der aristotelischen Philosophie für die Gegenwart. Berlin: Weidmann'sche Buchhandlung.

Eutropi Breviarium ab urbe condita. G. Hartel recogn. Berlin: Weidmann'sche Buchhandlung.

Faber, A. De Minucio Felice Commentatio. Nordhausen: Haacke.

Heimskringla eda Sögur Noregs, herausgeg. von Linder u. Hagson. Konunga Snorra Sturlosonar. III. Bd. Upsala: Lundequist.

Hertz, M. Die Verdienste des preussischen Königspaars um die Erforschung des classischen Bodens. Breslau: Barth.

Homer's Iliade erkl. v. J. W. Faesi. 2. Bd. 5. Aufl. Besorgt v. F. R. Franke. Berlin: Weidmann'sche Buchhandlung.

Lorenz, O. F. Collationen d. Codex vetus Camerarii (B, Biblioth. Vatic. Cod. Palat. 1615) u. d. Ursinianus (D, Vatic. 3870) zur Aulularia d. Plautus. Berlin: Calvary.

Müller, J. G. Die Semiten in ihrem Verhältniss zu Chamiten und Japhetiten. Gotha: Besser.

Reliquiae Dialecti Creticae. Pars 1. Glossae Creticae cum commentariolo de universa Creticae Dialecti indole. Scripsit M. Kleemann. Halle: Lippert'sche Buchhandlung.

Rigvéda; ou, Livre des Hymnes. Traduit du Sanskrit par A. Langlois. (Bibliothèque orientale.) 2ième édition, revue, corrigée et augmentée d'une index analytique par Ph.-Éd. Foucaux. Paris: Maisonneuve.

Sharpe, S. The Rosetta Stone in Hieroglyphics and Greek, with Translations and an Explanation of the Hieroglyphical Characters, followed by an Appendix of Kings' Names. J. Russell Smith.

Straumer, F. De Ciceronis quae fertur, oratione apud Cassium Dionem Commentatio. Chemnitz: Brunner.

Terenti Hauton. Timorumenos. Erkl. v. W. Wagner. Berlin: Ebeling u. Plahn.

Valentinelli, J. Bibliotheca Manuscripta ad S. Marci Venetiarum. Codices MSS. Latini IV. Venezia: Tip. del Commercio.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 48.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intenaed as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, June 1, *and Advertisements should be sent in by May* 28.

General Literature.

A. Sainte-Beuve. Souvenirs et Indiscrétions. Paris: Michel Lévy Frères.
A. Sainte-Beuve. Nouveaux Lundis. Tome troisième.

THERE is something pitiful about these two scrappy volumes, a sort of impression of the gleaning of grapes when the vintage is done. Of course the deplorable circumstances make the temptation to book-making irresistible; and even apart from the two fragments of autobiography which appear in both, the two volumes contain much, both in the way of remains and of anecdote, which was too good to be wasted, and the time has not come for a life of Sainte-Beuve in which such materials might have been used without suggesting the suspicion that they were being traded upon.

Sainte-Beuve was one of the writers who suppress their personality without escaping from it, and therefore we can neither comprehend their writings without a knowledge of their character nor reconstruct the character without needing any help beyond the writings. An adequate life is wanted, but perhaps it may be doubted whether the adequate life can ever be written. His secretary appeals to Sainte-Beuve's correspondents, but it will surprise few if the appeal produces nothing more interesting than an interchange of diplomatic civilities with a variety of celebrities, with all the expression of opinion coming at the beginning of the series, before the writer had forgotten to feel and learned how to criticise: and then these scanty memorials may tell us very nearly all there is to tell of a great writer, whose character was too guarded to be easily known, perhaps too jealous to be worth knowing. The fact is, he was too important not to be a valuable convert, and he may be said to have passed his life in tantalising those who desired to proselytize him; he could never abandon his intellectual liberty, and he could never resist the fascination of tasting and trying to the uttermost what he never meant to buy. One result of this cruel curiosity is to be traced in the inconsistencies of his great work on *Port-Royal.* Through all the successive revisions, we can still discern what passages belong to the Lausanne lectures, when the subject was still fresh, when the writer was in the full enjoyment of the luxury of being almost persuaded. They stand out in a very marked contrast from the successive layers of erudition which Sainte-Beuve continued to accumulate with admirable diligence long after he had come to regard the ideas of Jansenism somewhat in the light of a squeezed orange. And in what Sainte-Beuve says of himself, and in what his last secretary says of him and does not say, we find the trace of the kind of isolation which is another and an inevitable result of such a career. A man who had been acquainted with all that was best in France had none nearer to him at last than an old college companion whom he had found again after almost losing sight of him for thirty years, and had to apologize to an old friend of Béranger who had known Lisette for the improvised family whom he might meet at his table. After all allowance has been made for differences of manners, there is something depressing in the thought that such a man lived so long in the world without taking root in it, without subduing it, and without really rising above it. Still he was not subdued himself: he was free to the last and laborious to the last, and if he measured his ideal obligations more jealously than could have been wished, it is to be remembered that he acted scrupulously up to his own standard, and that unwearied kindliness to individuals, an indefatigable activity in the relief of tangible distress are higher qualities than the capacity for fidelity to a school, or a coterie, or a cause. Material external success is a secondary consideration, but it came at last in a manner not inadequate to Sainte-Beuve's abilities and his heroic industry; it is scarcely worth while to dwell upon a drawback which it is clear, from the two fragments of autobiography, he felt himself. An undiscerning public was ready to leap to the conclusion which ungenerous critics were ready to suggest, that he had been patronised more or less by every one of those whom he had met, and from whom he had parted, whose reputation had been more rapid, perhaps more brilliant, than his own, without being really higher and without being so enduring. His highest success was of course in criticism, and the public were ready again to exaggerate the extent to which he had not succeeded in the line of creative literature. From this point of view, it is interesting to know that five large editions of *La Volupté*, "*toutes réelles*," were actually sold; and that the copyright of the first edition of *Joseph Delorme*, the first work of an unknown writer, was judged worth 600 francs. Perhaps the most interesting biographical matter after the two fragments of autobiography are some letters to the college friend whom Sainte-Beuve found again in the autumn of his days; they date from the early days of Romanticism, and it is curious to see the essential manliness and reasonableness of the writer breaking through the morbid fervour of the school. He must have smiled, and perhaps his correspondent would have smiled too, if they ever re-read a serious exhortation to a man who had, very sensibly, accepted an appointment in a country *Lycée*, to resign himself to his tragical fate, to submit to have had no youth, and no past, and no future. Some light is thrown on two contested passages in Sainte-Beuve's later career: the famous Good Friday dinner, and his migration from the ex-official *Moniteur* to the anti-dynastic *Temps*. It is shown, with almost superfluous completeness, that the first was in no sense a "demonstration;" but the scandal must have been foreseen at least as a possibility, and no doubt the company thought it important not to be hampered by it. Sainte-Beuve was willing to humour a friend who disliked dining with thirteen at table; it seems that he found it less easy to respect a feeling which he regarded as equally superstitious and more influential. The other matter is more perplexing. He had undoubtedly a strong claim upon the *Moniteur*, and the *Moniteur* was singularly indiscreet in showing that it still dragged its chain: opinions will always differ as to whether Sainte-Beuve was justified in the way in which he resented the officious pusillanimity of the editor who suppressed an article on some public lectures which offended the clerical party. It will be easy to deny that his conduct was in any degree disloyal, and hard to maintain that it was exactly generous or delicate.

The fact is, that he was one of heaven's Swiss like General Jomini, welcome and valuable in all camps, at home in none, and therefore exposed to mortifications which they always knew how to resent. There is a sort of fitness in the fact that his last great effort was a rehabilitation of the

famous tactician whose works had become the text-books of the army from which he had been driven; and the completeness with which the writer has succeeded in realising or in seeming to realise what constitutes the merit of a writer on tactics, what constitutes the special merit of Jomini, is one of the most astonishing *tours de force* in literature, especially when we remember that it was performed by a man of nearly seventy, suffering under a painful and incurable disease. On the other hand, we should have been glad to have had some discussion of Napoleon's dictum, that Jomini was a good writer and a bad officer. In general, it may be said that the finished little biographies which were Sainte-Beuve's speciality hardly seem to an English reader to deserve the name of "Studies;" they assume absolutely no knowledge on the part of the reader, though they always start from the fullest knowledge on the part of the writer, consequently the latter from first to last is always in the attitude of imparting information rather than in the attitude of answering questions. It is natural to compare them to Plutarch, and they hardly gain by the comparison: the scientific superiority of the Parisian to the Chaeronean is unquestionable, but so is the inferiority of subject; and on the literary side we have to choose between easy perfection of execution and breadth of treatment and an elevated tone. The article on Joachim du Bellay, one of the poets of the *Pleiad*, has much interest, both of a biographical and a literary kind. Sainte-Beuve claims for him the merit of having first formed a clear conception of the use to which all the French classicists from Racine to Chenier would put ancient literature. Malherbe was a hackneyed subject, and perhaps the paper on him was hardly worth reprinting: its principal merit is the insight with which the writer deplores the misfortune of French poetry in having no continuous tradition. It was originally written in the year of the Italian campaign, the year that Sainte-Beuve received the Grand Cross of the Legion of Honour—at a time when a disinterested critic might have found as many reasons for supporting the empire as Malherbe found for his devotion to Henri IV. and Richelieu. We have one of the first traces of the writer's disenchantment with imperialism in a wonderfully just and stinging sketch of true and spurious Caesars, dashed off as an introduction to an article on the *Vie de César*, which he was vainly pressed to review. As the article was never meant to be completed, the introduction is to be regarded as a *jeu d'esprit;* from this point of view it is hardly a defect that both classes are generalised from a single instance.

G. A. Simcox.

NORWEGIAN FAIRY-TALES.

Norwegian Popular Tales, told by P. Chr. Asbjörnsen. New Collection. [*Norske Folke-Eventyr*, fortalte af P. Chr. Asbjörnsen. Ny Samling.] Christiania: Dybwad, 1871.

Norwegian Huldre-Tales and Popular Legends, told by P. Chr. Asbjörnsen. Third Edition. [*Norske Huldre-Eventyr og Folkesagn*, fortalte af P. Chr. Asbjörnsen. Tredje Udgave.] Christiania: Steensballe, 1870.

One of the most competent judges of fairy literature, Andersen, began a biographical notice of Peter Christian Asbjörnsen, which he published some years ago in a Copenhagen periodical, with the following words:—

"In the lonely wood with its changeful play of sunbeam and shadow, where the silence is only broken by the patter of the distant waterfall, or the melancholy flute-notes of the throstle, or the ring of the axe as the trees are marked and felled to be carried down by the current to the landing-place; amongst the mountain dairies, where the hills echo to the tones of the reed-pipe, to the pet names of the cattle herded home, and to the joyous laughter of youth; in the block-house where the goodwife sits at the humming spin-wheel through the long winter evenings, while the skilful husband and his sons carve the useful trifles which are eagerly purchased at distant markets; there, far away to the north, the fragrant flowers of fairy-tale still put forth their shoots. Yet do not think that it is given to every comer to receive a full and pure impression of their simple natural beauty, that, fresh and blooming as they are, he has but to stretch out a hand and seize them; far otherwise, this tender blossom is a mimosa which closes its petals at the least unfriendly touch. He who would pluck it must have a soul filled with love for nature and the life of the people, an eye which has been touched with the magic salve—no other can so much as see it!—That this is really so, any one may satisfy himself who compares all previous collections of Norwegian fairy-lore with that of Asbjörnsen and Moe, which made its first appearance in 1842, and has not long since been presented to us in a fourth edition. In this collection, and in none of the others, we find the fairy-tale as it still lives in the mouth of the people, and have therefore no difficulty in understanding how this work possesses a significance in Norway which has left profound traces on the best recent literature of that country."

The collection of fairy-tales of which Andersen speaks was received on its first appearance with universal applause, was translated into several languages (into English by Dasent), and made Asbjörnsen's name most favourably known. The present long expected continuation possesses all the merits of the first collection in an equal degree, and will be no less welcome, so that it will no doubt shortly be made accessible to the English public in a translation. Part of it has already been given to the world in the *Yuletræet*, "The Christmas-tree," published by Asbjörnsen in 1850–52 and 1860—23,000 copies of which were sold the first year. All these are now brought together with the addition of new tales, which, continuing the numbers of the old series, reach from 61 to 105. The great majority are identical in substance with the cycles of legendary fiction already met with in and out of Europe, though they present some novel features; but others again are entirely new, so that the whole collection, apart from the charm of the style, offers much promising material for scientific research.

The same may be said of the second of the collections under discussion, the *Huldre-Tales and Popular Legends.* And yet we have not to do here with fairy-tales proper, which are at home everywhere and nowhere, but with legends attached to definite localities, and derived from the special national mythology. Thus the Huldre-tales tell of the Huldre-folk, Norwegian mountain and wood elves, who, however, belong to the same class as the English and Scotch fairies, brownies, daoine shee, good neighbours, &c., so that the same legend is often told in Norway as in England or Scotland. Thus Sir Walter Scott relates in his well-known introduction to the ballad *The Young Tamlane*, how "that a Gallovidian gentleman was one day taking the air near his own house, and was suddenly accosted by a little old man arrayed in green, who gave him to understand that he resided under his habitation, and that he had great reason to complain of a drain or common sewer, which emptied itself directly into his chamber of dais," &c. Quite similar is the complaint of a Norwegian Huldre-man against his neighbour, in the legend given by Asbjörnsen, p. 99, which is also to be met with in Denmark and Germany. So in Henderson's *Notes on the Folk-lore of the Northern Counties of England*, p. 154, there is a legend of the smith of Yarrowfoot, and (p. 158) another from Berwickshire, both of which bear a close resemblance to several passages in the Norwegian (and other) tales; Asbjörnsen, pp. 5, 193, 364. I pass over other instances of the same kind to call attention in general terms to the interest of the matter and the riveting charm of the narration in these *Popular Legends*, qualities especially remarkable in *Skarvene fra Udröst*, "The Cormorants from Udröst," "The Three Corbies," &c. The last of these is in the section *Til Havs*, "At Sea," under the title *Makreldorging*, "Mackerel-dredging," as it is on a fishing expedition of this kind that the legend is supposed to be told

by an old fisherman. All the legends are introduced in a frame of similar character, which gives the author an opportunity of representing this or that neighbourhood, this or that class of the Norwegian people, in so clear and attractive and yet so natural and life-like a manner, that the reader feels as if he were actually amongst the woods and mountains of Norway with the *dramatis personae*, as Asbjörnsen's characters may, with literal propriety, be called, for they are really the actors of little dramas, which he sets before the reader with an art that looks like nature. As another Danish writer has remarked, no professional dramatist could show greater skill than he does in preparing the occasions on which his tales as it were introduce themselves. The poet nowhere appears, and yet the work is one of the most richly poetical with which we are acquainted; the descriptions are so varied and many-sided that new pictures are always being disclosed, and one wanders through the whole country hunting and fishing, up to the mountain homesteads, along the streams and through the woods, with companions in whom one seems to recognise old acquaintances, "whether they be huntsmen, or plank-carriers, or gipsies, or highland dairy-maids, or conjuresses" (*signe-kiærringer*, literally "spell-women"); in a word, Norwegian nature and the Norwegian people are cast bodily by the poet into a single volume. That this is so appears from the repeated editions of his works, of which each one is more perfect in form than its predecessor. From year to year he penetrates further into the inmost life and nature of those classes of his countrymen who chiefly figure in his works, and from whom he derives the legends there communicated. His official position as ranger of the Norwegian forests is an important assistance to him in this way, as he has to traverse the country every year, visiting now this now that district, not omitting those most remote and inaccessible, so that he only tells and describes what he has seen and experienced in his own person. As long vacation tours, hunting and fishing excursions, and especially summer trips to Norway, are the order of the day in England, we can recommend no better guide and companions than those masterly descriptions of Asbjörnsen of the country and people of Norway; while those who are not able to see with their own eyes may trust instead to his; his glance is indefinitely more penetrating, and sees more justly, than that of all the authors of travels in Norway put together. It would therefore be a very thankworthy undertaking on the part of whoever will make this work accessible to the English public in a translation; the necessary permission would doubtless be readily conceded, and such a work might count upon the best reception and a wide popularity. It is seldom that so many excellent qualities are combined as here.

Felix Liebrecht.

LITERARY NOTES.

M. Charles Aubertin, in the *Revue des deux Mondes* (May 1), derives from the correspondence of the Abbé Dubois some interesting details concerning the share of that Figaro-like diplomatist in the negotiations between France and England in 1717–18; from which it appears that, though Dubois was chiefly devoted to his own interest and that of the regent his master, the charge of venality brought against him by Saint-Simon was as inaccurate as many others of that writer's statements, and that his real talent was for administering bribes, though he never succeeded in prevailing on Lord Stanhope to accept the 600,000 livres which he was empowered to offer him at the Hague.

The attempts made during the siege of Paris to establish a system of signals with mirrors and reflected light appear to have failed only because there was no spot in the city high enough for the rays of light not to be intercepted by the curve of the earth's outline before they had reached a serviceable distance. The recent experiments at Montpellier, directed by M. Le Verrier, seem to promise ultimate success, and an exceedingly simple apparatus is suggested for enabling two bodies of troops to discover each other's whereabouts, and so establish telegraphic communication.

"Novelties in Poetry and Criticism," in *Fraser* for May, is an attempt to hold an equal balance between the poets "generically known" as the "new school" and Mr. Tennyson, with whom the author also classes Mr. Browning, Sir Henry Taylor, George Eliot, and Mr. Lowell, as possessing more or less truly classical virtue. He points out that the "new school" is only held together by certain principles of art criticism, and that the poetical merits of Messrs. Rossetti, Morris, and Swinburne, though equally real, are widely different and independent of their common theories.

A. G. Stapleton contributes to *Macmillan* some very interesting reminiscences of Canning and Frere, and some of the squibs jointly composed by them in 1825 for the amusement of their private circle. In prose the two friends thought in such harmony that each would finish the sentence the other had begun; two unpublished pieces of satirical verse are equally characteristic of the difference between their styles, the playful airiness of Frere being perhaps as much more poetical as it is less telling than Canning's concise ironical eloquence.

Im Neuen Reich (April 12, 19) contains an interesting study, by Gustav Freytag, on Nicolaus von der Flüe, a monk of Unterwalden, who was commonly reported, at the end of the fifteenth century, to have lived for twenty years without food, and who was ultimately canonised, although a vision seen by him had been interpreted of a coming Antichrist, whom Luther subsequently identified with the pope. Nicolaus was a layman, quite ignorant, and left a wife and ten children in the world when he settled in his hermitage; to the visitors who pressed him to say if it was true that he lived without food, his only answer was, "Gott weiss!" and his great natural shrewdness seems to have been, all things considered, very little tainted with charlatanism; in 1481 his representations were successful in restoring a good understanding between the towns and country districts of Switzerland. Several contemporaries described the impressions made on them by this saint, and it is curious that the passages of ancient journals, &c. modernised by Herr Freytag resemble nothing so much as—Walter Scott, whose pictures of society in the latter part of the middle ages are a good deal more faithful than it has been fashionable of late to admit.

In the *Revue des deux Mondes* (April 15) M. Renan completes his life of Nogaret; and M. Louis Étienne reviews *Le Théâtre* from 1869 to 1872. M. Sardou is accused of always sacrificing the moral unity of his situation to an ingenious and effective plot. M. Octave Feuillet is the only modern dramatist who succeeds in making passion supply the element of fatality indispensable to tragical effect. M. Augier's dialogue is admirable, but he is deficient in want of feeling. M. Dumas' latest works would be excusable mistakes if they had appeared without prefaces, but if the theatre is the confessional of society, M. Dumas treats his penitents too much like those casuists who suggest more sins than would naturally occur to lay minds. M. Pailleron has poetic merit enough to succeed in the higher comedy. M. Godinet's ingenuity is undeniable even when most perverse. M. Meilhac only wants measure and correctness to attain a legitimate success; moreover, the public is getting tired of the artifices which have amused it for twenty years; it still goes to the theatre from habit, but would welcome more ambitious poetry and sterner morality than is offered it at present.

H. Oesterley writes to the *Allgemeine Zeitung* to point out, what has not been noticed before, that the prose Latin versions of the old French poem *Dolopathos* are certainly derived from a metrical original, as was supposed, for that whole passages can be turned back into verse with very slight changes and transpositions. He is preparing a critical edition of the work.

M. Philippson, in *Im Neuen Reich* (April 26), writes on the "religious policy of Henry IV." to the effect that there was a great deal of policy and very little religion in his conduct, and that his tolerance was even more the result of scepticism than of calculation, but no fresh facts are adduced in support of this unfavourable view.

A collection of Danish tales of peasant life in Jütland has lately been published by "Thyregod" (? a *nom de plume*) called *Blandt Bænder*. Some of them have literary merit of a very high order, and they are all thoroughly genuine and national in character.

Klaus Groth's lectures on "Lessing and his Time," which we before announced (*Academy*, vol. iii. p. 64), were delivered in German at the Taylorian Institution at Oxford on the 22nd, 23rd, and 25th of April, to a small though attentive audience. As is inevitable in the present phase of professorial sentiment in Germany, the political side of Lessing was brought into especial prominence. It was Lessing who emancipated German literature from French influence, and directed attention to England and especially to Shakespeare.

Art and Archaeology.

Fairy-Tales. By Hans Christian Andersen. Illustrated by E. V. B. Sampson Low.
Illustrations to Faust. By Paul Konewka.
Falstaff und seine Gesellen. Von Paul Konewka. Strassburg.

This new book of E. V. B. displays the same faculty that charmed us in her *Story without an End* and *Dream Book*, yet for some reason or other it is not quite so satisfactory as either. The peculiar ability of the artist seems hardly sympathetic with Andersen's *naïveté* and northern homeliness. Something more quaint and simple, and above all more individual in style, than these elaborate designs would have been better suited to express the pathos of the "Ugly Duckling" or the "Little Mermaid." As it is, the massive background of cypress-trees and southern hills, the Florentine young men from Pinturrhicchio or Gozzoli, which illustrate the last scene of the "Wild Swans," or, again, the Albanesque water-babies in the "Little Mermaid," touch a wrong chord. The wicked princess in the "Fellow Travellers," arrayed in poisonous greens and yellows, with black hair and sallow beauty, is more akin to the spirit of Andersen; while the two pictures of the water and the air—carp and swallow life, studied each in its own element—which accompany the tale of Thumbkinetta, would, we feel sure, gratify the author's soul. Through all these pictures the special talent of E. V. B.—great delicacy of taste, sensibility to varied forms of beauty, sympathy with styles as remote and different as possible from one another—can be traced. Her instinct for what is graceful in decoration appears on the frontispiece in the wreath of swans' necks and heads, marvellously intertwined. Her power of expressing religious mysticism is seen in the "Angel of the Garden of Paradise;" the weirdness of her fancy, in the portrait of the Wicked Princess. These are all characteristics of the *Dream Book;* but we repeat that in that publication they both were more in place, and had a freer scope. A Book of Dreams may well contain many moods of shifting insight into the beauty and mystery of the world. The illustration of so peculiar an author as Andersen demands more unity of style in the artist. Another remark too may be made—that the minute and delicate workmanship of E. V. B. suffers grievously from the crude daubing of the colourist. This is most noticeable in the first illustration to the "Wild Swans" at p. 8. When we compare *this* with the fine touches reproduced by photography in the *Dream Book*, and far more with the delicate original from which the chromolithographs are copied, and which were lately on view in the Dudley Gallery, we are justly indignant. The new translation of these eight stories of Andersen is excellent in freshness and simplicity.

Turning to the work of the late Mr. Konewka, we pass at once from the region of strong colours, carefully constructed pictures, and multifarious moods, to the eloquent monotony of shadow-land. This artist lived in a curious world—a world of *silhouettes*, black outlines moving on a white background, expressing nothing by the eye, depending on no accessories for effect, but owing their life and meaning to pure attitude and action, and the outline of features in profile. The necessities of Mr. Konewka's chosen style have forced him to study all the expressiveness of dumb-show; the result is that few artists better understand how to tell a story or to indicate a character by the raising of a hand, the curve of a back, the peculiarities of curls in hair, &c. As may be readily understood, this art of indirect indications lends itself better to slight or humorous subjects than to what is profound or tragic. On the whole, therefore, we prefer Mr. Konewka's children's books and *Falstaff* to his *Faust*. Yet it must be admitted that the mood of passionate despondency expressed by Faust's exclamation, "Entbehren sollst du, sollst entbehren," is adequately rendered by mere attitude in the *silhouette*, that the distinction between Margaret innocent and happy, and Margaret passionate or mad, is also made quite clear by little alterations in the tension of the limbs and the arrangement of the dress and hair. Perhaps the great value of these *silhouettes* is to bring home vividly to our minds the pregnancy of meaning which the slightest movement of the body can convey. A whole new science of physiognomy in attitude seems to be revealed. Mr. Konewka's children are particularly charming. His little boys have a quite peculiar grace. His pifferari dance and caper in the most attractive manner. But it is in *Falstaff* and the whole of his humorous circle, Poins, Pistol, Peto, Slender, Shallow, Bardolph, and the Merry Wives, that he has shown the greatest wealth of fancy. To some extent, both in *Faust* and in *Falstaff*, he has learned from Retzsch; but in his own province of expressive attitude and dumb show he stands unrivalled among artists.

J. A. Symonds.

THE EXHIBITION OF THE ROYAL ACADEMY OF ARTS.

It cannot but be acknowledged that portraits constitute as usual the principal feature, if not the principal interest, of this year's exhibition of the Royal Academy of Arts. Millais leads off with his splendid *tour de force*, "Hearts are Trumps; Portraits of Elizabeth, Diana, and Mary, daughters of Walter Armstrong, Esq." Then come his portraits of Sir James Paget, of the Marquis of Westminster, and of Master Liddell, son of Charles Liddell, Esq.—each in its way as good as can be. Never were the splendid physical endowments of this painter more manifest. As a painter of pure sense impressions he stands unrivalled. There can be nothing more startlingly real than the effect produced on the spectator who enters Gallery 3 by the figures of the girls playing cards, who regard him from the other end of the room. They are more real, more alive, than the living men and women who gaze on them. This powerful illusion is greatly enhanced by the scale of colour selected for rendering the subject. We find the keynote in the white azaleas of the upper left-hand corner, and, starting thence, the whole is set before us with complete unity of tone, in unmistakable, unmysterious daylight. Given the keynote, which is of course absolutely in the discretion of the artist, everything is right. As regards the apparently reckless handling, we must bear in mind that the science of representation is a science of symbols, and that each man has to adapt or invent symbols fitted to express the class of facts which he has intended to represent. In Mr. Millais' case the symbols which he employs are so admirably calculated to render the matter which he intends to render that we cannot

quarrel with them, though we may feel that they partake more of the nature of sleight of hand than of true workmanship. In his landscapes, as in his portraits of the surgeon, the marquis, and the boy, we may be sure that we have all that Mr. Millais saw of each scene, or of each creature, expressed in symbols fully adequate to the purpose. As a painter Mr. Whistler cannot compete with the splendid realism of Millais. But Mr. Whistler takes a foremost place in virtue of the intellectual power which he has shown in his forcible "Arrayment in Grey and Black; Portrait of the Painter's Mother." The treatment of the subject is stiff, und harsh even to painfulness. At first sight in its voluntary renunciation of any attempt to rouse pleasurable sensations by line, or form, or colour, it brings up a vision of the typical Huguenot interior—protestantism in a Catholic country. Then, the longer we dwell on it, the more cruelly vivid becomes the presentment to us of life with its sources of joy sealed or exhausted. Mr. Millais, as we have noticed above, starts directly from his sense impressions unmodified by any mental operation; Mr. Whistler starts from a precisely opposite point of view. The attitude of mind in his sitter being conceived, he has worked it out, selecting the key of colour and the lines of composition so as to enforce, as it were, rather the mental attitude than the material facts. In Mr. Watts we have an artist who is without the physical force of Millais, and (looking at Mr. Whistler's work of this year) without the intellectual vigour of Whistler. But Mr. Watts has a vein of poetic sensibility, and a refined taste, which make his work always interesting however unequal. His portraits of Mr. Calderon and Mr. Dunlop must rank amongst his best efforts. Both are fine in colour, and distinguished by the characteristic intention with which minor facts in each face are ignored or suppressed, the chief effort being concentrated in emphasizing the most essential lines only. By this method, when it reaches full success, we get, not so much the individual, but the type of which the individual is a variation; the root of the word; a simpler and at the same time a more condensed and intensified form of the man we know. Amongst the vigorous realistic painters of whom Mr. Millais must be reckoned the chief, Mr. Orchardson takes high rank with his unaffected and lifelike "Portrait of a Lady." It is a satisfactory piece of substantial work characterized by an air of healthy reality. The red gown has been successfully encountered, the figure stands well, and looks out of doors, which is saying a great deal. Gallait's "Mlle. A. B." is the work of a powerful and highly trained painter. The little child figure is alive with natural child piquancy.

When we leave the portraits, perhaps the marking picture of the exhibition is Mr. Walker's "Harbour of Refuge." It challenges attention even in the trying neighbourhood of Millais' dashing work. There may be in these galleries pictures more harmoniously complete in themselves as, for instance, Mr. Leighton's lovely poem, "Summer Moon," but there is no picture more considerable in real content. Mr. Walker gives us material enough to furnish out a lifetime of subjects to the average painter. Every figure in the group of old men is a separate study of character read with insight. The attitude of the careless servant who supports the old woman is admirably expressive, but her face—why has Mr. Walker suffered us to look straight into those eyeless sockets? The tone, too, is unsatisfactory, the atmosphere is oppressive, the air seems choked with brickdust. Yet, though there is something of relative failure, there is much of positive achievement, and we have cause to be grateful in the presence of so original an artist, who seizes out of the daily life of his people the elements of dignity and pathos. In Mr. W. Richmond we have not, indeed, an original artist, but an artist of considerable ability, and of natural good taste refined by constant study of the best models. His "Lament of Ariadne" is a striking performance. The individual study which has evidently gone to the rendering and the masterly treatment of the drapery go far to make us forget the first predominant impression, viz. that we hear "The Lament of Ariadne" by Mr. Richmond in the style of Mr. Leighton. Of Mr. Leighton's contributions we have before spoken (see *Academy*, No. 46, vol. iii. p. 148), and need only add that they fully preserve, in the disturbing glare and contrasts of a public exhibition, their own air of harmony and distinction. The "condottiere" is refined and spirited, and nothing mars our pleasure in "Summer Moon" but a faint sense of discontent that the painter has not felt and made us feel more clearly the structure of the beautiful limbs before us. Mr. Poynter's "Andromeda" is disappointing. It is to be regretted that such an amazing quantity of good work would have been put into such a falling-to-pieces composition. It suggests a design originally intended to decorate some allotted architectural spaces. In the centre the monster, to right the clever-looking little Perseus, to left the chained woman whose lower proportions are of inordinate length, to right again, and again to left, two little pieces of landscape. The moment of action also is unluckily selected; we cannot stop with ease in the middle of the thrust which is to free Andromeda. But still there remains for us so great cause for satisfaction in the seriousness of intention, and in the amount of conscientious and artist-like work, as fairly vindicates the claim of "Andromeda" to be considered a painting of high importance. The grand processional air of Mr. Mason's band of harvesters has been a thing well found and finely felt. A great deal of the strange suggestiveness of this artist's works seems to arise from the very sense we have of their incompleteness. To the point desired, and sufficiently to place us in full relations with the motive, they are however finished, and that thoroughly; there the hand stops. Much may be slight, but nothing is sketchy. "Fair, Quiet, and Sweet Rest," by Mr. Fildes, hardly justifies the considerable eulogiums which have been passed upon it. It is undoubtedly a work of promise, but at the same time of inadequate performance. With brilliant qualities, it shows grave defects. From end to end there is not a passage exactly true in relation to any other. The vigorous Scotch-looking handling gives full effect to drawing which is not free from the reproach of slovenliness. But the fresh, bright spring of youth which seems to flow into the picture attracts and prevents us from being quite out of humour with the evident signs of want of scholarly training. Again a similar want will be felt in Mr. Boughton's work. The landscape of the "Flight of the Birds" is fine, but the figures are unreal and commonplace. The "Coming of Winter" must rank far higher than either of its companions. Here there is no obvious shortcoming, and it is distinguished by delicate sentiment and much grace of colour. If we turn from these works, charming as in some respects they are, and look at M. Tissot's "Les Adieux," we recognise at once the work of a well endowed and thoroughly accomplished artist. The work of a man who knows what he wants to do, and how to do it, "Les Adieux" is, both in conception and presentment, as polished and high-bred as a poem of the best society should be. There is not a touch, not a fallen leaf, which does not lead up to, or help in some imperceptible way, the main beauty of the picture, viz. the exquisitely subtle expression of the girl's face. "Lavinia" shows Mr. Leslie, always an attractive painter of daintily bred damsels, at his very best. His "Elopement" has been unfortunately hung. The virile force which Legros has put into his "Pelerinage" breaks down through the river and reeds below, and crushes them up and drives them out of sight utterly. Of Mr. Poole's "Remorse" it is equally difficult to speak, or to be silent. Can we leave it there with its strange imperative air unchallenged? Here is a man who has left us to our nineteenth-century realism, to our *vers de société*, and our verses of sentiment, and comes with a subject of which we know nothing set in a light which is a riddle to us, and embodied in shapes which are not human, and yet—here is some true artistic power.

In the Sculpture Galleries, "Maternal Love," by J. Dalou (terra-cotta, life-size), affords us a beautiful example of delicately just treatment of a modern subject. In statuary, as in painting, such subjects are for the most part invaded by dry dulness, or rush off into impertinent rococo. The mother and child are modelled with a simple directness of intention, guided by so fine a perception of beauty in life and delicate instinct for the just right mode of rendering it in art that they attain a quite classic charm. The same feeling may be observed in the little terra-cotta by the same statuary, "Le Jour des Rameaux," above which is Mr. Woolner's "In Memoriam," another example of good work and genuine artistic sentiment. And a very poetic conception will be found in Mr. Spencer-Stanhope's "Andromeda." The lower limbs are rather empty, but the torso, and indeed the whole upper portion of the figure displays modelling of a far higher order than one would expect from a mere acquaintance with Mr. Stanhope's work with the brush.

E. F. S. Pattison.

ART NOTES.

The death of Mr. Richard Westmacott, R.A., the well-known sculptor, occurred at Kensington on April 19th. Mr. Westmacott was born in London in 1799. Amongst his most esteemed works are reckoned "Venus and Ascanius," "The Player on the Cymbals," and a "Nymph and Faun." He was also the author of a history of sculpture, and of an essay on the colouring of statues.

The reorganization of the art institutions of Berlin continues to occupy much of public attention. No. 17 of *Im Neuen Reich* contains an article in which the brightening prospects of the museums are discussed. The writer points out that the increased funds at their disposal will enable them to undertake much which has hitherto been out of the question. He strongly urges the formation of a museum of casts from all the most distinguished works in foreign galleries, and invites the government to earn the thanks of the scientific world by employing the growing navy on voyages of archaeological investigation and discovery.

The April number of the *Preussische Jahrbücher* contains an article bearing Conze's signature which carefully estimates the relative merits as catalogues of the late Dr. Carl Friederichs' *Berlins antike Bildwerke* and Bötticher's *Königliche Museen.* The writer considers that Friederichs' book, although defaced by certain much to be regretted blemishes, is a model of genuine popular treatment, and offers as much of interest to the laity as to the learned. Bötticher's catalogue, on the one hand, wants in comprehensiveness, and, in spite of the dragging in of all possible *minutiae*, is not sufficiently worked out to be of service to the learned, and, on the other hand, takes in too much for the simple public, and is often so abstruse as to be incomprehensible.

M. Léon Heuzey, professor of archaeology at the École des Beaux-Arts, has just brought his course of lectures to a close by two experimental lessons on Greek costume, to which he invited members of the Academy of Fine Arts, art students, and critics. A patient study of the works of Greek antiquity has convinced M. Léon Heuzey that the costume of the men and women of ancient Greece was composed simply of squares of stuffs varying in dimension. With squares of various stuffs M. Heuzey reproduced on the living model all the diverse and often complicated arrangements of drapery which are to be found on the statues, basreliefs, and vase paintings of ancient Greece. Last year the professor terminated his course by similar experiments illustrating Assyrian and Egyptian costume. Next year he intends to take as his subject Roman archaeology and the more complicated costume of the Roman people.

M. Jules Canonge bequeathed to the Louvre in 1870 two valuable drawings in red chalk by Raphael, representing one Psyche, the other Jupiter giving a kiss to Love. These two drawings are now publicly exhibited in the Salle Louis XIV of the Musée des Dessins. All the sculptures, vases, and bronzes from the châteaux of the Tuileries, Meudon, and St.-Cloud, are at present brought together in the gallery of the Daru Pavilion.

MM. Édouard Dubufe and Mazerolles are about to open in Paris a studio for pupils.

The April number of the *Zeitschrift für bildende Kunst* contains a very excellent etching, by W. Unger, of "Die Lautenspielerin," after Terborch. The original is one of the "Meisterwerke der Kasseler Gallerie."—Wilhelm Schmidt, of Munich, contributes some original researches on Jean Baptist van der Meiren, commonly known as van der Meer.—B. Stark draws the attention of the German public to the importance of the recent excavations on the site of the temple of Diana at Ephesus, in a valuable letter addressed to the editor, v. Lützow, and accompanied by a plan of the situation.

The Oesterreichische Museum in Vienna is making preparations for a permanent exhibition of the various modes of reproducing works of art. The special committee of organization consists of Artaria, v. Eitelberger, v. Hauslab, Schestag, and Moritz Thausing. The scheme for the first exhibition includes five groups: (1) Engraving in wood and metal; (2) Etching; (3) Lithography; (4) Galvanoplastic impressions; (5) Daguerreotype, photography, photolithography, heliography, albertotype, and nature-printing.

The art-union of Basle is engaged in forming an exhibition in honour of the opening of the newly erected Hall of Art. The exhibition is to include the paintings both of modern and ancient masters, and will commence on May 26. It is said that the schools of Munich and Düsseldorf will be in great force, although Swiss artists will of course occupy the first rank. The Netherlands are to furnish the chief contingent of the works of old masters, but both the Italian and French schools will be well represented.

The sale of the works of art belonging to M. Henri Rochefort took place on April 17. With the exception of a Meyer, "Plage de Scheveningen," which was sold for the rather high price of 1550 frs., and a van Goyen, which went for 780 frs., all the paintings were of a very middling order.—A large and valuable collection of Limoges enamels was disposed of by M. Pillet on April 12; the most remarkable were—Penicault (le vieux): a fine triptych, the centre compartment representing Christ on the Cross; the left wing, Christ bearing the Cross; the right wing, the Descent from the Cross; each plaque 26 c. in height, the centre 24 c. in width, and the two sides 10 c.; 3500 fr. Pape (N.): a very fine plaque, which had formed a portion of a triptych representing figures in a landscape looking towards the left, and appearing to listen to some one preaching; 32 c. high, 17½ c. wide; 2500 fr.—The paintings left by M. Zamacois came to the hammer on April 15. "L'Heure du Rendez-vous" went for 6000 fr.; "Un Confessional," 6100 fr. These were the highest prices reached by the works of the artist himself. His collection, which was sold at the same time, contained a fine painting by Madrazzo, "Jeune Femme jouant avec un Singe," and several examples of Fortuny—a painter whose works are rarely seen in auction rooms.—On the same day took place the sale of the collection of M. L. M., the principal event of which was the active competition for a picture by Brascassat, "Taureau attaqué par un Chien," which was knocked down for 10,550 fr.—We find that the Berlin Museum is not the lucky purchaser of the du Cerceau work which came to the hammer at the sale of M. Vaudoyer's effects. The *Chronique des Arts* for April 24 corrects this statement, which we copied from a previous number. The work of du Cerceau was acquired by M. Edmond de Rothschild.—The last days of the sale of the Gillott collection, the 4th and 5th May, fully equalled in excitement and interest those which preceded them. Several fine examples of Turner went for very high prices; the "Ehrenbreitstein" for 2650 guineas, "Bamborough Castle" for 3150 guineas. Drawings by Hunt brought prices varying from 200 to 500 guineas. The large Rubens fetched only 1200 guineas.

New Publications.

Alten, F. von. Aus Tischbein's Leben u. Briefwechsel. Leipzig: Seemann.

Bertram, Dr. Neue baltische Skizzen. Helsingfors: Wasenius. (Leipzig: Voss.)

Ethé, Hermann. Essays und Studien. (Literary and Oriental.) Berlin: Nicolai.

Froehner, W. Les Musées de France, recueil de monuments antiques. Liv. 1 et 2. Fol. planches. Paris: Rothschild.

Goethe's Briefe an Eichstädt. Mit Erläutrgn. hrsg. von W. Frhrn. v. Biedermann. Berlin: Hempel.

Hemardinquer. La Cyropédie, essai sur les idées morales et politiques de Xénophon. Paris: Thorin.

Hildebold von Schwangau, Die Minnelieder von, zum erstenmale übersetzt u. mit begleitendem Texte herausgegeben von Joh. Schrott.

Instituto di Corrispondenza Archeologica, Monumenti, Annali, Bolletino dell. (Published by Archaeological Institute of Bonn.) Berlin: Asher.

Schnorr von Carolsfeld, J. Zur Geschichte des deutschen Meistergesanges. Notizen und Literaturproben aus den Dresdner Handschriften des Hans Sachs und anderer Meistersänger. Berlin: Lobeck.

Theology.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—It is always dangerous to publish opinions upon part of a great question without also laying down, explicitly as well as implicitly, the wider principles which should cover the question as a whole; and I see by your note in the current number of the *Academy* that I have not escaped this danger.

I have promised, if possible, to carry on my enquiry as to the Fourth Gospel also to the Synoptics; and, till this is done, I must venture to think that some of your objections to my argument are a little premature. I am quite ready to admit the "antecedent probability" of a legendary element finding its way into the Evangelical history. But "antecedent probability" will not carry us far. We ask *to what extent* legendary matter has thus entered in. And the only way in which the answer can be given is by determining the relation in which the writers stand to their history. This, I think, can be decided in the case of the Fourth Gospel by independent considerations; and if such considerations point to the Apostle St. John as the author of the Gospel, it appeared to me rather superfluous to argue the question of legend in connection with it further. The same conditions do not apply to the Synoptic Gospels; and it slightly misrepresents me to say that I deny the existence of legendary matter in these. On the contrary, I have rather asserted it (pp. 258, 267, 268). But I think there is strong evidence to show that such legendary accretion as seems to be there is still very near to the original facts. When I come to the Synoptic Gospels, I will state my reasons for this opinion more fully, but in the meantime I can hardly admit that the objection is relevant to my present argument.

Again, I think you push into a little too much prominence the particular argument from the "circumstantial precision" of the Gospel. I have only made use of this along with others, and it loses a great part of its force when separated from its context. The point of the sentence quoted lies in the conditional clause. I say that the relations of Judaism to nascent Christianity are depicted in a way in which they could not have been, had the author been born after the taking of Jerusalem—and I am not aware that this argument has ever been fairly met. Besides I maintain, and have endeavoured to establish step by step, that the circle of ideas within which the Gospel moves is entirely the Evangelical and Apostolic circle, not the Gnostic or any other.

I did not fancy that I had given any great prominence to Sir R. Hanson: at least as much, I should have thought, is given to Dr. Scholten and M. Renan, not to speak of authors like Meyer and Weizsäcker, with whom I more nearly agree. My reason for choosing Dr. Keim was simply because he seemed to hold the anti-Johannean hypothesis in its most tenable form and with its least substantial element sifted out of it. If any better representatives of this theory exist, I should be glad to know of them. The hypothesis of "mediate authorship" (pp. 301–4) may perhaps need more discussion, but I am convinced myself that it will not hold, and that the arguments are all there, and only need to be arrayed.

If it is true that "many of my arguments have too strong a likeness to the (present?) century," by all means let them be dismissed. I had made it my endeavour to exclude all that was not based on permanent conditions of human nature; and wherever I have failed to do this, I have missed my object. But care should be taken lest, in flying from one form of modernism, we fall into another. I am convinced that a good deal of German criticism (admirable, magnificent as that criticism is) is yet essentially modern, and not only modern, but German in the restricted sense. That is why I do not adopt quite so fully as you would wish me the method of "liberal"—*i. e.* practically of "liberal German"—criticism. I am prepared to defend my procedure in this respect, and I hope I shall be able to make it appear in time that the principles upon which I have worked are not taken up at hap-hazard, but hang systematically together. W. SANDAY.

Great Waltham, Chelmsford, May 3.

[So far as our note is liable to misconception, we are most happy to modify it in the sense of the above explanation. To take the points in order. First, German criticism has passed through several phases, and we questioned whether an English critic was justified in taking up the subject at such an advanced point. This doubt, however, was only thrown out incidentally. As for Sir R. Hanson, it is true that he is referred to, as far as we can remember, only twice by Mr. Sanday, but on both occasions in a pointed manner, and apparently as the most noteworthy English writer. Secondly, we are quite aware that Mr. Sanday's argument from circumstantial precision hangs together with that from the doctrinal characteristics of the Gospel, but we thought, perhaps erroneously, that this was patent to the reader by one express mention of the complete analysis of the book. The quotation about Shakespeare tempted us by its incisiveness. Our third remark was to the effect that the admission of the historical character of the Fourth Gospel involved a similar admission with regard to the other Gospels. This was no doubt liable to misconception: we should have said, "with regard to great part of the other Gospels." The relevance of the argument is an open question; we only asserted that it might be urged by an objector. Fourthly, Mr. Sanday is mistaken in supposing that "liberal" criticism is identical to us with German. Not so; criticism is essentially neither German nor English, but should seek to transcend mere local or temporary peculiarities. And we fear that Mr. Sanday's psychological point of view has not escaped the danger of onesidedness.]

Contents of the Journals.

Journal Asiatique, Jan.—Rapport sur une mission archéologique dans le Yémen; par M. J. Halévy.—Nouvelles et mélanges: *Phonetic Values*, and *History of Assurbanipal*, by G. Smith; par M. J. Oppert. [We regret the bitter tone of M. Oppert's criticisms, which points to some personal misunderstanding between himself and Mr. Smith. It would be absurd to ignore the eminent services of M. Oppert. We question however whether he himself always observes the rule of acknowledging the labours of his predecessors. Two or three of his facts are questionable. *Mat Mas* is not *madbar(u)*, "desert," but "the land of Mash" (Gen. x. 23). The Iphtatael *yuctatatsir* is paralleled by the Istataphal *yustetesir;* and the value *nas* assigned to the character *ta* is imaginary.]—Yarkand (Mr. Forsyth's mission); par J. M. —Lettre à M. Jules Mohl.

Götting. gel. Anzeigen, March 27.—Kohut on the Persian translation of the Pentateuch by Tavus; rev. by H. E., who finds much to censure in the execution of the work, and questions the authorship of Tavus (Taus, ταῶς).—April 24. Works on Libyan inscriptions by MM. Reboud, Faidherbe, and Judas; rev. by H. E., who expresses a hearty recognition of the services to linguistic science rendered by the French in Algeria; he adds a few words on Count Sierakowski's work on the Berber languages and tribes, which includes a grammar of the Schaûi by M. Torchon.

New Publications.

BROCKHAUS, Cl. Aurelius Prudentius Clemens in seiner Bedeutung für die Kirche seiner Zeit. Leipzig: Brockhaus.
MOESINGER, G. Supplementum Corporis Ignatiani. Innsbruck: Wagner.
REUSS, E. Bibliotheca Novi Testamenta Graeci. Strassburg.

Philosophy and Science.

Auerbach's Edition of Spinoza. [*B. de Spinoza's Sämmtliche Werke.* Translated from the Latin, with a Life of Spinoza, by Berthold Auerbach. 2 vols. Cotta.

SINCE the first edition of this work was published thirty years ago, 3000 copies have been sold—a fact on which the translator is not unreasonably disposed to congratulate his countrymen, as the number must have been made up outside the learned classes to whom the Latin text is accessible. The present edition is "corrected and enlarged;" the new matter in the life is chiefly derived from van Vloten, whose discovery of unpublished letters to and from Spinoza led to the identification of two anonymous correspondents with Dr. Schaller and a young Saxon noble von Tschirnhaus. These letters were translated in 1870 by Dr. Willis, *B. de Spinoza, Life, Correspondence, and Ethics;* and to English readers by far the most valuable part of the present work is that supplied by Professor Schaarschmidt, who translates the early work of Spinoza which he had edited in the original Dutch in 1869, and which was only otherwise accessible in an uncritical Latin translation by van Vloten, its discoverer. This *Korte Verhandeling van God, de Mensch en deszelfs Welstand* ("Short Treatise on God, Man, and Human Happiness") covers nearly exactly the same ground as the *Ethics*, and contains by implication all Spinoza's characteristic doctrines; but it is of peculiar interest to the student of his system as

showing which parts of this Spinoza accepted for their own sake, and which as necessary logical inferences from previous assumptions, for it is certainly one of the disadvantages of the mathematical mode of demonstration that a conscientious thinker is led by it to say sometimes more and sometimes less than he presumably thinks. The two points on which Spinoza's views seem to have undergone modification as well as development are the will, of which he is more anxious to deny the existence than the freedom, though this is perhaps rather a difference of language and arrangement than opinion (cf. *Eth.* ii. 49, cor.); and the natural world, which in chap. iv. he seems half inclined to speak of as "der Gottheit lebendiges Kleid," instead of, as in the *Ethics*, strictly identifying God and the whole sum of natural existences.

In his translation Auerbach has aimed, he tells us, at faithfulness and accuracy, and "dabei möglichst deutsch zu schreiben;" in the latter respect he may have been more successful than in the former, though we cannot think that his style would have lost by following the pointed terseness of the original more closely. He seems as a rule to give the general sense, which it is scarcely possible to mistake, with sufficient accuracy; but he does not aim at reproducing the exact value of each word in the text, and, what is worse, he allows himself to use different equivalents for the same word, and the same equivalent for different words. Thus *idea* is generally *Vorstellung*, but sometimes *Idee; imaginatio* is sometimes *Einbildungskraft*, sometimes *Phantasie*, and *imaginari* sometimes *sich in der Phantasie vorstellen*, sometimes *sich einbilden*, sometimes *darüber phantasiren*. It is thus left to the translator's discretion what precise shade of meaning a particular passage shall receive. *Vorstellung* and *Einbildungskraft* are German for idea and imagination, and it was for Herr Auerbach to explain, if necessary, how much of the ordinary literary connotation of the words his readers must dismiss from their minds in order to follow Spinoza's use of them. We had marked a few passages taken at hazard, in which we had to turn to the original for explanation of the translation: vol. i. p. 529, we find the precept, "Vergnügen nur so weit zu geniessen, als es zur Erhaltung der Gesundheit genügt." Spinoza could not have written this, and did write *Deliciis in tantum frui*, &c.; the *nur* is redundant, and almost reverses the meaning. Vol. ii. p. 430, is an instance of the same word set to do double duty; Herr Auerbach has, "so weiss ich nicht, wer ihm gesagt hat, dass wir . . . . nur durch freien Beschluss des Geistes festen und beständigen Geistes sein können;" Spinoza, of course, "ex libero *mentis* decreto fieri ut firmato et constanti simus *animo;*" and in the same letter the phrase, "qua in re satis, ne dicam, nimis confidenter perstat," might surely be better translated in a rich and flexible language than as we find it, "und hierbei bleibt er ziemlich, um nicht zu sagen, allzu vertrauensvoll stehen." Small blemishes and inaccuracies (*Machtvollkommenheit* for *sufficientia*, *das Verständniss* for τὸ *intelligere*, &c.) are rather numerous, and though it may be said that these are trifles, still it is scarcely worth while to translate an author like Spinoza unless he is to be naturalised amongst the classics of a language; and a good deal will have to be done to the work before us before it will dispense any serious amateur of Spinozism from the necessity of learning Latin. There is a real difficulty in vol. ii. p. 325; Spinoza is answering Blyenbergh's enquiry whether God was the cause of Adam's disobedience, and the obscure passage runs "non vero quatenus malum erat; nam malum, quod in eo erat, non erat aliud quam privationis status, quem propter illud opus Adamus amittere debebat." Willis translates quite at random, "not however, as it was evil, for the evil that was in it was nothing other than a state of privation into which Adam must fall by reason of the act;" Auerbach not much better, "denn das Böse, das darin war, war nichts Anderes, als der Zustand der Beraubung, welchen Adam wegen jener That annehmen müsste." This is one of the letters which was not written in Latin, and perhaps Professor Schaarschmidt will be able to correct the common text by the original Dutch version; but meanwhile we had certainly better construe, "For the evil which was in it was nothing else than (the evil) of privation of the state which (state) on account of that deed Adam was to lose."

H. Lawrenny.

The Morphology and Physiology of Plants. [*Botanische Abhandlungen aus dem Gebiet der Morphologie und Physiologie.* Herausgegeben von Dr. Johannes Hanstein, Prof. der Botanik an der Universität Bonn.] 1870–1871.

Four numbers of this important publication are now before us; each number, whether of smaller or larger dimensions, being devoted to a single subject with a separate title-page, so as to be complete in itself. The subjects already published are as follows:—1. The Development of the Embryo in Monocotyledons and Dicotyledons. 2. On the Structure and Development of Bacillariae (Diatomaceae). 3. On the History of the Growth and Morphology of the Roots of Phaenogams. 4. On the Development of the Embryo in the Genus Selaginella. It will at once be observed that the subjects are not such as promise much novelty, but it is of great importance that, after the various theories which have appeared from time to time, we should at last have some point on which we can firmly place the sole of our foot. It is much to be wished that botanical instructors, or the handbooks which are submitted to students, should not bewilder them with a multitude of theories, good sense in most cases being sufficient to indicate what is really the true one. It is proposed at present to confine our remarks to the two latter subjects with the intention at some future time of adverting to the two earlier numbers.

The paper on the development and morphology of roots is due to J. Reinke, but the observations were conducted under the guidance of the editor. The consideration of the root of Gymnogens did not come within the views of the author. The subject is of some importance as regards the prevalent notions of the functions of the spongelets or hood (Haube), as it is called in the memoir, the truth in all probability lying between extreme views on either side. That it is active at the first moment of development can scarcely be doubted, though the outer cells soon become effete and inactive. The young root is by the author divided into five parts: the pleroma, which, as the name implies, fills up the centre of the rootlet, and is homologous with pith; a layer of cells called pericambium, which lies between the pleroma and another set of cells, to which he gives the name of periblema, which may be regarded as the rudiments of bark; another layer of cells beyond this called the dermatogen, which generates the cuticle above and the spongelet below. The process is just the same in adventitious roots, which appear almost always to be developed in the neighbourhood of a spiral vessel. Slight modifications occur now and then, but the general structure is just what is described in the case of the primary and adventitious rootlets of the common sunflower. It is to be regretted that the anomalous primary rootlet of Tropaeolum did not come under notice, and it would have been very interesting to know precisely the relations of the coleorhize, which is quite distinct from the false coleorhize arising from the prolongation of the base of the cotyledons, to the included rootlet. The production of the four adventitious rootlets in Impatiens almost contemporaneous with the development of the primary rootlet is

very curious. The term endorhizal ought to be expunged as characteristic of Monocotyledons, as in the greater portion of the class the first root is as truly exorhizal as in any Dicotyledon.

The other memoir to which we advert at present is that on the development of the embryo in the genus Selaginella. It is not, however, confined merely to a portion of what had previously been so well done by Hofmeister, and it would perhaps be difficult to point out any important additional information which it affords; though some points, as the development and form of the spermatozoids and of the rootlets, are treated at greater length than could be expected in a mere general investigation like that of Hofmeister. The several stages, moreover, of the formation of the suspensor and embryo are carried out more continuously, and we have the fact put forward more prominently that the plumule and primary rootlet are horizontal, and not vertical, as in ferns. The occasional transformation of the aërial roots into leafy shoots is curious. As regards the development of the roots themselves there is merely a resemblance with that of Phaenogams in the earliest stage, and that only in certain plants. In Phaenogams the several parts enumerated above, pleroma, &c., are from the first distinctly separated, whereas in the vascular Cryptogams they are merely differentiated as well in the embryo as in the growing stem by corresponding divisions in the segments.

The lettering unfortunately in the former memoir is not always very clear, which makes it difficult to understand the figures, which is the more necessary as the terms used are not familiar. M. J. BERKELEY.

Notes of Discoveries and Scientific Work.

Geography.

Central Asia.—The narrative of a most important journey in Central Asia, made in the summer of last year by A. P. Fedchenko, is given in *Petermann's Mittheilungen*, having been prepared from a collection of the traveller's letters published at Tashkend. Central Asia, especially the region surrounding the high valley of Eastern Turkestan, has long rivalled the North Polar area and the Nile basin of Africa as a centre of attraction for geographical explorations. The present journey forms the chief step in the steady advance which has been made from the Russian side. Fedchenko entered the diminished Khanate of Kokand from Kojend, in the Russian province of Turkestan, and at an audience granted by the Khan at the capital city he obtained a written permission to travel in the Khanate. From the city of Kokand the traveller first went southward by Ispara, on the way which leads through the mountains to the principality of Karategin; but the passes in this direction were closed to the Kokandians through a rebellion of the Kirghiz. Fedchenko describes the head of the Ispara valley as an extensive circus, on the southern side of which eight peaks rise to a height of from 18,000 to 19,000 feet; between each of these a great glacier with side moraines sinks into the valley, descending to a level of about 10,000 feet above the sea. The pass to Karategin is over one of these glaciers. From this the route lay across the high spurs of the mountains which bound the Khanate, south-eastward to where a side valley of the Syr Daria, that of the Kurshab, a small tributary, leads up to the most important pass of the whole region, the Terek-Dawan, on the highway to Kashgar and Eastern Turkestan. The Terek pass is scattered over with great stones to such an extent that it can only be used for traffic in winter, when the snow has filled up the spaces between these. In summer the caravans take a more circuitous route by a side pass. The summit of the Terek, looking down towards Kashgar, appears to have been the extreme limit of the journey.

Southern Arabia.—The results of elaborate investigations of the geography of Southern Arabia, made during a long residence in the neighbourhood of Aden, by Freiherr von Maltzan, are published in the same journal. Von Maltzan obtained his knowledge for the most part by a regular system of examination of every traveller arriving by any of the routes which centre in Aden; and by comparing the accounts thus received with the descriptions given in the manuscript work of the Arabian geographer "El Hamdâni," a copy of which he was fortunate enough to find in Aden. In this way he has been able to map out a region of the country stretching north- and eastward almost equal in extent to Bavaria. When studied along with the journeys of von Wrede, Munzinger, and Miles, the map forms a most valuable addition to geography, by filling up a space which was hitherto a perfect blank.

The Yellowstone National Park.—This remarkable tract of country, to which attention was directed in the *Academy*, No. 46 (vol. iii. p. 151), has been described in considerable detail by Dr. F. V. Hayden in the parts of the *American Journal of Science* for the present year. The April number contains a map of the park and its surroundings, and the Report of the Committee on Public Lands, which serves to explain its many interesting features.

Ameland.—A company has been founded, and operations already commenced, for the purpose of throwing a double dam across the Wadden, which flows between Ameland and the mainland, and uniting this island with Friesland. The soil of Ameland, which affords very rich pasturage, is fast being worn away by the sea. An interesting description of the island, and the great engineering undertaking that is to save it from destruction, is given in *Das Ausland*, 1872, No. 11.

Die Zeitschrift der Gesellschaft für Erdkunde zu Berlin, No. 36, contains a description, by Dr. Nachtigal, of Wara, the chief town of Wadaï, with a population of about 10,000. The paper contains a detailed account of the palace of the Sultan and the chief buildings, and is provided with a plan of the town.

The correspondent of the *Times* in Rome, in a letter of the 8th inst., states that reports had reached Naples of an extraordinary ebullition of the sea near Stromboli.

Zoology.

On the Early Stages of an Ascidian.—In the year 1866, Kowalevsky published a remarkable series of observations on the embryology and early stages of several Ascidians, in which a structure similar to, if not identical with, the type-characters of the Vertebrata was demonstrated. These observations were confirmed by Kupffer, who showed, in addition, that the nerve-mass actually penetrates the tail of the embryo to a considerable distance; but met with opposition from Dönitz, in a paper which has hitherto been almost entirely ignored. Kowalevsky, while continuing this line of research in tracing the embryology of *Amphioxus*, believed he saw a very close resemblance between this lowest form of the class of Fishes and similar stages of the Ascidian; and other zoologists arrived at the conclusion that the connecting link between Vertebrates and Invertebrates had been discovered. In support of this view, additional and not unimportant evidence is furnished by Dr. E. S. Morse, in a paper "On the Early Stages of an Ascidian (*Cynthia pyriformis*)"—(*Proc. Boston Soc. Nat. Hist.* xiv.). In larvae just freed from the egg, he observed so distinct a segmentation of the axial chord that he was enabled to count the segments, forty in number, four of which extended into the body proper. The tail was surrounded by a fin, in which could be clearly distinguished numerous fine diverging rays, as in an embryo fish. The axial segments were nucleated, and enclosed in a continuous investing sheath, which disappeared at the caudal tip. The paper by Dönitz alluded to above is entitled "On the so-called Chorda of Ascidian Larvae, and the Supposed Relationship of Invertebrate and Vertebrate Animals," and is published in the *Sitzungsberichte der naturforschenden Freunde zu Berlin*, 1870–71, as well as in the *Archiv für Anatomie und Physiologie* (pp. 761–764). Dr. Dönitz, who made his observations on *Clavellina lepadiformis* at Naples, states that the central nervous mass, as described by Kowalewsky, is not found in the larval *Clavellinae;* that the string of cells, intermixed with vacuoles, in the axis of their tail, is only apparently similar to the vertebrate chorda, being, in fact, quite different from it; and that these cells are arranged concentrically, and not in bilateral order, nothing like a vertebra being formed. He thinks it even very doubtful if the adjoining cells can be regarded as muscle-cells.

Fossil Phascalomys.—Professor Owen has read before the Royal Society (*Proc. Royal Soc.* 1872, 131) another chapter of his *Fossil Mammals of Australia*, treating of the remains of species of Wombat similar in size to the known existing kinds. These researches are made on specimens obtained from the bone-caves of Wellington Valley, and the freshwater deposits of Queensland. Modifications of the lacrymal, maxillary, and palatal bones in the existing species of wombat were applied to the determination of the fossils, and the author was thereby enabled to distinguish, in addition to the *Phascalomys Mitchelli*, known since the year 1835, a second species, which he has named *Ph. Krefftii*, after its discoverer. Having likewise met with valuable distinctive characters in the mandible, he shows that *Ph. latifrons* is represented among the fossils from the Wellington Valley caves. Three other new species, *Ph. Thomsoni*, *Ph. platyrhinus*, and *Ph. parvus*, are also founded on mandibular remains from Queensland, the last species being markedly inferior in size to any of the known living wombats. Prof. Owen promises, in a continuation of this memoir, an account of the extinct species which exceeded in size the existing wombats.

Although several more or less complete treatises on and lists of the Birds of New Zealand have been published, they were rather of a

tentative and preliminary character; and the work before us (*A History of the Birds of New Zealand*, by W. L. Buller; London and New Zealand) is the first which gives a full account of this ornithic fauna, which, in zoological interest, is not excelled by any other country. The work comprises an introductory treatise on the ornithology of New Zealand; a diagnosis of each species, male, female, and young, with the synonymy and references to the more important part of the literature, followed by a detailed description, to which is added a full account of the life-history and habits of the bird. About one-half of the species, which amount to some 150, will be represented by coloured illustrations. The work will be issued in five parts, each containing not less than seven plates, and we understand that the author contemplates to conclude it with an account of the osteology of the more remarkable forms. There can be no doubt that Dr. Buller, well known in Europe by his preliminary ornithological publications, is eminently qualified to fulfil this task. His long residence in the colony and his official position have given him rare opportunities of making observations and collecting materials; and by a lengthened visit to England he derived the great advantages of studying typical examples, and of availing himself of that typographic and artistic skill in which this country excels. To judge by the first part just issued, Dr. Buller has succeeded in producing a work of real excellence. The text is clear, instructive, and not overloaded with unnecessary detail; while the illustrations are beautiful and life-like. The remaining parts are to be issued at very short intervals.

The sixteenth volume of the *Bulletin de l'Académie impériale des Sciences de St.-Pétersbourg*, 1871, contains some highly interesting papers:—1. L. von Schrenck, Report on Several Individuals of Mammoth said to have been recently found in Northern Siberia, from letters received from M. Gerh. von Maydell, with remarks on the way in which these bodies may have been preserved, their scarcity, &c. (pp. 147–173).—2. Alex. Brandt, Supplementary Remarks on Fossil Medusae (pp. 413–422).—3. J. F. Brandt, Report on the Progress of his Researches on Cetaceans inhabiting seas which covered Central Europe and Asia during the Tertiary epoch (pp. 563–566).

Berichte des naturwissenschaftlich-medizinischen Vereines in Innsbruck, i. 1871, contain only one zoological paper, which may be easily overlooked, as this journal is almost unknown in this country. It is a memoir by C. Heller, "Untersuchungen über die Crustaceen Tirols," No. 1 (pp. 67–96, with 2 plates). Of the descriptions of the various species, we notice particularly those of two new *Cyclops* and one new *Candona*.

The Linnean Society has issued the fourth and concluding part of the twenty-seventh volume of its *Transactions*. The following zoological papers are contained in this volume:—1. H. B. Brady, W. K. Parker, and T. R. Jones, A Monograph of the Genus *Polymorphina* (pp. 197–254, pls. 39–42).—2. A. Rattray, On the Anatomy, Physiology, and Distribution of the *Firolidae* (pp. 255–276, pls. 43 and 44).—3. Sir J. Lubbock, Notes on the *Thysanura* (pp. 277–298, pls. 45 and 46.—4. E. L. Moss, On the Anatomy of the Genus *Appendicularia*, with the description of a new form (pp. 299–304, pl. 47).—5. St. G. Mivart, On the Vertebrate Skeleton (pp. 369–392, pl. 53).—6. O. P. Cambridge, Descriptions of some British Spiders new to Science; with a notice of others, of which some are now for the first time recorded as British species (pp. 393–464, pls. 54–57).—7. R. O. Cunningham, Notes on the Reptiles, Amphibia, Fishes, Mollusca, and Crustacea obtained during the voyage of H.M.S. *Nassau*, in the years 1866–69 (pp. 465–502, pls. 58 and 59).

The *Forhandlingar i Videnskabs-Selskabet i Christiania*, 1871, contain, besides several smaller notices of local interest, a long paper by Axel Boeck, "Crustacea amphipoda borealia et arctica," pp. 83–281, preliminary to a larger work which will be shortly published, illustrated by 32 plates.—Professor Esmark contributes diagnoses of two new fishes, *Maurolicus* and *Argyropelecus*, p. 489.

It is with very great regret that we have to record the death of Mr. George Robert Gray, which took place on the 6th instant, after a short illness. He was born in the year 1808 at Little Chelsea, and was appointed an Assistant in the Zoological Department of the British Museum in 1831. At the time of his death, he occupied the post of Assistant Keeper of that department. He established his reputation as an ornithologist by his *Genera of Birds*, a great work, in the production of which he was engaged for twelve years, from 1837 to 1849. From that time he was *facile princeps* in this branch of science, to which he devoted himself almost exclusively. Only a short time before his death he completed his invaluable *Handlist of Birds*, published in three volumes by the Trustees of the British Museum.

Botany.

Experiments on Hybridization.—Mr. J. Anderson-Henry, one of our most skilful horticulturists, is contributing to *The Garden* the details of some important experiments on pure hybridization, or crossing distinct species of plants. He finds that in those plants which possess two series of stamens, one long and one short, the results vary essentially according as the pollen is used from one or the other series to effect the fertilisation. He uses the short stamens only in all cases where he wishes to cross a large on a small species, and with the most successful results. The converse also he finds to hold good, remarkable hybrids being produced by using the long stamens where he wished to cross a small on a large species. The reason of this he considers to be that the shorter stamens contain pollen of smaller grains, and therefore better fitted to emit its tubes through the style to fertilise the ovules of the smaller species, and *vice versâ*. The plants chiefly operated upon by Mr. Anderson-Henry are various species of Geranium, Rhododendron, and Azalea.

The Formation of Ozone by Flowers.—It has been found by Mantegazza (*Rendiconti del Reale Istituto Lombardo*, vol. iii. fasc. vi., abstracted in *Der Naturforscher*, 27th April) that many essential oils, like that of peppermint, turpentine, oil of cloves, lavender, bergamot, aniseed, nutmeg, thyme, and others, when in contact with the oxygen of the atmosphere in presence of sunlight, develop very large quantities of ozone. The oxidation of these oils is, in fact, a very convenient source of ozone, as they, even in small quantities, ozonize much oxygen. The action is strongest in direct sunlight, far less so in suffused daylight, and very weak or at an end in the dark. The development of ozone which has been begun in the light continues for a long time in darkness. In the same manner act eau-de-cologne, hydromel, and other aromatic tinctures on exposure to the solar rays. Experiments which Mantegazza has made on flowers with powerful perfume, such as the narcissus, hyacinth, heliotrope, mignonette, and others, in closed vessels proved that they also form ozone. Those with fainter perfume produced less ozone, those without scent none at all. Mantegazza believes that this important source of ozone is of hygienic value for the purification of the air of marshy districts.

New Publications.

Brush, G. J. Appendix to the 5th Ed. of Dana's Mineralogy. New York: Wiley.

De la Liberté et du Hasard, essai sur Alexandre d'Aphrodisias, suivi du traité du Destin et du libre Pouvoir, trad. par M. Nourisson. Paris: Didier.

Delesse, M. Lithologie du fond des mers. Paris: Lacroix.

Engler, A. Monographie der Gattung Saxifraga. Breslau: Kern.

Faivre, E. De quelques travaux récents sur les corps organisés flottants dans l'atmosphère. Lyon: Vingtrinier.

Feser, J. Lehrbuch der theoretischen und praktischen Chemie. Berlin: Hirschwald.

Hoefer, F. Histoire de la physique et de la chimie depuis les temps les plus reculés jusqu'à nos jours. Paris: Hachette.

King, C. Mountaineering in the Sierra Nevada. London: Trübner.

Koch, L. Die Arachniden Australiens nach der Natur beschrieben und abgebildet. Nürnberg: Bauer und Raspe.

Müller, J. Terminologia entomologica. 2. Aufl. Brünn: Winiker.

Ramann, G. Die Schmetterlinge Deutschlands und der angrenzenden Länder. 3. Lief. Berlin: Schotto.

Rey, E. Synonymik d. europ. Brutvögel u. Gäste. Halle: Schwetschke.

Schrauf, A. Atlas der Krystallformen des Mineralreiches. 3. Lieferung. Wien: Braumüller.

Stefan, J. Untersuchungen über die Wärmeleitung in Gasen. Wien: Gerold's Sohn.

Ulrich, T. Internationales Wörterbuch der Pflanzennamen. Leipzig: Weissbach.

Van Tieghem, P. Recherches sur la symétrie de structure des plantes vasculaires. 1er fascicule. Paris: Masson.

Villard, F. Du Hachisch. Paris: Delahaye.

Weiss, C. Ueber Transplantation gänzlich abgetrennter Hautstücke. Tübingen: Fues.

Wiesner, J. Untersuchung einiger Treibhölzer aus dem nördlichen Eismeere. Wien: Gerold's Sohn.

History.

Droysen's History of Prussian Policy. [*Geschichte der Preussischen Politik.* 4. Theil, 2. Abtheilung: Friedrich Wilhelm I., König von Preussen.] 3 volumes. Berlin: Veit and Co., 1869–70.

Of Professor Droysen's comprehensive work on Prussian Policy, four parts have now appeared, in ten volumes. The first part, reaching to 1440, describes the origin of the power of the Hohenzollern in Brandenburg, after the Emperor Sigismund, in 1415, gave that electorate (its Ascanian dynasty having died out) to Friedrich of Hohenzollern, the Burggraf of Nüremberg. The second part carries on the his-

tory of the electors to the Thirty Years' War; the third describes to us the Great Elector Friedrich Wilhelm, 1640–88; the fourth contains a history of the first King Friedrich I., 1688–1712, and his successor Friedrich Wilhelm I., 1712–40; while a supplementary volume describes the original authorities and discusses critical difficulties. We shall here notice the account of Friedrich Wilhelm I.

Historical events often have not only a preparatory but also a retrospective influence, since they give a meaning and importance to occurrences which the latter would not seem to possess if considered by themselves. The recent growth of Prussian power sets before us the aim as it were of all those events which Droysen describes; in the beginning we seem to see the end. This is especially the case with our author's later volumes; in the earlier parts he is not always successful in making it visible to us, but in Friedrich Wilhelm I.'s time it is clear enough. This prince has been often unfavourably judged. The Memoirs of his daughter, the Margravine Wilhelmine of Baireuth, the narratives of Pöllnitz and Seckendorf, &c., represent him as half perverse and half foolish, and this is perhaps still the erroneous view among those readers abroad who recollect Macaulay's essay on Frederick the Great. A more favourable view, however, soon was formed in Germany, where men perceived that wonderful energy and an earnest and honest will and sense of duty lay hid under the rough outside of that arbitrary character. His son and successor already recognised this, though he had himself been not among the least sufferers from the harshness of his father's character. The judgments passed on the king by J. von Müller, Förster, and Preuss, by Ranke and in England by Carlyle, agree in the main with Droysen's view. Droysen too does not go much into the personal character of Friedrich Wilhelm and his court, but confines himself almost exclusively to Prussian policy, *i.e.* the diplomatic relations and the intercourse of Prussia with the other powers. Perhaps he has done this too strictly, as without altering the main character of his work he might have made it more attractive by noticing many individual traits of character from the numerous sources at his command — and this all the more since the mere diplomatic negotiations were by no means the decisive element in Prussia's history at that time. The state was not powerful enough to determine the course of European politics, and the king was not so much a politician as an administrator. His importance lies not in his external action, but in such an arrangement and concentration of the kingdom's internal resources that his successor could employ them successfully abroad. But though the ordinary reader, especially in foreign countries, may find it difficult to master the book, yet the historian will be not less grateful for Droysen's work, drawn as it is from a thorough investigation into the Prussian archives, which will not need to be made again, though some supplementary notices may be added from other state-archives. Foreign enquirers also will find valuable material here collected, especially for English history—the possession of Hanover connecting England and Prussia closely together.

The first two books contain an account of the Northern War, and that of the Spanish Succession, the latter of which was drawing to its close when Friedrich Wilhelm began to reign. By the treaty of Utrecht, 1713, Prussia obtained in Upper Guelders a long desired addition to her Cleve-Westphalian possessions. It was an advantage too that the king was enabled to concentrate his whole power on the north. The stubbornness of Charles XII. armed not only the Russians and Danes, but even his admirer Friedrich Wilhelm against him, and in 1715 the conquest of Rügen and Stralsund proved the military power of the young state and its new army. The treaties which Sweden made after Charles' death with Prussia and Russia destroyed her supremacy in the Baltic. Nor could the fruits of victory be wrested from the king as they had been once from the Great Elector. Prussia won the inestimable possession of Fore-Pomerania, Stettin, and the mouths of the Oder. Droysen has gone minutely into the negotiations of this period with the emperor, Russia, England, Hanover, Poland-Saxony. The petty and complicated intrigues of that age contrast strongly with the negotiations of the present day, when the broad interests of great nations are confronted with each other. It would be well for the reader to gain a general view of the subject from Ranke's *Nine Books of Prussian History* before he enters into the labyrinth of detail which Droysen has had to disentangle. This is especially applicable to the last book in the first volume (1721–7), in which our author considers the position of the leading German powers, complicated as it was by the fact that their foreign possessions were more important than their German provinces. Hanover was united with England, Saxony with Poland, Austria with Hungary and with Italian and Slavonian provinces, Brandenburg itself with "Prussia" (in the original sense of the word). But here lay the difference. Though the land which gave the title of the crown lay outside the German empire, yet it was in reality German, and though materially adding to the strength of the electorate (Brandenburg), yet not important enough to remove the centre of gravity beyond its limits. This happy union of "Prussian" and German interests may be regarded as one main cause of the growth and development of the new state. Naturally the rising greatness of such a vassal was not looked on favourably at Vienna. What would it be when, on the dying out of the house of Pfalz-Neuburg, Prussia by the compact of 1660 would gain Jülich and Berg, and therewith a very important position on the Rhine? The acquisition of this inheritance, contested as it was by the line of Pfalz-Sulzbach, formed the cornerstone of Friedrich Wilhelm's policy; and the impossibility of getting his claim recognised at Vienna was the chief motive which induced him to join the political union which after the great change in the European system of alliances in 1725 was formed by England and France against the emperor and Spain. Ranke was the first to publish (i. 210) the secret article in the treaty of Hanover, September 3, 1725, between Prussia, France, and England, by which the two great powers agreed to support the king's claim to the Pfalz-Neuburg inheritance; Droysen has brought to light all the details of this noteworthy agreement. The king however, whose German patriotism of itself disinclined him to foreign alliances, found his expectations disappointed. Holland did not wish the Prussian position on the Rhine to be strengthened; England and France could not be really relied on; and so Prussian policy soon took the opposite direction. The transition point lay in the closer union now formed by Prussia with the new Northern power, which had already under Peter the Great taken a distinct line against the policy of England. October 3, 1726, a treaty was made with Russia; and on the 12th of the same month Seckendorf, whom the emperor had sent as extraordinary ambassador to Berlin, succeeded in bringing about a preliminary treaty between Prussia and Austria—the main point again being that the emperor would favour the Prussian claims on the Rhine. Though this change has exposed the king to the charge of vacillation and fickleness yet it gave his policy a fixed direction for a number of years. Seckendorf's ability, aided by the influence of Grumbkow, the king's favourite, and the well understood interests of the two states, held them together. The book which treats of the alliance with the emperor, 1727–32, shows us how the preliminary treaty

of 1726 was confirmed by the formal alliance of December 23, 1728. Prussia acknowledged the Emperor Charles VI.'s Pragmatic Sanction, by which, on the male line of the Hapsburgs dying out, all the Austrian possessions were to be inherited by Maria Theresia, the heiress of the house; and in case of need Prussia was to support this arrangement with 10,000 men. In return the emperor gave up his claims on Berg to Prussia, and agreed that the king should put himself into possession on the dying out of the Pfalz-Neuburg line. Every one knows what came of this, how the king never got Berg, and how Frederick the Great upheld the Pragmatic Sanction. But Austria meanwhile reaped the advantage that Prussia henceforth supported the imperial interests. After Friedrich Wilhelm's journey to the Rhine in 1730, Prince Eugene wrote to Seckendorf that the king had acted as a true friend of the emperor and with a zeal for him which no man in the emperor's own pay and service could have exceeded.

Consequently the king's relations to the emperor's opponents, and especially to England, became more and more unfriendly, and all the more so owing to the family relations between them. In George I.'s time, while friendship existed between the two closely related courts, a double marriage had been planned, one between the Prince of Wales and the Princess Wilhelmine (afterwards Margravine of Baireuth), and another between an English princess and the Crown Prince Friedrich. The queen and her children were set on this plan, and the king also shared the wish. Now, however, that his hated brother-in-law, George II., sat on the throne of England and Hanover, and their political interests became more and more opposed, it became in the king's eyes more and more dangerous to the peace of his state and his family that the crown prince—already a source of anxiety to him—should be influenced by and partly dependent on a foreign power. All that followed, the family quarrel, the prince's flight in July 1730, the execution of his friend Katte, his own danger of death, is too well known to English readers from Carlyle to need further mention. Droysen too has only gone into it so far as was necessary for connecting the family quarrels with political proceedings, and to show that the king did not oppose the marriage from mere despotic caprice, but on definite political grounds.

Even after the reconciliation with the prince and his marriage with Elizabeth of Brunswick-Bevern, the king's irritation against England continued. But his relations to the emperor also became gradually troubled. The policy of the court of Vienna, cunning rather than prudent, now tried to diminish the price given for the treaty of 1728. Still in January 1732, the king seriously endeavoured to get the Diet to ratify the Pragmatic Sanction, even against the opposition of Bavaria, the Palatinate, and Saxony; but in June he found by a conversation with Seckendorf that the court of Vienna wanted to limit his claims on Berg more than he could allow. To make matters certain, he brought about a meeting with the emperor, and the conference at Prague, August 1–5, 1732, became the turning-point of the so-called "eternal alliance" with Austria. Droysen is the first to point out the true significance of this. Earlier writers, deceived by letters and the outward festivities, have seen nothing here but peace and friendship. In reality Friedrich Wilhelm went back to Berlin with the feeling that he had been tricked; for the emperor and Prince Eugene had wrung from him grievous concessions; in particular he had to renounce his right to Düsseldorf. This disagreement of the two powers injured Germany in the following years—as so often in later times. When Augustus II. of Poland and Saxony died in February 1733, the war of the Polish Succession broke out. The weak and fickle policy of Austria led her, under Russian influence, and against her own interests, to support Augustus III. in opposition to the rightful King Stanislaus Leszinsky, though she had no more allies, while France and Spain, under the prudent guidance of Cardinal Fleury, were united against her. Of course the King of Prussia could not wish to strengthen a dangerous rival by continuing the union of Poland with Saxony, notwithstanding that he offered to maintain the Rhine frontier with 50,000 men. But this offer was refused from jealousy of the growing power of Prussia, and the Austrian court merely demanded an auxiliary corps of 10,000 men, under the treaty of 1728. The folly of all this was soon shown by the wretched mismanagement of the wars in Italy and on the Rhine. As so often, so now Germany had to pay the penalty by giving up Lorraine to compensate King Stanislaus for the loss of Poland, the previous Duke of Lorraine, Maria Theresia's husband, receiving instead the grand-duchy of Tuscany. This ill success naturally did not add to the friendship of the two powers. At Vienna great part of the blame was laid on Prussia, and less regard than ever paid to the stipulations of 1728. It even became known at Berlin that secret negotiations were being carried on with Prussia's rivals of Pfalz-Sulzbach. At length the king, prematurely old (he had been dropsical since 1735), saw himself obliged to return to the point from which he had started. On April 5, 1739, a treaty was made at the Hague with France, which guaranteed to Prussia at least a part of its claims on Berg—Düsseldorf, however, and the southern districts excepted. The king's feeling against Austria was at its height. "Here is one who will avenge me," said he, pointing to his son, the crown prince.

One cannot call the king's policy brilliant. It is often said that with his resources he might by bold decision have obtained great advantages, whether against Poland, Austria, or Sweden. Droysen has rightly avoided meddling with such combinations or proposing a task for the king which did not suit either the good or the weaker peculiarities of his character. What lay in him to do, that he did with rare energy and success; and if the fortune of a man is to be looked for in his solution of the problem set before him by nature, then was this king one of the most fortunate rulers. He nearly doubled the power of Prussia. His army and treasury were the envy of his neighbours; the town population of the Mark increased from 100,000 to 206,000; Prussia (in the narrow sense) and Lithuania were, when he began to reign, so to say, dead, but now (as Seckendorf admiringly said) had arrived at the same point of culture as Germany. "The body of the state," with these words Droysen concludes his book, "its mechanism, its rule and form were there—a work of art, like Pygmalion's clay image. What was wanted was what this king could not give, the Promethean spark." How this spark was kindled, Droysen will show us in the next volumes, which may be expected soon.

One word on the supplementary volume. It offers us criticisms of the contemporary authors, Manteufel, Rousset, Lamberty, Fassmann, Mauvillon, Martinière, the Margravine of Baireuth, Pöllnitz. The two last are of especial interest. The Margravine's Memoirs appeared for the first time, and in a double edition, at Stuttgart and at Brunswick in 1810. Their genuineness has been often doubted. But the original MS. with the Margravine's own corrections was obtained by Pertz in 1850 for the library at Berlin. Droysen, however, shows by several instances the amount of error contained in these notices, dictated by an almost inconceivable spirit of bitterness and hate against her father and brother. Amongst the very interesting original documents here given we find a pretended "Memorandum of the Holy Congregation of

Cardinals," in 1735, aiming to reconcile all Catholic powers with the object of crushing heretics. Ranke has used this document, i. 419, and Droysen tries to prove it genuine (in the *Proceedings of the Berlin Academy* for June 1869). But I must confess that his reasons have not convinced me; and I have no doubt that it was one of those satirical falsifications so common in the eighteenth century. Manteufel, the Saxon ambassador at Berlin, in writing to his minister, Count Brühl, February 28, 1738, rightly characterizes it as "ouvrage de quelque esprit oisif, mutin et ennemi personnel de la cour de Rome." HERMANN HÜFFER.

Ranke's Collected Works. [*Leopold von Ranke's Sämmtliche Werke.*] Vols. I.–XXI. Vol. XXIII. Leipzig: Duncker und Humblot, 1867–1872.

The Origin of the Seven Years' War. [*Der Ursprung des Siebenjährigen Kriegs.* Von Leopold von Ranke.] Leipzig: Duncker und Humblot, 1871.

The German Powers and the Confederation of the Princes, 1780–1790. [*Die Deutschen Mächte und der Fürstenbund. Deutsche Geschichte von* 1780 *bis* 1790. Von Leopold von Ranke.] 2 vols. Leipzig: Duncker und Humblot, 1871, 1872.

THE great master of modern historiography in Germany, although he has lately entered on his seventy-sixth year, still continues to issue work after work with wonderful rapidity. His stores seem to be quite inexhaustible; and in the full enjoyment of mental vigour the habit of work, which in fact has been the strength of a long life, does not show as yet the least sign of giving way. It is true that Ranke has discontinued his lectures in the university of Berlin since last summer, but merely in order to pursue his literary labours with greater effect. The retirement from his professorship has left a blank which it will be very difficult to fill up again, since at that seat of learning there remains at present nobody who, in a similar degree, combines the same perfection in critical method, the scientific basis of the study of history, with a corresponding taste and artistic manner of exposition. When Ranke published his first book, now about forty-eight years ago, and when he soon after began teaching, he not only adopted the systematic method of research originated by F. A. Wolf in philology and by Niebuhr in history, but he generalised it, and made it the firm backbone for study in any department of universal history. A multitude of pupils have since gone forth from his school, so that there is hardly a chair of history in any of the German universities which is not filled by one of them. There are numberless teachers, too, in the middle-schools of Germany, who either attended his classes or more indirectly owe their knowledge and capacity to Ranke's example. The principle of sifting and weighing by comparison the value of primary and secondary sources of knowledge, and of discovering their literary pedigree, being originally taught with especial reference to mediaeval subjects, as they were multiplied by the contemporary progress of the *Monumenta Germaniae Historica*, has been transferred successfully to the history of all times and of every country. There is no doubt that Greek and Roman historiography, especially since its new epigraphic material has been coming to light, has received an invigorating impulse from the methodical handling of the chronicles, annals, and charters of the middle ages. And the same may be said with regard to the history of the four last centuries, the original sources of which were buried more or less in the archives of the different countries. That the most valuable records of the policy of modern states have only been opened to the scholars within living memory is owing generally to the progress of enlightenment of the age; but it would scarcely have taken place to the extent, and with the amount of success it has, if there had not been "path-finders" and forerunners like Ranke. Having selected just the history of the sixteenth and seventeenth century for his chief domain, and starting from general points of view, like the connection between the Romanic and the Germanic nations and the papacy, it will ever be remembered how he found his way into the unique storehouse of diplomatic despatches preserved in the vast chambers of the Frari at Venice; and how, in course of time, he mastered also the most valuable contents of the more important collections in Italy, France, Belgium, Holland, England, Germany, and Austria. We doubt whether there is another historian living who has amassed such stores of copies and notes from various places, or who is so competent to give a comparative account of the respective value of each of these record offices.

As an author, Ranke has not been universally acceptable. Some blame him for his objectivity as too cold and unimpassioned. The adherents of political liberalism call him a royalist, an aristocrat, since he writes chiefly from the reports of those who after all were the obedient servants to governments which were despotic without exception. Another very elementary objection misses in his books the entertaining element of detailed narrative, and accuses the superabundance of general view and of argument. The scholar, however, will understand that all these points objected to spring from first principles. In spite of a certain individual mannerism, Ranke approaches the classical model of clearness and conciseness, as near as any contemporary historian, just on account of this objective treatment of his matter. He so little misses the moving spirit in history by overlooking it that in fact there will be few authors who, with the same impartiality, and without any apparent predilection for any political or religious opinion, explore the very mines of literature as well as of political economy, a subject in which both the ore and the dross of a new period generally lie close to one another. Ranke in his ripe age has more than once sat in judgment on his equals, and has invariably done justice to political opponents in the most impartial spirit. We would especially refer in this respect to his short commemorative speech on Gervinus, delivered in Munich on the 27th of September last, and printed in a recent issue of Sybel's *Historische Zeitschrift*, as an excellent specimen of characterization untinctured by any subjective prepossession, and, by the way, well worth the English reader's attention on account of a comparison between the political bias of Gervinus and of Lord Macaulay.

The collected works—an edition commenced at the jubilee of the Professor's doctorate—have been progressing steadily, four or five volumes being issued in the course of the year. Each separate work has been revised most carefully by the author himself, so that the collection includes the latest editions of the history of the reformation in Germany and of the French and the English history. It appears that to each of these works another volume has been added, partly based upon new materials, and partly consisting of some extracts from the choicest accounts still in manuscript. In this manner the historical review of the empire is continued in volume vii. through the reigns of Maximilian II., Rudolph II., and Matthias, tracing the causes of the Thirty Years' War. The extracts added to the former editions of the history of France from the inimitable and racy letters of the excellent Duchess of Orléans, Elisabeth Charlotte, to her aunt, the old Protectress Sophia, at Hanover, have now developed into a separate volume (xiii.). And if we are not very much mistaken, there will be some similar enlargement of the English history, which in its title has dropped the words, "chiefly during the sixteenth century," reserving this predicament exclusively for the next following century.

Vol. xxi. contains the end of the narrative of George II.'s reign, and the first portion of the usual *Analecta*, amongst which a recension of Cromwell's most important speech on the 13th April, 1657, discovered in a British Museum MS. (and much more distinct than the copy reproduced in Mr. Carlyle's work), as well as Ranke's own very elaborate papers on Clarendon, on the autobiographical notices of King James II., and of Burnet's *History of His Own Times*, deserve a special mention. In the appendix we meet with some documents from the royal archives at Berlin, never printed before, and referring to the military assistance which was sent in 1688 by the Elector of Brandenburg to William of Orange, when starting on his ever memorable expedition. The rest of the *Analecta* will probably fill vol. xxii., which is still wanting, with enlarged extracts from the still, in great part, unpublished correspondence of William III., and from the highly interesting despatches, written in French, from London to the court of Berlin, by the Huguenot residents of the Bonnet family. They report regularly during thirty-five years, down to 1720, sometimes so accurately that the debates in the two houses of parliament, for instance, during the anxious time preceding and following Queen Mary's death, may be reconstructed much better from this than from any other source. Vol. xxiii., the last which has appeared, contains the third and in the main unaltered edition of the *Life of Wallenstein*. Perhaps the *History of the Popes* which, since Lord Macaulay's essay, and Mrs. Austin's incomparable translation, has become the favourite with the English reader, may be reissued after this, hardly in a new dress, though very probably too with some important documents found since by the indefatigable author.

We have still to notice two very remarkable productions, which appeared separate from the collected works within the last twelve months, and not uninfluenced by the great events of the immediate past. The essay on the *Origin of the Seven Years' War* grew into a complete book out of a paper read several years ago before the Royal Academy at Berlin. Even such an imperturbable worker as Ranke confesses that when, at the outbreak of the war of 1870, all the young men around him were hurrying away to join the army, it was impossible for him to fix his attention on any subject but one cognate in some respects to Prussia's latest and grandest venture. In such a mood he took up again what had been sketched previously, and connected it with the results of the researches made since in the repositories of all the states which had united for the purpose of annihilating Frederick II. Being fully acquainted, from the original correspondence, with the transactions between France, England, and Prussia, he lamented that the Austrian records were still jealously withheld from the public. But fortunately Arneth brought down his most important work on Maria Theresia to the very period. And in the midst of the din of arms the great Prussian historian was at last permitted to search at liberty in the splendid Vienna collections for the still partly hidden secret of the real transactions which took place before 1756 between the Austrian and the French courts, as well as between Vienna and St. Petersburg. The result is a finished example of historical art, the great difficulties of which nowhere appear through the smooth surface. Yet as the secret and hostile conspiracy, from which the great European conflict of the last century originated, had to be followed up in reference to each of the various governments concerned, and without losing sight of the total march of events, a sort of parallel narrative had to be constructed, in which the seams serve as the most natural lines of chronological transition. Ranke has completed this task with such thorough mastery that causes and effects, and whatever was really at the bottom of a secret of generations, now at last stand out with complete lucidity. The accusations once so violent in many a country, and for a moment in 1866 revived from the Austrian side, that Frederick the Great, by striking the first blow, had wilfully committed the most flagrant crime, will not be repeated again by anybody who acknowledges the evidence of documents. True, there are no actual repetitions in history, and even the most gifted individual dwindles down in comparison with the silently leading forces of destiny, which sway him as well as his opponents. Yet rulers and governments will ever learn from history, and there is no question that, under similar circumstances, they may act according to precedent with a certain degree of security as to the issue. From the appendix, which contains several dissertations on Frederick's own explanations and the respective value of the memoirs of the Marquis of Valori and of the little book of Duclos, *Histoire des Causes de la Guerre de* 1756, it may be mentioned that the often repeated story of an intimate correspondence between Maria Theresia and the Marquise de Pompadour turns out after all to be an entire invention. The empress in later life stated deliberately that she never wrote to the lady, and only made her a single present, "plûtot galant que magnifique."

Even more elaborate and circumstantial is the last work on our list: *The German Powers and the Union of Princes—German History from* 1780 *till* 1790. Who can deny that here, too, the most significant phases of a transient experiment are illustrated by the successful termination of a long and eventful development? The reason why no sufficient notice has hitherto been taken of an attempt made by Frederick II. to unite the German governments in a kind of national federation is simply to be found in the tremendous effect of the French revolution and its consequences, by which the nation was almost torn to pieces. We are here introduced to a period in which the old Empire still existed nominally, though it must be confessed that all its real functions were already extinct, when, with the exception of the short warlike bustle of 1778, thanks to the King of Prussia, Germany enjoyed a most welcome internal peace, coinciding with the brilliant resuscitation of her national literature. This is strikingly, but far too shortly, alluded to in the sixth chapter. Once more we meet with the old king hero, but now as the veteran guardian, who keeps steady watch on events at home and abroad, and with consummate skill either wards off their evil influences from his subjects altogether or allows them to reach his realm fraught with some palpable advantage. Next to him rises the Emperor Joseph II., no longer proud to call himself Frederick's pupil, but after his mother's death, in his full-grown tempestuous ambition and feverish effort, to reform not only Austria, which in spite of her many races is tending to become a geographical unity, but church and empire as well. Old Prince Kaunitz, Joseph's chief adviser—he, too, the guardian of a traditional policy—is a figure depicted by Ranke in his best style. We can only mention that the emperor became the ally of Catherine II. in her schemes against Turkey and Poland; that Frederick was in danger of losing that same alliance which already formed an article in the political creed of Prussian statesmen of the type of Count Hertzberg; that the emperor wished to swallow up the electorate of Bavaria, the impotent incumbent of which he proposed to indemnify with the Austrian provinces in the Netherlands; and that, moreover, by certain revivals of his obsolete imperial prerogative he roused the greater number of the German princes against himself personally. Thus it was that in the last year of his life Frederick II., leaning upon the Dutch Republic and upon George III. in

his capacity both of King of England and of Elector of Hanover, promoted the Union of Princes, with the distinct recollection of what the Union of Smalcald had purposed against Charles V., but with a certain national tendency more characteristic of our own age. The steps to the confederacy and its completion, the share which the Prince of Prussia as the heir-apparent and other princes, especially the spirited Charles Augustus, Duke of Weimar, took in it, are most carefully delineated. The narrative pauses for a moment to see the great Frederick die at Sanssouci and Frederick William II. ascend the throne, who, as long as Hertzberg stands at his side, is sincerely inclined to continue in the steps of his eminent predecessor. These were marvellous days so shortly before the awful Paris catastrophe. While Prussia and England reinstated once more the Stadtholder in Holland, while Catherine and Joseph attacked the Turks with their combined forces, the princes of the empire thought of reforming it under a Prussian protectorate, and Prussia herself, in a triple alliance with England and the Dutch Republic, helped to stay the destruction of the Porte. It will be remembered how Joseph II. ended in exhaustion, how the Belgian provinces rebelled against his autocratic innovations, how the Hungarian and even the estates of Lower Austria threatened the same. The death of Joseph II. involved a complete change of policy, for by the treaty of Reichenbach, Prussia and Austria, after their long quarrel, for the first time joined as allies against the dangers rising in the West, and still continuing in the East. The thirty chapters of the book are as usual illustrated by a very rich collection of hitherto unpublished documents. Most curious are the extracts from Frederick II.'s correspondence with the Duke of Brunswick, referring to the state of the world in the beginning of 1782. He hits off most sarcastically the pitiable capacity of the various sovereigns, and alluding to the approaching peace which England has to submit to with her revolting colonies, he writes: "The King of England, after concluding it, will come down with all his might upon the French and Spaniards. I am offered to mediate the peace between them, but under what conditions? Are the Americans to be free or subdued? Can Holland conclude peace without receiving back her lost colonies? Is Lord Bute to continue behind the curtain the leader of affairs? In that case, nobody would have confidence. The abominable corruption which pervades the parliament and the whole nation has degraded the sentiment of honour and the republican nerve which for a long time have given such examples of courage and generosity." And after accusing the prodigious wealth accumulating in England, he continues: "Vous dans votre Basse-Saxe et moi dans ma sablonière nous n'avons rien à craindre que l'opulance dégrade les sentimens de nos concitoyens, et je préfère notre simplicité, même notre pauvreté, à ces maudites richesses qui pervertissent la dignité de nôtre espèce." However, a few years later secret articles were signed, which are now printed for the first time. They were contracted on the 13th August, 1788, by the prudent advice of William Pitt, between England and Prussia for the sake of peace in the East. Two sets of documents refer to the confederation of the German princes from 1784 down to 1788, two others contain the pith of the correspondence of Prince Kaunitz with Joseph II. and Leopold II. Many letters from the hand of Frederick William II. which conclude the last volume are well adapted to show this prince in a much more favourable light than is usually the case.

In conclusion, one more remark. It strikes us that the author in his venerable age, writing with very striking emphasis and almost youthful vigour, has dropped his former reserve in dealing with modern subjects. With regard to the Oriental question, he ventures to hint at the fact that Frederick William II.—"a prince who embraced mankind with human kindness"—had been likewise in favour of seeing a Greek empire restored at Constantinople (i. 31), and that by the Crimean war it was intended to nullify what had been settled seventy years before (i. 162). But nevertheless he remains faithful to his principles, which combine a scientific method with a conservative conviction, which a great success has approved. So he says most emphatically in the preface: "It would be impossible not to have one's own opinion in the midst of all the struggles of forces and ideas, from which spring, in fact, the most decisive transactions. Yet the principle of impartiality may be guarded in spite of that: the meaning of which is that the respective position of the contending powers is recognised, and that the individual relations of each of them are duly estimated. They may be observed separately in themselves, in their contraposition, in their conflict. By their very opposition, the great facts are brought about, and the general development of events unfolded. Objectiveness is at the same time impartiality." It will be most interesting to see such principles applied by Ranke himself, if rumour says right, to the history of Prussian policy, both under Frederick William III. and his son, the late king. In fact, the Hohenzollern dynasty, among other pieces of good luck, has reason to rejoice in the possession of its historiographer royal.

R. PAULI.

Intelligence.

The number of students at the Strassburg University, which we stated on excellent first-hand authority to be 1500, now dwindles down to about 200. Apropos of the recent inauguration, a very instructive little paper has been composed and distributed to the crowd of learned and official guests by the secretary of the Academical Senatus, Dr. A. Schricker, *Zur Geschichte der Universität Strassburg*. It appears from the records, and chiefly from the matriculation books, that the old university, which was twice incorporated by the emperors Maximilian II. and Ferdinand II., since the days of its founder, the celebrated Johannes Sturm, combined the position of a local high-school, in which a remarkable amount of native talent both learned and taught, with the attractions of an academy for the nobility of the empire. During the era of the Reformation Strassburg offered a neutral ground to the followers of Luther and of Bucer and Calvin, as well as to the later humanists of the adjacent countries. And even after its annexation to France, the German university was confirmed in all its privileges by the conqueror. Princes and diplomatists of European name continued to crowd the classes of professors, because at the same time they had the advantage of becoming acquainted with the polite manners of the French as they slowly encroached upon the ancient imperial city. Cobentzl, Metternich, Montgelas, were students at Strassburg; and so was Goethe in 1770, as all the world knows. His autograph in the book is facsimilé-ed thus: "Joannes Wolfgang Göthe Moeno-Francofurtensis, logiere bey Hr. Schlag, auf dem Fischmarkt d. 19 Aprilis." Between 1785-87 Strassburg was still an educational resort of international celebrity, where among 125 young men of the best families were inscribed 17 Germans, 16 French, 23 English and Scotch, 3 Italians, 11 Danes and Swedes, 5 Courlanders and Poles, 44 Russians and Livonians. This was the natural result of its geographical position, on the confine or, as it were, on the high-road between two nations. Strassburg, though it lost its own political existence in 1681, had scarcely been injured nationally by the French monarchy. This began when the emissaries of the Convention, St.-Just and Lebas, arrived within its walls to wage their sanguinary war against all "aristocrats and fanatics." In the Journal of the old Faculty of Divinity, whose members too had to suffer in prison and exile, the single word TERROR! forms a striking entrance of the year 1793. On the 29th May, 1794, it was resolved by the civic council, in order to conquer "l'esprit de localité," and to strangle "l'hydre de germanisme," that the university should be suppressed. As its reminiscences are not gone, there is indeed a fair hope that they will revive together with the new foundation, and that the people of Elsass in another generation will be proud again of their German seat of learning.

Dr. Gustav Parthey, who died at Rome on the 2nd April of this year, was the grandson of Friedrich Nicolai, the learned philistine and well-known contemporary of Goethe. Parthey, who had inherited from his grandfather considerable property and the old Nicolai publishing firm at Berlin, belonged to the earlier generation of travellers and

Egyptologists in Germany. He has described his travels in Sicily in two learned volumes, 1834 and 1840, and made himself known by a very creditable dictionary of the Coptic language, together with a number of other works and dissertations referring to the history, geography, and philology of ancient Egypt: e.g. *De Philis insula ejusque monumentis Commentatio*, 1830, and *Das Alexandrinische Museum*, 1838. In conjunction with the late Dr. Pinder, after carefully collating all the principal manuscripts, he re-edited the *Itinerarium Antonini*, 1848, and the *Geographus Ravennas*, 1860. To the same predilection for geographical and topographical researches must be ascribed his editions of Pomponius Mela, 1867; of the curious mediaeval tract *Mirabilia Romae*, 1869; and of *Dicuili Liber de mensura orbis terrae*, 1870. Art-collectors are indebted to him for a very useful catalogue of Wenzel Hollar's prints, *Beschreibendes Verzeichniss seiner Kupferstiche*, 1853 and 1858. He has bequeathed his own large and valuable library to the Instituto di Corrispondenza archeologica at Rome.

The Prussian government, together with the German Reichstag, has recently made a grant for the erection of an Institute of Archaeology —like the well-known one on the Capitol—at Athens, where a small knot of German scholars will soon gather to watch the principal excavations in Greece, and to decipher the newly found inscriptions.

Dr. Paul Scheffer-Boichorst, author of Kaiser Friedrich's I. *Letzter Streit mit der Curie*, Berlin, 1866, who has reconstructed the *Annales Patherbrunenses*, and has written some learned dissertations, chiefly on the sources of the twelfth and thirteenth century, has been called by Dr. Pertz to assist him and Dr. W. Arndt in the editorship of the *Monumenta Germaniae Historica*.

According to an advertisement of E. S. Mittler und Sohn, at Berlin, the first instalment of the official work on the last great French-German war will be soon forthcoming. It has ever since been most carefully prepared by the general staff of the Prussian army, under the superintendence of Field-Marshal von Moltke himself, and with the active assistance of the most distinguished officers who were on the staff of the various German army corps. The bulk of materials, which had been collected incessantly in the very actions of the campaign, is said to be enormous, and at all events required a strict and methodical sifting. The subscription price is 18 thalers.

We must give a few words of encouraging recognition to Mr. W. R. W. Stephens' *Life and Times of St. Chrysostom* (Murray), which is singularly objective and historical in its tone. Biographies are too often written with reference to the sayings and opinions of their subjects as criticised from a modern point of view. Neander's *Life of Chrysostom* is perhaps liable to this charge. Mr. Stephens is conscious of the difficulty, and has, we think, carried out his leading idea well. Church's *Life of St. Anselm* may have served to rouse his emulation, and Dean Hook's son-in-law may feel a sort of natural impulse to write the history of the great archbishop of the Eastern Church. The narrative is clearly given, and Mr. Stephens has cautiously abstained from introducing modern points of view, which, after all, are utter anachronisms. Everything is so merely in the germ in Chrysostom's time that he is not of so much use in modern controversy as might be expected. Roman Catholic writers wonder how he and "St. Basil could allow themselves to speak of the Virgin Mary as they do;" a Calvinist finds him very unsatisfactory about predestination and election. Is it not time to deal with church history as we have long done with philosophy, and cease to read modern ideas backwards into our authors? Chrysostom's actions must all be considered from the point of view and the necessities of his age. He became an ascetic monk; but the excessive corruption of the great cities drove most men who wished to lead a devout and honest life into retirement. In fact we may almost use the prevalence of monasticism as a barometer to weigh the corruption of an age. As soon as a good life becomes fairly possible in society, monasticism declines; till then it exists by its own necessity. In our own days the necessity may still exist for individuals; it has ceased for whole classes of men. But the system was always accompanied by great evil. "Nothing," says Chrysostom, "had inflicted more injury on the moral tone of society than the supposition that strictness of life was demanded of the monk only." The system withdrew from the earth those who were meant to be the salt of it. He trusted the time might come when these refugees would be able to return to the world with safety. Similarly the feeling as to marriage or celibacy was largely influenced by the generally degraded condition of women in that age. The early life of Chrysostom under the charge of his mother Anthusa may be compared with that of Augustine under Monica; very tenderly does Anthusa appeal to her son not to deprive her of his protection, companionship, and help, who had devoted her life to him by retiring into a monastery. He studied under the heathen rhetorician Libanius, who would have made him his successor in the school of rhetoric "but for the Christians having made him a proselyte." And to the last his Homer and his Plato influence his writings. When he says that the star of Bethlehem, which came and "stood over where the young child was," must have been not a star, but some one of the heavenly powers which shot down from heaven to give the sign, was he not thinking of *Iliad*, iv. 75, where a heavenly power shoots down "like a star" to earth as a sign to Greece and Troy? His work at Antioch and Constantinople is described at length, and good illustrations selected of the manners of the time; the baths and theatres, the dresses and fashions, everything contributes some minute touches to the picture of licentious luxury all around him. His later life, his persecution by the Empress Eudoxia, and by Theophilus of Alexandria, and his death in exile, are drawn out in a sort of natural sequence. For this part, Thierry's late articles on Eudoxia in the *Revue des deux Mondes* have been of essential service. We learn from his homilies many curious details of church development. Thus the great sermon on Christmas Day, 386, tells us that this festival was not originally celebrated in the Eastern Church; it had been adopted from the West, and, in Antioch at least, less than ten years before the year of Chrysostom's discourse. The tone of Chrysostom's commentaries is especially remarkable. He interprets the sound sense and judgment, adhering closely to the literal and historical meaning of the text. It is quite refreshing to read his homilies; they stand out in such contrast to the unreal fancies of so many of the early writers. The last chapter contains a survey of Chrysostom's theological teaching, and is clearly put together. The value of such a survey is to show us that theology may be cast into a very different shape from what we are accustomed to in the West. "Merit," "satisfaction," "decrees," "forensic justification," "imputed righteousness," are terms which do not occur in the writings of the Greek theologian, because they are the expression of ideas in which he felt no interest; they are the offspring of the Roman mind in which legal ideas were dominant. Burnet found this out, and it had such an effect on him that he says, in the preface to his *Exposition of the Thirty-Nine Articles*, "I follow the doctrine of the Greek Church, from which St. Austin departed, and formed a new system."

New Publications.

Buttmann, Aug. Agesilaos, Sohn des Archidamos; Lebensbild eines Spartanischen Königs u. Patrioten, nach den Quellen dargestellt. Halle: B. des Waisenhauses.

Egger, J. Geschichte Tirols von den ältesten Zeiten bis in die Neuzeit. 1. Bd. 5. Lfg. Innsbruck: Wagner.

Ficker, J. Ueb. die Datirung einiger Urkunden Kaiser Friedrichs II. Wien: Gerold's Sohn.

Gachard. Les Seigneuries et les seigneurs en Brabant au 18ième siècle. Bruxelles: Muquardt.

Grünhagen, Colmar. Die Hussitenkämpfe der Schlesier, 1420–1435. Breslau: Hirt.

Hertzberg, G. Die Feldzüge der Römer in Deutschland unter den Kaisern Augustus u. Tiberius. Nach den Quellen dargestellt. Halle: B. des Waisenhauses.

Historisches Taschenbuch, begr. durch F. v. Raumer. Hrsg. v. W. H. Riehl. 5. Folge, 2 Jahrg. Leipzig: Brockhaus.

Höhlbaum, K. Joh. Renner's livländische Historien u. die jüngere livländ. Reimchronik. 1. Thl. Göttingen: Vandenhoeck u. Ruprecht.

Lambel, H. Bericht üb. die im August u. Septbr. 1871 in Ober-Oesterreich angestellten Weisthümer-Forschungen Wien: Gerold's Sohn.

Pannenborg, A. Studien zur Geschichte der Herzogin Matilde v. Canossa. Göttingen: Vandenhoeck u. Ruprecht.

Pierre le Grand, Les Auteurs du Testament de. (Page d'Histoire.) Paris: E. Dentu.

Philology.

Mélanges égyptologiques. Troisième Série. Tome I. Par F. Chabas, avec la collaboration de MM. S. Birch et Ch. W. Goodwin. Paris et Châlons-sur-Saône.

In this new part of his *Mélanges*, M. Chabas, who is the author of almost the whole, mainly devotes himself to texts bearing on the administration and civil life of the ancient Egyptians. The principal essay is an analytic translation of the Abbott Papyrus in the British Museum (already published by the Trustees, with a valuable introductory notice by Dr. Birch), a document recording an official enquiry in the reign of Ramses IX. of the 20th Dynasty into certain acts of spoliation in the royal and other tombs at Thebes. This subject naturally suggested to M. Chabas, who is always resolute in his determination to obtain as positive results as the nature of the case admits, a thorough enquiry into the administration of the laws under the Pharaohs. To this we owe a very interesting discussion as to the precise meaning

of the Judicial Papyrus of Turin, in reply to the explanation of M. Devéria. That lamented scholar had published this papyrus with a translation, which made the Pharaoh, Ramses III., to whose reign it relates, prejudge persons accused, and, further, taking the place of the judges, himself pronounce judgment on a certain number. Such a case would be directly contrary to the statements of the classical writers on these matters, which, as M. Chabas well remarks, were based on notorious facts, not on the observation of persons unacquainted with the native language. Without, however, laying any undue stress on this evidence, he analyses the text translated by M. Devéria, and comes to a very different conclusion, for he shows clearly that there was no direct intervention of the king in the case. It might seem surprising that so wide a difference of opinion should be possible between two accomplished Egyptologists, were it not well known that the texts of the hieratic papyri are generally far more difficult than those written or engraved in hieroglyphics, from the carelessness and caprices of the scribes, and the occasional extreme obscurity of the more cursive forms of the character. We have often to deal with the running-hand notes of an Egyptian scribe, written very fast and meant only for his own use. It is, therefore, no discredit to the memory of a singularly able scholar that he should sometimes have found himself unequal to a task which even M. Chabas, whose knowledge and acuteness in this department are unequalled, occasionally finds almost beyond his powers. But it is precisely this difficulty that renders the study of the hieratic papyri the most fruitful in the domain of Egyptology, at least so far as the language is concerned. The student is compelled to compare all accessible documents, to pay the utmost attention to grammatical niceties, and not least to refer constantly to the vocabulary and grammar of Coptic, which of late has been scarcely admitted to its rightful place in the enquiry.

Passing from the introduction to the analysis of the document, many points strike the reader which show the wide bearing of Egyptology. In the papyri of the Ramses age, the occurrence of Semitic words transcribed in Egyptian has been frequently remarked. This was an influence like the successive influences of Italian and French on English. The similarity of certain Egyptian roots with Semitic ones has not been as generally acknowledged. It is, however, a phenomenon equally observed in our own language in the case of roots of common origin with Italian and French ones. Hence we find M. Chabas objecting, "On a pensé que le mot *Sar* [seigneur] avait pu être emprunté par les Égyptiens aux langues araméennes; mais on le trouve sur les plus anciens documents, c'est-à-dire à une époque où les rapports de l'Égypte avec l'Asie-Centrale ne peuvent encore être distinctement entrevus, et où par conséquent des emprunts de cette nature ne peuvent être supposés que sur des présomptions tirées de l'homonymie, ce qui ne saurait suffire" (p. 162). Here a certain similarity between two languages pointing to a common descent, in part or whole, is not recognised, and nothing is admitted beyond direct borrowing. But surely Semitic words in Egyptian, written with full vowels, like *marukabuta*, a chariot, מֶרְכָּבָה, *shakaru*, a shekel, שֶׁקֶל, and Egyptian words in Hebrew, like the proper names פִּינְחָס, *e.g. Pa-nehsi*, and חַרְנֶפֶר, *Har-nefer*, are directly borrowed, preserving their original forms, and have nothing to do with roots common to both Egyptian and Semitic, which have proper Egyptian and Semitic forms, like *pteh*, פֶּתַח, and *khtem*, חֶתֶם.

It is not alien to this subject to quote a very curious illustration of a difficult passage in Genesis. M. Chabas is noticing the Egyptian mode of taking an oath. "Il prononça alors le serment ordinaire: Par la vie du Seigneur Vie-Santé-Force, en se frappant le nez et les oreilles et se plaçant sur le sommet [or "on"] du bâton. Il s'agit du bâton, insigne habituel des Oérous [magistrats], que le magistrat tenait étendu pendant la formalité. Le prévenu montrait, par cette attitude et par ces gestes, sa soumission envers le magistrat et la connaissance qu'il avait des châtiments par lui encourus, si sa culpabilité venait à être démontrée. Certains crimes étaient en effet punis par l'ablation du nez et des oreilles, et le plus grand nombre des délits par la bastonnade. L'histoire du patriarche Joseph, dans la Bible, est fortement imprégnée des idées égyptiennes; elle nous présente une épisode qui a quelque analogie avec celui que nous venons d'analyser. Sentant sa fin prochaine, Jacob fait jurer à son fils qu'il ne le fera pas enterrer en Égypte. Joseph prêta ce serment à la manière des anciens Hébreux, c'est-à-dire en plaçant sa main sous la cuisse de son père. Mais Jacob ne méconnaissait pas l'importance du maître de l'Egypte; le serment prêté, il s'incline sur la tête du bâton de son fils, וישתחו ישראל על־ראש המטה (Genèse, xlvii. 31)."—Pp. 91, 92. This is at least a plausible explanation of a passage in which the Septuagint reading, supported by the New Testament, has never been either disproved or explained. Of course, "de son fils" is only a Targumic addition by M. Chabas. The Septuagint has ἐπὶ τὸ ἄκρον τῆς ῥάβδου αὐτοῦ.

The second essay, similar in subject to the first, is the joint work of Dr. Birch and M. Chabas. It relates to a papyrus which appears to be of the time of Setee II. of the 19th Dynasty. One point of great interest is raised by it. The culprit to whom it refers was saved from punishment by appealing to "an individual called Mési, of whom neither the titles nor the functions are indicated."

"Ce Mési était évidemment un personnage très-influent, puisqu'il réussit à préserver Panéba des poursuites du Gouverneur. Nul doute qu'il n'appartînt à la famille royale. M. Lepsius a rangé à la suite des princes de la famille de Ramsès II un fils royal de Coush, basilico-grammate, du nom de Mès. C'est vraisemblablement le même personnage." (Pp. 190, 191.)

This observation, accentuated by a note drawing attention to the fact that the governor was among the highest Egyptian functionaries, is very curious in relation to the story that places the Exodus in the time of Menptah, the father of Setee II., for the name of the powerful individual so strangely mentioned without any title is very like that of Moses. Curiously enough, however, we find at this period two princes of Cush, both bearing the name in question, Mési (Messui?) under Ramses II. and Mes under his son Menptah. (Lepsius, *Königsbuch*, Taf. xxxv. xxxvi.) It may be asked whether the occurrence of this name had anything to do with the fixing the Exodus to this period in the Manethonian story; but there it is said that the Egyptian name of Moses was Osarsiph. The whole subject is full of difficulty. It may, however, be remarked that this interesting joint essay throws light upon the history of the age of Setee II., showing that Egypt was then in a disorganized state.

Among the other essays, that on the Price of a Bull is valuable in reference to the origin of money, and that, by Mr. Goodwin, on an Inscription of the reign of Shabaka, is very important as bearing on the myth of Osiris.

M. Chabas states in the introduction to this volume that he has more essays of his own nearly completed, and others by the friends who have worked with him. Every student of Egyptology must look with great interest to the continuation of a publication conducted under exceptional difficulties, and of more than exceptional value.

Reginald Stuart Poole.

Germanic Studies. [*Germanistische Studien*, herausgegeben von K. Bartsch. 1. Bd. Wien: C. Gerold's Sohn.]

Of the eight essays contained in this volume—originally written for Bartsch's *Germania*—the most interesting for English readers is that by Karl Regel on the alliteration in Layamon, with some general remarks on the metrical form of the poem. Its main characteristics, according to Regel, are its freedom of structure and its extraordinary development of every kind of rhyme, end-rhyme, internal rhyme (Binnenreim), and letter-rhyme or alliteration. The same tendency is shown in the very frequent repetition of two or more words at the beginning of two consecutive verses, as in *ful swiđe us mœi scomien, ful swiđe us mœi gromien*—a rhetorical figure which is alike unknown to the older A.-S. poetry and to the Old French original, and was no doubt developed independently by Layamon. Many of his alliterations are also original, as is clearly shown in the case of foreign (Celtic) names, which are almost always introduced in alliterative combinations: *Selemon þe sele and Cadwalan þæ kene*, &c. Others again are purely traditional, and these Regel has collected and arranged systematically. He begins with combinations of words of the same root, such as *tale tellen*, which he is probably right in regarding as the most primitive of all, and classes the rest under the different heads of words allied in meaning (*fisc and flæsc*), contrasted combinations (*ord and ende*), and the various combination, of verb, adjective, and substantive. The value of these lists with their almost exhaustive fulness and their excellent grouping, is further increased by the parallels given from the cognate literatures, which not only clear up obscurities of form and meaning, but also show that many of Layamon's alliterative combinations which do not occur in the extant A.-S. literature, really form part of the common Teutonic stock. In most cases of difficulty we fully agree with Regel's explanations; some, however, seem to call for criticism. He translates *wunien on wunsele* by "im Wohnsitz wohnen;" the analogy of the A.-S. *wynburg*, &c. points rather to the meaning "Wonnesaal." In *hunger and hete* the translation "Hunger and Hitze (d. i. brennendes Verschmachten)" seems very forced. Madden, who translates "hatred," has only erred on the side of over-literality: the meaning of the word in this combination is simply "affliction." In the old poetry the ideas of "hostility," "crime," "punishment," and "affliction," are almost controvertible, as will be evident to any one who looks over the passages which Grein has collected under *synn*, *morđor*, *niđ*, &c. Conclusive evidence is afforded by the Old Saxon *hungar hetigrim*, quoted by Regel himself, which he would alter into *hêtgrim*.

Theodor von Hagen's article on the manuscripts of Gottfried's *Tristan* is the first attempt that has yet been made to settle definitely their relationship and critical value. He classes them under two groups, one represented by the Heidelberg and the Munich MSS., the other by the Florentine and a large number of inferior MSS. The two lost MSS. which formed the originals of these groups appear to be of equal authority; hence their readings must be compared systematically, and in cases of divergence it must be settled which of the two prototypes had the better reading. A right understanding of the relationship of the two groups is of especial importance in cases of disagreement between two representatives of the same family. If in such a case one of these divergent readings is supported by the reading of the other group, *this* reading will probably be the correct one. Thus in 36, 11, the F. group reads *umb kein ander himelrîche gegeben*, H. has *umb kein ander künecrîche gegeben*, while the editors have adopted the reading of M. *umb tûsent künecrîche gegeben*. But the agreement of H. and the F. group shows that the three first words *umb kein ander* must be retained, while the *künecrîche* of the prototype of M. and H. may be easily explained as a mere graphic corruption of *himelrîche*. The true reading is then *umb kein ander himelrîche gegeben*, which, with its peculiar use of *himelrîche* in the sense of "Himmelsglück," as v. Hagen translates it, is quite in Gottfried's manner, and is in every way preferable to the commonplace reading of M. This, together with several other instances, shows that much remains to be done before the text of the Tristan can be considered as definitely fixed.

The general result of Karl Meyer's article on the "Tellsage" is to enroll Tell in the already overcrowded ranks of the solar myths, while the tyrant Gessler turns out to be nothing more substantial than the clouds and mists which are pierced by the weapons of the sun-god. The other element of the myth—the shooting of the apple from the child's head—he confesses himself unable to explain. We must, however, protest against the depreciation of the apple, of which he says that it "überall nur als an und für sich gleichgiltiges Mittel zum Zwecke erscheint." The fact that the apple appears in nearly all the various renderings of the myth—even, as we learn from a note, in a Persian story of the same kind—certainly points to the directly opposite conclusion. It is not impossible that the key to this part of the myth may be found in Idunn and her apples of immortality. It will be seen that Meyer's explanation of the "Tellsage" is thus incomplete and unsatisfactory; we think that the real value of the essay lies in the remarks on the relation between history and mythology, and the importance of distinguishing carefully between the purely mythological nucleus of a tradition and the historical accretions which afterwards modify it, instead of attempting to discover a mythological explanation for every detail—a course which is too often pursued by comparative mythologists, and tends to bring both themselves and their science into discredit.

Of the remaining essays a mere enumeration must suffice. The most important of them is an elaborate and apparently exhaustive account of the syntactical use of the optative in Gothic, by Arthur Köhler. Konrad Maurer's examination of the so-called "Kristinréttir" of king Sverrir leads him to the conclusion that the king had nothing to do with the compilation of the laws in question. "Wetzels heilige Margarete," by the editor; "Hester," by K. Schröder; and "Das niederrheinische Bruchstück der Schlacht von Aleschans," by H. Suchier, treat of special points of Middle High German literature. The first two give critical texts of newly discovered poems with literary and philological remarks. Neither of the pieces seems to have much literary merit, although the second is of interest as being the only poetical periphrase of the Book of Esther that is known to exist in Middle or Old High German, and also on account of its author, whom Schröder proves by the most convincing evidence of style to be no other than the unknown author of the *Passional*.

Henry Sweet.

THE LATE PROF. GOLDSTÜCKER'S PAPERS.

TO THE EDITOR OF *THE ACADEMY*.

Sir,—So many public and private expressions of opinion respecting my intentions with regard to the manuscripts of my late brother, Prof. Theodor Goldstücker, have come under my notice, reposing for the most part upon imperfect information, that, as the matter is one of some public importance, I am induced to request your permission to state them briefly and correctly in your valuable journal.

The MSS. left by my brother are of two kinds. The first, to which he himself attached the chief importance, relate to his general work, and will, in all cases, be preserved. Arrangements have been already made for their publication. The second are the MS. indices prepared as the foundation for his *Sanskrit Lexicon*, which was in

progress when he died. According to the opinion of an authority in whom my brother reposed entire confidence, these indices are not so much bricks for an edifice as clay out of which bricks have to be made. They could only be used by persons possessing a similar knowledge of the language, and able to deal with them independently. To such an extent is this the case, that it would be impossible for any Sanskrit lexicographer who employed them, to distinguish in the complete work what was his own and what was Goldstücker's.

Now, my brother, fully aware that his own scientific method of treating the subject, to which he devoted his life, was irreconcilably opposed to that adopted by the majority of his co-workers, felt that the use of his indices, after his death, by persons using a thoroughly antagonistic method, would lead to deplorable results unless specially controlled. This feeling occasioned him unmixed regret, but became predominant, so that he was resolved at all hazards, even by personally burning his own MSS., to prevent such a misuse of his labours. This design formed the subject of many conversations between us, especially towards the close of 1869; and his disturbed state of mind at my not recognising his right to ensure the final and unconditional destruction of his MSS. convinced me that I had only the following alternative to consider: to give him the hope that I would fulfil his instructions, and thus probably prevent him from destroying his MSS. with his own hand; or to deprive him of this hope, and thus probably render their destruction certain. But I could not make up my mind to this alternative without a reservation. Acknowledging that my devotion to the interests of my brother's science must ever be less than his, and that no one could judge better than himself how those interests could be most advanced, I promised not to neglect his directions, provided none of them bore the marks of passionate precipitation. This promise continues binding.

When, therefore, I received the startlingly sudden news of his death, I came to England, fully convinced that no change had been made, and nerved to make a sacrifice which it had been the very object of my promise to prevent. I found a change—a partial, but not a complete remission. While my brother was still in health, he told a person, whose word I can thoroughly trust, that if the MSS. would fetch 500*l.* they need not be burned. I considered this large sum to be fixed in order to escape from any mercantile speculation. But this change of disposition justifies me in preserving the MSS. for the moment; indeed, as no time was fixed within which this price is to be obtained, the period is left to my own determination. If the money be obtained, it will be handed over to the person named in my written stipulations respecting my brother's literary remains in England, left in charge of Mr. Hepworth Dixon, who has had the kindness to act under my power-of-attorney. I have also thought proper to attach other conditions to the purchase, which will be communicated to any intending purchaser, having for their object the prevention of any such scientific misuse of these MSS. as my brother was anxious to prevent; but I lay no value upon them for their own sakes beyond their being the only ones which I could discover for the moment, to fulfil my conflicting duties with a clear conscience. To preserve the indices, without prejudice to the scientific interests which my brother wished to secure, will ever remain the sole rule for my conduct in this transaction.

Berlin, April 28, 1872. WILHELM TOBIAS.

Intelligence.

A letter from a missionary in China, lately published in the *Daily Globe* of Toronto, Canada, affords important testimony to the great linguistic value of Mr. Bell's "Visible Speech" alphabet. The writer states that his study of the language has been successful, and greatly aided by the new alphabet. It has given him a great advantage over those who are learning beside him, so that, although they have the advantage of having been in the country two or three months before him, he can read three characters to their one, and they cannot pronounce correctly. It appears that many who had devoted a long time to learning the language with the Roman alphabet were giving it up in despair. The writer undertakes in one month to supply a visible speech lesson-book, by which people at home could learn Chinese as easily—indeed more easily—than with a teacher. Visible speech has also been applied in America to teach articulation to deaf mutes, and has succeeded perfectly, even the intonations of the voice being imparted to the pupils. There seems every reason to believe that before long the system will be in universal use for this purpose throughout America.

Dr. G. Bühler, of Bombay, has issued the first part of a Catalogue of Sanskrit MSS. contained in the private libraries of Gujarât, Kâthiâwâd, Kachchh, Sindh, and Khândesh. It is merely intended to be a survey of the Brahminical libraries in that part of the presidency, and, as such, will be highly useful to Sanskrit scholars. New lists, Dr. Bühler says, are now being prepared, in which the first and last ślokas are to be given. The original lists, from which this volume was compiled, include upwards of twelve thousand MSS. It contains the Vedic literature, under the heads of *Mantrasanhitâs* (182 MSS.); *Brâhmaṇas* (82 MSS.); *Upanishads* (620 MSS.); *Sûtras*, *Pariśishṭas*, *Kârikâs*, &c. (320 MSS.); the remaining *Vedângas*, *Anukramaṇikâs*, &c. (90 MSS.); and an appendix containing 179 MSS. under the head of *Prayogas*. Dr. Bühler estimates the total of the Brahminical MSS. in the larger libraries of his division at upwards of 30,000. The *Jaina* books he takes to be much more numerous, and probably to amount to four or five times that number. As this branch of Hindu literature is yet very little known, he proposes to give first a list of the oldest works, the *Sûtras*, with a short analysis of each, and a general survey of the whole literature according to the Jaina authors. Dr. Bühler also expresses his readiness to procure copies of the MSS. contained in the catalogue—ordinary copies at the rate of Rs. 2½–3 per 1000 ślokas, and corrected ones at Rs. 4–5 per 1000—for any scholar who may apply to him.

A very interesting recent publication is Signor John Beludo's *History of the Greek Colony at Venice:* Ἑλλήνων ἀποικία ἐν Βενετίᾳ, ἱστορικὸν ὑπόμνημα Ἰωάννου Βελούδου. Ἐν Βενετίᾳ, τυπ. τοῦ Ἁγίου Γεωργίου, 1872. The author (well-known as the sub-librarian of the Marciana at Venice) has availed himself of numerous unpublished documents, and has thus succeeded in giving a faithful account of the history of the Greek colony at Venice, which was the centre of Greek intellectual life from the sixteenth century until the foundation of the Greek kingdom. The Greek college and the various Greek presses are treated of at considerable length. As the work is written in very pure Greek, we venture to recommend it both to lovers of Greek literature and friends of accurate historical investigation.

The first volume of Mr. Const. Sathas' Μεσαιωνικὴ Βιβλιοθήκη is now ready, forming a well-printed volume of 314 pages of text with ρλη' (138) pages of introductory matter. Instead of three volumes, as we stated in a previous number of our journal (vol. iii. p. 20), the work is now intended to fill no less than six, owing to the addition of most important historical extracts from the *Diarii Storici* of Marino Sanuto which exist in MS. at Venice, and of two volumes of Byzantine Anecdota, including an inedited historical work of Michael Psellus, and historical speeches and letters by Nicetas Choniates. We shall recur to the work as soon as the second volume is published, in which the editor promises the mediaeval chronicles of Cyprus, and an account of inedited coins from the pen of Mr. Paulus Lambros, a gentleman justly celebrated for his accurate knowledge of mediaeval Greek antiquities.

Messrs. Teubner have just published the first volume of a biography of the well-known translator and poet John Heinrich Voss, from the pen of Professor W. Herbst. The style of the volume is very readable, the course of the relation not being interrupted by continual references and foot-notes, as is unfortunately the case in many German publications. To insure accuracy, there is at the end of the book an appendix entitled "Sources and References," with the usual fulness and elaboration of German philological research. Of great interest are the letters exchanged between Voss and Heyne; and friends of German literature will meet with much new material concerning the life and opinions of Klopstock and other literary characters of the second half of the eighteenth century. The present volume carries the life of Voss down to his removal from Otterndorf to Eutin, and thus leaves by far the most important part of Voss's life to the second volume, which we hope to see at not too long an interval after the appearance of the first.

The first number of Messrs. Teubner's *Mittheilungen* of this year, contains notices on the following publications: (1) *Homeri Ilias, ad fidem librorum optimorum edidit J. La Roche;* (2) a Manual of Greek and Latin metres, by W. Christ; (3) a new instalment of Bursian's *Geography of Greece*, containing the Islands; (4) a Manual of German antiquities and commentary on Tacitus' *Germania*, by the late Professor A. Holtzmann, edited by Holder; (5) a new edition of Ammianus Marcellinus, by Gardthausen, and a number of school-books.

The January number of the Greek journal Πανδώρα contains the first edition of the mediaeval Greek poem περὶ τῆς ξενιτείας, found in the Vienna MS. The text is printed from a copy made by Mr. Sathas, but is still capable of emendation in more than one place. The poem is an artless, but by no means inelegant composition, in 548 lines, in which the fervent love of their native soil, always inherent to the Greek character, is well expressed by one who had himself tasted all the bitterness of exile. There are frequent traces of the employment of popular songs in this poem.

It gives us much pleasure to notice the second edition of the second part of the late Professor Conington's *Virgil* (containing the first half of the Aeneid). It speaks well for English students and scholars that so excellent and refined a work as this has so soon reached a second edition. We venture to recommend continental scholars to take more notice of the Professor's notes and introductions than they appear to do at present.

Contents of the Journals.

Journal of the Royal Asiatic Society, new series, vol. v. pt. 2.—I. Specimen of a Translation of the *Âdi Granth* of the Sikhs; by Dr. E. Trumpp. [Twenty hymns, in the original ancient Gurmukhî, are here given, with an English translation and critical notes, of this holy book of the Sikhs, which Dr. Trumpp is now translating for the Indian government.]—II. Notes on Dhammapada, with special reference to the question of *Nirvâṇa*, by R. C. Childers. [A number of passages is here commented upon and translated differently from previous interpreters, in support of the writer's view, that *nirvâṇa* is a state of blissful freedom from human passion on earth, followed by annihilation after death.]—III. The *Bṛihat-Sanhitâ;* or, Complete System of Natural Astrology of Varâha-mihira. Translated from the Sanskrit into English by Dr. H. Kern. [Continuation; chapters 16–35.]—IV. On the Origin of the Buddhist *Arthakathâs;* by L. Comrilla Vijasinha; with an introduction by R. C. Childers. [The Sinhalese scholar endeavours to prove that the commentary on Buddha's sermons mentioned by Buddhaghosa as having existed during Buddha's lifetime, and collected at the first council immediately after his death, were desultory discourses delivered by Buddha in explanation of the piṭakas.]—V. The Poetry of Mohamed Rabadan of Aragon; by Lord Stanley of Alderley. [Continuation. This portion of Rabadan's poem, in the Morisco-Spanish, relates the history of Shaibeh or Abdulmutalib, the son of Heshim, and of his son Abdullah, the father of the prophet.]—VI. *Proverbia Communia Syriaca;* by Capt. F. Burton. [A collection of 187 modern Arabic proverbs, text, translation, and notes.]—VII. Notes on an Ancient Indian Vase, with an account of the Engraving thereupon; by C. Horne. [The vase here described, and since acquired for the India Museum, was found in the Kûlû country, near the junction of the Chandra and Bhagur rivers. The writer believes it to be Buddhistic, and fixes its date at about 200 or 300 A.D.]—VIII. The Bhar Tribe; by the Rev. M. A. Sherring, of Benares. [This tribe, also known by the terms Râjbhar, Bharat, and Bharpatwa, once occupied the tract of country between Gorakhpur in N. India and Saugor in C. India. The paper is illustrated by seven plates of bearded Bhar figures.]—IX. Of Jihâd in Mohammedan Law, and its Application to British India; by N. B. E. Baillie. [The writer endeavours to show that Jihâd, or religious warfare, on the part of the Indian Mussulmans against the British government, is unlawful according to Mohammedan law.]—X. Comments on Recent Pehlvi Decipherments; with an Incidental Sketch of the Derivation of Âryan Alphabets; and Contributions to the Early History and Geography of Tabaristân; by E. Thomas. [The writer adduces some fresh material in support of his theory that the Pehlvi letter, read as *mn* by the Pársís, and by Du Perron and De Sacy, is to be read as long *î;* and contrasts his method of Pehlvi interpretation by starting from the early alphabets preserved on medals, seals, &c. with that of other scholars who try the language of the inscriptions by the backward test of the Pársí fragments still extant.]—Annual Report.

The Indian Antiquary, ed. by J. Burgess; part iii. (Bombay, March).—Sketches of Mathurâ; by F. S. Growse. Description of the country near Mathurâ, and historical account of that place.]—On the Identification of various Places in the Kingdom of Magadha visited by the Pilgrim Chi-Fah-Hian; by A. M. Broadley. [Continuation; of the Mount Baibhar.]—The Jungle Forts of Northern Orissa; by J. Beames. [Continuation.]—Biographical Notices of Grandees of the Mughul Court; by H. Blochmann. [The first of a series of biographical sketches of Amírs of the reigns subsequent to Akbar, chiefly drawn from the *Maásir ul Umará*, by Shah Nawáz Khán of Aurangábád. It begins with Shaikh Dáúd Quraishí, who served under Dárá and Aurangzíb.]—The Indigenous Literature of Orissa; by J. Beames. [A list of (82) ancient Uriyâ works known to be in existence.]—Translation of and Remarks on a Copper-plate Grant discovered at Tidgundi in the Kaládgi Zilla; by Shankar P. Pandit. [A Châlukya grant from the time of Tribhuvana Malla Deva (? A.D. 1083).]—Dardu Legends, Proverbs, and Fables; by G. W. Leitner.—Reviews. [Favourable; of Fergusson's *Rude-Stone Monuments;* and Broadley's *Ruins of the Nalanda Monasteries.*]—Miscellanea.——Part iv. (Bombay, April).—Tamil Popular Poetry; by R. C. Caldwell. [Three poems, in Tamil and English, by Sivavakkiyar und Puttiragiriyar.]—On the Non-Âryan Element in Hindi Speech. [Upholds Lassen's theory, that almost all, if not all, Prâkrit words are derived from Sanskrit, against that of Muir, that in the modern vernaculars words not derived from Sanskrit are very numerous.]—On the Identification of Various Places in Magadha, &c.; by A. M. Broadley. [Continuation; on Mounts Vipula, Ratnagir, and Udayagir.]—On the *Chandikâṣataka* of Bâṇabhaṭṭa; by G. Bühler. [Account of that work, being a century of stanzas in honour of the goddess Chandî. The fact that a poem of that title had been composed by Bâṇa, the author of the *Kâdambarî* and the *Harshacharitra*, was hitherto only known from a passage of a comment on the *Bhaktâmarastotra*, quoted by Dr. F. Hall.]—Bengali Folk-lore: a Legend from Dinajpur; by G. H. Damant.—On the Râmâyaṇa; by Prof. A. Weber. [Translated from the German, as published in 1870.]—Correspondence, Notes, and Queries.—The Srîrangam Jewels.—The late Professor Goldstücker; by C. Mather.

Calcutta Review, January.—Notes on the Arabic Language. [Tries to show a radical connection between the Âryan and Semitic languages, by comparing Arabic with English words!]—The Architecture of Kashmir; by F. S. Growse. [A brief but useful account of the various temples of Kashmir, their probable date and history, style of architecture, &c.]—The Revision of the N. W. P. Settlements.—Elementary Education in Madras.—Benoudha. [The writer traces the history of that portion of Oudh, principally availing himself of the writings of P. Carnegy (viz. *A Historical Sketch of Fyzabad Tehsil, including the former Capitals of Ajudhiá and Fyzabad*, 1870; *Notes on the Races, Tribes, and Castes inhabiting the Province of Oudh*, 1868; *Fyzabad Settlement Reports—Historical*), though other works, such as Sleeman's *Tour*, and Butler's *Southern Oudh*, are also used.]—The Income-Tax in India.—Reminiscences of Ava; by J. T. Wheeler. [Recollections, personal and political, of Mr. R. S. Edwards, late Collector of Customs at Rangoon, who was born (in 1802) and educated at Madras, and was sent, in 1819, to the Straits Settlement to be a clerk in the office of the Superintendent of Wellesley. In 1825 he proceeded to Tenasserim, where he witnessed the outbreak at Tavoy, under Moung-dah, in 1829. In 1839 and following years he was the principal medium of communication between the English Residency and the Court of Ava.]—The Bengal Commissariat.—Topics of the Quarter (Land Revenue, and Education in Bengal).—Brief Notices of Vernacular and Anglo-Indian publications. [W. C. Benett's *Report on the Family History of the Chief Clans of the Roy Bareilly District;* M. Müller's *Classical Studies in India;* J. Westland's *Report on the District of Jessore, its Antiquities, History, and Commerce;* W. Oldham's *Historical and Statistical Memoir of the Ghazipur District;* C. E. Gover's *Folk-songs of Southern India;* J. Garrett's *Classical Dictionary of India, illustrative of the Mythology, Philosophy, Antiquities, Arts, Manners, Customs, &c. of the Hindus;* Pratápa Chandra Ghosha's *Dúrgá Pújá*, &c.]

New Publications.

ASTON, W. G. A Grammar of the Japanese Written Language; with a Chrestomathy. London: Printed at the Office of the *Phœnix*.

BECKHAUS. Xenophon der Jüngere u. Isokrates od. über die unechten Schriften Xenophons u. die Hellenika. Berlin: Calvary.

DINTER, Bernh. Satura Grammatica (Stellen aus Cäsar, Sallust u. Horaz behandelnd). Grimma: Hering. (Teubner.)

GOETSCHKE, C. Adnotationes Sophocleae. Agitur de Oed. Col. vv. 1044–1058. Berlin: Calvary.

GRIMM, J. W. Deutsches Wörterbuch. Fortgesetzt v. R. Hildebrand u. K. Weigand. 4. Bd. 5. Lfg. Leipzig: Hirzel.

HAUPT, M. Variarum Lectionum capita VII. Berlin: Calvary.

HEITZ, E. Die öffentlichen Bibliotheken der Schweiz im J. 1868. (French and German.) Basel: Schweighäuser.

HUBSCHMANN, H. Ein zoroastrisches Lied m. Rücksicht auf d. Tradition übers. u. erkl. München: Ackermann.

NORRIS, C. Assyrian Dictionary. Vol. III. Williams and Norgate.

OPPERT, J. Mélanges perses. Paris.

PARIS, Gaston, et PANNIER, L. La Vie de saint Alexis, poème du XIième siècle, et renouvellements des XIIième, XIIIième, et XIVième siècles, publiés avec préface, variautés, notes et glossaires. 7ième fascicule de l'École des hautes études. Paris: Lib. Franck.

PRAETORIUS, F. Beiträge zur Erklärung der Himjarischen Inschriften. Halle: B. des Waisenhauses.

PÜSCHEL. Li romanz de la rose. Première partie. Par G. de Lorris. Berlin: Calvary.

RASMUS, E. De Plutarchi Libro, qui inscribitur di communibus notitiis commentatio. Berlin: Calvary.

SCHNEIDER, P. De Elocutione Hesiodea commentatio. Pars I. Berlin: Calvary.

SUSEMIHL, F. De Politicis Aristoteleis quaestionum criticarum particula IV. Berlin: Calvary.

VERGILIUS P. MARO'S Georgica, hrsg. u. erkl. v. Dr. E. Gläser: mit einer Einleitung. Halle: B. des Waisenhauses.

ERRATA IN No. 47.

Page 164 (*b*), line 40, for "Sturm and Drang" read "Slurm und Drang."
,, 164 (*b*), 9 lines from bottom, for "Dutmar" read "Dülmen."
,, 167, line 4 of *Intelligence*, for "best" read "least."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 49.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Saturday, June 15, and Advertisements should be sent in by June 11.

General Literature.

Sanct Brandan. Ein lateinischer und drei deutsche Texte. Herausgegeben von Dr. Carl Schröder. Erlangen: Eduard Besold, 1871.

Bibliothek van Middelnederlandsche Letterkunde, onder Redactie van Mr. H. E. Moltzer, Hoogleraer te Groningen. Sixth Part. Groningen: Wolters, 1871.

THE subject of the two publications before us is one of the most widely spread legends of the middle ages, and is also to be met with in two old English versions, one in verse and the other in prose, edited by Thomas Wright (*St. Brandan*, London, 1844, Percy Society). It is to be found in French and Spanish, was known in Italy, and formed everywhere the favourite reading both of monks and the widest secular circles. Even so late as in 1721 expeditions were undertaken in search of the island paradise reached by the saint in the course of his wanderings by sea and through hell and purgatory. According to the Spaniards, the island of "San Borondon" was the sojourn of King Roderick, who was overcome in battle by the Moors. According to the Portuguese, their king Sebastian was still living there, after having been in like manner vanquished by the Arabians in the battle of Alcasyarquivir. It is probable, too, that the island of Avallon, where King Arthur, according to the English belief of the middle ages, was supposed to be still alive, was the same Brandan's isle, in so far, that is, as the legend rested on the ancient conception of an island lying in the western sea, which according to the heathen faith was the abiding place of the blessed, and to later Christian fancy contained the earthly paradise, where, for instance, Elijah and Enoch still live on. Even yet the belief is not quite extinct, as the Irish idea of the island *Hi Breasal* shows; and this is the same, I think, as that reached by the Irish monks in their miraculous voyage, in Geoffrey of Viterbo (p. 78, ff.; cf. *Acta SS.*, June 2, 184). Again it is related, in an Irish MS. of the seventh century or earlier, at the Royal Library of Stockholm, how an Irish chief once found on a tree near his castle a golden bough, covered with flowers of gold and precious stones. He broke it off and took it with him to the castle, and while every one was admiring it, a beautiful woman came forward and claimed the precious object, maintaining that it came from an island where such branches grew commonly, and where men never grew old. She advised the chief to fit out a vessel and to sail with her for that island, which he did in a ship manned by thrice nine sailors. They reached the island and stayed there some time, and were so happy that the days went by without their knowing how. At last their leader returned to Ireland, but no one knew him any more, for he had been away more than a hundred years. (See G. Stephens, *Förtechning öfver de förnämsta Brittiska och Fransyska Handskrifterne uti Kongl. Bibliotheket i Stockholm*, Stockholm, 1847, pp. 18, 19.)

A similar popular belief still exists in Norway concerning the island *Udröst*, which people reach sometimes by chance, but never when they seek it. The legend is admirably related in Asbjörnsen's *Norske Huldre-Eventyr og Folkesagn*, 3rd ed., Christiania, 1870, "Skarvene fra Udröst." But to return to St. Brandan; all the versions hitherto noticed, including the English ones, as Schröder maintains against Wright, are traceable to a Latin prose legend, which they all follow. In this Latin legend there are two elements which must be distinguished; namely, a national mythological foundation, and a universal Christian legendary superstructure resting on the first and giving it a special ecclesiastical colouring. On the other hand, there were, in the thirteenth century, many other forms of the legend, which depart materially from the Latin text, by additions and amplifications, besides abandoning much of the specifically monastic spirit and arrangement which characterize even its fictions. In exchange they introduce something of the new spirit which took possession of Europe during the Crusades; something of the delight in huge deeds of arms, in extravagant wonders and miracles, in strange, new, exciting tales, of which Gervinus speaks. The Old-German texts here published by Schröder represent the latest form of the legend, and contain half ascetic, half heroic sea voyages, in common with other contemporary poems, such as *Oswald und Orendel*; while from another, *Herzog Ernst*, it borrows various wonders which take the place of details from the earlier Latin outline, which it omits, or more or less considerably modifies. The contrast between the two versions appears from the first, as Schröder observes. In the Latin text Brandan is induced by the narration of Barinthus, who had been privileged to see the *Terra repromissionis sanctorum*, to set forth in search of the fortunate island; after seven years' wandering, he finds it, and then returns home. In the German version, on the other hand, Brandan is introduced as suddenly seized with doubts as to the marvels related in a book he is reading, and, cursing the poet, he burns the book. As a punishment for this he is condemned to wander over seas for nine years, to see with his own eyes the things which he had refused to believe, and to write down the account of them for an everlasting remembrance. He is not pardoned and allowed to return till the book of his adventures is finished, and the loss of the work he had rashly burnt in some sort made good.

Of the three German texts, two are in rhyme, and of these the first, in Middle High German (in 1934 verses), which has not been printed before, belongs probably to the end of the twelfth century. The second is an abridged, or rather a mutilated, Low German translation of the other, in 1165 verses, of uncertain date, published once before, but very defectively. The last is a prose paraphrase of the first poem, dating from the fifteenth century, which had been printed as a chapbook no fewer than thirteen times before 1521. Besides these Schröder also gives the Latin legend, to enable the reader to estimate the relation between it and the German version, as Jubinal's edition (Paris, 1836) was badly printed, in only a small number of copies, and from a bad MS. In addition to its critical merits, Schröder's work is recommended by an instructive introduction and remarks, only however intended for the learned, on points of language and matter. From these I will only quote two passages, which show that even in the middle ages doubts had emerged respecting the authenticity of St. Brandan's travels, since Vincentius Bellovacensis, in his *Speculum Historiale*, observes, "Hujus autem peregrinationis historiam propter apocrifa quedam deliramenta que in ea videntur contineri, ab opere isto resecavi." The other passage occurs in a satirical poem, describing the drunken monks of the Scottish convent at Erfurt, but it also shows in what high regard Brandan was held, at least by the Scotch:—

"Sunt et ibi Scoti, qui cum fuerint bene poti
Sanctum Brandanum proclamant esse decanum
In grege sanctorum, vel quod deus ipse deorum
Brandani frater sit et ejus Brigida mater.
Sed vulgus miserum non credens hoc esse verum
Estimat insanos Scotos simul atque profanos
Talia dicentes. Accedant scire volentes,
Ex evangelico textu probo quod tibi dico:
Qui non delinquit, sed qui perfecerit, inquit,
Velle mei patris, illum voco nomine fratris.
Immo meus frater est et soror et mea mater.
Sic sancti quique, qui regnant hic et ubique,
Et possunt fratres simul et Christi fore matres,
Si non ignores, et possunt esse sorores.
Sic Brigidam matrem, Brandanum dicite patrem,
Nam perfecerunt, quecunque deo placuerunt."

Besides the texts published by Schröder, and belonging to the group which departs from the Latin form, is a Middle Dutch version, published formerly by van Blommaert, and now reprinted by Professor Moltzer as part of the above-mentioned *Bibliothek*, of which the object is to familiarise the general public with the ancient literature of the Netherlands. Its productions appear in this collection under the learned direction of the professor, and with the co-operation of other distinguished proficients in that literature, such as Professors Bisschopp, Brill, Hermans, Jonckbloet, Verwiijs, and de Vries. As in the *Deutschen Classikern des Mittelalters* (which I shall notice in the *Academy* shortly), the texts are provided with ample notes for the instruction of the general public, but the introductions contain nothing but what is rigorously indispensable. Opinions vary as to the original source of *Sinte Brandaen;* the learned editor regards in this light some possible French version, and assigns the Dutch poem to the thirteenth century, while Jonckbloet and Schröder believe it to have been translated from the Middle High German in the twelfth century—a view which Professor Moltzer will probably share after the appearance of the Middle High German poem. It is true that the Dutch text is fuller than the German (it contains 2284 verses), but it contains nothing peculiar to itself, though in one place it serves to supply a seeming gap in the German text, and it also contains an interpolation (v. 137–260) which is entirely wanting in all German copies. I will only allow myself a few remarks on the notes, in which almost every serious difficulty is satisfactorily met. On v. 184–194, where Brandan sometimes addresses the death's head as "thou," sometimes as "you," the editor observes, "This is a piece of carelessness either of the copyist or the author." But it is not so, for the change from the singular to the plural in addressing the same person is met with elsewhere, not only in Flemish, but also in German, English, Danish, Icelandic, French, Provençal, Italian, and Portuguese, especially in the older poems, as I pointed out in the *Gött. gel. Anz.*, 1866, p. 1038; 1870, p. 1232; and 1872, p. 318. Accordingly in the poem before us, *di*, v. 1248; *ghi*, v. 1254; *saechdine*, v. 1894; and *suldijs*, v. 1913, are right, and should not be altered. On v. 314, *om hout dat si ghingen*, it is observed that *dat* is superfluous; the same may be said of many other passages, *e.g.* v. 322, 1522, 1524, &c.; cf. Borman's *Leven van Sinte Christina de Wonderbare*, Gent, 1850, pp. 149, 279. V. 615, *daer verbeide ic dat ghescille: wille*, does not make good sense, as the learned editor rightly remarks. The corresponding line in the Middle High German poem (v. 419) runs, *biz daz weter wirt stille: wille;* which shows that the reading of the other manuscript, *daer verbeide ic dat ghestille*, is right—*ghestille* being here not a substantive but an intransitive verb, so that *dat ghestille* will mean the same as *dat het wordt stille.* V. 907, *Waric niet een droghenare*, is not quite right according to Professor Moltzer, as, if *niet* were correct, the negative *en* should precede it, besides which Brandan would not declare himself a deceiver. But *en* as a double negative is common in Middle High German, and there are other traces, as the editor himself notices, of Germanism in the Dutch poem; while for Brandan to call himself a deceiver is only a consequence of his extreme humility. The corresponding passage in the German poem runs quite differently. V. 1155–6, *Die storem wart arde groet—Die zee borlede ende scoot:* this is not sense, says Professor Moltzer, and wishes to read *woet* instead of *scoot.* Yet *scoot* may be here the imperfect of *scieten* (*schieten*), in an intransitive sense, as in Old and New German *schiezen*, *schiessen*, may mean, "to move as fast as a shot": the German poem has (l. 825–6), *ein wester wint hûb sich vil grôz—von dem daz mer sêre irdoz.*

These remarks, scanty as they are, will serve to show that I have read the Dutch poem carefully through, and can therefore confidently recommend the whole collection to which it belongs to those who wish to acquaint themselves with the Old Dutch literature without difficulty or fatigue.

Felix Liebrecht.

The Life and Letters of St. Francis Xavier. By Henry James Coleridge, of the Society of Jesus. Volume the First. Burns and Oates.

Francis Xavier is one of the very few saints canonised since the sixteenth century whom the world has agreed to recognise: it is superfluous to seek very far for the reason of the recognition. His self-devotion was too astounding not to be conspicuous, and, like St. Vincent de Paul, he was devoted to a cause which it was, to say the least, respectable to patronise. We have gone on admiring him with so little knowledge that really Mr. Venn might almost find some excuse in our ignorance for treating his reputation as a bubble that would burst when touched. Of course, in one sense the main facts of Xavier's life are known, but this is only another reason for gratitude to a writer with the qualifications of Father Coleridge, who makes it his "chief object to draw out the character of St. Francis Xavier from his own words and actions." Perhaps in one way he is almost too well qualified: more than once he seems to write like a man who is filling up an outline which is present to his own mind, while it has hardly been impressed on ours. Still the story is given more completely and more coherently than it has been given in English at any rate before, and the process of fitting the letters into biographies which were not written from them has been got over in spite of difficulties which would be worth referring to in future editions of the *Horae Paulinae.* These difficulties, though real enough, are not so obtrusive as to affect any but the attentive student: the ordinary reader will take more interest in the tact which elucidates comparatively isolated points. For instance, the aid which Xavier received from Loyola becomes intelligible when we are reminded that a young noble from Navarre, who wished to be respected in Paris as he had been respected at home, would soon find the sums which friends in Navarre might think it sufficient to send very insufficient for wants which he might easily think legitimate. Whether we admire Xavier's sacrifice in passing his home without a farewell, or are content to respect what is outside our sympathies, it is a relief to know that he could not have been expected, and that therefore the sharpest pain at any rate fell upon himself alone. Nor has any writer before given so much prominence to a fact which explains and justifies the wholesale baptisms in which Catholic writers have been too prone to find matter for boasting, as Protestant writers have been too prone to seek matter for apology. Neither is in place when we remember that Xavier was always specially drawn to neglected populations of native

Christians whose religion was little more than a name to which they were sincerely attached.

It is always difficult to describe the character of the saints —their habitual thoughts are so far from ours; and since the world has become self-conscious, their self-suppression has become more deliberately impenetrable. We certainly know even less of Xavier and of Loyola than of Francis of Assisi and of Bernard of Clairvaulx. Almost all that outsiders can hope to ascertain about a man like Xavier is the point at which he started and the direction in which he moved, to become the unknown being that he was. We are struck at once by a singular union of sweet radiant impetuosity, like what we might imagine for the saintliness of a Shelley, with the most patient common sense and the most generous candour.

From first to last his sense of the obligations of his religion was so keen and eager that he was always pressing them upon others to the verge of exactingness, and yet he is always spontaneously exuberant in his thankfulness for even the cheapest and easiest approximations to his standard. Another contrast suggests itself, and will hardly be repelled, Xavier's power of organization was on the same heroic level as his devotion to personal labours; but anything like sustained opposition invariably drove him to break up new ground. The charm of his charity and gracefulness was immense; there were not many who were obstinate enough to resist it when it was brought to bear upon them, and the multitudes who passed under his ascendency received a deep and powerful impulse towards good. But a person who could hold out against Xavier for six months could baffle him for ever; and in this way the very magnitude of his success became the source of his severest disappointments. In a few months he could achieve results which another man would have hardly dared to anticipate from the labours of a life, and then he had to watch the steady persistent working of hostile forces in a struggle which seemed hopeless because he was helpless. His work was in reality for the most part exceedingly solid; but its immense and interrupted promise was always tormenting him with the impression that it was illusory. And whatever they may have been for India and for the world, we can hardly doubt that the immense diplomatic and ecclesiastical powers which he received from the king of Portugal and the pope were a heavy misfortune to himself. After his first year in India the duties in which they involved him compelled him to withdraw more and more from preaching and baptizing from village to village—the only work in which he could really find consolation for his immense privations. Sometimes the consolation, like the suffering, was almost too much for flesh and blood—the joy in the good of which he was the instrument was too intense for earth; sometimes he longed for martyrdom to release him from a world where he felt useless; once, at least, he felt the saying—"He that will save his life shall lose it, and he that will lose his life for my sake shall find it"—hard and obscure. Perhaps the last mood is really the highest. We seem, taking the three together, to catch an echo within the limits of humanity of "I beheld Satan as lightning fall from heaven"—"I have a baptism to be baptized with, and how am I straitened till it be accomplished?"—"Now is my soul exceeding sorrowful even unto death, and what shall I say?"

Father Coleridge keeps the miracles with which the life of Xavier abounds as much in the background as is possible for a writer who delights in them and believes in them. It is, perhaps, a wise discretion; in a sense, it is keeping them in their natural place, in the place they had in the saint's own mind. If any man had the gift of miracles, it seems that Xavier had it, but he hardly thought of it; virtue went out of him almost without his knowing. It is almost like an impertinence to pretend to know more about it than he knew himself. We may leave the question of his miracles altogether and hardly know less of him. And though he lived in the full daylight of history, and though his miracles are attested by sworn eye-witnesses, they throw less light on the general question of the miraculous than the wonders attributed to St. Martin, who could be pained by the sense of diminished power, or those attributed to the Curé d'Ars, who had the opportunity of cultivating the spirit of Christian sobriety to a very high degree within the whole of his immediate circle. We have no security that the sworn eye-witnesses could be trusted without cross-examination, or that they were cross-examined, or even that they were not asked leading questions by men who had been directed to them as in a position to verify the wonderful rumours that were in the air. Whenever we hear of raising the dead, it is natural to think of suspended animation, especially in India, where a Faquir submitted with impunity under tests devised by Europeans to be buried alive for a whole month. In a country where our own officers have been spontaneously deified, and might, if they had pleased, have exercised the gift of healing as freely as Charles II. or Vespasian, it is not wonderful that many should have believed they were benefited by the supernatural powers that it was so easy for them to attribute to a man who led the life of Xavier. Nor is the evidence of the Portuguese of a kind to dispel these uncertainties. They were hardly on the intellectual level of the Pilgrim Fathers, and the example of the Pilgrim Fathers proves that a sudden change of conditions enormously exalts the susceptibility to supernatural beliefs, and proves it so clearly that no one has thought it worth while to enquire whether it may not revive a susceptibility to supernatural influences. With this drawback the stories of Xavier's predictions stand on the same level as the most puzzling stories of clairvoyance, though, if the facts were established, it would be natural and legitimate to refer them to Grace in him and to nature in somnambulists. And this reflection applies to another class of wonders, for which even the evidence of Xavier's converts might be received, unless indeed it shall be established *à priori* that all wonders are impossible. It is well known that in certain conditions of nervous exaltation persons have been known to make coherent use of languages in which, in their normal state, they could not frame a single sentence. Such exaltation would be supernatural if it were produced by spiritual causes. Again, it is not hard for persons with great excitement to translate any sound into articulate words. There seem to be instances of a powerful personality impressing its own thoughts immediately upon others; this power, too, might be supernatural in respect of its source. Under such exaltation Xavier might preach in a language he had not learnt; by possessing such a power over thought, he might be heard to preach in several languages at once. However, without affirming that he had the gift of tongues, or denying that he raised the dead, we may say that his miracles, if he wrought any, serve rather for edification than for controversy. Indeed, until the processes of his canonisation are accessible, controversy about them is beating the air.

The volume is the first of a quarterly series of a sufficiently miscellaneous character which is to be conducted by the editors of *The Month*. Among its minor attractions we may mention the Spanish sonnet, attributed to Loyola, which is the original of the beautiful Latin lines which have become familiar as Xavier's. Father Coleridge appends another very inferior Latin version, and the half forgotten couplets of Dryden as the standard English rendering.

G. A. Simcox.

LITERARY NOTES.

The first number of a magazine entitled *Atsume gusa*, and intended, in the words of the editor, M. Turrettini, "pour servir à la connaissance de l'extrême Orient," has reached us from Geneva. In the preface we are told that its pages are to be more especially devoted to popularising in Europe the literature of China and Japan, and as a first step towards carrying out this object, M. Turrettini gives us in the number before us a translation from his own pen of the first chapter of the well-known Japanese romance *Heike monogatari*. The choice thus made is a good one, as not only is the *Heike monogatari* one of the most popular tales in Japan, but to European readers it presents a vivid picture of the state of Japanese society and government during the twelfth century. Literally translated, the title reads, "The History of the House of Hei." This is fairly descriptive of the contents of the work, which consists of an account of the struggles of the two great families of Gen and Hei for the supreme power, which, though nominally wielded by the Mikado, rested in reality in the hands of the Daimios. After the manner of feudal lords in all parts of the world, these nobles, each supported by his army of retainers, made war the one against the other, concluded peace, and usurped titles with barely so much as a reference to the official "fountain of all honour." M. Turrettini has, in some instances, missed the sense of the original, but, speaking generally, the translation is highly creditable to his knowledge of the language. We hope that he intends at some future period to complete the translation of the entire work.

In the *Revue des deux Mondes* (May 15), M. Louis Leger translates (with some abridgment) a story of village-life in Bohemia, by Mme. Svietla, whom her admirers and countrymen call the national George Sand, though in the specimen given the influence of Auerbach is at least as clearly visible.—M. Henri Delaborde invites the admirers of severe and conscientious art to visit the paintings of M. Édouard Bertin (the late owner of the *Journal des Débats*), at the École des Beaux-Arts, where the generation which has grown up since he ceased to exhibit in 1854 will have the opportunity of appreciating his talent.

In the *Preussische Jahrbücher* for May, the son of Immanuel Bekker publishes some notes and reminiscences of the youth and early manhood of the eminent philologist. He was noted for a shy awkwardness and reserve in later life; but it is curious to find that, even in his own special field, an overscrupulous diffidence considerably delayed the appearance of his first works of independent research. The letters to and from Wolf printed in the article are of more personal than scientific interest.

The *Magdeburg Gazette* states that a new and complete edition of Herder's works has been undertaken by the Halle Orphan-house, under the patronage of the Prussian government. None of the German classics is so much in want of revision as the works of Herder, and none, as the *Gazette* remarks, would gain more in interest by a restoration of the original text.

In *Im Neuen Reich* (May 17) F. Gehring deplores the indifference of German musicians to the study of acoustics, and their neglect of Helmholtz's theory of musical sound.—The editor begins a series of papers based on the chronicles (printed fifteen years ago) of the Franciscan monk Salimbene, a lively and intelligent writer of the thirteenth century, who only believed in very well authenticated miracles, and tried to decipher "*cum cristallo*," an illegible inscription on S. Mary Magdalen's tomb (at Saint Maximin, near Toulon), before being convinced that it was too illegible not to be genuine.—A new literary annual, *Die Dioskuren*, is well spoken of; nearly all the popular *littérateurs* of Austria contribute to its pages.

We have just received a newspaper report of part of Professor Max Muller's opening lecture at Strassburg. The largest auditorium in the Schloss was filled to overflowing: and the professor as patriotic as German professors are just now, and a great deal more eloquent. He dwelt upon the importance of maintaining the old German simplicity of life in the face of the demoralising influences of money-making and luxury.

Art and Archaeology.

SUMMER EXHIBITION OF THE SOCIETY OF FRENCH ARTISTS.

The French school is passing at this moment through a critical phase, and this fact cannot but give rise to deep anxiety in the minds of all those to whom the interests of art are matter for serious concern. For standing, as this school does at the present moment, foremost in the world, whatever gravely affects its course must gravely affect the future of all. The signs of the time are evident; even this small exhibition affords ample food for illustration and comment. With little impertinence and much show of justice, one might boldly divide the contributors into two classes, viz. painters and scene painters. We have here the works of poets to whom colour, form, and line are the natural means of expression; we have here the work of those who give us the results of patient and profound study of the facts of nature; but we have here the work of those who, with well-calculated rough and ready handling, forcibly accentuate for us only our most obvious physical impressions. These men, the scene painters, are the young school. They have broken with tradition, and their work has that air of isolated effort which characterizes our century. They do much; better than it has ever been done before; they match tints with wonderful justness, but their colour is without refinement; they draw with daring certainty, but without delicacy; their composition is skilful, but without dignity; their technic is admirable for dash and command, but it is coarse. Whether such work is lovely and desirable in our eyes as art is not the question; setting aside personal predilections, the critic must endeavour to bring a trained and discriminating judgment to the appreciation of whatever matter presents itself. We cannot demand from Manet and Courbet expressive finish which is not in their intention, possibly not in their gift—what we have to estimate is the value of this terrible effectiveness which is an undoubted power in their hands. Small canvasses in a small room such as this do not indeed give us the opportunity of seeing such work on its favourable side. Its special excellences do not seem appropriate to the space and place, but they cannot therefore be ignored; they challenge us too boldly, they are too intelligible for that. What is likely to be the effect on taste of the production in art of work which corresponds in style to the style of the sensation writers in literature? It is evident that we are to be completely freed from the yoke of the Past, and thoroughly emancipated from tradition. Do we not run the risk of opening the door to all kinds of deceptive innovations, of substituting clever tricks for sound method, and of replacing the effort to instruct and train the eye by the mere desire of astonishing it? The true secrets of nature and art are only revealed to the patient, and those who cannot wait give us in all they do only the outside. One cannot but fear that this terrible effectiveness, so easy to understand, or, say rather, so impossible to misunderstand, which puts so forcibly to the eye the commonest, the most vulgar, the most salient facts, has from its very intelligibility a much to be dreaded seduction, and that it will to a great extent destroy any relish which may exist in the public for work of more subtle quality, which is less readily to be comprehended.

What can we have cleverer in its way, more vivid in presentment, than the green sea, the black ship, the dirty trail in the wake of the passing steamer, the frisk of the fish's tail, in Manet's "Dolphins"? Just the facts which the most untrained eye may take in in a couple of seconds. It is as clever and as forcible as Millais. Or, again, the brilliant trick of his "Bull-fight," or the bravado of his "Guitarplayer," or even the abominable ugliness of his "Christ in the Sepulchre." But this fresh slap-dash destroys the eye for other work. Courbet's "Source of the Loue" is grandly conceived, and the relation of the slow entering gradations most skilfully managed; but it is difficult to turn from this, true as it is in a certain sense, and give full weight to the exquisite delicacy of tone and colour in Lafarge's "Snowy Day," or the dreamy and somewhat monotonous refinements of Corot, of whose work "River Pasture" is a very fine example. "For this, for everything, we are out of tune; It moves us not." It requires even a certain effort before we can thoroughly enjoy the tolerably obvious artistic merit of Laurent Bouvier's "Spring," which is about the first picture which meets the eye

on entering. M. Bouvier has established a reputation by his decorative work, which he now sustains by the admirable drawing of the painting in question. As we might expect, "Spring" is treated decoratively. The figure rests in the branches of a blooming apple-tree, which forms the background, by an open network of branches interlacing over a sheet of tremulous blue sky. For a moment the motive reminds us of Hamon, but M. Bouvier has brought to the rendering greater force and positiveness, if less grace and sentiment than distinguishes Hamon's work. But of this force and positiveness comes a realistic treatment which, excellent in itself, yet hardly seems to accord with the ideal character of the motive. The head and expression have an ordinary character—they are those of the model unmodified, and the straightforward empty gaze disturbs the complete harmony of the impression. Yet "Spring" is a beautiful drawing, showing sound artistic feeling and much science. Close in its neighbourhood hang two of the four pictures contributed by J. F. Millet. The "Geesedriver" and (in respect of colour) even more beautiful "Shepherdess" are two poems from peasant life, in which subject and treatment are happily allied. The "Water Carrier" (a large work) afflicts us with the strange discrepancy between the sentimental grace and attraction of its tone and touch and the hideousness of the brutalised savage by these means placed before us. But everything which Millet does affords matter for study, for interest, for admiration. In "The Angelus," the most important both in size and subject of his four contributions, we find this delightful painter equal to himself, in colour, in sentiment, and in instinct for true finish and completeness. The suggestive exaltation of the woman's attitude makes her figure a poem in itself, of which the full charm and loveliness can only be realised by long looking. The lines of composition in Hemy's "Mending Nets" are noteworthy for their excellence. The figures are very insufficient. Amongst the landscapes, Rousseau's "Village on the Cliffs" is remarkable. The execution is wonderfully masterly, and the general effect has a noble truth of tone and feeling; every line and touch looks thoroughly felt. In "The Marsh," by Lansger, one recognises the sympathetic quality which the French prize in this young artist. Then Boudier's "Study at Fontainebleau" is very true and careful, and the rich colour of M. Dupré's "Pond" is attractive. A genuine sense of colour, too, is betrayed in Puvis de Chavanne's "White Rocks," but its power is marred by much wilful affectation—affectation, too, which loses all grace, and becomes pure offence in such treatment of such a subject as we find in the "Decapitation of St. John." The fresh naturalness of Fantin's flowers ought not to be left without remark; they are almost rivals of the flowers of that prince of flower painters, Albrecht Dürer.

The sketch for the "Assassination of the Bishop of Liege," by Delacroix, recalls us to other days, days when the conflicting tendencies of the French school were resumed by the names of Ingres and Delacroix. Now all is changed. No man is carried to a supreme height by the collective effort of many. Modern society is developing the individual at the expense of the family, and in every field of human labour this is making itself felt. The school with its influence and its responsibility is at an end; and the risk of endeavour and the crime of failure must be borne by each artist at his own peril. E. F. S. PATTISON.

ART NOTES.

A very noteworthy exhibition of old masters is now open at Amsterdam. MM. Six, van Loon, Pallandt, van Weede, van Dyckveld, have each lent a portion of their valuable collections. The catalogue enumerates nearly 350 chef-d'œuvres.

M. Jules Jacquemart has just finished a very fine medallion of Théophile Gautier, which will appear in the reprint of the volume *Émaux et Camées*, which is about to be published by Hachette.

There has been much talk in Paris as to the reported resignation of M. Lefuel, the architect attached to the Tuileries and Louvre. It was said that M. Lefuel, annoyed at having a young architect, M. Paschal, put upon him in the capacity of inspector, had sent in his resignation. It now appears that M. Paschal was added as assistant at the express request of M. Lefuel.

The "Sampson" of Michel Angelo is about to be removed from its place at one side of the entrance of the Palazzo Vecchio at Florence. It is found to be so seriously injured by the action of the weather that it is absolutely necessary to put it under cover.

M. Adolphe Moreau, the biographer of Decamps, is about to publish a work on *Eugène Delacroix et son Œuvre*.

Under the title, *Un Palais grec en Macédoine*, M. Léon Heuzey has just brought out the interesting work which last year he laid before the Academy of Inscriptions. The subject is an important edifice discovered by M. Heuzey at Palatitza, the ground-plan of which he has been able, with the help of M. Daumet, the architect, to re-establish. Starting from this point, the learned archaeologist seeks to prove, by a number of ingenious arguments, that the building in question was a prytaneum, serving probably at the same time as a palace for the kings of Macedon. The text is accompanied by an explanatory plan.

M. Brianchon, a well-known archaeologist, has just presented to the Musée de Sèvres some very interesting examples of ceramic. These are bricks of the Renaissance period which once decorated a house in the hamlet of Mare-Barbet (arrondissement of Havre). These bricks, representing masks, leafage, grotesques, fleurs-de-lis, medallions of men and women, inserted between the timbers of the façade of the building, are one of the rare specimens of pottery applied to the decorations of constructions in the sixteenth century. As has often happened on various occasions in ceramic, a potter seems to have cast the moulds for these bricks on some article of sculptured wood of the same date.

M. Jeanron, formerly director of the national museums of France and inspector of fine arts, has been named keeper of the archives of the School of Drawing and Mathematics.

The *Opinione* publishes a letter of Giustiniano Nicolucci, on the discovery in the Terra di Lavoro of a tomb dating from the Stone age. The letter goes into details: the writer says that the stone weapons found in this sepulchre are remarkable in point of workmanship, and denote talent and skill on the part of the workman who fashioned them.

M. Foucard, of Valenciennes, has recently presented to the Louvre a portrait of a man by Mabuse, signed, and dated 1524. It is in an excellent state of preservation.

The sale of twenty-five paintings from the collection of Mdme. Roëll, *née* Hodshon, at Amsterdam last month realised 50,000 fr. "Pigs," by Potter, was sold to M. Oppenheim, 705*l.*; "A Landscape," by Hobbema, to M. Newenhuis, 4,125*l.*; "A Marine," Vandervelde, to Mr. Holloway, 3,712*l.* The Antwerp Museum bought a "Waterfall," by Ruysdael, for 2,275*l.*—On the 13th, six water-colour drawings, by T. M. Richardson, were sold by Christie and Manson for 838*l.*; and on the 16th, a magnificent collection of engravings after Sir Joshua Reynolds was also disposed of. Amongst the most remarkable were, "Mrs. Carnac," by Smith, 87 guineas; "Lady C. P. Clinton," by the same, 30 guineas; "Miss Horneck Doughty," by the same, 36 guineas; "Nelly O'Brian," by Dixon, 40 guineas; "Lady Spencer Dickinson," 46 guineas; the "Strawberry Girl," by Watson, 68 guineas; the "Marchioness of Tavistock," by Fisher, 51 guineas. A collection of Watteau's works was sold at the same time for 310 guineas. There were about 700 plates, making up 5 vols.—On May the 13th and 14th, a portion of the Allègre collection came to the hammer at the Hôtel Drouot. It is impossible for us to mention all the important articles of this most important sale, but here are a few:—Two plaques of gold, enamelled on both sides, one representing Charlemagne and St. Louis, the other Pierre II. de Bourbon sire de Beaujeu, and Anne de France, his wife, daughter of Louis XI. The workmanship is French, and dates from the fifteenth century. They formed part of the Debruge collection, and are cited by M. de Laborde in his *Notice sur*

les Émaux du Louvre, p. 115. Bought by the Duke d'Aumale; 20,000 fr. Dessert spoon, knife, and fork, in gold, jasper handles covered with openwork ornament; belonged to Cardinal Mazarin; 10,300 fr. Two Chinese vases, in gold, chiselled in relief, set with pearls and other precious stones, from the Summer Palace; 25,200 fr. Bowl of rock-crystal, ornamented with three masks and arabesques of the most exquisite workmanship. It is of the very first period of the sixteenth century; was formerly in the collections of Louis and Édouard Fould. 18,900 fr.—The pictures, studies, curiosities, tapestries, &c. of Troyon's atelier will be sold shortly.—At the sale of Prince Napoleon, the portrait of Cosmo de' Medici, by Angiolo Bronzino, went for 325 guineas; a portrait by Vincenzio Foppa, 250 guineas; "A Girl at her Toilet," by Paris Bordone (from collection of Duke Litta of Milan), 700 guineas; "Portrait of a Youth," by Francesco Francia, 390 guineas; "Virgin and Child," signed Joannes Bellinus, 600 guineas. Two sixteenth-century statues—Bacchus and Venus—from collection of Duke Litta, 2,770*l.* A statue of Aeolus and a companion figure, from a fountain in the palace of the same nobleman, 1,260*l.* There were also a few fine pieces of majolica, one a bowl with the subject of Curtius leaping into the gulf in the Forum, attributed to Orazio Fontana, was sold for 125*l.* Two lustre dishes, one inscribed Fra Xanto, de Rovigo Urbino, 1532, the other, Fra X. R. 1536, went for 144*l.*

Mr. Cole sends us the following:—

"With a view to preserve accurate copies of the Cartoons of Raphael, the Lords of the Committee of Council on Education, acting through a committee, propose to select nine artists to make preliminary studies of given parts of three of the cartoons. Artists will first be required to complete an accurate copy either in water colours, tempera, or oil, of a photograph full size, of a head selected from the Beautiful Gate. These will be sent in to the secretary of the Science and Art Department by the 31st July 1872. From the candidates so competing, nine may be selected to make accurate coloured copies from the cartoons themselves of portions set out by the committee as a final test. Candidates will be allowed 2*l.* per week for not more than eight weeks to complete these copies, which will be the property of the Science and Art Department. If the competition prove satisfactory, a further selection of portions of the cartoons will be made to continue the work of reproduction."

New Publications.

Ahlwardt, W. Bemerkungen über die Aesthetik der alten arabischen Gedichte, m. besond. Beziehg. auf die sechs Dichter. Greifswald: Bamberg.

Arnold, Matthew. The Great Prophecy of Israel's Restoration (Isaiah xl.–lxvi.). Arranged and edited for Young Learners. Macmillan.

Colvin, S. Children in Italian and English Design. Seeley, Jackson, and Halliday.

Comparetti, D., e D'Ancona, A. Canti e Racconti del Popolo Italiano. Vol. III. Canti delle Provincie Meridionali. Turin: Loescher.

De Mazade, C. Lamartine, sa vie littéraire et politique. Paris.

De Morgan, A. A Budget of Paradoxes. Reprinted from the *Athenæum*, with the Author's Additions. Longmans.

Eichelkraut, F. Der Troubadour Folquet de Lunel. Berlin: Weber.

Goll, J. Anthologie české lyriky. Prag: Gregr u. Dattel.

Grässe, J. G. T. Beschreibender Catalog des königl. Grünen Gewölbes zu Dresden. Dresden: Zahn.

Grimminger, A. Mei' Derhoim. Gedichte in schwäbischer Mundart. Stuttgart: Cotta.

Hunter, W. W. Orissa; or, the Vicissitudes of an Indian Province under Native and British Rule. 2 vols. Smith, Elder, and Co.

Köpke, R. Kleine Schriften zur Geschichte, Politik u. Literatur. Hrsg. v. F. G. Kiessling. Berlin: Mittler.

Lübke, W. Geschichte der deutschen Renaissance. 1ste Abth. Stuttgart: Ebner u. Seubert.

Maskell, W. Description of the Ivories Ancient and Medieval in the South Kensington Museum; with Preface by. Chapman and Hall.

Radenhausen. Isis. 4ter Band. (Schluss.) Hamburg: Meissner.

Shakespeare's Hamlet, Prince of Denmark. Ed., with Preface and Notes, by W. G. Clarke and W. Aldis Wright. (Clarendon Press Series.) Oxford.

Wagner, B. A. Christian Thomasius. Ein Beitrag zur Würdigung seiner Verdienste um die deutsche Literatur. Berlin: Weber.

Theology.

The Epistle of Barnabas. [*Erklärung des Barnabasbriefes.* Ein Anhang zu de Wette's *Exegetischem Handbuch zum Neuen Testament.* Von J. G. Müller.] Leipzig, 1869.

The title of this work is perhaps liable to some misconception. We might have inferred from it that the editor is disposed to assign to this Epistle a quasi-canonical position, such as that which it holds in Hilgenfeld's *Novum Testamentum extra Canonem receptum:* but in his introduction he is careful to explain that, by calling his work an appendix to de Wette's *Handbook to the New Testament*, he does not mean so much as this, pointing out that it differs in internal character from the Canonical Epistles, and that the instinct of the ancient church placed it on a lower level. He might have added to his other arguments the fact that the very witnesses commonly adduced to support its claims to canonical rank are adverse to these loftier pretensions. The *Codex Sinaiticus*, for instance, places it after the Apocalypse, and not with the Catholic Epistles, which would have been its proper position if regarded as a substantive part of the Canon: while Clement of Alexandria, who quotes it frequently and with respect, and even ascribes it to the "Apostle Barnabas," yet nevertheless on one occasion points out an error of fact into which the writer has fallen (*Paedag.* ii. 10).

In this work Müller has supplied a real want. Though the writings of the apostolic and subapostolic ages have been so carefully sifted of late, and reviews, monographs, and critical histories teem with materials ready to hand, yet no attempt had before been made to furnish a complete commentary on this remarkable work of early Christian antiquity. The edition of Cotelier, though now nearly two centuries old, still supplied the best and fullest body of notes. This defect is now remedied. Müller's *Commentary* is complete in all directions; no sources of information are overlooked; no points of interest left untouched. It is quite the most useful storehouse of information in all that relates to this epistle.

On the whole the grammatical portion of the *Commentary* is the least successful. It is difficult to see, for instance, why time should be spent on explaining common grammatical constructions like διʼ ἡμᾶς (p. 183) and ποιεῖν τινά τι (p. 192), while the very unusual order in c. 1, τῆς δωρεᾶς πνευματικῆς, passes without a word of remark (pp. 56, 122), as if the editor were unaware that the position of the epithet is anomalous. Again, in c. 1, ὑπὲρ τι καὶ καθʼ ὑπερβολὴν ὑπερευφραίνομαι, where he rightly defends the text against Hilgenfeld, he does not see that ὑπὲρ is used adverbially, as in 2 Cor. xi. 23, but renders ὑπὲρ τι "above anything," *i.e.* "above everything"—a sense which it could not possibly have in this connection. This want of grammatical insight again is seen in his treatment of a passage in c. 7, τὸν μὲν ἕνα ἐπὶ τὸ θυσιαστήριον, τὸν δὲ ἕνα ἐπικατάρατον· καὶ ὅτι τὸν ἐπικατάρατον ἐστεφανωμένον; where he rejects the obvious explanation (to which the context points) that the sentence is elliptical, and has recourse to the expedient of accusatives *absolute;* and where also for ὅτι he substitutes ὅ τι, which he translates "wherefore?" not seeing that ὅτι introduces a quotation.

Müller's estimate of the authorities for the text is on the whole just; but he occasionally makes slips which show that he is not treading on firm ground. Why, for instance, does he represent Tischendorf as saying that ℵ was written by the scribe of B (p. 25), when in fact Tischendorf says that the New Testament of B was written by *one of the scribes* of ℵ? Why does he assume that the corrector of ℵ (ℵ**) collated this Epistle with a MS. written by Pamphilus (p. 29), when the corrector's notice of the source of

his collation is confined to a definite portion of the Old Testament? What authority has he for stating that the Latin MS. belonged to the German monastery of "Corvey an der Weser" (p. 22), when the facts point to the French Corbey, near Amiens, as its locality? Why, lastly, does he describe two Florence MSS. as 7 and 21 (p. 22), their true designation being Plut. lvii. No. 7, and Plut. vii. No. 21, thus omitting the number of the bookcase, and mentioning only the number of the volume in the case? The former of these two MSS. should not have been mentioned at all, for it does not contain this Epistle. It is the celebrated Greek MS. from which Voss first published the Ignatian Epistles in their shorter form. The Epistle of Barnabas is found attached only to the longer form of these Epistles.

Inattention to this distinction has misled Müller on another point, which is important. Jerome inadvertently quotes a passage from the Epistle as if from Ignatius (*Adv. Pelag.* iii. 2). This father's knowledge of the earliest Christian writings is very superficial: he most frequently quotes them at second-hand through Origen or Eusebius; and in this particular instance he may have derived the quotation, which is very remarkable, from the treatise of the former *Against Celsus* (i. 63), giving it from memory, and carelessly substituting the wrong name. Müller however, following Menard, Hilgenfeld, and others, gives a different explanation of the error. The Ignatian Epistles are followed in the existing MSS. by the Epistle of Polycarp, and this by the Epistle of Barnabas: but in the archetype of these MSS. some leaves containing the end of Polycarp and the beginning of Barnabas were wanting, and the transcriber, not perceiving this, has copied on continuously, thus welding the two Epistles into one, and making nonsense at the juncture. These critics suppose that the MS. which Jerome used was already mutilated in this way, and that this was the occasion of his mistake. If Jerome had quoted Barnabas under the name of Polycarp, the explanation would have been plausible enough: but as he names Ignatius, it is quite inadequate. Moreover, the phenomena of the MSS. are entirely adverse to such a supposition. This sequence of Polycarp and Barnabas is connected only with the longer Greek of the Ignatian Epistles. With the shorter recension it is not found. And we cannot without great improbability assume that the Epistles of Ignatius were known to Jerome in this longer form.

The date of this Epistle is fully discussed by Müller in excursuses (p. 105 sq. and p. 334 sq.) on the two passages on which the decision mainly depends. He arrives at the conclusion that it was writen A.D. 119. The first of these passages (c. 4) points, as he allows, to the age of Vespasian; for the ten kings of the prophet Daniel, as there interpreted, can only be explained of the first ten Caesars. Yet he explains the second passage (c. 16), in which the writer discusses the prediction of Isaiah xlix. 17, as if it referred to the hopes which Hadrian held out to the Jews that he would rebuild the temple. Thus he gets two different points of time in the two passages: and he can only reconcile the two by the lame expedient of supposing that in the first passage the writer refers to events which had occurred long before he wrote. This solution however is directly excluded by the words with which the interpretation of the prophecy is prefaced, *τὸ τέλειον σκάνδαλον ἤγγικεν*, and which confine the horizon to the immediate present. If so, the interpretation of the second passage must be wrong; and indeed the whole argument of the supposed Barnabas shows that he did not contemplate the re-erection of the temple, then recently destroyed, as a material structure, but referred to its rebuilding as a spiritual edifice, which was fulfilled in the rise of the Christian Church. Thus all contradiction between the two passages disappears.

It may seem captious to call attention to minor errors in a work on which so much labour has been expended, and which deserves the gratitude of all students of early Christian literature: but it must be regretted that this volume is disfigured by constant misprints; and in proper names such enormities as Usser, Coutelier, Delaroue, ought to have been avoided.

J. B. Lightfoot.

Apocryphal Acts of the Apostles, edited from Syriac MSS. in the British Museum and other Libraries, by W. Wright, LL.D., Ph.D., &c. Vol. I. The Syriac Text. Vol. II. The English Translation. Williams and Norgate, 1871.

Professor Wright, already known, in addition to his other works, by *Contributions to the Apocryphal Literature of the New Testament*, now favours us with a collection of *Apocryphal Acts of the Apostles*. Every fresh addition to our sources of information on so important a branch of early Christian literature must be cordially welcomed, for only a small part of the available material has yet been published. Of the text here brought together, some, such as the *Decease of John*, the *Acts of Andrew and Matthew*, the *History of Paul and Thecla*, and a large part of the *Acts of Thomas*, were already known in Greek; others, such as the part of the *Acts of Thomas* in which the Greek is deficient, and some sections of the *History of John*, only in Latin; while others, such as several more sections of the *History of John* and the *Acts of Philip in Carthage*, are now published for the first time.

The greater part of the *Apocryphal Acts of the Apostles* is no longer extant in the original form. With few exceptions they arose in Gnostic circles, and were composed with the object of presenting the mysterious doctrines of the Gnostics in a dress attractive to the people. These marvellous tales were read with avidity by the faithful, and the only impediment to the propagation of such teaching which the Catholic teachers could interpose was by putting forth of orthodox editions, in which the fascination of romance was retained, while the heretical doctrine was more or less carefully eliminated. To this circumstance it is due that considerable remains of the apocryphal literature have come down to our own time.

The texts which Professor Wright has now edited and translated belong without exception to the class of Catholic alterations of Gnostic writings, and the simple popular language in which they are written proves that in Christian Syria as elsewhere these narratives were designed for the people and not for theologians. They are also without exception translated from the Greek.

The story of the *Decease of John* (vol. ii. pp. 61–68) agrees almost verbally with the conclusion of the Greek *Acts of John* published by Tischendorf (pp. 272–276, Tisch.). Here and there however the Greek can be filled up from the Syriac. Thus in cap. 15 (p. 272, Tisch.), where, after *πόσα ἴδετε παρ' ὀφθαλμοῖς ὑμῶν*, should be read *ἃ ἡτοίμασεν ὑμῖν, μηδὲ τούτοις τοῖς ὀφθαλμοῖς ἑωραμένα, μηδὲ ταύταις ταῖς ἀκοαῖς ἠκουσμένα*; and in c. 22, after the words *καὶ εἰπὼν*, "Be thou with me, Jesus the Messiah our Lord. Then he went down into the trench, where he had spread his clothes, and saying . . ." (vol. ii. p. 67). The genuineness of the latter passage is also shown by the Latin text in Abdias, *Histor. Apost.* v. 23. In other places words which are found in the Greek are wanting in the Syriac, *e.g.* c. 18, end, in the prayer of consecration, and just after, c. 19 (p. 63, foll. Wright), where in the Syriac, as was the case in Abdias, the direction of the apostle to dig his grave follows directly upon the Eucharistic feast. The disciple of John, who receives this command, is called Byrrhus, as in Abdias (the Greek

text has Εὐτυχὴς ὁ καὶ Οὐῆρος). Other variations from the Greek arise partly from other readings, partly from the inexactness of the translation. On the whole the Syriac represents a text which is much more closely allied to that edited by Tischendorf than to the Latin of Abdias.

The *History of Andrew and Matthew* (not Matthias) *in the City of Cannibals* (vol. ii. pp. 93–115) and the *History of Thecla* (pp. 116–145) agree in all essential points with the Greek text. Here and there the translation is inexact and paraphrastic; in some places the Syriac gives only extracts. For instance, it omits capp. 12–15 of the Greek text of the *History of Andrew and Matthew;* in c. 10 and 18 a few sentences are transposed; in c. 10, 20, 27, 29, the Greek text is shortened; oftener still, shorter sentences are omitted; and sometimes the text from which the translation was made seems to have differed from that of our Greek MSS. (c. 24, end, c. 26, 27, 28, 31). Additions are rare (c. 30, 32, 33), but several passages of the Greek may be filled up or corrected from the Syriac. Thus, in c. 19, after ἐπιστεύθημεν, insert, "For if thou didst utter them, heaven and earth would tremble" (vol. ii. p. 103); in c. 23, instead of ἀλλὰ ἀπολυθῆναι τὰς μαχαίρας ἐκ τῶν χειρῶν τῶν δημίων, the Syriac has, "Let their heads be paralysed, and let the knives fall and melt like wax before the fire" (p. 108). In c. 28 (p. 111), instead of τότε ὁ Ἰησοῦς εἶπε τῷ Ἀνδρέᾳ, the Syriac has, "And when he had said these things, a voice came to him in Hebrew, saying . . ." It is noteworthy, that the city of cannibals is twice called Medinat-Kalbin, which Dr. Wright renders "City of Dogs;" at the close of the story, the words "which is ʿĪrḳā" are added. Prof. Nöldeke conjectures that either the city of the Chalybis or Colchis is meant; he considers the identification of the cannibal-city with ʿĪrḳā, *i. e.* Arka in Lebanon, to be the malicious jest of a copyist.

The gain for textual criticism is more definite in the *Acts of Paul and Thecla*, in many parts of which the Greek text may be supplemented to a greater or less extent from the Syriac. This is the case with the beatitudes in c. 5 (vol. ii. p. 118, foll.); in c. 8, where the Syriac inserts the sentence "And Thamyris answered . . . see her" (p. 120); in c. 19, 20, 27–29, 33, where the Syriac text is fuller (pp. 126, 131, 135, &c.); and in other passages. Demas and Hermogenes are here described as coppersmiths (pp. 116, 124, cp. 2 Tim. iv. 14), and Tryphaena almost always (but only once in the Greek, c. 36) as queen.

Omissions in the Syriac of words or sentences extant in the Greek text are rare. In c. 2 the name of Lectra, in c. 28, foll. that of Falconilla, is wanting, and the sons of Onesiphorus, Silas and Zeno, are converted into sons of Simon, though in one passage (p. 117, top) Zeno is distinguished from them; comp. also capp. 14, 43. On the other hand paraphrastic readings occur frequently (c. 26, 28, 37, 41, &c.). The conclusion from cap. 44 onwards is omitted.

Greater importance, however, attaches to the *Acts of John in Ephesus* (pp. 3–60), and the *Acts of Philip in Carthage* (pp. 69–92). The latter was previously quite unknown; the former only known in fragments. It is true that a narrative which bears the name of Prochorus is extant in Latin, and in an incomplete form in Greek. But though it resembles our Syriac narrative in beginning with the separation of the Apostles, and the first acts of John in Ephesus, the greater part of it is occupied with the miracles of the apostle in Patmos. There is also a part of the Ephesian narratives to be found in Abdias, and in the so-called Mellitus (Melito). The Syriac text published by Dr. Wright, which also bears the title *Doctrina Johannis* (p. 60), claims for its author Eusebius, the church-historian, who is said to have "found it in a Greek book" (p. 3). In another place the author mentions as his authorities the books in the archives of Nero (p. 9). The narrative begins with the separation of the apostles, and relates how St. John hires himself out as a servant with a bath-keeper, raises the son of the procurator who had died by a divine judgment in the bath, converts the procurator and the nobles and a great multitude, and at last even the priests of Artemis, and procures the fall of the idol. The name of the procurator is Tyrannus, and is obviously borrowed from Acts xix. 9. The fall of the image of Artemis, however, is told quite otherwise by Prochorus, Mellitus, and Abdias; the last mentioned also speaks of the resurrection of a profligate youth, but under quite different circumstances. On the other hand, the remaining narratives, which are given by Mellitus and Abdias, are wanting in the Syriac. The banishment of St. John is here placed, not under Domitian, but under Nero; a fearful vision compels the emperor to recall his command, on which the apostle passes the rest of his life unmolested in his cottage near the former temple of Artemis, and at last, at the wish of Peter and Paul, who visit him in Ephesus, composes his Gospel. It is worth while to notice the chronological statements as to the age of John, who is said (p. 59) to have lived 120 years, and the duration of the ministry of Christ (p. 15), which is reckoned at something over two years, from the 30th to the beginning of the 33rd year of his age. This calculation varies equally from the earlier chronology, and from that which has prevailed since Eusebius, and seems to have arisen independently out of the fourth Gospel. It does not, however, follow that the present text of the *Acts of John* is older than Eusebius; in fact, he is well acquainted with the full Christological formulas of the fourth century. The conception of Christ took place, according to our author, through the ear of Mary (pp. 7, 14, &c.), an opinion which was afterwards sanctioned by the Catholic tradition, and popularised by painting, and which doubtless appears here for the first time. The name *Doctrina Johannis* is justified by the long speeches and sermons which are put into the mouth of the apostle. The contents are of a sound Catholic tendency, the last vestiges of Gnosticism being effaced; such a phrase as "the children of the left hand" (p. 4) is perhaps the only one which reminds us of the Gnostic περίοδοι Ἰωάννου. This circumstance, as well as the large number of the still extant and very various reproductions of the *Acta Johannis* in a Catholic sense, seem to show that the histories of this apostle were read by the Catholics with especial diligence.

Of the old περίοδοι Φιλίππου we possessed up to this time four separate fragments, the *Acts* of the apostle in Scythia (in Abdias and Symeon Metaphrastes), those in Greece (in Greek, see Tischendorf, p. 95, foll.), and two narratives, the scene of which is laid in Hierapolis, the one preserved in the great *Menaia* of the Greeks, the other, with the *Martyrium* of the apostle, in Greek (Tischendorf, p. 75, foll.) and Latin (*Acta Sanctorum*, May 1).

The last mentioned passage is distinguished in the Greek text by the heading ἀπὸ πράξεως πεντεκαιδεκάτης μέχρι τέλους, ἐν αἷς τὸ μαρτύριον. A new portion of the πράξεις hitherto missing has now been discovered in Syriac; it seems to have formed the commencement of the narrative. It relates the journey of the apostle from Jerusalem to Samaria and Caesarea, his marvellously quick voyage to Carthage, during which he converts the Jew Ananias, the sermon and murder of the latter in the synagogue at Carthage, with his resuscitation by Philip, and the final expulsion of the unbelieving Jews. That the περίοδοι Φιλίππου consisted in great measure of controversy with the Jews; this is confirmed by the *Acta Philippi in Hellade*, and the history which it contains

of the unbelieving high-priest. The conclusion of the Syriac acts, however, reveals a comparatively mild disposition towards the Jews. It represents the Carthaginian Jews, guilty as they were of unbelief, of murder and perjury, as spared further punishment, because the Jewish law of retaliation was abolished in Christianity. Not less remarkable is the chronological notice on p. 78, that the devil had been expelled from Carthage after having sat on his throne for 3795 years. As Prof. v. Gutschmid has pointed out to me, the year 3795 is, according to the ordinary Jewish era, the year from autumn 33 to autumn 34 A.D., *i.e.* the first or one of the first years after the Crucifixion. This, then, is the first known instance of the use of the Jewish era of the Creation, which has been commonly supposed to have arisen in the middle of the fourth century. The document from which this notice is taken, and which forms the basis of our Acts, cannot, it is true, be older, but is apparently at least not younger than the third century. Besides, the use of the Jewish era is not the only indication of the Jewish culture of the author. It is corroborated by the special interest which he takes in the Jewish people, and still more by the remarkable collection of Jewish traditions about the Old Testament prophets (pp. 83, 84). The original Gnostic character of this as well as other narratives is clear from the nature of the miraculous stories they contain, *e.g.* those of the miraculously swift voyage, a detail which recurs in the *Acts of Thomas and Andrew*, of the mysterious apparition of the body of the murdered Ananias, and of the speaking and miracle-working oxen.

But the most valuable part of this new collection is formed by the *Acts of Thomas*, which are given here in a much more complete form than in the Greek. The book is divided into nine acts. The first three, the fifth and sixth, correspond to the Greek acts edited by Thilo and Tischendorf; Acts vi. and vii. contain the histories of the generals of king Mazdai, and of Mygdonia and Karîsh (Charisius); while the last section consists of the *Consummatio*, which is also extant in Greek (Tischendorf, p. 235, foll.) and Latin (Abdias, ix. 22, foll.). In the 7th act, the Syriac omits some of the miracles related by Abdias (capp. 14, 15); as a compensation for this the 4th act, the story of the speaking ass (pp. 179–181, Wright), is quite new. Several narratives and speeches are also new in the 7th and 8th acts, especially the hymn of the soul (pp. 238–245), and the following hymn (pp. 245–251). The Syriac text is less original than that of the Greek acts. The Gnostic features, which constitute the value of the book for church-history, are almost entirely effaced, and replaced by Catholic. The Gnostic prayers and hymns to Achamoth are changed into prayers to Christ; the Christology is the Nicene, but with echoes of Sabellianism (pp. 153, 173, foll., 187, foll., 208, 249, 267, 288, foll.). A strong light is thrown on the process of Catholic rewriting by the hymn on p. 195 of Tischendorf's edition compared with p. 150 of Wright's English translation. "The girl," "the daughter of light," by whom the original writer meant Achamoth, becomes in the Syriac the church; the chorus of the thirty-two aeons, who sing praises to her, the twelve apostles and the seventy-two disciples; at the words "groomsmen" and "bridesmaids" the number seven, which distinguishes them as the seven Archontes and their companions, is struck out; and in like manner the twelve servants, *i.e.* the twelve zodiacal spirits, are removed. On the same principle the Gnostic baptismal prayer (p. 213, foll. Tischendorf; cp. p. 166, foll. Wright), the speech of the dragon (p. 217, Tisch.; cp. p. 171, Wright), and other passages, are rendered more Catholic in tone. The Gnostic rites, especially those at baptism and chrism, are also carefully removed, and the Catholic usages substituted (cp. especially p. 166, Wright, with p. 212, foll. Tisch.; also p. 188, &c. Wright). Once, in the speech of the wild ass (p. 214, foll.) there is even a polemic against the Gnostic rejection of conjugal society, which is certainly in strange contradiction to the narratives of the book itself.

In spite of all the care of the orthodox editor, a few traces of Gnostic speculation are still visible, *e.g.* "mother of seven houses, whose rest was in the eighth house" (p. 166), and a few expressions in the prayer of Thomas in prison (p. 279, foll.). The *Hymn of the Soul*, pp. 238–245, deserves particular attention. It is an unadulterated Gnostic poem, which is not, like the rest, translated from the Greek, but was written originally in Syriac, and by a happy accident has been inserted in the *Acts of Thomas*, with which it has absolutely no connection. The metre is hexasyllabic. The hymn treats, under the figure of a king's son, of the fortunes of the soul, which has been sent down from its celestial country, to fetch the pearl watched by the snake here below, but forgets its commission, till it is reminded of it by a letter from the father, the mother, and the brother, "the second (in authority)," (*i.e.* πρῶτος ἄνθρωπος). Then the soul fulfils its commission, receives back its bright robe, and returns to its country. As for the geographical setting of the parable, Egypt is described as the lower world, the kingdom of the East, or Parthia, as the heavenly country, "Sarbug" (?), Babylon, and the great Maishān (Mesene), "the haven of merchants," as the stations touched by the returning soul. As the other geographical notices also prove, the song was written in the regions of the Euphrates. The form of the Gnostic ideas points to the teaching of the sect of the Ophites, but not to that party which worshipped the serpent as queen of heaven, but that which saw in her the evil world-soul. The part which Egypt plays in the hymn reminds us of the similar fancy of the Naassenes and Peratae in Pseudorigenes. The hymn can scarcely have been composed by Bardesanes, not so much on account of the metre, as of the contents, which do not altogether tally with the peculiar doctrines of Bardesanes, as gathered from Ephrem. Besides, the thought which it develops recurs in the most different turns of expression in almost all the Gnostic systems. The date of composition is at any rate considerably earlier than the present Syriac translation of the *Acts of Thomas*. For it is certain that the latter is not earlier than the fourth century, whereas the hymn must have been written in the time of the Parthian empire, *i.e.* before 229.

The hymn to the Father and the Son, however, which immediately follows that of the soul (pp. 245–251) is of Catholic origin. Abdias has as little knowledge of the one as of the other; but what he offers us is nothing but a mere epitome of the Greek original. A comparison of the corresponding sections with the Syriac shows that Abdias largely abridged not only the speeches, but also the narratives, and omitted many passages which were in his view offensive, *e.g.* the description of the outrages which the wife and daughter of the general had to suffer from demons (p. 201, foll. Wright), the story of the wild asses which were yoked in the chariot of the apostle, the miraculous ejection of the demons by one of the asses at the apostle's bidding (p. 206, foll.), and much besides. Variations in the two narratives are of frequent occurrence. Thus the Syriac mentions a double examination of Thomas before king Mazdai (p. 262, &c., 274, &c.), which Abdias (ix. 13) merges into one. Abdias, too, knows (c. 24) only one parting prayer of the apostle, the Syriac two (p. 276, foll., 296). It is remarkable, on the other hand, that both in the Syriac and the Latin the name of the general is not mentioned till afterwards in the history of Mygdonia and Karîsh. The Syriac, too, calls him Ṣifūr (p. 233), which agrees with the Sapores of Abdias. The names of the other persons are really the same as in the

other texts, though the original forms are only partly preserved. The king is called Mazdai (Μισδέος, Mesdeus), the queen Tertia (so also in the Greek; Abdias has Treptia), the king's son Vīzān (Ἰουζάνης, Zuzanes), which confirms Gutschmid's conjecture, that Ἰουζάνης conceals the Persian name Wīǰan.

In the section corresponding to the Greek acts, the Syriac sometimes gives the means of improving the Greek original. Thus on p. 214 of the latter the words of Codex A, rejected by Tischendorf and bracketed by Thilo, are partly confirmed, partly supplemented by the Syriac. The correct reading will be, ἡ δὲ ἀπληστία . . . διαρπάζουσα τὰ ἀλλότρια καὶ ὑποψίαν ἔχουσα μὴ ἀποδιδοῦσα τὰ ἀλλότρια τοῖς δεσπόταις αἰσχυνθῇ, and just afterwards, ἡ δὲ ἐργασία τῆς κοιλίας εἰς φροντίδας . . . ἐμβάλλει τὴν ψυχὴν, μεριμνῶσαν μὴ ἄρα ἐνδεὴς γένηται καὶ τῶν πόρρωθεν αὐτοῦ ὄντων θηρατήν (instead of θεαθῇ). After the speech of the dragon (p. 218, Tisch., p. 172, Wright), at the beginning of c. 33, the Syriac adds a few sentences which are wanting in the Greek. Similarly, there is a long section which is wanting in the Greek at the beginning of c. 34 (p. 219, Tisch.; p. 173, Wright)—the song of the youth raised from the dead: but the distinctly Catholic tone proves that it has lost its original form. A short addition also occurs in the words of the young man (c. 51, p. 194, Wright); and several other instances might be given: *e.g.* pp. 196, 198 (end of c. 54 and c. 56). A more important deviation from the Greek occurs in pp. 195, 196 (pp. 230, 231, Tisch.), in the speech of the girl. On the other hand, it deserves to be noticed that the very passages in which the Greek offers few if any traces of Gnosticism are given with great fidelity in the Syriac. The unavoidable inference is that our *Acts of Thomas* have undergone *repeated* Catholic redactions, and that the form which they assumed after the first of these was that which the editor of the Syriac translation had before him.

In the last act (p. 292, &c.), on the other hand, the Syriac text agrees pretty closely with the Greek τελείωσις Θωμᾶ (p. 235, &c. Tisch.), at least if we except the two first chapters of the latter, which present only a short extract of the foregoing narratives. Here again the Greek text may sometimes be filled up and corrected from the Syriac, the readings of which are often confirmed by Abdias, though he too gives a mere extract from the original. The words on p. 293, "And they rose early—told thee the truth," are wanting in the Greek, but occur in a condensed form in Abdias. In the reply of Thomas to the king (c. 4, p. 237, Tisch.), instead of οὐκ εἰμὶ δοῦλος καὶ τὴν κατ' ἐμοῦ ἐξουσίαν οὐκ ἔχεις οὐδὲ ὅλως, it is preferable to read with the Syriac (p. 293) and with Abdias, εἰμὶ δοῦλος, ἀλλὰ σὺ κατ' ἐμοῦ ἐξουσίαν, κ.τ.λ. But the reading of the Syriac on p. 294 is manifestly wrong, "Of what country *art thou?*" instead of "is he," as the Greek and Abdias read. In c. 10, after συνήγοντο πάντες οἱ ἀδελφοί (p. 240, Tisch.), the Syriac (p. 297) inserts a few words; while some lines afterwards (c. 11) it omits a few. The speeches and prayers in this part are again more original in the Greek than in the Syriac; *e.g.* c. 6 (p. 238, Tisch.; p. 295, Wright), and c. 8 (p. 239, Tisch.; p. 296, Wright). In both places Abdias has in part preserved the Gnostic colouring more faithfully than the other two. At the end of the work, both the Syriac (p. 298) and the Greek contain a notice that the bones of the apostle were taken away secretly, and conveyed to the West, while Abdias states with greater precision that they were removed to Edessa.

These remarks may serve to bring out the great importance of the writings collected by Prof. Wright. It may be added that the portions now published for the first time are of value to the historian of dogma, especially for the Christological views and the ritual observances of the first centuries. With regard to the former, it is worth while to notice the frequently recurring allusion to Christ's outwitting of the devil (pp. 45, 78, 184, 279); and with regard to the latter, the very full description of the usages at baptism (p. 38, &c., 53, &c., 166, &c.), and at the Lord's Supper (p. 54, &c., 188, &c.), the mention of infant baptism (p. 42), and of the Eucharistic sacrifice (p. 55), as well as the custom of inscribing the sign of the cross on gates and ecclesiastical buildings (p. 55). But before parting from the work, let us express our hearty thanks, not only to the editor, but to Prof. Lightfoot, of Cambridge, who has generously borne the entire expenses of publication. R. A. Lipsius.

Religious Thought in England from the Reformation to the End of the Last Century. A Contribution to the History of Theology. By the Rev. John Hunt, M.A. Two volumes. Strahan and Co.

Considering the wide interest aroused in England at all times by religious questions, it is a matter of wonder that there is no history of religion in England which can take rank as a permanent book. We have many histories of the church, or books calling themselves so, but hardly any of them rise above the level of controversial pamphlets, in which the facts of the past are grouped into a case in favour of the writer's opinions. Mr. John James Tayler's *Retrospect* is indeed a book of a higher character, and is not so well known as it would be, were it not supposed, quite groundlessly, to be a "unitarian" history. Mr. Hunt may justly say that he is dissatisfied, and supposes most men are, with the spirit in which the history of religion in England is generally written. Mr. G. G. Perry's *History of the Church of England* is the work of a liberal-minded man, but is avowedly written from the point of view of the modern High Church party.

Mr. Hunt's two volumes are offered not as a history of ecclesiastical affairs, nor as a history of theological learning. His subject is intermediate between these two. He proposes to describe the successive prevailing phases of religious opinion, from the reformation to the end of the last century. To designate this subject-matter, Mr. Hunt is obliged to use a term to which there are strong objections, viz. "Religious Thought." But as no one has yet suggested a better, we must suppose that the language has no term for this complicated set of phenomena. Church, State, Literature, Art, Philosophy, Science—each of these names denotes a definite collection of facts, and each such collection of facts or phenomena can have, and has, its history. But what class of phenomena is intended by the term "religious thought"? Does it really mean anything substantially distinct from "theological literature"?

The answer must be that it does. "Religious thought" is not used by Mr. Hunt as an equivalent for "theological literature." He does not aim at being an ecclesiastical Hallam, and writing supplementary volumes to Hallam's *History of Literature.* Much rather might Mr. Hunt's work be said to be supplementary to Buckle's *History of Civilisation.* Neither books nor events are his subject, but opinion. It is true that neither the Christian creed nor the principles of Theism have been substantially changed since the reformation, yet the current opinions, sentiments, feelings, language, mental habits, which regard the permanent creed, have been in constant flow, and still flow on; "labitur et labetur." This flux of "thought" Mr. Hunt has taken for his subject—a highly interesting class of facts, but also one most difficult to seize and disentangle.

We all remember how in a cognate subject Mr. Buckle began his first volume by severely censuring the historians for describing the succession of events instead of tracing

the law of the succession, and how he ended in his last by doing exactly as they had done. We are not quite certain that Mr. Hunt has remembered his own definition of his object, "which is to trace the current of religious thought, and not to write a history of theological literature." He proposes to himself a history of the succession of ideas, but he slides into an analysis of the contents of books. But of the ideas which are consigned to books, only a very small fraction is taken up into popular opinion and becomes part of active thought. Circulating capital and fixed capital are two different quantities. Each man's mind contains a portion of ideas which is the common property of thinking men in his generation, and a portion which is peculiar to himself and a select class. The latter, or special knowledge, constitutes learning. It is of the former portion, or the sentiments shared by a writer with his age, of which Mr. Hunt intends to be the historian. If he has not always sufficiently kept this intention in view, and has allowed himself to analyse books in chronological order of publication, the sufficient excuse must be found in the evanescent nature of the subject, which is apt to elude the grasp. As a survey of the religious literature of England for the seventeenth and eighteenth centuries, Mr. Hunt's volumes have the field to themselves. There is no other book in which the information here brought together can be found. Mr. Hunt assures us in the preface that "in no case has the information been taken at second-hand!" Even a cursory inspection is sufficient to convince anyone that the notices are derived from original study of the authors. We have the contents of a vast library of books condensed in two convenient octavos.

MARK PATTISON.

HEBREW TEXT OF PSALM CXXXVII. 5.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—The second clause of this verse presents a difficulty of which no tolerable solution has, so far as I am aware, been yet proposed. In the Authorised Version the difficulty is got over by the addition of two words to which there is nothing corresponding in the original text:

> "If I forget thee, O Jerusalem,
> Let my right hand forget [her cunning]."

The ancient versions give no help: LXX—"*Let my right hand be forgotten;*" Syr.—"*Let my right hand forget me;*" which, strangely enough, De Wette adopts.

Modern expositors are not more successful. Ewald: "so vergesse meine Rechte sich." Delitzsch: "versag' mir die Rechte." Others judiciously leave the sentence incomplete. Thus Köster and Hupfeld: "so vergesse meine Rechte . . . . ."

The case appears to be one in which an emendation of the text may with propriety be resorted to as our only resource; and I, therefore, venture to suggest for consideration whether, instead of תִּשְׁכַּח יְמִינִי, we should not read יִבַּשׁ כֹּחַ יְמִינִי. In the ancient Aramean character the difference between יב and ת is not great. The passage will then stand thus:

אִם אֶשְׁכָּחֵךְ יְרוּשָׁלִַם
יִבַּשׁ כֹּחַ יְמִינִי
תִּדְבַּק לְשׁוֹנִי לְחִכִּי
אִם לֹא אֶזְכְּרֵכִי

> "If I forget thee, O Jerusalem,
> Let the strength of my right hand be dried up;
> Let my tongue cleave to the roof of my mouth,
> If I do not remember thee," &c.

The alteration, though slight, removes the grammatical difficulty, improves the rhythm of the Hebrew, and is, besides, borne out by comparison of Ps. xxii. 16 (15), where "My strength is dried up (יָבֵשׁ כֹּחִי) like a potsherd," is parallel to "And my tongue cleaveth to my jaws."

DUNCAN H. WEIR.

Intelligence.

It gives us much pleasure to notice Mr. Matthew Arnold's tasteful revision of the second part of Isaiah, with a slightly pretentious but very interesting preface. There is no reason why the more obvious results of technical scholarship should be withheld from the rising generation, or why "the children of the people" should not be introduced to the one great literature for which they have had some preparation. Mr. Arnold's object accordingly is, "not to present an absolutely correct version of the series of chapters treated, but merely to remove such cause of disturbance as now, in the authorised version, prevents their being read connectedly" (p. vi). He speaks in a tone of satisfaction, which we cannot pretend to share, either as lovers of English or of exact scholarship, of the attempt now being made at Westminster to revise the Bible of 1611. He is himself a puritan in the matter of Bible English, and his corrections are studiously devised so as not to impair the effect of the diction or disturb the balance of the rhythm. Though heartily endorsing his views, we question whether there may not be room for another kind of translation, such as that of Mr. Cheyne, which simply aims at rendering the original accurately in appropriate English, and in so aiming is compelled to retain a good deal of the earlier fabric. No doubt, as Mr. Arnold shows at some length, this translator's "affectionate reverence" has withheld him from several (from his point of view) salutary though less important corrections. But in one point, which Mr. Arnold touches upon with some earnestness, Mr. Cheyne could not have acted otherwise than he did without a gross dereliction of his principles. "Those noble and consecrated expressions," as Mr. Arnold calls them—law, judgment, and righteousness—are often found the greatest obstacles to a distinct apprehension of the prophet's meaning. Mr. Arnold states, and we are bound to believe it, that he has learned enough Hebrew to follow critical commentaries. But is it certain, or even probable, that certain words in xl. 2 mean "her sin-offering is accepted" (p. xxv), and "double for all her rue (?)" (p. xxvi, where, by the bye, Mr. Cheyne's view of the passage is exactly inverted)? Can Mr. Arnold's renderings of xlv. 9, 11 be justified, even as paraphrases? And is it consistent with his principles (see p. xvii) to correct lix. 19, and leave xli. 2, especially as the authorised version of the former passage, though erroneous, is both lucid and grand, and that of the latter neither one nor the other? On the other hand, not a few of Mr. Arnold's corrections are either the best possible or as good as any others which could be proposed. Two in particular may be mentioned—xlii. 19, "who is blind as God's *liegeman*?" and liii. 2, "he grew up before him as a *slender* plant" (thin and insignificant, *not* tender and cherished). The latter rendering might have been further supported by Ezek. xvii. 22. The notes are beautifully terse, and supply all that "young learners" are likely to require. One word in conclusion. It is too bad of Mr. Arnold to bring such a sweeping charge against German critics on p. xxxiii. He seems to be unaware that his own view of the "Servant" is essentially that of Knobel. And on what authority does he assert that Ewald, "in order to save [his] hobby," tampers with the text at the opening of ch. xlix.? These are traces of dilettanteism which disfigure an otherwise admirable work.

Our esteemed contemporary, the Roman Catholic *Literaturblatt*, of Bonn, contains (January 29) a critique of *The Speaker's Commentary*, which should have been noticed before, but through some accident has only just come to hand. The writer, Professor Reusch, agrees with our own reviewer (*Academy*, vol. ii. p. 335) in recognising the thoroughness of this work in most questions connected with archaeology, which he contrasts with the meagreness of the "strictly theological" element, and the comparative superficiality of the critical sections. Dr. Fell, the Egyptologist, of Cologne, subjoins a detailed examination of Mr. F. C. Cook's appendices on Egyptian history and philology. We are sincerely glad of his testimony to Mr. Cook's Egyptian scholarship, which has been unreasonably called in question by an eccentric writer in the *British Quarterly* (January). Dr. Fell, however, differs from Mr. Cook in many points, and maintains the ordinary view, according to which the exodus took place under King Menephthah, at the end of the nineteenth dynasty, and not, as Mr. Cook thinks, under Tuthmosis II., of the eighteenth dynasty. On the other hand, he endorses Mr. Cook's view that "the writer of the Pentateuch" possessed an accurate knowledge of the Egyptian language, and that this constitutes a strong presumption in favour of the Mosaic authorship. It should be remarked, however, that the relations of Egyptian to the Semitic languages are as yet far from being established with such precision as to justify so positive an assertion and so sweeping an inference. And we see no evidence that either Dr. Fell or Mr. Cook is acquainted with the actual situation of the Pentateuch controversy.

Prof. de Lagarde announces an edition of the Reuchlin codex of the Targums on the Prophets. Subscribers' names are requested.

Contents of the Journals.

Theolog. Literaturblatt (Rom. Cath.), March–May. — Biblical articles: Merx' *Job*; by Schegg. Hausrath's *History of the New-Testa-*

ment Age; by Langen. [Clear, temperate, and learned; from the Tübingen point of view. Cp. rev. in *Theologisch Tijdschrift.*]—Ecclesiastical: Scharpff's *Nicolaus von Cusa;* by Schwab. [A reformer in Church, State, and Philosophy of the fifteenth century.]—Bickell, *On the Apostolical Origin of the Liturgy of the Mass, and its Connection with the Passover Liturgy;* by Langen.—Heinrici's *Valentinian Gnosis;* by Kraus. [Chiefly to show that the heretical Gnosis exercised no positive influence on the Fourth Gospel.]—Probst's *Works on Liturgies;* by Mayer.—Comparative Theology: Spiess' *Religionum indagatio;* by Stiefelhagen. [To show that the comparative study of religions has a scientific (apologetic) value in theology.] Philosophical: Hartmann's *Philosophy of the Unconscious;* by Hartsen; and *Das Ding an sich;* by Michelis.—Lewes' *Hist. of Philosophy;* by Storz.—Aristotle and Modern Science; by Katzenberger.—Ribot's *La Psychologie anglaise contemporaine;* by Hartsen.

Theologisch Tijdschrift, May.—The Anti-Paulinism of the Epistle of James; by Blom.—Oort, de Goeje, and Kuenen, on Micah iii.-v. [Oort has retracted his conjecture; see *Th. T.* 1871, p. 501, &c.]—Specimen of a History of the Logia Hypothesis; by Meijboom.—Postscript to the Dissertation on John in Asia Minor; by Scholten. [Answer to Hilgenfeld.]—Review of Burnouf's *La Science des Religions;* by Tiele. [Founded on too slender a basis of facts.]—Notices of Spiess' *Religionum indagatio* [on the whole, very favourable]; Weiss' *Marcusevangelium;* Keim's and Hausrath's Histories, &c.

New Publications.

Franz, A. M. Aurelius Cassiodorus Senator. Ein Beitrag zur Geschichte der theologischen Literatur. Breslau: Aderholz.

Ritschl, A. A Critical History of the Christian Doctrine of Justification. (English Translation.) Edinburgh: Clark.

Physical Science.

Geology of Oxford and the Valley of the Thames. By Professor Phillips, F.R.S. &c. Clarendon Press, 1871.

In the earlier days of geological enquiry, when men longed to have some clear notions of geology, it was not unusual to publish broad outlines of the geological structure and composition of a country. Sometimes these outlines appeared in the form of a map, sometimes in that of a treatise. They were necessarily very sketchy; and even when they gave correctly some of the leading features of geological structure, they often misrepresented others, or at least traced them with the imperfection which characterized the science of the time. Admirable, however, were some of these early attempts. No one can look, for example, on the maps of William Smith without astonishment at the sagacity and clearness of observation which guided their preparation. In later years came the desire and the necessity for filling in the details of the work outlined for us by the pioneers of English geology. Instead of maps or descriptions of the whole country or of entire geological systems, there appeared detailed notices of special districts—notices which bear the same kind of relation to the earlier works that elaborate modern county histories do to the older text-books of the general history of the country. This parellel may be extended to the remark that in geological as well as in political history the materials for research have now accumulated to so vast an extent that the full treatment of either the social or geological annals of one country is almost beyond the compass of a single writer. He must content himself with the story of one or two great periods, or he may betake himself to the task of tracing the records of one district, and showing how far they throw light upon the general march of historical development in the country viewed as a whole. It is this latter kind of treatment which is exemplified in the volume before us.

Into no abler or fitter hands could the geological history of the Thames Valley have fallen than into those of the genial professor of geology at Oxford. Old enough to have seen some of the splendours of the dawn of English geology, and to have known not a few of the early leaders, and related by near ties of kinship to William Smith, the greatest of them all, Professor Phillips moves among us with a kind of antique glory. We reverence in him the traditions of the past. But he has other and higher claims. Trained in the school of Smith, Buckland, and Conybeare, he has been intimately associated with the progress of geology in England for half a century. As an original investigator he has done much to elucidate the geological structure of the country and the nature of its former inhabitants; at one time working by himself, as in Yorkshire, at another time in concert with his colleagues of the Geological Survey, in Wales, Devon, and Cornwall, the Malvern Hills, and other tracts. As one of the earliest and most laborious members of the British Association, he has unquestionably given an impetus to the spread of a desire for geological information throughout the country, and now for the last sixteen years he has been at work sowing the same desire among the youth at Oxford. No man could more appropriately have undertaken the task of gathering up the sum of all that is known regarding the rocks which enclose and underlie the great valley of the south of England, and respecting the ancient tribes of plants and animals of which these rocks are the tombs.

The valley of the Thames, as Professor Phillips treats it, contains more or less perfectly developed representatives of all the great geological formations from the oldest fossiliferous rocks of England up to the most modern alluvium. Far to the west, and, in a strict sense, beyond the limits of the valley, lie the ancient formations which rise into the picturesque outlines of the Malvern Hills. Eastwards beyond London stretch the gravels and brick-earths from which the later extinct mammalia and the earliest traces of man have been found. Between these limits the Secondary rocks, rich in fossils, and exposed in many natural and artificial sections, spread all over the country of which Oxford is the centre. Hence, in treating of the geology of Oxford, Professor Phillips brings before his readers no mere local details. The history of his district is in reality in great part the history of the whole country, and this fact he makes abundantly clear in the present volume.

Starting with a brief *résumé* of the historical notices of Oxford geology, and paying a kindly tribute to the memory and the labours of his early friends, the author sketches the general physical features of the Thames Valley—hills and vales, rivers, rainfall, springs, and water supply. He then passes on to describe the various geological periods, beginning with the oldest and rising through the long series up to recent times and the changes which are going on now. His most ancient rocks are those of the Malverns, the metamorphosed portions of which he classes as belonging to the "first or gneiss period of Malvern." Though there may be great doubt as to the real geological age of these rocks, it seems a pity now-a-days to talk of a "gneiss period" when the metamorphic origin of the gneissic texture is fully recognised, and when the use of such a phrase, though intelligible enough, sounds somewhat like a resuscitation of the long extinct Wernerian dogma of the precipitation of the Gneiss and the Schists from a primaeval ocean. Next come the Cambrian, Silurian, Old Red Sandstone, Carboniferous, and Permian rocks, which, as not strictly coming into the Thames Valley, are rapidly described along with the fossils characteristic of each formation.

It is the Secondary systems which are of course most fully treated by Professor Phillips, and as a text-book for these his volume will be chiefly valued. Beginning with those curious shales in the vale of Severn to which the name of Rhaetic has been given, he describes in considerable detail the subdivisions of the Jurassic and Cretaceous systems

and their more marked organic remains. The Oolites, as might be expected, are elaborately described, more especially those subdivisions which occur so markedly around Oxford, and of which the organic contents are so well illustrated in the University Museum. The nature of the strata of each subdivision is described along with the changes which they show in thickness or other characters as they are traced across the district. At the end of the account of the rocks of each period comes a full list of the fossils peculiar to or characteristic of each formation. This part of the book is admirably executed. The lists themselves are valuable for reference. Not less so are the short but lucid generalisations by which they are accompanied. Their most important feature, however, is the detailed description given of many of the species, particularly of the Oolitic Vertebrates. Professor Phillips has the faculty of making the dry bones live again for us. As he arranges jaws, skulls, teeth, ribs, and vertebrae before our eyes, the antique animal seems to career through the waters as it used to do among Ammonites, Belemnites, and other long extinct forms. In his careful analyses of the structure of Megalosaurus and Ceteosaurus he has not only done much for the elucidation of the palaeontology of his district, but has made an important contribution to our knowledge of the extinct Saurians which peopled the rivers and seas of England during the Middle Secondary periods.

Professor Phillips pauses now and then to note the bearing of his subject upon some of the wider questions of science which are now engaging attention. For instance, after describing the wonderfully complete series of fossiliferous strata forming the Oolitic system of England with its great diversities of organic remains, and the long period of the earth's history which it chronicles, he takes notice of the light which it may cast upon such questions as the origin of species. His reference, however, is tantalizingly brief, nor is it always as clear in phraseology as other parts of the book. Assuredly in this country, at least, no such basis of palaeontological evidence can be found for testing the worth of theories of the origin of species and genera as that furnished by the richly fossiliferous Jurassic series of rocks. And we should have been glad to have from the Professor of Geology at Oxford some fuller exposition of the conclusions to which his life-long labours among these rocks have led him.

In the last two chapters we are presented with some general and cautiously expressed views regarding the waste of the surface of the Thames Valley, and the origin of its outlines, and with some information respecting the economically useful minerals furnished by the district. The volume is illustrated with maps, sections, and numerous plates of fossils. It may be cordially and confidently recommended to all geologists to whom the Secondary rocks of England are a subject of interest. ARCH. GEIKIE.

Geographical Botany. [*Die Vegetation der Erde nach ihrer klimatischen Anordnung.* Ein Abriss der vergleichenden Geographie der Pflanzen. Von A. Grisebach. 2 Bände.] Leipzig: Engelmann.

THE science of Geographical Botany is yet in its infancy. In English, we have no extended work on the subject; in fact, if we exclude books treating merely of the floras of limited areas, valuable as far as they go, our original literature on the subject is almost confined to the slight sketches by Dr. Hooker comprised in the Introductory Essays to his *Floras of New Zealand and Tasmania*, and in his lecture on Insular Floras, delivered at the Nottingham meeting of the British Association in 1866. On the Continent the earliest publication of importance was an offspring of the gigantic intellect of Humboldt, his *Essai sur la Géographie des Plantes*, published in French and German in 1805 and 1807; this was followed by a Danish work by Schouw in 1822, and by Meyen's *Grundriss der Pflanzengeographie* in 1836, a translation of which by the Ray Society is the only treatise on the subject accessible to the English reader; while the standard work hitherto, and the most recent of any high scientific value, is De Candolle's *Géographie botanique raisonnée*, published in 1855. It is therefore with no ordinary interest that botanists have expected the publication of the present work. Professor Grisebach's intimate acquaintance with the vegetable productions of several widely separated portions of the surface of the globe, as evinced by the local floras which he has already published or edited, promised a contribution to botanical literature of no small value.

The first impression on opening the work is one of disappointment. We look in vain for those wide general views, for those philosophical generalisations which should characterize a work of this nature, the result of the unwearied investigations of years. Indeed in this respect Professor Grisebach's work will not bear comparison with the far slighter sketches by Dr. Hooker to which we have already alluded. The same failing in the mode of treatment characterizes the arrangement. To a closely printed work of upwards of 1200 pages, consisting of an immense mass of details, we have a table of contents of ten pages only, and no index whatever; so that, if we wish to ascertain the geographical range of any particular class of plants, or to turn to the author's views on any contested point, we have no resource but to look till we find it. The only excuse for this serious drawback to the value of the book is that the author is but following, though perhaps carrying to an excess, the custom of his countrymen. When once however we have allowed for these defects, and have fairly waded into the depths, our first feeling of disappointment gives way to one of admiration and delight at the enormous mass of information, worked out with infinite care and labour, here placed before us.

The phyto-geographical regions of the surface of the earth hitherto most generally adopted are those proposed by Schouw, twenty-five in number, each region being formed dependently on the extent to which its flora is endemic or peculiar to it. Grisebach divides the world into nearly the same number of regions, but takes into account, besides the endemic character of the flora, various other considerations—as, for instance, the general external features of the vegetation; and hence his boundaries differ materially from those of Schouw, and some of them are entirely new. They are as follow:—1. The Arctic Flora (of both continents). 2. The Forest Region of the eastern continent. 3. The Mediterranean. 4. The Steppes (of Central and Western Asia). 5. China and Japan. 6. The Indian Monsoon Region (including the whole of the Archipelago). 7. The Sahara (North Africa except the Mediterranean coast, and Arabia). 8. Sudan (Central Africa). 9. Kalahari (the western district north of the Cape). 10. The Cape. 11. Australia. 12. The Forest Region of North America. 13. The Prairies (including the south-western portion of the United States). 14. California. 15. The Mexican Region (including the greater number of the States of Central America). 16. The West Indies (including Yucatan). 17. Cis-equatorial South America (excluding the Andine region). 18. Hylaea (Tropical Brazil). 19. Brazil (south of the Tropics). 20. The Tropical Andes. 21. The Pampas. 22. Chili. 23. The Antarctic Forest Region. 24. Oceanic Islands (including New Zealand and Madagascar). This sub-division undoubtedly possesses greater claims to be considered a natural one than any that had been proposed before. The

regions necessarily vary extremely in size. The Forest Region of the eastern continent includes the whole of Europe excepting the extreme south, and nearly the whole of Northern Asia south of the Arctic Circle; while the regions of California and the Cape are scarcely larger than Great Britain, and that of Chili is considerably smaller. Exception may no doubt be taken to some of the details. The flora of North-western Australia shows so close an affinity to that of the Malay Peninsula and the East Indian Archipelago that it is doubtful whether they can rightly be separated; and the recent researches of Dr. Welwitsch would seem to indicate the existence in Central Africa of more than one distinct flora.

In the details of each region Grisebach follows a plan suggested by Humboldt. After discussing the climate, natural and geological features of the country, and other general matters, he examines the vegetation under seven distinct heads, classified, not according to the natural affinities of the plants, but their external facies and habits, as follow:—1, woody plants; 2, succulent plants; 3, climbers; 4, epiphytes; 5, herbaceous plants; 6, grasses (including sedges and rushes); and 7, cellular plants (or the lowest forms of vegetation).

The real value and interest of the study of the Geographical Distribution of Plants lie in the light which it throws on the great question of the mode of origin of the infinite variety of life found at the present time on the surface of the globe; and to this end the vast assemblage of facts here collected will be of inestimable value when carefully collated and analysed. It has always seemed to us that the solution of the problem of the Origin of Species may be looked for more hopefully from a careful study of the vegetable than of the animal world. Plants, being fixed to the same spot for the whole of their lives, and unable therefore individually to choose the conditions most favourable to their growth and perfect development, must be to a greater extent than animals the creatures of the circumstances that surround them; and hence we ought the more easily to be able to trace the steps by which each form has supplanted its proximate ancestor. Towards this consummation we have, however, made but very little progress at present.

We are now so familiar with the idea that organisms which present a close similarity in the essential points of their structure have descended from a comparatively not remote common stock, that we are apt to forget that it is only within considerably less than fifteen years that the writings of Darwin and Wallace have forced upon the greater part of the scientific world the conviction of the truth of the theory of evolution. Prof. Grisebach is a supporter of the older doctrine of the original distinction of species, and of the all but exploded theory of "centres of creation." "Only," he says, "at certain places has the earth disseminated the first germs; but these places were innumerable, and arranged without symmetry, like the stars of the firmament, and each one has the capacity to produce a definite organic formation. Each natural flora is a separate creation, springing from an exchange between its centres of vegetation, and existing independently." This theory seems to us in every respect more cumbrous and less probable than the theory of evolution. It is wanting in that unity and simplicity which commend this latter view of the origin of existing forms of life so strongly; it can at all events not claim to have any more solid foundation of observed facts to rest upon; and it is open to the obvious objection that it is an elastic theory, capable of indefinite modification as our knowledge of facts increases. With each fresh geographical or phytological discovery, the advocate of this hypothesis would be ready to shift his "centres of creation" to any extent. The tendency of scientific thought has inclined of late years strongly in the direction of extending to the whole realm of nature the "uniformitarian" explanation of which Sir Charles Lyell is so distinguished an advocate in geology. It is more in accordance with sound reasoning, it is more consonant with our increasing knowledge of natural phenomena, to believe that the state of things which existed in any past geological epoch was the result of an accumulation, prolonged through an indefinite series of years, of the same causes which we now see operating around us on every side, than that it was produced by convulsions or "cataclysms." The production of Grisebach's "centres of vegetation" would seem to require as violent an interruption of the ordinary laws of nature as the separate creation—according to the Linnean aphorism, *Species tot numeramus quot diversae formae in principio sunt creatae*—of all species as they now exist. Nor does our author offer any hypothesis as to the mode in which the dissemination of the earliest germs (*Ausstreuung der ersten Keime*) took place, or how the germs themselves were produced. It is singular, too, how all opponents of the theory of evolution are compelled constantly to make use of phrases—"relationship," "affinity," and so forth—which would appear to the unlearned reader to admit the truth of the doctrine which they are contesting.

We might urge further objections against Prof. Grisebach's theoretical deductions: but these form after all but a very small portion of the work under review. It is a more grateful task to express once more our sense of the eminent service he has rendered to science by the patient and laborious accumulation of this vast store of facts relating to one of the most interesting subjects which can engage the attention of the philosophic student of natural history.

Alfred W. Bennett.

Notes of Discoveries and Scientific Work.

Geology.

New Cretaceous Birds of North America.—Amongst the many objects of interest brought by the Yale College expedition from Western Kansas are the remains of several species of fossil birds in perfect preservation. An examination of this remarkable find has shown that they represent gigantic swimming birds, probably having their nearest living allies in the *Colymbidae*, but differing widely in many respects from the members of that group. O. C. Marsh, in the *Amer. Jour. of Science* for May, 360, proposes the name of *Hesperornis regalis* for this new bird.

Elephant Remains in Colorado.—In the coarse sand and gravel beds of the Arkansas river in Colorado remains of *Elephas americanus* are not rare. About a year ago two teeth and some bones of this species were found, and quite recently a large tusk, probably of the same species, was disinterred from the same deposit. (*Amer. Jour of Science*, April, 302, and May, 373.)

The Loess in China.—Baron von Richthofen, who has travelled through a great part of China during the last few years, examined the extensive deposits of loess in the province of Shensy, which in some districts attain a thickness of from two to three thousand feet. They are not confined to the great valleys or river basins, but form the slopes of mountains, cap the tops of hills, and in fact cover a considerable portion of the province. This deposit, consisting chiefly of sand and silt with occasionally marly nodules, does not show the slightest sign of stratification, and the few land shells it contains are not rolled. Von Richthofen is not disposed to attribute the deposit to any agency of water or ice, but shows it to be the result of a subaërial action, which up to this epoch was one of the most energetic agencies influencing the contour of this portion of the globe. (*Verh. d. geol. Reichsanstalt*, 1872, No. 8, 156.)

Plant Remains in the Permian Beds of Bohemia.—Eighteen years ago C. von Ettingshausen described the occurrence of remains of plants in the anthracite-bearing shale of Budweis, in Bohemia, and compared them with the flora of the Alpine anthracite formation, which were believed to be true coal measures. D. Stur has published (*Verhandl. d. geol. Reichsanstalt*, 1872, No. 8, 165) the results of his recent researches on the floras of this locality, and of several others in

Bohemia, Moravia, and the Alps. It appears now placed beyond doubt that this abundant flora is of Permian age, and that the flora of Budweis especially belongs most probably to the "rothliegende" (lower Permian). Of the numerous species may be mentioned *Alethopteris conferta*, *Walchia piniformis*, *Odontopteris obtusa*, and *Neuropteris cordata*. It is of interest to note that the beds in which this flora occurs contains in Bohemia anthracite beds and in Moravia graphite.

The Coal Measures of Carinthia.—According to E. Tietze (*Verhandl. d. geol. Reichsanst.* 1872, No. 7, 142) the group of shales, limestones, and conglomerates, usually called the Gailthal beds, in Carinthia, and generally supposed to be carboniferous, represent in part only strata of the age of English and Silesian coal measures, the rest being of a higher horizon. It appears that in the mountains north of Pontafel the whole of the Carboniferous series is represented. The occurrence of *Productus giganteus* indicates the Lower Mountain Limestone series; and by the presence of *Littorina obscura* the lower portion of the coal measures is detected, whilst the occurrence of *Fusulinae* with plant remains determines the upper coal measures. Tietze's observations render it highly probable that the series of conglomerates, shales, and limestones resting on the Carboniferous beds belong to a higher horizon, and cannot rightly be included with what are termed Gailthal beds.

A New Crab from the Vienna Basin.—This new form, which was found in the Leitha limestone of the Tertiary basin of Vienna, is placed by A. E. v. Reuss near *Actaeon* and the living *Daira varcolosa*, but from several peculiarities of proportions and configuration has been made the representative of a new genus, and been termed *Phymatocarcinus speciosus*, Rss. (*Sitzungsber. d. k. Akad. d. Wiss.* lxiii. April 1872.)

The Geology of Queensland.—At the meeting of the Geological Society of London on 24th April, R. Daintree read a paper describing the Geology of Queensland. After directing attention to the scanty alluvium of Queensland with the great extinct fauna of mammalia and the so-called Desert Sandstone, which rests unconformably on Cretaceous beds, the author described the various deposits assigned to the Mesozoic epoch. Mr. Daintree supposes that, contemporaneously with the deposition of a series of marine beds to the west of the great dividing range of hills during the Oolitic and part of the Cretaceous period, a vast lacustrine deposit was accumulated over a large area to the eastward of the range, to which the sea subsequently obtained access. Among the Palaeozoic rocks, the author detects Carboniferous and Devonian strata; the former is represented in Northern Queensland by an extensive coalfield. Devonian rocks extend from 18° S. to the southern boundary of Queensland, and for 200 miles inland. They consist of slates, sandstones, and coral limestones. The upper portion of this series contains an abundance of fossil plants, and of the deposits containing them, those at Mount Wyatt are interstratified with beds containing *Spiriferae*. Gold is found in many parts over the Devonian area, and the author entered in considerable detail into its mode of occurrence there. Metamorphic rocks occur in various localities; and the connection between the presence of certain Trap rocks in these Metamorphic areas and in the Devonian area and the production of auriferous and cupriferous lodes was traced. The volcanic rocks, the author believes, have played a most important part in determining the elevation and present physical contour of North-eastern Queensland; they follow the line of greatest elevation on the main watershed at altitudes of from 1500 to 2000 feet above the sea-level.

Squaloraia polyspondyla from the Lias.—In the *Geological Magazine*, April, W. Davies describes the rostral prolongations of this singular Liassic fish. The two projecting processes from the snout of this fish were regarded by Dr. Riley and Prof. Agassiz as forming a single rostrum; but the author maintains that the upper one is really a cephalic spine analogous to that met with and similarly placed in the male *Chimaeridae*, and that it was employed, as by them, in conjunction with the elongated rostrum for securely clasping the female. Mr. Davies refers to other characters in the anatomy of this curious fish, of which he gives an illustration.

The Quaternary of Sullivan Co. consists, in descending order, of blue and grey clays irregularly stratified with coarse and fine gravel; below these, the same clays with coarse gravel and boulders of granite, gneiss, quartzite, porphyry, with a small quantity of gold, copper, lead ore, magnetite, and garnet; and, under these again, blue and white plastic clay two to five feet thick. The stratified loess, considered to be next in time, contains at Fort Azatcal near Merom, a number of land shells, all of which are identical with existing species now met with in the State, with the exception of *Helix occulta*, which has not been found alive north of Arkansas. (*Second Report of the Geological Survey of Indiana*, 1870, by E. T. Cox; Indianapolis, 1871.)

Physiology.

The Action of Pepsin on Blood Fibrin.—In the last part of *Pflüger's Archiv*, Band v. Heft 8, is a long paper by v. Wittich on the ferments affecting the digestion of the fibrin of blood. The digestive fluid he employed was always the fresh glycerine extract of the minced stomach of the pig, or some other animal; the fibrin used was that of blood which had been immersed in a considerable quantity of a 0·2 per cent. of hydrochloric acid. He concludes from his experiments that fibrin absorbs pepsin very energetically, but that the process of digestion commences with chemical combination, though perhaps of comparatively little stability, of the pepsin with the acid, and that this compound is the really active material. A series of researches undertaken to ascertain the effect of temperature showed that even with a considerable degree of cooling (to below 40° F.) the process of digestion is not entirely arrested, whilst it proceeds with the greatest rapidity at temperatures between 95° and 112° F.; higher temperatures than these appear to retard the action. V. Wittich also finds that for the digestion of a given amount of fibrin definite quantities both of acid and pepsin are requisite; the presence of water is also an essential condition. He maintains that Meissner's *parapeptones metapeptones*, &c. are to be regarded as representing the initiatory stages of the action of the pepsin-containing fluid on the fibrin, and that they are converted into peptone as the action proceeds, though, if the amount of pepsin present be insufficient, they may remain unaltered, the entire process, in fact, being analogous to the change of alcohol into ether by means of sulphuric acid.

Causes of Variation in the Amount of the Gases contained in the Blood.—Drs. Mathieu and Urbain, in a paper contained in the May number of Brown-Séquard's *Archives de Physiologie*, state that they have been able to establish the accuracy of the law, "that in animals maintaining a constant temperature, the quantity of oxygen absorbed by the blood varies inversely with the temperature of the air that they respire." In other words, the amount of oxygen that circulates in the arteries of a vertebrate animal with warm blood is greater when it is exposed to cold, and less when exposed to warmth; and, as a consequenee, all the processes of organic combustion are rendered more active under the former condition, while they are retarded under the latter. They further show that under diminished pressure there is diminished absorption both of oxygen and of carbonic acid by the blood, and *vice versâ*.

The Physiological Value of Alcohol as a Food.—Liebig, it is well known, regarded alcohol as a food, and classed it with sugar, starch, and fat, referring in support of his view to the large amount of carbon it contains, the facility with which it can be oxidized outside the body, and the disposition to fatten observed in those who, though they consumed little food, take much alcohol. During the last few years, however, considerable differences of opinion have arisen in regard to the correctness of these views, chiefly in consequence of the statements of Lallemand-Perrin and Duroy to the effect that whatever alcohol is ingested into the system is absorbed into the blood in an unaltered state, and after traversing the system is sooner or later eliminated by one or other of the excretory organs. This statement has been strongly opposed by the majority of English observers, as by Dupré, Parkes and Wallowicz, and Anstie. The question has again been raised by v. Subbotin, who gives an account of his investigations in the last part of the *Zeitschrift für Biologie*, Band vii. Heft 4. He experimented with rabbits, and after injecting some alcohol of the strength of 29 per cent. into their stomachs, carefully analysed the excretions of the bowels, lungs, skin, and kidneys, with an apparatus placed at his disposal by Prof. Voit. The amount of alcohol eliminated was determined by an indirect method: the alcohol was converted into acetic acid by the action of chromic acid, or of bichromate of potash and sulphuric acid, and after distillation the quantity of acid was easily ascertained. His results indicate that during the first five hours after the introduction of alcohol into the animal organism a by no means inconsiderable proportion is again eliminated by the skin, lungs, and kidneys; that at least twice as much alcohol passes off by the lungs and skin as by the kidneys; while, lastly, numerous considerations showed that his experiments did not show the entire amount of alcohol eliminated. He satisfied himself that in the course of twenty-four hours after alcohol has been introduced into the stomach of a rabbit at least 16 per cent. of it is eliminated either in the form of alcohol or of aldehyde. Dr. Subbotin contends that though alcohol is not a nutriment, it resembles arsenic in diminishing the disintegration of the tissues, and in this way may lead to fattening.

Effects of Extension of the Nerves on their Irritability.—G. Schleich, in the *Zeitschrift für Biologie*, Band vii. Heft 4, records a considerable series of experiments made with the object of determining the effect on their excitability by stretching nerves with various weights, and states that moderate extension of the nerves of the frog, the extending weight being about 40 grammes, causes no material diminution of its excitability; when, however, the weight exceeded this amount, the excitability rapidly diminished. In some instances, slight extension seemed to augment the excitability of the nerve. Muscular contractions were often observed when the extending weight exceeded 30 grammes.

Development of the Lens of the Eye.—D. Sernoff (*Russische kriegsärztliche Zeitschrift*, 1871, and *Medicinisches Centralblatt*, 30th March, 1872) has undertaken a series of researches to determine the

correctness of Kölliker's view that the lens of the eye is a product of the multiplication and modification of the epithelial elements. He pursued his researches on the fowl because in this animal, according to the concurrent testimony of Haller, Baer, and Henle, no *membrana pupillaris* is formed; the presence of that membrane in mammals might readily justify the belief that the capsule of the lens was derived from connective tissue, of which the *membrana pupillaris* consists. He began his observations on the second day of incubation. At this period an inversion begins to appear in the epiblast for the formation of the lens, but there is no opening in the mesoblast, and the lens is not in immediate contact with the eye-vesicle, as Remak maintains, but is separated from it by a lamina of the mesoblast (connective tissue). This lamina also becomes inverted into the cavity of the secondary eye-vesicle with the lens. At the lower border of the eye-vesicle is a thickening of this lamina, which fills it, and was formerly known as Schöler's inversion of the vitreous. On the third day, when the lens is already constricted off, the above mentioned lamina of connective tissue closes over it, and forms the *temporary* capsule of the lens. This was seen, but incorrectly interpreted by Remak. It is not structureless, as he states, but contains scattered nuclei, and exhibits a slightly fibrous structure. From the *posterior half* of the temporary capsule of the lens are formed successively: *a*. the vitreous, owing to a growth of the tissue on the third day; *b*, the posterior half of the capsule of the lens (a layer of connective tissue covering the posterior surface of the lens begins to thicken, and the nuclei originally present gradually disappear, leaving it structureless; this takes place about the fifth or sixth day); *c*. the *Zonula Zinnii* (aided by a condensation of a portion of the vitreous which is situated in the space between the aequator of the lens and the *corpus ciliare*: this occurs between the eleventh and fifteenth days). From the *anterior part* of the temporary capsule is formed: *a*, the cornea; and *b*, the anterior half of the capsule of the lens with the anterior chamber between the two, owing to fission of the temporary capsule into two laminae on the fifth day. There then develops on the posterior surface of the cornea an endothelium from connective tissue cells, which proceed from the substance of the cranial laminae. From the peripheric parts of the anterior half of the temporary capsule the iris grows, which is at first united by its pupillary border with the capsule, but afterwards, on the tenth day, becomes free. The border of the eye-vesicle now projects towards the posterior surface of the iris; from its external layer is developed the posterior pigment layer of the iris, and from its inner the so-called *membrana pigmenti*. It appears, then, that in birds the capsule of the lens is developed from an inversion of the same connective tissue from which Kölliker considered the *membrana pupillaris* to develop in mammals. Sernoff thinks that in mammals both the *membrana pupillaris and* the capsule of the lens are developed from Kölliker's lamina of connective tissue.

Chemistry.

The Transformation Products of Starch.—A paper on this subject was read before the Chemical Society on the 16th May by C. P. O'Sullivan. He finds that, if malt-extract be added to starch paste at 50° C., disorganization immediately commences, and the solution develops a blue colour with iodine. After the lapse of a few minutes, it colours iodine no longer blue, but dark reddish-brown. A few minutes later iodine ceases to strike a colour in the filtrate from the cooled solution. If the digestion be continued, a point is reached when the change is complete. The substance then in solution has a specific rotatory power $[\alpha] = +150°$, or nearly, and gives a reduction of cupric salts corresponding with 65 per cent. glucose; and although the digestion be continued for a considerable time, there is no increase in the amount of reduction. The three substances—soluble starch coloured blue by iodine, dextrin coloured dark reddish-brown by iodine, and dextrin not coloured by iodine—when dried at 100° in a current of dry air, have the composition $C_6H_{10}O_5$, and the same specific rotatory power, $[\alpha] = +213°$. The numbers usually given for the rotatory power of dextrin, + 138°·68 (Béchamp makes it + 176°), are incorrect, the substances employed for the determination having been a mixture of dextrin and sugar, and not pure dextrin. The final product of the transformation of starch by the action of diastase is a sugar having the same composition as cane-sugar and lactose, $C_{12}H_{22}O_{11}$. Its rotatory power is little more than twice that of the former sugar, $[\alpha] = +150°$ $(+74° \times 2 = +148°)$; and it reduces very nearly the same quantity of cupric salt as the latter. Maltose, as the new sugar has been named, reduces only two-thirds as much cupric salt as glucose; lactose reduces seven-tenths as much. The new sugar has not yet been obtained in a crystallized condition; there is reason however to believe that it will be so.

The Influence of Pressure on Fermentation.—At the meeting of the Chemical Society, on the 16th May, a paper on this subject was read by H. T. Brown. The author found that during alcoholic fermentation other gases besides carbonic anhydride are invariably given off. When malt worts ferment, he finds the gas unabsorbed by potash to be about $\frac{1}{100}$ of the total gas evolved, and to have the percentage composition:—

Nitrogen	92·15
Hydrogen	4·85
C_nH_{2n+2}	1·67
Nitric oxide	1·33
	100·00

The nitric oxide is traced to the nitrates of the fermenting liquid, the nitrogen to the decomposition of albuminoids. When fermentation takes place under reduced atmospheric pressure, the proportion of evolved gas not absorbed by potash is found to be considerably augmented, the increase being mainly due to hydrogen; and the oxidation products, acetic acid and aldehyde, are likewise more abundant in the fermented liquid. The author considers that water is decomposed during fermentation, dissociation of the water molecule being favoured by decrease of atmospheric pressure.

To celebrate the fourth centenary of the birth of Copernicus, which falls on the 19th of February, 1873, the committee of the *Copernicus-Vereins für Wissenschaft und Kunst*, established at Thorn, his native town, contemplate preparing a new edition of the *De Revolutionibus Orbium Coelestium*. It is to be an exact reprint of the first and memorable Nuremberg edition of 1543 as regards form and arrangement; and the text will be revised with the help of the original manuscript, which is still in the possession of the Graf von Nostiz-Rieneck. Persons desirous to subscribe for a copy, the cost of which will be one pound, are to make application to the committee before the 1st of June. The reprint is expected to be ready for distribution in January next year.

New Publications.

Balfour, J. H. Introduction to the Study of Palaeontological Botany. Edinburgh: Black.

Becquerel, C. Mémoire sur la Décoloration des Fleurs et des divers Tissus végétaux par les décharges électriques et la chaleur. Paris: Firmins Didot.

Bree, C. R. An Exposition of Fallacies in the Hypothesis of Mr. Darwin. Longmans.

Bruhns, K. Alexander von Humboldt. Eine wissenschaftliche Biographie. 3 Bände. Leipzig: Brockhaus.

Bruhns, K. Atlas der Astronomie. Leipzig: Brockhaus.

Choyer, R. F. La Théorie géogénique et la Science des Anciens. Paris: Lettrielleux.

Dana, J. D. Corals and Coral Islands. Low, Son, & Co.

Hébert, M. Le Néocomien inférieur dans le Midi de la France (Drôme et Basses-Alpes). Paris: Blot.

Heinemann, H. Die Rational-Theorie der Bewegung als Lehrbuch der Hydrodynamik. Hagen: Hammerschmidt.

Höltschl, J. Die Anéroïde von Naudet und von Goldsmid. Wien: Reck.

Koch, F. E., und Wiechmann, C. M. Die Mollusken-Fauna des Sternberger Gesteins in Mecklenburg. 1. Abtheilung. Neubrandenburg: Brünslow.

Lamy, H. Unité de la Matière. Clermont-Ferrand: Thibaud.

Müller, N. J. C. Botanische Untersuchungen. II. Heidelberg: Winter.

Naumann, A. Ueber Molekülverbindungen nach festen Verhältnissen. Heidelberg: Winter.

Smith, R. A. Air and Rain. Longmans.

Philology.

Al-Harîrî's Durrat-alghawwâs. [*Pearl of the Diver.*] Herausgegeben von Dr. H. Thorbecke. Leipzig: Vogel, 1871.

Very few authors of the East are as well known in Europe as Al-Harîrî. He was first introduced into our literature by Friedrich Rückert, who equalled him in the mastership of his native tongue. Of late he has been rendered accessible to the English reader by Mr. Chenery's translation. His *Maḳâmât* or "Sessions" are the most perfect specimens of rhetorical art in Arabic. Although he was not the first who practised it, his "Sessions" may fairly be considered as the foundation of this sort of literature not only in Arabic, but also in Persian, Turkish, and Hindustani. His influence is less remarkable from the fact that numerous writers tried to imitate him, than it is by the fact that he has thoroughly

altered, not to say infected, the style of all prose-writers ever since. Their chief object was not to express an idea, but to write brilliantly. Whilst in Harîrî there is still a rational proportion between form and sense, after him the former has got the preponderance, encroaching upon, and in many cases altogether absorbing the latter. Harîrî is the father of the bombastic phrase which has killed the spirit in literature.

Harîrî was also a philologist. Being as a stylist the starting point of a literary movement, he stands in his quality of a grammarian in the *arrière-garde* of a great period, having no claim to original merits, but distinguished, if at all, by subleties of minute importance. Arabian philology was started about the middle of the second century of the Hejra; it culminated in the third and fourth centuries, and *praeter propter*, A. H. 400, may be considered as the end of originality in this branch. Then begins the period of reproducing, rearranging, and collecting. People wished to supersede and antiquate the older works by compilations of them, and we must lament that their endeavours have been crowned with so much success.

The book, edited by Dr. Thorbecke, was composed with the object of preventing educated people from making blunders of any kind, mistakes in forms, words, and construction. Only the language of Koran, Hadîth, and the ancient poets is classical; anything deviating from their usage is a vulgarism. Without any apparent order the author quotes those faulty expressions, adds his corrections, and tries to prove and to illustrate them from the just mentioned sources. The *Durrat-alghawwâs* (that is, "Pearl of the Diver") is very well written, and more readable than books of this kind generally are. To the main work are appended two chapters, one on synonymics and another on wrong modes of spelling.

Naturally the subject of Harîrî's puristic corrections has quite a different interest for us. What to him is vulgarism, is mainly the organic development of the language. The Arabic of literature has remained unchanged from the times before Muhammad till the present. It is supposed originally to have been spoken, pure and unmixed, by the tribe Kuraish, but as early as the second century people consult indiscriminately the Bedouins as those who spoke the purest language, no regard being had to what tribe they belonged and from which part of the country they came. Immediately after the first expansion of Islâm the Arabs were greatly mixed with foreign elements in the towns. The dialect of common life began in many points to diverge from the rules of the classical language, less in consequence of the intercourse with foreigners than because the Arabic, like all other languages, had to run its course of organic development; *i. e.* deterioration, which progresses particularly rapidly in those times, when radical changes in the life of the nation are taking place. Even the very early grammarians observed this fact and tried to contend against it. To this misunderstood zeal we owe a small literature on the slang of those times, very valuable in so far as it furnishes us the connecting link between the dialects, spoken in our time, and the classical language. There is a great gulf between the two; to fill it up is one of the problems of modern Arabic philology. The means by which this may be effected are twofold; the works of ancient grammarians on slang and works written in dialect, which do not go much further back than the fourteenth century of our era. When these sources shall have been utilized, it will be time for somebody to try to write a history of the Arabic language; though a great many difficulties will still remain to be solved by his own conjectures. The comparative grammar of all Semitic dialects will also derive much light from the same source.

Regarding the individual merit of Harîrî's work on slang we cannot form a very high opinion. The first books of this kind were composed three centuries before him, and ever since this branch of literature had been cultivated. From the materials amassed by his predecessors he has made a rather poor compilation. From a close comparison of the *Durra* with its sources it will, no doubt, be made out that very little original merit is due to him, and that the words in his preface, "And look! I have deposited in it (the *Durra*) all the pith and marrow of choice observations and subtle remarks, which are not to be found in the context of any book" are more grandiloquent than true. It seems, for instance, that the logical and stylistic observations are his own, whilst everything else had already been much more amply treated by others. He seems chiefly indebted to Al'aṣma'î, Tha'lab, and Ibn Ḳutaiba. It has frequently been the case in Arabic literature, that late compilations have been printed instead of their much more valuable sources. Although we are not of opinion that a book, simply because it is older than another of the same contents, must therefore be more valuable, still we must state that experience has led us to observe that (in the period of reproduction) the compilers, however careful and diligent they may seem, almost never have exhausted their sources to such an extent and in such a manner as to render the originals superfluous for us. Al'aṣma'î has been used by later authors more than anybody else, and still his treatises contain many observations which none of his compilers seems to have thought worth while transcribing. It is not our intention to reproach the editor for having chosen the *Durra*, but what we lay stress upon is this, that the sources of the *Durra* are much more valuable than the *Durra* itself; and that, in order thoroughly to utilize this literature on slang, it will be necessary to investigate the works of the predecessors of Harîrî.

Silvestre de Sacy first directed the attention of scholars to the *Durra*, and edited about one third of the whole in his *Anthologie grammaticale*. Since it has been edited at Bŭlak, A. H. 1273 (1856). The edition of Dr. Thorbecke is based upon the Gotha manuscript, which was copied within a century after Harîrî's death (A. H. 516). Besides he has derived much help and useful information from the commentary of Alkhafâjî. The editor has carefully instructed the text with vowel and diacritical points; he has also added various readings under the text and a complete index of words and names. Dr. Thorbecke, well-versed in researches of this kind for years past, has a complete command of the language as well as of the subject, and he has produced a book which is sure to win him the gratitude of all fellow-students. In the preface he has added explanations and corrections. Those mistakes which had eluded the attention of the editor himself, have been corrected by Prof. Fleischer.

It is a great pity that, for reasons which cannot be the subject of scientific criticism, Dr. Thorbecke was prevented from giving a complete commentary of his own. Let us hope that another time circumstances will be more favourable to him and to us. ED. SACHAU.

A Grammar of the Japanese Written Language; with a Short Chrestomathy. By W. G. Aston, M.A.

THE want of such a work as the one before us has long been urgently felt by students of Japanese. The study of a language so far removed in its structure from the European linguistic families must at all times be attended with difficulty, even when trustworthy dictionaries and grammars are ready at hand; how much the more then when each student has been compelled to find his own way through the almost untrodden field of Japanese grammar? Possessed with a

keener taste for scientific enquiry than the Chinese, Japanese scholars have devoted considerable attention to the construction of their language, and numerous treatises on the subject have appeared within the last century. In the work before us, Mr. Aston has embodied the results of a careful study of the most noteworthy of these, and has arranged the information he has thus acquired in an able and scholarly manner.

In common with the Altaic family of languages, Japanese is an agglutinative language, "that is to say, the roots of words suffer no change, and the results which are obtained in European languages by inflection are arrived at in Japanese by the use of separate particles suffixed to the root." With Chinese it has no connection, beyond the fact that at different periods numerous Chinese words have been imported into the language, but these have in no wise affected its essentially Altaic character. The original written language of Japan was alphabetical, and was introduced into that country from Corea, where a similar character is to this day employed; but when, during the sixth century, the study of Chinese, stimulated by the promulgation of Buddhism, became general throughout Japan, Chinese characters were adopted, as affording means for a greater latitude of expression. At the present day these may be read in four different ways. In some cases they possess the value of Chinese words, and in others they serve as equivalents of synonymous Japanese words. Again they sometimes represent the mere sound of Chinese words, and at others the sounds of Japanese syllables. When used in either of the two first capacities, they are described by native writers as *Mana*, or "direct names," and when in either of the latter ways, as *Kana*, or "borrowed names." As may readily be imagined, when literature became more highly cultivated, the difficulty of rendering by *Mana* the native modes of expression and poetical terminations became so great that a more extended use of Chinese characters, in their capacity as mere phonetic signs, came into vogue. The want of system, however, which at first attended their employment in this capacity gave rise to such confusion that it became necessary to adopt "alphabets, or rather syllabaries, known as the Katakana, or (Yamatokana), and Hiragana, or (Idzumo-gana)." Both these alphabets consist of forty-seven syllables, which, in the case of the former, are represented by abbreviated forms of Chinese characters, one side (*Kata*), or "a part," being taken to represent the entire character; while the Hiragana syllabary "is nothing more than abbreviated cursive forms of a limited number of the more common Chinese characters." In the latter syllabary each syllable is represented by several characters, so that the entire number of signs amounts to several hundred.

In modern Japanese writing the three forms of characters, namely, the *Mana*, the *Katagana*, and the *Hiragana*, are invariably used together, thus adding a further entanglement to a language already sufficiently complicated. The difficulty of determining whether the Chinese characters in a sentence should be read as *Mana* or *Kana* is often very great, and is overcome only by the instinct which is the result of proficiency, while the various forms employed in the *Hiragana* are distinguishable only after long and careful practice. The native grammarians divide the words of the language into three classes, namely, *Na*, literally "name," and including the parts of speech known in European grammars as noun, pronoun, and numeral adjective; *Kotoba*, "word," comprising verbs and adjectives; and *Teniwoha*, a word formed of four of the most common particles, viz. *te*, *ni*, *wo*, and *ha*, under which class are grouped the article and prepositions, together with the terminations of verbs and adjectives. This classification Mr. Aston has accepted as according well with the structure of the language, with this difference only, that he subdivides the *Teniwoha* into two classes, uninflected subordinate words and inflected subordinate words. It must be understood that the uses of inflection in Japanese are in no way analogous to its functions in European languages. It has nothing to do with voice, mood, tense, person, gender, number, or case. Its principal office "is to give to the same root the force of a different part of speech, according to the inflection employed." The importance attaching to this use of inflection will be obvious when it is stated that all verbal and adjectival roots have forms in which they appear successively as nouns, adverbs, adjectives, and verbs. "Mood and tense are indicated by *Teniwoha*, or suffixes; person is only occasionally and indirectly intimated by the use of honorific or humble particles; gender is denoted by compounds similar to the English words 'he-ass,' 'she-ass;' and number and case are expressed, if at all, by suffixes or particles distinct from the noun." In common with all languages of the Altaic family, every word in a Japanese sentence which serves to define another word invariably precedes it. "Thus the adjective precedes the noun, the adverb the verb, the genitive the word which governs it, the objective case the verb, and the word governed by a preposition the preposition."

Such are, briefly stated, the leading features of the Japanese language. Through its more minute intricacies we have not space to follow Mr. Aston. On the subject of these we must refer our readers to his book itself, which, if carefully studied, cannot fail to prove a sure guide to an accurate knowledge of the language. ROBERT K. DOUGLAS.

A Dictionary of English Etymology. By H. Wedgwood, M.A. Second Edition. Trübner, 1871–2.

MR. WEDGWOOD evidently belongs to the "old school" of Philology. The two main principles of all systematic etymology—(1) that before comparing two words, they must be traced back to their oldest forms; and (2) that every change of form must be justified by a reference to the known laws of sound change in the language or languages in question — are persistently ignored by him. His method is simply to take a word in modern English, and without troubling himself to ascertain its previous history, to set it down as imitative of the idea it represents, supporting his position with parallels drawn at random from the modern Teutonic or Slavonic languages. "The analogy between sound and movement is nowhere better illustrated than in the origin of *quick*. The radical image is a quivering sound, the representation of which is used to signify a quivering movement, and thence applied to express the idea of life as the principle of movement." He then proceeds to identify it with the German *quiek!* "used interjectionally to express a sharp, shrill sound, as the squeak of a pig." This is extremely plausible, but if we trace back the word *quick* through the Gothic *kvius* to the original *gīwas*, from the root *giw* = "live" (Latin *vivere*, Greek *bíos*), the whole edifice falls to the ground. Mr. Wedgwood then quotes the Danish form *qvæg* and the compound *quægsand*, of which he says that it unites *quick* with *quag* (in *quagmire*), in apparent ignorance of the fact that the change of final *k* into *g* is a regular law in modern Danish, and therefore that his comparison of English *quag* with Danish *qvæg* is as groundless as his connecting *whole* and *hale* with Greek *hólos*—a blunder from which the study of so well-known a work as Professor Müller's *Lectures* might have saved him—and English *bad* with the German *böse!* But Mr. Wedgwood's sins against Grimm's Law are but a small tithe of his offences. Let us test him in the Romance languages. Under *mouse* he says,

"it is singular that the name of so familiar an animal should not have been retained in the Romance languages." It is clear that the reading of Diez's *Grammatik* did not form part of his philological programme, else he could hardly have missed the law so clearly laid down by Diez that all Latin monosyllabic words disappear in the Romance languages, and are replaced by dis- and polysyllabic formations.

The unsoundness of his general principles is only equalled by his inaccuracy of detail. A sound knowledge of the oldest English or Anglo-Saxon is surely an indispensable requisite for an English etymologist, yet even here we find such blunders as *bænce* for *benc*, *lafere* for *lawerce*, *hreosan* identified with *rīsan*, &c. In many cases the Old English form is omitted altogether in favour of the corresponding Icelandic words, with which Mr. Wedgwood makes equally wild work. His Dutch words seem to be chiefly taken from the old dictionary of Kilian, and it will seem hardly credible that he is misled by the old *u* for *v* in *auegaen* (modern *afgaan*) to identify it with the *w* of *awkward*, but such is the fact. He might as well infer from the Elizabethan spelling *uerie* that Shakespeare said *werry* instead of *very*.

These few examples might be multiplied by the thousand, but enough has been said to prove the general untrustworthiness of the etymological part of the work. We will now turn to the Introduction on the Origin of Language, in which Mr. Wedgwood zealously defends the imitative theory. Here, again, his conclusions are generally of little value through his utter want of method and scientific training, yet he has collected a large number of interesting facts, and his criticisms on the mysticism of German philologists, especially on the "ding-dong" theory advanced by Professor Müller, are sound enough. But it is easier to pull down than to reconstruct, and we cannot see that he has done anything to prove the general applicability of his own theory. He has only given a large number of examples, many of which can be disproved by the simple process of tracing them back to an older form. Others, again, such as *cuckoo* and *cock*, are, as Professor Müller has well said, "dead sticks in a living hedge," which by mere accident have displaced the older *geac* and *hana*.

The insuperable obstacles, both phonetic and psychological, there are to the general application of the imitation principle have not been sufficiently weighed by Mr. Wedgwood. If we trace the sounds of the Aryan languages back to their oldest forms, we cannot fail to observe a general tendency to simplification both in the number of simple sounds and the extent to which they are combined with one another. It is certain that in the original Aryan language there were only *ten* simple consonants, *g, d, b, k, t, p, n, m, s, r*, with a correspondingly limited number of compounds. Indeed every analogy leads us to suppose that in a still earlier stage of the language there were no consonant groups at all, and that every consonant was necessarily followed by a vowel. It is evident that under these circumstances the range of the imitative principle must have been very limited. And it must be borne in mind that even the pre-historic Aryan root-words registered in such a work as Fick's *Indo-Germanisches Wörterbuch* are comparatively modern in form, and consequently that, even if a large number of these roots could be explained on the imitative principle, there would be no certainty of the same explanation holding good of the same roots in an earlier form. The second objection is that the most primitive and indispensable words of language are just those which could not possibly have originated directly from imitation: the first object of language must have been to make known the most pressing material wants, such as hunger and thirst, not to call attention to the song of the nightingale, or discuss the ornithology of the cuckoo.

Towards the end of his essay, Mr. Wedgwood wanders off to the interjectional theory, which he somehow contrives to mix up with the principle of imitation. He says that when a Greek expressed surprise with *babaí*, he was *imitating* an instinctive interjection, whereas the truth is that there is no imitation at all in the matter; it is the sound, the interjection itself, which is used to express the idea. When Mr. Wedgwood comes to *papa* and *mamma*, he quotes with approval the explanation of La Condamine, that "they are the first that children can articulate, and consequently those which must in every country have been adopted by the parents who heard them spoken." This is probably correct, but what has it to do with imitation or even with interjection? What natural sounds do the words imitate, or what emotions do they express? None, at least, that Mr. Wedgwood can point out. All this is at the best mere beating about the bush: nursery jargon and imitation run alongside of language proper, but without influencing it appreciably; where language begins, they leave off. The large number of imitative bird-names in savage languages asserted by Mr. Wedgwood is exactly paralleled by their great use of gesture (some tribes of American Indians, it is said, cannot carry on a conversation in the dark), but as language increases in copiousness and precision, the imitation and gesture words drop out, and are replaced by legitimate non-imitative words, founded on some definite function or attribute of the thing named, not on a mere accident of sound.

Before parting from Mr. Wedgwood, we cannot but express our regret that he has not taken more trouble to familiarise himself with the leading principles of philological investigation: a few months at any good comparative grammar might have saved him from nearly all the serious errors he has fallen into, and enabled him to turn his extensive reading to a really profitable account. HENRY SWEET.

Intelligence.

Has Vergil already become one of the great forgotten? Somehow or other this trivial question is one very likely to suggest itself to most readers of a recent article by that acute scholar, Herr Lucian Müller, the well-known author of the treatise, *De Re Metrica*, and editor of we know not how many of the Latin poets. In the current number of the *Rheinisches Museum* he seizes the opportunity of showing up certain errors of Gaisford in his edition of the *Scriptores Latini Rei Metricae*. One of these writers on metre, Marius Plotius, gives the following as an instance of an hexameter with dactyls in the second and fifth places in the verse:—

> "Contemplator item, cum se nux plurima silvis."

So runs the line in Gaisford's text; Herr Müller, however, decides that Gaisford is wrong here, and tells us we must read not *nux*, but *nox*, on the ground that the line is a "manifest imitation" of the Lucretian

> "Contemplator enim, cum solis lumina cumque
> Inserti fundunt radii per opaca domorum."

We can only suppose that Gaisford, in blissful ignorance of literature, imagined Plotius to be quoting from the familiar place in the *Georgics*:

> "Contemplator item, cum se nux plurima silvis
> Induet in florem, et ramos curvabit olentis"—

in which case, in spite of our insular prejudices in his favour, we rejoice to see him receive the castigation he so clearly deserves.

In the *Abhandlungen* of the Royal Academy of Berlin, Professor Weber has lately printed the *Pratijnâsûtram*, a phonetic treatise belonging to the white Yajurveda, with a German translation and a commentary written by Râmaṣarman, in the beginning of the present century. This little manual consists of twenty-seven rules, partly treating of the accents used by the Mâdhyandina school in reciting their Veda, and partly on modifications of the original pronunciation of certain letters, which in course of time had crept in in private Veda reading. Several of these rules are very interesting, showing as they do some of the modifications which the original Sanskrit sounds had already undergone in the common language at the time these rules were framed. To this treatise Professor Weber adds a passage from the *Yâjnavalkyaṣikshâ* on the representation of the various letters by means of certain signs made by the fingers; and some remarks on the symbolical employment of the fingers in Hindu life and literature. He also communicates,

in two appendices, a fragment of the *Pratijnâpariṣishṭam*, a supplement to the same Veda, enumerating its schools and the subjects treated in its Sanhitâ; and an analysis of the *Maṇḍûkâ-ṣikshâ*, another phonetic treatise, of which a MS. has been presented to the Berlin library by Dr. Bühler, of Bombay.

In the monthly *Proceedings* of the Berlin Academy for February, another paper by Professor Weber is published, containing an interesting account of the Indian game of chess, according to a detailed description given of it in the first book, or *Tithitattva*, of Raghunandana's great *Digest of Hindu Law*, which, according to Dr. Bühler, was compiled in the beginning of the sixteenth century. It is well known that the game is mentioned as having originated in India, by Arabic writers as well as by Firdusi, who in the *Shah Nameh* states that it was introduced at the courts of the Sassanian king Nushirvan (A.D. 529–577) by a Hindu, who acted as the ambassador of the king of Canouj. The Sanskrit name of the game is *chaturanga*, originally an expression for the fourfold disposition of an army in foot, horse, cars, and elephants. The late Mr. Bland, in a paper published in the *Journal of the Royal Asiatic Society* for 1852, gave a full and highly interesting account of the various modes of the game and the legends regarding its origin, drawn from various Persian and Arabic MSS..; and on the authority of some of these legends, and the assumed Persian origin of the name for the Rook (*rukh*), he claimed the invention of the game for Persia. Professor Weber now adduces a passage from Halâyudha's *Commentary on Pingala's Chandaḥsûtra*, in which *chaturanga* occurs as a name for "chess," and proves it to have been a game well known in India at that time. The writer is generally supposed to have lived before the end of the tenth century.

Magyar Nyelvör (Nos. II. to V.) fully sustains the promise given by the first number which we noticed in the *Academy* for February 1 (vol. iii. p. 58). Its contents fall into three classes:—First, matter interesting only to students of Hungarian as a living modern language. Such are the corrections of the bad Hungarian found not only in the periodical literature of the country, but also in books written by members of the Hungarian Academy, and even in the great dictionary published under the auspices of that learned body. The mass of Germanisms revealed by the *Nyelvör* is large enough to make any ordinary patriot despair of maintaining the purity of the language. A large proportion of these foreign idioms originate in the numerous translations, generally from the German, made by "New Magyars" more familiar with the language from which than with that into which they translate. The second class of contents consists of materials for a more extensive knowledge of the folk-lore and popular dialects of the Magyars, every number containing hitherto unpublished songs, proverbs, dialectical vocabularies impartially collected from every district between the frontiers of Styria and those of Moldavia. The third class of subjects treated of does not take up so large a space as the two preceding, though of more general interest to philologers. It consists of examinations of old documents, comparison of cognate languages, &c. throwing light on the growth of the language and the etymology of obscure words. Thus Dr. Budenz explains *egyház*, "church," by an obsolete adjective *egy*, or *igy* = "sacred," of which traces are found in a few names of places, *e.g.* Hegykö, in German Heiligenstein, in the county of Sopron.

Orientalists generally will endorse Professor Cowell's eloquent protest against the abolition of the chair of Hindu Law in the Calcutta Sanskrit College (see *Times*, April 15). The native editor of the *Hindoo Patriot* remarks that "nothing could be more shortsighted . . . That is the one branch of Sanskrit study which is of the greatest practical importance to the country . . . . In the Sanskrit College alone is there a chair of Hindu Law, and the venerable Pundit who held it, but whom under the inexorable fifty-five-years rule the Government has lately driven from the service, is the highest authority on the subject. But under the auspices of Mr. George Campbell this only source of Hindu Law is to be shut up."

Mr. Cheyne, of Balliol College, writes to point out that Mr. Poole is in error in supposing (*Academy*, May 15, vol. iii. p. 197) that M. Chabas has given the first explanation of the LXX rendering of Gen. xlvii. 31, ἐπὶ τὸ ἄκρον τῆς ῥάβδου αὐτοῦ, as Dr. Geiger (*Urschrift*, pp, 371, 372) has offered a very similar hypothesis, which at the same time throws light on the Masoretic reading.

We venture to draw the attention of the numerous students of the Greek tragic poets in this country to N. Wecklein's recently published *Studies on Aeschylus* (Berlin, W. Weber), a work which contains a number of very accurate and elaborate investigations concerning Aeschylus' style and diction, a disquisition on the MSS., and detailed discussions of metrical points, with a considerable addition of convincing and many probable, conjectures. The same author has also just published a school-edition of the *Prometheus* of Aeschylus (Leipzig, Teubner).

A very remarkable and thoughtful monograph on the ancient silver-mines of Laurium has just appeared, by Aristides K. Oekonomos, ἐν Ἀθήναις, τυπογραφεῖον θέμιδος.

Contents of the Journals.

Rheinisches Museum, xxvii. pt. 2.—A. F. Näke: On the Theban Tetralogy of Aeschylus. [With a short preface by Ritschl.]—E. Bährens: Critical Notes on the *Panegyrici Veteres*.—K. W. Nitzsch: On the Sources of Herodotus for the History of the Persian Wars. [Shows that Herodotus, in his account of the Persian wars, is not following any previous writers such as Choerilus of Samos, but merely following the popular narratives current in the great houses connected with Pericles at Athens and the royal house at Sparta: just as his earlier narrative depends on the λόγοι of Egyptian and Persian priests, &c.]—L. Jeep: On *Claudianus de* VI *consulatu Honorii*: a contribution to Roman topography. [Discusses the poem as illustrating some points of Roman topography, such as the situation of the Temple of Jupiter Capitolinus and that of the Tarpeian Rock.]—J. M. Stahl: On Thucydides. [Defends the genuineness of Thucyd. iii. 17.]—L. Müller: On Marius Plotius and Nonius.—K. Dilthey: Critical Notes on the Greek Anthology.—J. H. Mordtmann: Unpublished Greek Inscriptions. I.—F. Blass: The Poem of Simonides in the *Protagoras* of Plato. [Another reconstruction of the fragments.]—F. Ritschl: On the Literature of Plautus. III. [Draws attention to an extremely interesting letter of Camerarius.]—C. Wachsmuth: Δρύμιαις and Δρύματα.—K. Lehrs: The Opening of *Odyss.* i. and *Odyss.* v.—On Plato.—W. Teuffel: On Horace.—Erotemata philologica, &c.

Journal of the Bombay Branch of the Royal Asiatic Society. vol. ix. No. xxvii. — On some Sanskrit Copper-plates found in the Belgaum Collectorate; by J. F. Fleet. [A Devanâgarî transcription is given of nine copper-plate grants in the Hala Canarese and Kâyastha characters, which contain two different lists of Kâdamba princes, hitherto unknown. The writer inclines to the opinion that they preceded Mayûravarmâ, who is the first in Sir W. Elliot's *Genealogy of the Kadambas*, and probably reigned about A.D. 580–600.]—The Shrine of the River Kṛishṇâ at the village Mahâbaleṣvara; by Râo Sâheb Viṣvanâth Nârâyan Mandlik. [An account of this shrine, sacred to the river Kṛishṇâ, is here given. Another shrine at the same village, which is sacred to Mahâbaleṣvara, the writer takes to be much more modern, and established after the model of the very ancient shrine of Mahâbaleṣvara at Gokarṇa, in North Kânarâ.]—Some Further Inscriptions relating to the Kadamba Kings of Goa; by J. F. Fleet. [Seven more grants, mostly in the Canarese character. They show that the residence of these Kadamba princes was neither Bânavâsî nor Halsi, but Goa, Sanskrit Gopaka.]—Report on Photographic Copies of Inscriptions in Dharwar and Mysore; by Dr. Bhau Daji. [Accounts of fifty-seven inscriptions, mostly Canarese, contained in a photographic work published by the Committee of the Architectural Antiquities of Westeru India. They relate to the Châlukya, Yâdava, Kulachuri, Kadamba, Gupta, Ratta, and Singha dynasties.]

The Pandit, vol. vi. No. 71 (Benares, April 1).—The *Śabdakhaṇḍa* of the Chintâmaṇi; with a Commentary. [Continued.]—The *Gopâla-lîlâ*, a poem by Râmachandra [concluded; Books 18 and 19]; with a *résumé* [upasaṃhâra].—The *Viddhaṣâlabhanjika*, a drama by Kavirâja Râjaṣekhara [continued; the first part of the fourth act.]—Sanskrit text and English translation of the *Vidvanmanoranjinî*, a commentary on Sadânanda's *Vedântasâra*; by Râmatîrtha. [Continued; by A. E. G. and G. D.]—Supplement: Catalogue of Sanskrit MSS. [Continued: Vols. 67–72 of the *Dharmaṣâstras*.]

New Publications.

ANTHOLOGIA PALATINA. Ed. Fred. Dübner. Vol. II. Paris: Didot.

BERNHARDY, G. Grundriss der griechischen Litteratur. Dritte Bearb. 2. Th. 2. Abtheil. Halle: Anton.

BHÂMINÎ-VILÂSA, Le; texte sanscrit, publié avec une traduction et des notes, par A. Bergaigne. (9ième fascic. d. la Bibliothèque des Hautes-Études.)

BOUCHÉ-LECLERCQ, A. Placita Graecorum de Origine Generis Humani. Paris: A. Franck.

MÉLANGES ASIATIQUES tirés du Bulletin de l'Acad. impériale des Sciences. Tom. vi. livr. 3 et 4. St.-Pétersbourg.

WEBER, A. Ueber ein zum weissen Yajus gehöriges phonetisches Compendium. Das Pratijnâsûtra. [Berlin Academy.] Berlin: Dümmler, in Comm.

The contents of the *Journal asiatique* and *Götting. gel. Anzeigen* were by an oversight placed in our last number under the head of Theology.

ERRATUM IN No. 48.

Page 187 (*b*), line 4, for "one" read "our."

POSTSCRIPT.—We have received as we are going to press a full Report of the Meeting of Philologists at Leipzig, from our Special Correspondent; which we regret to be compelled to postpone for a fortnight.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 50.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, July 1, and Advertisements should be sent in by June 26.

General Literature.

GERMAN MEDIAEVAL LITERATURE.

Deutsche Classiker des Mittelalters: mit Wort- und Sacherklärungen. Begründet von Franz Pfeiffer. Zwölf Bände. Leipzig: Brockhaus, 1866–1872.

Deutsche Dichtungen des Mittelalters: mit Wort- und Sacherklärungen. Herausgegeben von Karl Bartsch. Erster Band. Leipzig: Brockhaus, 1872.

ONE of the best and most thoughtful of the students of German literature, whose work on that subject is constantly appearing in fresh editions, the late Vilmar, truly said that there was one man above all others who possessed the imperishable merit of having fed and fostered with all his strength the growing taste for the treasures of old German poetry; this man was Friedrich Heinrich von der Hagen. Gratitude for what he accomplished in this field is the more incumbent on us at the present day as his merit is to a certain extent overshadowed by the progress of later researches, which naturally and inevitably supersede his. This is undeniably the case, as every student of old German literature is aware; for the long series of patient enquirers from von der Hagen to Pfeiffer and Bartsch have been unweariedly exploring its rich veins, and they have learnt to separate the pure ore from the dross surrounding it more perfectly than formerly. Nevertheless, the poetical productions of the German past remained inaccessible to the mass of readers who could make no use of even excellent critical texts, encumbered as they were with innumerable variants, and destitute, in spite of all the difficulties they presented, of every explanation of either language, meaning, or subject, which were consequently only available for the small class of professional students. To the cultivated majority all this body of poetry remained unknown, because the language was unintelligible. The *Nibelungenlied* was a solitary exception, in having penetrated by the help of translations to every level in the German people, whilst it had also become known to the other nations of Europe. The reason of the pleasure everywhere taken in this poem is to be found simply in its subject and spirit, which, even in translations, seize the reader with an irresistible power. It is, therefore, an exaggeration when Pfeiffer, the founder of the present collection, and editor of the first volume, observes in the preface to it: "The spirit of the past is only very imperfectly represented in translations; it is quite impossible to translate a Middle High German poem even tolerably into Modern High German; the thing cannot be done unless we sacrifice with ruthless hand its fairest bloom and fragrance, and what remains is at best a pallid copy of the original work." This remark is thoroughly inapplicable to translations like Simrock's of the *Nibelungenlied*, which has gone through twenty-four editions, and reaches a fresh one nearly every year, and to various other excellent translations of the same poem, such as the one by Bartsch, who, since Pfeiffer's death, has edited the *Deutsche Classiker*, and evidently has shown that he does not share Pfeiffer's opinion on this point. Even mediocre translations may produce a powerful effect if the original is sufficiently valuable, as, to quote a single example, Wieland's translations of Shakespeare produced upon Schiller; and there is some truth even in Voltaire's assertion that the real value of a poem cannot be certainly determined except by rendering it into prose and observing if it retains its power; Charles Lamb's *Tales of Shakespeare* readily suggest themselves as an illustration. If we consider, too, how many excellent translations of poetry there are in nearly every literature, we feel at once that Pfeiffer was carried away by zeal for his own projected undertaking into a rash assertion; for the early German language and literature is no exception to the rule, and has at least as much affinity with modern German as that has with Greek or Sanskrit. Of course, to know the ancient poetical literature of Germany—or of any other country—so as to appreciate its inner nature and its most delicate peculiarities, the reader must acquaint himself with the originals, and the value and merit of the present editions is that they make these originals accessible to everyone who knows German. They presuppose readers who have no knowledge at all of ancient German, and the explanatory notes on the text consequently include every unusual word or grammatical form, instead of only noticing words which are not to be met with in the literary language, or of which the meaning has changed. For greater convenience the notes are placed at the foot of the page, the first time a phrase occurs in the book; as a rule they are not repeated afterwards; but that there may be no difficulty in referring back to the necessary note, there is a special table at the end of each volume of all the words that have been explained. Besides single expressions, all the difficult passages and constructions are explained by paraphrases; the substance of the text receives various illustrations; and, lastly, detailed summaries precede the separate lyrical poems and the sections under which the larger epic compositions are arranged, so that the connection of thought in the former and the course of the narrative in the latter case are both clearly brought out and the difficulties of interpretation reduced as much as possible in this direction also. The necessary clue to Middle High German metre is not wanting (though it is a question whether two-and-twenty pages is not more than is necessary for the general public), and the introduction to each poem discusses, at more or less length, according to circumstances, the life and times of the author, and the substance and bearing, literary, historical, mythical, or otherwise, of his work. It is evident, therefore, that every educated student of modern German, whether foreigner or native, may acquaint himself in these editions with the originals of the masterpieces of early German poetry, at a very trifling expenditure of labour. All the difficulties are cleared up by a series of writers who, like Professor Franz Pfeiffer, of Vienna, Professor Karl Bartsch, of Heidelberg, and their not less deserving colleagues, are taken from amongst the most accomplished students of early German.

A sufficient testimony to the opportuneness of the undertaking is to be found in the number of editions reached by most of the works of the series, which forms twelve volumes in all, though they can be bought separately. The first volume, containing the works of the famous lyric poet, *Walther von der Vogelweide*, which first appeared in 1866, reached a second edition in the following year, and by 1870 the two editions of nearly 4000 copies were exhausted, and,

after Pfeiffer's death, a third, superintended by Bartsch, made its appearance. That the poems of Walther should find that number of readers in the original language shows how widely these convenient editions must have circulated amongst the ordinary educated public (for the really learned cultivators of the study are to be counted by hundreds at most); and this notwithstanding the unavoidable difficulties of the original and the success of four editions of a very good translation by Simrock. The remaining eleven volumes contain the following poets and anonymous works: II. *Kudrun;* III. *Das Nibelungenlied*; IV.–VI. *Hartmann von Aue;* VII. VIII. *Gottfried von Strassburg;* IX.–XI. *Wolfram von Eschenbach;* XII. *Erzählungen und Schwänke* ("Tales and Jests"). The writers all belong to the first half of the thirteenth century, that is, to the golden age of old German lyric and epic poetry; and as they are more or less fully discussed in every history of the literature of the middle ages, I shall only notice a few points of detail.

With regard to Walther von der Vogelweide, the importance of his poetry to us lies, at least as much as in its intrinsic merit, in the glimpses into the political, ecclesiastical, and social conditions of his time which it affords; accordingly, a literature, abundant even to satiety, as Gervinus says in the last edition of his *History of German Poetry*, has grown up about him, and many various and extensive researches relating to his life and poems have been published, since the new epoch marked by Uhland's work on Walther in 1822, over and above simple translations and editions of the text. The subject-matter for such researches is not scanty, for besides the tender emotions of the heart, which are duly honoured by his muse, he was possessed by a much stronger and deeper passion, love of the Fatherland, for which no heart ever beat more truly. His voice was raised in defence of the honour of the emperor and the independence of the empire from foreign and illegitimate influences, and his most glowing strains sounded the praise and glory of Germany. In return for the favour of the Emperor Frederick II., who entrusted him with the education of his son Henry, he was always ready to assist his master with counsel or action, either exhorting him with words of encouragement not to succumb to the difficulties of his position, or detecting and denouncing the treacherous intrigues of the princes of the empire; or, again, with the generous daring of a man convinced of the justice of his cause, reviling the reprehensible and ruinous policy of the Roman court. An example of his *Sprüche* ("Political Poems") may be welcome, so we have chosen the following on the See of Rome. He compares Pope Innocent III. with Gerbert, afterwards Sylvester II. (999–1003), whose knowledge of natural history and mechanics caused him to be suspected of proficiency in the Black Art. But Gerbert (who, according to the legend, was carried off by the devil) only destroyed his own soul by his sorceries, whereas the present pope involves the whole of Christendom in his fall:—

> "Der stuol ze Rôme ist allerêrst berihtet rehte
> áls hievor bî einem zouberaere Gêfbréhte.
> der gap ze valle niwet wan sîn eines leben:
> sô will sich dirre und all die kristenheit ze valle geben.
> wan rüefent alle zungen hin ze himele wâfen
> und frâgent got, wie lange er wolle slâfen?
> sie widerwürkent sîniu werc und velschent siniu wort:
> sin kameraere stilt im sinen himelhort,
> sîn süener roubet hie und mordet dort,
> sîn hirte ist z' einem wolve im worden under sînen schâfen."

"The chair of Rome is only now right well filled, as heretofore by the sorcerer Gerbert: he, however, gave to destruction nought but his own one life, but this one will destroy himself and all Christendom. Why do not all tongues call to heaven, wo! and ask God how long He will sleep? They (the pope and his party) work against His works and falsify His word: His treasurer (the pope) steals from him His heaven-hoard (the treasure of divine grace); His peace-maker (the pope, who ought to make peace, to pacify) robs here and murders there; His shepherd is become a wolf amongst his sheep."

This is certainly very vigorous language, and its application is not limited to Walther's age, any more than that of the next saying, addressed to the higher clergy of Germany and Italy, and beginning with the words—

> "Ir bischov' unde ir edelen pfaffen, ir sît verleitet.
> séht wie iuch der bâbest mit des tievels stricken seitet!" &c.

"Ye bishops and ye noble prelates, ye are led astray. See how the pope holds ye fast with the devil's meshes!" &c.

These specimens will be enough to raise the wish for a more intimate acquaintance with Walther.

We need say nothing of the *Nibelungenlied*, as the subject is sufficiently well known; in this collection it is edited, together with *Kudrun*, by Professor Bartsch. The latter, which has been called the *parhelion* of the *Nibelungenlied*, though less tragical than it, is likewise a powerful heroic poem. Its chief subject is the many combats attending the rape and recovery of Kudrun, a king's daughter in North Germany. This legend, of which the original substance is derived from Teutonic mythology, was known to the Anglo-Saxons, for the *Complaint of Deor* (eighth century) refers to one of the chief characters in it, the bard *Heorrenda* (in *Kudrun* called *Horant*); the same legend had been preserved, though with considerable alterations, in a Norse song on the Shetland Islands until last century.

The poems of Hartmann von Aue are edited by Professor Fedor Bech; they contain the epic narratives *Erec* and *Iwain*, both based upon old British legends, which may be illustrated out of Lady Guest's *Mabinogion* (*The Lady of the Fountain* and *Geraint ab Erbin*), though these versions are by no means among the most ancient; *Gregorius*, a mediaeval Oedipus legend, for Gregorius, without knowing it, marries his mother, but nevertheless, after long penance, is made pope; *Der arme Heinrich*, a legend, of which the source is unknown, telling the history of a leprous knight who is cured by the loving self-devotion of a young maiden; lastly, the *Songs and Booklets*, of which the first are love-songs, whilst the latter contain a monologue on love, and a dialogue between the body and the heart, on the question, which is the chief cause and which the chief sufferer from an unfortunate love. "Hartmann shows a rare mastery of style in all his works; no early German poet has equalled him in this respect, and none has thought out the subject of his epic poetry so thoroughly as he does."

The *Tristan* of Gottfried von Strassburg treats the same subject as the old English *Sir Tristrem*, edited by Sir Walter Scott, though there is no comparison between the poetical value of the two compositions. That of Gottfried possesses a gracefulness, an artistic beauty equalled by no other romantic poem of mediaeval Germany; in no other is there such a wonderful spiritual harmony between matter and form. We miss in this poet, it is true, the perfect simplicity and dignified clearness of his contemporary and model, Hartmann von Aue, and he is far from attaining the earnest moral severity and grandiose elevation of his opponent, Wolfram von Eschenbach, but he stands alone and unrivalled in the easy flow of his language, in pretty and ingenious playing upon words, thoughts, or images, and in the magically seductive and fascinating art of soul portraiture. This is the well-founded verdict of the editor, Professor Reinhold Bechstein, and it harmonizes completely with what other competent critics have said of Gottfried, whom even his contemporaries admired, praised, and imitated. In spite of particular objections, Gottfried, whose native town is now German once more, "is to be held in honour as one of the most eminent poets to whom Germany has given birth, and as a true classic of our ancient literature." The

ancient British framework of the Tristram saga is to be met with in nearly all parts of Europe; we find it in Provence, in Spain, in Italy, in Scandinavia, even in Bohemia, only not in Greece, as has been said by different historians of literature, and as even Bechstein seems to believe. The error probably owes its origin to Grässe's *Lehrbuch einer Literärgeschichte*, &c., vol. ii. part 3, p. 205, for the passage there quoted, "von der Hagen, *Minnes.* vol. iv. p. 607," only says that there is still in existence a Middle Greek rhapsody, taken from the legendary cycle of Arthur and the Round Table, in which Tristram appears as one of the chief knights of the Table; which is of course quite a different thing from this being the subject of an independent Byzantine poem.

We come next to Wolfram von Eschenbach, "universally admitted to be the deepest thinker and the most powerful of all the courtly narrative poets of mediaeval Germany. He alone has attempted to make the highest problems which agitate the human breast into a subject for epic poetry." With these words the editor, Professor Bartsch, begins his introduction to Wolfram's *Parcival* and *Titurel*, of which latter poem only fragments still remain. Both belong to the Grail cycle of legends, and to those Bartsch gives the necessary references, though enquiries into the origin of the legend are so far from being at an end that they have not hitherto led to any definite result. Oppert, for instance, whose essay on *Prester John* I noticed in the *Academy*, No. 17 (vol. ii. p. 122), in an excursus on the Grail, maintains that belief in its miraculous properties was derived from those which were popularly ascribed to Coral. Paulus Cassel (*Der Graal und sein Name*, Berlin, 1863) sees in the Grail and the food which it dispenses the *panes gradiles* of imperial Rome spiritualised, and so become a symbol of the Last Supper, and similarly *alii aliter*. *Parcival*, as Bartsch remarks, is a psychological epos, showing the inward development of man, as Goethe's *Faust* does in a dramatic form; like *Faust*, it is amongst the hardest of poetical works, and the more so since Wolfram's education was of the scantiest, scarcely coming up to the average standard of his time, so that the great soul, which is struggling to express itself, often finds a difficulty in attaining its purpose, and this occasions an obscurity of language which was made a reproach to him even by his contemporaries. Bartsch has done everything that was possible to reduce this obscurity, and the grateful reader will be able to judge by the few remaining doubts of the extent of his obligations to the editor. Still it cannot be denied that considerable patience, goodwill, and scientific zeal are needed to master all the difficulties which surround Wolfram's great spiritual epic, and that the *Tristan* of Gottfried von Strassburg will always be much more attractive than the *Parcival* to the majority of lovers of poetry.

The last volume of this collection contains *Erzählungen und Schwänke*, selected and edited by Professor Hans Lambel. These poems are the work of a tendency which we do not meet with until the full bloom of the popular and court epos has begun to fade, that is, towards the middle of the thirteenth century. They are, however, in the highest degree interesting and instructive, and they may attract, by their shortness, many readers who might be deterred from venturing upon the greater works. In any case, they form a suitable preparation for the study of early German literature in the original language; besides being connected by their substance, whether serious or jocose, to that cycle of fiction which, since the middle ages, has spread from the East into every part of Europe, and has penetrated so far into every section of society. Variously reproduced in prose and verse, they procure us a degree of insight into the real life and circumstances of different classes which the earlier poems, that do not leave the realms of imagination, are far from affording, and they are therefore at once amusing and instructive. From amongst the vast number of versified tales of this kind, Professor von der Hagen published a whole hundred in his *Gesammtabenteuer*, and Lambel has selected nine, in which these qualities are especially evident. The first is called *Der Pfaffe Amîs*; the author, who had also produced a considerable number of such minor poems, was known as *Der Stricker*, "The Knitter," probably from the occupation of his ancestors. He here relates a series of swindling tricks played by an English priest (apparently from some place upon the Thames) in the course of his wanderings in different countries, after which he returned home, was made abbot, and died in the odour of sanctity. The narrative has probably an English original, but it has not yet been indicated. References, however, abound for the history of the single pranks of the priest, and may be found in Kemble, who also discusses *Der Pfaffe Amîs* in his book, *The Dialogue of Salomon and Saturnus, with an Historical Introduction* (London: printed for the Aelfric Society, 1848). I may mention, in addition, that the first question put by the bishop to the priests, how much water there is in the sea, for which Kemble refers to Chaucer's *Second Merchant's Tale* (*The History of Beryn*), is also to be found in *Syntipas*, in *The Seven Viziers*, in the *Mischle-Sendabar*, in the *Life of Aesop* by Planudes, and in Plutarch's *Conviv. Septem Sap.* (c. vi.). *Der Meier Helmbreht* ("Farmer Helmbrecht"), by Werner the Gardener, depicts in the most lively manner the circumstances and incidents of life amongst the villagers of Bavaria and Austria, as (we gather from other contemporary accounts) they either were or may have been in the middle of the thirteenth century. This poem may be looked upon as one of the most interesting in early German literature, but I cannot refrain from regretting that another short poem, *Der Weinschwelg*, "The Tippler," was excluded from this collection on account of its not being in narrative form, but descriptive of the growing delight and growing powers of an invincible toper, as he drains glass after glass. It is a masterpiece of its kind, though unluckily the end is wanting, in which the drunkard fastens on an iron coat of mail lest his belly should burst, but perhaps in the end the coat of mail itself burst. Gervinus, speaking of this poem, observes "that there is nothing more disgusting than solitary swilling, and nothing so contrary to the proper destination of wine, to open the heart and heighten the common rejoicings." He adds, indeed, that the art of the poem is so admirable that one overlooks the ugliness of the subject, but he has himself overlooked the fact that there is nothing in this remarkable poem (as I shall show in detail elsewhere) to indicate a solitary toper, so that his reproach against it on this account appears to be unfounded. But to return to the volume under discussion. *Der Wiener Meervart* ("The Voyage of the Viennese"), by Joyless, the name assumed by the poet, represents a company of tipsy citizens of Vienna, who begin to roll, and therefore imagine they are on board ship, and a storm is driving them hither and thither, so that they make great disturbance in the inn, and when they have slept off their carouse have to pay handsomely for all the damage they have done. The oldest form of this story is in Athenaeus (ii. 5, p. 37), where the scene of the adventure is Agrigentum in Sicily. I will end with the *Herzemaere*, "The Tale of the Heart," by Konrad of Würzburg, who is also known by other poems. This is the story of the lover of a noble lady, who, dying in the Holy Land, charges his squire to embalm his heart and bear it to her in a golden casket. When he is near her castle, her husband meets the messenger, takes the

casket from him, and makes his cook prepare the heart and place it before his wife. When she hears what she has eaten, she says that after tasting such precious food she will never eat again, and dies of a broken heart. The legend belongs to a very widely spread group, which is well known from the tragic fate of the Trouvère of North France, Reignault, chatelan of Coucy, and the lady of Fayel, and of the Troubadour Guillem de Cabestant. Of course this volume, like all the rest, is provided with introductions and other necessary explanations.

I have here briefly indicated the contents of this whole collection, and I trust that what I have said of it may help to procure it a friendly reception from those who, out of Germany, may wish to study the classical productions of our early literature without serious labour to themselves. In Germany, as has been said, these volumes met with such speedy and universal acceptance that another enterprise of the same kind has been begun. The centuries immediately before and after the classical period of early German literature present a series of poems which well repay a more careful examination, in spite of their inferior perfection. They stand to the bloom or noonday of that literature in the same relation as the first dawn of spring or morning and as a mild autumn or the afterglow of evening. Accordingly Professor Bartsch has undertaken, in the second of the above named collections, *Deutsche Dichtungen des Mittelalters*, to publish the most considerable of the poetical productions of these two periods, which offer some entirely new features; for the gradual rise of the healthy middle-class spirit of later times, which appears in the *Erzählungen und Schwänke*, and lends a fresh charm to poetry, enlarges the intellectual horizon by the introduction of didactic and satirical subjects, while the drama develops itself into a characteristic, truly popular form. Amongst the works proposed to be published are *König Rother*, Lamprecht's *Alexander*, Freidank's *Bescheidenheit*, Ulrich von Lichtenstein's *Frauendienst*, *Reineke de Vos*, &c., poems to the importance of which every history of German or of general literature bears witness. The plan of the new collection, in which Bartsch is assisted by the same eminent scholars as before, and by others, is nearly the same as that already described, except that the explanations of the meaning of words are less frequently given in the body of the work, while the glossary at the end is fuller. The first volume has already appeared, and contains *König Rother*, edited by Heinrich Rückert. It is preceded by a very valuable introduction, which, however, by comparison with the *Deutsche Classiker*, may be thought to go too much into details uninteresting to the general public. Rückert has forgotten what the former editors always bore in mind, that these editions are not intended for the learned classes, but for persons who will take less interest in acute but prolix researches into the rise and history of a given poem than in a concise account of the results arrived at; he also demands from his readers too exact an acquaintance with the heroic legends of Germany. It might also have been thought that Pfeiffer's essay, above noticed, on the pronunciation and versification of Middle High German in general, would be enough to satisfy the curiosity of the general reader, and that Rückert's twenty-four pages on the special metrical and linguistic peculiarities of the poem edited by him run the risk of being skipped even by those whose thirst for knowledge is strong enough to lead them to wish to read it in the original. But I may perhaps be mistaken as to the intention of this second collection, for it almost seems from the footnotes as if they were designed to lead the way to a more precise and thorough study of the early German language and literature.

Felix Liebrecht.

Leighton's Works. Five Volumes. Longmans.

There are mountains and mountains, and there are mystics and there are mystics: it is only in Worcestershire that Malvern would pass for a mountain, and we might miss the real mystical elevation of Leighton if we did not look up to him across the dead level of eighteenth-century pietism, over which he towers with a modest dignity and sober grace to a really considerable altitude. An objective standard to measure spiritual force is unattainable and undesirable, and so far as an approximation to it is possible, it will be found not in a comparison of the heroes of the spiritual life with one another, but in a comparison of each with his surroundings. The real grandeur of a mountain depends quite as much upon its steepness as its height. These considerations are peculiarly relevant when we try to estimate the writings and character of a man like Leighton. His circumstances were unfavourable to the utmost exaltation of positive attainment, but they favoured both his reputation and his influence. In fact, it might almost be said that his life and his memory were the creatures of accident; or, rather, we should say that his lofty earnestness was a guarantee that he would be something, and that his simplicity left it to Providence to determine what. This union of receptivity and independence gives him an interest unique in its kind. A Covenanter who understood and practised the piety of the counter-reformation, an archbishop whose largeheartedness fascinated Doddridge, a humanist to whom Seneca was "the moralist," as Aristotle was "the philosopher" to St. Thomas and the Schoolmen, an enthusiast who before Coleridge sought the Platonic salvation in the Calvinist conversion—with so many attractions it is not wonderful that, though he is a spiritual writer, he should keep his place among the classics of an unspiritual literature. Indeed to mention this at all among his distinctions sounds like an anticlimax, though he divides the honour, for what it may be worth, with so great a name as Jeremy Taylor. He is like the—

> "Western cloud,
> All billowy-bosomed; overbowed
> With many benedictions, sun's,
> And moon's, and evening star's at once."

Of course, under the circumstances, it is difficult to tell what is the real natural colour of the cloud, and one can only conjecture that it must be a very pure delicate neutral grey: men are more individual than clouds; but Leighton's individuality is of a sufficiently neutral description: the only characteristic that is left when we have exhausted the generalities of saintliness is a sweet, wistful, importunate unearthliness. It is not that he is pining for the glories of heaven: though he speaks much of them, it is only to complain that we do not really desire them, to confess that we cannot imagine them; he has nothing of the fiery passion of mystics like St. Augustin or St. Theresa, nothing even of the hushed glow of the author of the *De Imitatione*, still less anything of the delicious dreamy fever of such writers as Herbert and Vaughan, who, one is tempted to think, found the pains of home-sickness pleasant enough. Leighton is one of the clearest and most practical of writers: one of the most reasonable, if we grant his premises; one of the most plausible, if we differ from him upon first principles. To borrow a distinction of Dr. Newman's, we might say that Leighton gave a "real assent" to the doctrine of the evil of the world that now is, while his assent to the doctrine of the better world to come, though it was given very heartily, and though it occupied very much of his thoughts, was only "notional" after all. He reminds us of one of the fathers of the desert who had a great reputation for wisdom, though he would never speak on any subject but the infirmities and

difficulties of monks. Of course all mysticism tends necessarily to a depreciation not only of ordinary knowledge, but of the intellect itself, but this depreciation may be either positive or relative; the intellect may be cultivated in order to be exhausted before it is transcended, and this is the tendency of mystics like St. Augustin and Swedenborg; or it may be neglected altogether, and this is the tendency of mystics like St. Francis and Boehme; or it may be disciplined and yet despised, dismissed as an unprofitable servant, before its work is begun, and this is the tendency of mystics like St. Bernard, and the author of the *De Imitatione*, and Leighton. This temper, as we see in St. Bernard, may be compatible with the very highest degree of practical ability, with the most unfailing courage, with the readiest intelligence; but it is not only the refinement and repose of the strong, it is also the deliverance and support of those who, without it, might be weak. As we look at Leighton's clear, soft, bright face, we feel that magnanimity and solidity were hardly his natural virtues. His life was a failure as far as influence or usefulness go, and he was not a man to console himself with either a high reputation or an easy conscience. He worked for many years as minister of Newbottle, and we do not read that he regenerated that highly favoured parish. He worked as Professor of Divinity at Edinburgh; he formed a few pupils like Scougal, now forgotten; otherwise he left the university as he found it. He worked as bishop and archbishop, and he did not pacify the Covenanters or save the episcopal establishment; all he achieved was to get his clergy to agree in synod to vague good resolutions; then in another synod the resolutions were renewed; by the third synod Leighton was reduced to write hopelessly and beg they might be acted upon. He postponed his own ordination till he was thirty, because he had noticed that others began to preach too soon and went on too long. When he was meditating the resignation of his see, he apologized, in what was meant to be a farewell letter to his clergy, for troubling the synod with such a trifle. He might almost seem to have taken his own measure accurately. His real success was in the writings which he constantly refused to publish; which he desired to have destroyed: and though these bear witness to his ineffaceable distinction, they bear witness to his limitation too. Not only do the same thoughts, the same phrases, the same quotations repeat themselves from one work to another, but in the *Commentary on St. Peter*, the work by which he is best known, whole pages are repeated with scarcely a variation. The explanation is obvious. Leighton only wrote for edification; he brought in what he considered a useful idea or a telling sentence as often as there was a chance of its producing its effect. He had such a predilection for the First Epistle of St. Peter that he delivered his course of lectures on it more than once, and this is the reason that it is so much the most voluminous of his expository works; either he or some admirers ran the MSS. of the successive courses into one, without a thought of suppressing the repetitions. When a man has his mind full of a limited number of thoughts, it is very much a matter of accident which passage of a book will remind him of one or other of them: and this is always Leighton's method as a commentator; he simply uses his text as a kind of multiplying mirror to reflect from a number of different points the light that is burning within him. This makes him one of the most capricious of expositors, and, in one sense, one of the least satisfactory. He accumulated in his youth a stock of knowledge which was certainly remarkable, but he lived upon it without increasing it; we should hardly be surprised to find that after he was settled at Newbottle he read nothing but his Bible and his commonplace-book. He puts away everything that he can as a superfluity, and he positively resents anything like controversy. It would be unjust to call him a latitudinarian writer, but anyone who in an age of disputes indulges his impatience to place himself and keep himself at the centre of the narrowing circle of the undisputed is really doing the work of the latitudinarian whom he anathematizes. One reason why Leighton gave way to this temper so readily was, that opinion with him was so much a matter of obedience that it was really an impossibility for him to develop anything that a sturdy partisan could recognise as an honest manly conviction. This is the explanation of his position in the ecclesiastical politics of the time; he did his duty as he understood it under both the presbyterian and the episcopal establishment; and he endeavoured to convert and edify souls under both, without ever quite believing in either. Probably, though his belief in the Covenant was never more than second-hand, it was at one time less hesitating than his preference for episcopacy ever was. But he soon saw that the work of reformation was to be the triumph of a political party, not the elaboration of individual character; he was disenchanted, and the intolerable pretensions, the insane, tyrannical pedantry of the sincere Covenanters, completed the work. Leighton found himself, like most other sensible men, in the ranks of the moderate party, which was managed by Shairpe, a clever, generous man of business, rather indelicate than unscrupulous. If Shairpe was the support of this party, Leighton was one of its most conspicuous ornaments: the court had not made up its mind whether it wished or expected to rely upon energy or conciliation, but the latter alternative was the pleasantest; and if anybody could conciliate, it would be a man like Leighton, who combined the charm of cultivated fervour with the charm of ascetic gentleness. It was inevitable that a bishopric should be pressed upon him: he had really no reason for declining except humility, and he was allowed to escape with the smallest and poorest. It gives the measure of his docility—perhaps we may say, of his scepticism—that he submitted to receive episcopal orders as deacon and priest with much less resistance than Shairpe, only stating his personal opinion that his presbyterian orders were valid so far as they went. He soon found that the character of Shairpe, who was headstrong, though not inflexible, and the vindictive passions of the selfish cliques which had the ear of the government, destroyed any chance there might have been of verifying a plausible theory to which he inclined—that a sort of modified episcopacy, with a synod to prevent a bishop from browbeating the clergy, and a bishop to prevent the synod from tyrannising over the laity, was upon the whole the system likely to work with least friction, and therefore with most edification. He found himself almost exactly in the position of an ecclesiastical Falkland converted to a cause whose success it was impossible for him to promote, and almost more impossible for him to desire. Falkland, at any rate, had the consolation of esteeming and pitying Charles; he might hope for a soldierly death if a manly life were out of the question; but Leighton had to work with Lauderdale, and as he had no enemies, could not hope to be shot like Shairpe. It only remained for him to retire and spend his old age in spiritual conversation, in occasional ministrations, in the daily occupation which took up more and more time, "of dressing and undressing his soul." He died as he had wished, in an inn, a stranger and a pilgrim to the last upon the earth where he used to say it was beyond angelical obedience to live for ever. He was on a journey to London, in the interest of an unsatisfactory nephew: he was unmarried himself, and lived after he resigned his see with a widowed sister-in-law, who scolded him for his pro-

fuse charities, and asked him if he supposed he could have given away so much if he had had children of his own; he replied, "I know not how it would be; but I know how it ought to be—'Enoch walked with God, and begat sons and daughters.'"

There we have the whole man with his timid, wistful, rapturous unearthliness which, as has been said, seems to give the keynote of his writings. Their real value is that they illustrate a character which may have lessons, which has certainly a fascination even for those who do not care to acquire it, though it is only the last who can hope to understand it. The main outlines of that character as they strike an outsider have been sketched already. Perhaps the most curious of the minor traits is his hankering after the Vulgate; he can never refuse to comment upon its rendering when it has a distinct set of associations, though he does not attempt to vindicate its superior accuracy. This is the more remarkable because he rejects with some disdain, not only the legend of the Three Kings, but also the mystical explanation of their gifts, which is found in almost all the fathers, and because he repeats the commonplace objections to popery with an air of calm conviction which is strange in a man who had learnt so much from papists. On the other hand, he uses St. Bernard and the *De Imitatione* as if the chasm of the Reformation had never yawned between: in many ways his whole turn of mind is mediaeval and scholastic, which shows itself in a taste for thinking by means of etymologies, a point of contact between him and Coleridge (it should be noticed that the etymologies are very fairly accurate). Other traits in his strictly theological writing may be marked in passing. He discouraged more and more decidedly, as he grew older, the craving for "assurance," which is always the crowning doctrine of pure and vital Calvinism, and he emphatically refused to answer the challenge in which all controversy tended increasingly to issue by producing a list of "fundamentals." Perhaps his pleasantest, though not his greatest, works are his academical addresses. The two most remarkable things in them are, first, the persistency with which he represents Christianity exclusively as a discipline of blessedness (and here he coincides with Locke, who escapes from scepticism by maintaining that God has given in Christ πάντα πρὸς ζωὴν καὶ εὐσέβειαν); and, secondly, his readiness to use the Neo-Platonists as authorities for the end, while denying them all knowledge of the way. Perhaps if he had maintained this exclusiveness throughout, he would not have committed himself to the Stoical precept of trying to fancy how we should bear trouble before it comes, though he is aware that at best there is something unreal in any victory that can be gained over imaginary antagonists.

We shall look forward with great interest to Mr. West's *Life of Leighton*, for which he has collected fresh materials; and even the existing materials have never been adequately used. Much might be done even from internal evidence to elucidate the very curious problem of Leighton's relation to the Catholicism of the Continent; and Mr. West's illustrations from the devotional literature of the counter-reformation, and from the Platonic pietists of the seventeenth century, show that he is on the right track. Perhaps, as this is the first edition in which anything except edification has been aimed at, we ought not to complain that much is still left for future commentators in the way of tracing both the extent to which Leighton borrowed from others, and the extent to which he repeated himself. It is to be regretted that the theological prepossessions of the editor have led him to ignore the great contemporary Scotch mystic, "sweet Samuel Rutherford," who deserves his name in spite of unmistakable narrowness and occasional coarseness. Of Leighton's own career as a Covenanter, Mr. West speaks with laudable moderation; and one new view of considerable importance is put forward: many sermons are assigned, on internal evidence, to the periods of Montrose's campaign and Cromwell's domination, which had hitherto been assigned to Leighton's episcopate. The theory is ingenious, and a very little additional evidence, which perhaps the *Life* may contain, might make it certain. G. A. Simcox.

LITERARY NOTES.

Charles Lever, the indefatigable novelist, has died at Trieste, in his 67th year, prematurely, we might say, judging from the unabated vitality and buoyancy of spirits evidenced in his latest works, though viewed as the author of *Harry Lorrequer* and *Charles O'Malley*, our surprise is, perhaps, rather to find that he has not been with us longer. They belong to the boisterous, inorganic type of fiction, of which Smollett is the great representative; and though they can still be read with amusement, their humour requires to be supplemented by a virtuous consciousness, that one is studying in them an instructive phase in the history of light literature. Lever became popular as a painter of Irish character, and yet no successful novelist ever troubled himself less about character, properly so called. He could tell one good story after another so volubly as to keep up an unbroken chuckle from the first chapter to the last, which stood in lieu of a coherent plot, while his heroes fell in love and out, and won and lost fortunes and battles neither he nor they much cared how or why. But unity of purpose, action, or conception, were not natural to his novels, and when he changed his style, a quarter of a century ago, it was because a fine tact warned him that, for better or worse, the public taste was no longer what it had been. His least successful and characteristic works belong to this period, when he aimed at constructing an ordinary novel of incident without a thoroughly congenial or inspiring motive. In 1858 he became vice-consul of Spezzia, and about that time he hit upon a new vein, which, with varying but considerable success, he continued to work until his death. Instead of the rollicking, happy-go-lucky Irishman of his early works, his hero is henceforward a deep diplomatic conspirator, generally belonging to an obscure nationality, but exercising as mysterious a sway over the fortunes of Europe as any of Mr. Disraeli's magnates. This new type is not more faithful to nature, nor of more permanent artistic value, than the wild Irishman of whom the public had got tired; but Lever's knowledge of the travelling Briton, who is at once his butt and his public, his unflagging spirits and lively invention, which disguise the essential sameness of his subject, were quite enough to account for his fresh success. Without being profound or veracious, he was almost always readable, and it does not detract from his merit that he attained this result by trifling with such contemporary foibles as a taste for ethnological "questions."

The *Cornhill* reprints the substance of a paper read before the Royal Geographical Society in March, by W. G. Palgrave, giving an account of his travels in North-East Anatolia, in 1870, with special reference to the traces of glacial and volcanic action, and to the unexplored mineral riches of the country.

A paper by B. Delbrück, on German Rhyme, in *Im Neuen Reich* (May 31), traces the change from alliteration and assonance to regular rhyme to the growing disposition to place the accent on the root syllable. The Greeks did not use rhyme, because their accented syllables were higher in pitch, not louder or more emphatic. Classical Latin eschewed rhyme for the very reason that recommended it to the barbarian clergy; rhyming syllables were plentiful, but they were mostly terminations, and therefore empty and insignificant. Italian and the other Romance languages do not derive the full benefit from the use of rhyme for the same reason, and English is even richer than German for poetical purposes, because the disuse of case-endings, &c. leaves so many words reduced to one accented significant root syllable.

The historical *Kreisverein* of Swabia and Neuburg—a society which devotes itself to collecting and bringing to light documents bearing on the history of domestic manners rather than political and military operations—has just published a curious *Tour in the Netherlands*, by a military chaplain, in 1651, found in MS. in the library of Augsburg, and containing very lively pictures of the state of things during the Thirty Years' War.

Dr. J. A. Messmer writes to the *Allgemeine Zeitung* (June 1) to announce the discovery of the bronze gates of Byzantine workmanship belonging to the ancient basilica of St. Paul at Rome, which were supposed to have disappeared since the church was nearly destroyed by fire in 1823. The gates, which have been preserved in the adjoining Benedictine convent, are uninjured, and will be restored to their proper place when the church is rebuilt.

The death of F. Gerstäcker, the well-known traveller and *littérateur*, is announced, together with that of Julius S. v. Carolsfeld, the early colleague of Cornelius. The fate of Hippolyt Schaubert, also lately deceased, should be considered by those who believe that there are better tests than popular favour for discovering and rewarding literary merit. In 1867 a prize was offered by Friedrich Halm (Freiherr v. Münch-Bellinghausen) for the best comedy, and was won by *Schach dem König*, the work of an unknown police clerk. Scandal said that the adjudicators believed that they were crowning the work of Rudolf Gottschall, but even if the mistake was made, it was still sufficiently flattering to Schaubert, who "woke and found himself famous." Unfortunately, neither the critics nor the public were induced by this *quasi* official triumph to believe that all the past, and, still less, all the future, works of the poet were titles to immortal fame. Some of his smaller comedies had a complete success, but apparently rather in spite than because of the higher ambitions which he had been led to entertain.

Art and Archaeology.

THE PARIS SALON, 1872.

THE reaction of events, the depression and fatigue of the general mind, make themselves felt sensibly enough in the current official exhibition of the French arts in the Champs Élysées. The formal revival is spirited and complete; the universal resumption of artistic activity and production is nothing short of amazing; but it is none the less true that the activity seems to carry marks of deterioration and distress, and the production seems mostly of impaired quality or unsatisfactory kind. In a word, it is not a good Salon, and can scarcely be thought good, except in the eyes of such as are sworn *à priori* to official admiration of whatever may be the results of the last new *régime*. That the new *régime* of the Fine Arts in Paris—by which, pending the future of emancipation and private initiative which we are assured is in store for them, the Fine Arts are laid more strictly under State control and regulation than ever—that this *régime* has done much immediate harm to the exhibition can perhaps hardly be demonstrated. Artists rebel, and justly, against the change of rule which puts the election of the annual jury into the hands of those exhibitors only who have already won prizes or decorations, instead of the whole body of exhibitors as heretofore. That is a rule evidently tending to officialism, fogeyism, academism—the principle, call it what you will, which is not unknown under another system nearer home, and which is apt to exclude or repress the efforts of originality and manifestations of the younger artistic mind. And the aspect of the Salon this year is by common consent "official"—unoriginal, with a few ambiguous exceptions, of which anon. Still, one does not hear of any specially unjust or notable exclusions, except that of Courbet out of intestine vindictiveness, and that of two painters of war scenes—one of them excessively skilful—under foreign pressure. The abstention of J. F. Millet, the foremost European painter (and poet) of country life and sentiment; of Stevens, the greatest master of tone and texture in modern interiors; of Bonvin, the strongest of the younger school of still-life painters, and of more notorious masters such as Gérôme and Meissonnier, is due to different causes; but a French exhibition of to-day from which these painters have abstained, and which contains no remarkable new appearance, while it excludes a painter so powerful in his art as Courbet, and so instructive even in his perverse extremes, must needs be a comparatively tame and unattractive one.

It is scarcely worth while to chronicle the more or less fully accomplished inanities, whether according to the voluptuous, the elegant, or the severe routines of traditional practice, which occupy upon the walls a space quite out of proportion to the attention they command. The "Cigale" of M. Lefebvre, a regulation nudity with blue-black hair and almond-shaped eyes (destined, we believe, for the English market), may count as a leading example of the first class, and save the mention of a hundred other nudities and more, varying only in the forms and attitude of the model, little or not at all in sentiment and significance. One other only, "Le Sommeil," by M. de Gironde, a pupil of Gleyre and Bonnat, may be noticed as a *début* of vigour and promise in its way, quite unconventional in treatment, and really rich in colour and handling. The second or elegant convention finds its leader in M. Bouguereau, with a life-size woman-reaper whetting her scythe, and an idyllic harvest party—both perfectly unreal and full of graceful vapidity and nicely trained artifice; unless indeed a more distinguished name were chosen, and the perfectly feeble and characterless "Giacomina," a costumed portrait of Cabanel, were pointed out, as one of the least fortunate of its painter's efforts. Then there are large "Temptations of Christ" which nobody looks at; large mythologies of "Herakles with the Hydra" (Bin, 143), and "Nessus with Deianira" (Tillier, 1454), which are not good either; an ambitious allegorical "Fortune" of M. Sirovy, which is showy and well-placed, but destitute alike of taste and imagination; an immense "Massacre of the Innocents" by Gustave Doré, invented with some power and originality of that now rather threadbare order which we know so well, coloured and carried out with even more than his usual disagreeable technical incompetence. Upon the whole, we note a considerable tediousness and decrepitude in all the higher, the more ambitious, manifestations of the painter's art; nothing which can be said to belie the exhaustion which one has long traced growing upon both the romantic impulse in serious French figure-painting which starts from Delacroix, and the classical impulse which starts from Ingres. On the other hand, the realistic impulse, which finds its central embodiment in Courbet, is not fairly represented; and M. Jules Breton, who has done some such tender and touching, although unequal, work in the realists' especial field of rural life and labour as they are, leans this time unfortunately to a weak and scarcely sincere convention. Both his pictures seem too large for his strength; the colour of their cold foliage-greens and cold drapery blues or violets is unpleasant, and the modelling and design of the peasant-girl figures, nearly life-size, is neither very frank nor very correct: it is not a good year for M. Breton, in spite of his conspicuousness. M. Manet, the well-known and much-contested talent who represents in an extreme form, and with an executive bravura which is his own, the logical doctrines of the more violent realists—modernists—has no figure-piece in the Salon; only a sea-view, with the fight of the *Kearsage* and *Alabama*; the deep blue-greens of the sea, the blacks of the ships' hulls and smoke, the tones of the sky, are seized with a forcible precision, and struck upon the canvas in rough traits which disguise a good deal of real subtlety, both in colour and drawing, under a wanton manifestation of slapdash. Richness and pleasantness in the actual management of paint are things sought by few French artists; and among these few M. Bonnat has a right to count; but in the clever Oriental piece, "Cheiks d'Akabah," he exaggerates this aim, and makes an excessive impasto cover real defects of thoroughness, a strained monumentalism of arrangement and composition serve instead of real dignity of drawing. Very much better, and powerful both in character and colour, is his portrait of an old woman of the Basque province (163). M. Gérôme finds an imitator, if not a substitute, in his pupil Lecomte du Nouÿ, whose picture of a Pharaoh receiving evil tidings, of which he imperturbably decapitates the bearers one after another, has a good deal of the master's power and accuracy, as well as more than enough of his cynical imagination and cruelty. A second (and this time a draped) "Sommeil" on a large scale—it is a young mother and child solidly painted, with rich coloured reddish and greenish coverings—has to be noticed as a first and considerable success by a pupil of Gleyre, M. Eugène Lecadre.

Turning to decorative ideals, the "Idylle" of M. Henner and "Espérance" of M. Puvis de Chavannes furnish two very opposite kinds of example. M. Henner is an Alsatian artist almost as well-known for frigid academical composition as for charming and spirited portraits of children which do not look as if they could be done by the same hand: this "Idylle," however, is neither one nor another, but a little classical dream of two naked women by a well on a hill slope, conceived in a fresh and simple spirit, and not only well drawn, but charmingly painted in an original key of pearly colour. M. Puvis de Chavannes' work is always flatly tinted, more in the manner of tapestry decoration than of oil-painting; he has a refined sense of colour, and a certain fanciful rigidity and archaism which remind one of some English contemporaries; this "Hope" is not a successful example. M. Ernest Aubert may be remarked, with his "Fil rompu," as a fair follower in the decorative path of Hamon; also the "Eve" of M. Laurent Bouvier. One of the very good pictures of the year, in a direction rather English as one would say, is the "Heure de la Marée" of M. Billet; a Normandy sea-side, with the fisher population among their beached boats inspecting and collecting the haul; very pleasant colour and spirit in the men, women, and children, with nice oppositions of rosy cheeks and blue jackets, and a quite natural and unforced sense of life, movement, and sea-swell.

Genre-painting, says current criticism, and not history-painting, is the strength of this year's Salon. Yet it does not contain much that is really remarkable in the way of *genre*: there is M. Caraud, of course, with his clever soubrettes in costume; there are some, but not many, of the followers of Alfred Stevens. The three names that I should be inclined to select in this field are the little known ones of M. Léon Saunier, whose two little out-door lady groups are painted with some discordance of tone, but with an extreme delicacy of drawing and expression, and a charming adjustment in their backgrounds of landscape; M. Claude, who sends the best Rotten Row scene of any that has been attempted—it is quite small, but catches admirably the pictorial effect and sentiment of the scene—and a careful and brilliant little interior, "l'Antichambre," with a lady and dog; lastly, M. Chenu, who has caught some provincial bourgeois types with great spirit and accuracy, and set them to drive a-visiting in a sunny weather, of which he renders the effect admirably. So is M. Jules Héreau's "Omnibus Station at Batignolles" an excellent piece of its kind.

There remain the class of war pictures, the class of landscape, and the class of portraits (and the sensation of the year has been made by a great pair of portraits): these, together with the sculptures, must be reserved for another number.

Sidney Colvin.

ART NOTES.

Under the title, *Histoire de l'Ornement russe du Xe au XVIe siècle*, a work is in course of publication which is of considerable importance in a special department of art. It consists of a collection of initials and other examples of ornamental design selected from Byzantine and Russian MSS. and printed in colours. The collection is arranged in chronological order, and accompanied by an explanatory and historical text. The Russian government, besides contributing a considerable sum towards the expenses of this very costly undertaking, has subscribed for 500 copies. Two hundred only come into the market, and may be procured from A. Morel, Paris.

In the present number of the *Zeitschrift für bildende Kunst*, Dr. Engelmann continues his valuable notice of the recent excavations in Pompeii and Herculaneum; Professor Conze contributes a notice of an early Christian sarcophagus discovered at Salona, and now placed in the museum at Spalatro; and Carl Klaus concludes his paper on the contemporary school of sculpture in Dresden.

M. Léopold Flameng, who is well known by his excellent work in the *Gazette des Beaux-Arts*, has undertaken to illustrate a forthcoming edition of Victor Hugo's *L'Année terrible*.

The first part of Lübke's *Geschichte der deutschen Renaissance* has now appeared. After an introductory chapter, the author passes into the description of the commencement of the new style amongst the painters and sculptors of the sixteenth century, and closes with an analytical examination of German Renaissance architecture. The next three numbers will treat of the now remaining monuments arranged in topographical order. It is expected that the entire work will be out before the end of the year.

The exhibition of the competitive designs for the German Houses of Parliament was opened at Berlin on May 2. There are fifteen English competitors, amongst whom we find the names of Gilbert Scott, Godwin and Edis, Kerr, Emerson, Turner of Dublin, W. W. Robertson, S. Williamson, and others. The accepted plans, we now learn, are those of an architect of Gotha; Mr. Gilbert Scott and Mr. J. Scott being bracketted second.

The miniatures of the Allègre collection were sold on May 14 and 15. A very fine miniature, on vellum, by van Blarenberghe (signed and dated 1763); 30,100 frs. The subject was the "Foire de Saint-Germain."—Collection Sampayo: An oval miniature, on ivory, by Hall, representing the artist's wife, sister, and child; 19,000 frs.—Sainte sale and collection Daugny: Oval miniature, on ivory, by Fragonard, the portrait of a boy in harlequin's costume; 3320 frs. A small round miniature, on ivory, by Hall, in a gold locket, the portrait of the celebrated Sophie Arnould; 2120 frs. Miniature portrait of the no less celebrated Mdlle. Du Thé, by Augustin; 4300 frs. "Le Triomphe d'Amphitrite," and "La Toilette de Venus," by Charlier; 6850 frs.—Collection Hope: Oval miniature, by Sicardi, "Harlequin and Columbine"; 6020 frs.—We find that the best of the Roëll-Hodshon collection will find its way to England. Sir Richard Wallace is said to have been the principal purchaser. To him fell the gem of the collection, the "Interior of a Church," by Emanuel de Witte, the price of which, 29,700 gulden, can hardly be considered out of the way, though it is perhaps ten times as much as any picture of de Witte's ever before reached. Sir Richard also became the possessor of the fine "Wooded Landscape," by Hobbema; of the "Boeren Binnenhuis," by L. Bourse (dated 1556); and of the very fine female portrait by Netscher. This last went for the very moderate sum of 660 gulden. A far inferior example of the same master, "Four Children on a Balcony," was bought by Mr. Holloway for the absurd price of 16,610 gulden; but he acquired a first rate van de Velde, of his early period, "Still Sea, with Ships," for 14,550.

The new number of the *Jahrbücher für Kunstwissenschaft* (May 10) opens with a series of corrections and amplifications to the *Cicerone* of W. Burckhardt, by Dr. W. Bode. Travellers using the *Cicerone* as a guide-book (and for travellers in search of art it is the best and indeed the one guide-book) will do well to furnish themselves with this appendix; and such an appendix, by so well qualified a hand as Dr. Bode's, might usefully be repeated at intervals. The necessity for correction lies rather in re-arrangements or new discoveries of works of art—sometimes, unluckily, in their decay—than in original errors or oversights of description. Florence, where so much has lately been done for the preservation and exhibition of treasures, takes naturally the largest place.—The same review contains a discussion of W. Schmidt on the signatures and attributions of doubtful pictures in the galleries of Munich and Schleissheim, and a chapter of *Holbeiniana* by the same writer, going minutely over the much trodden ground, and deciding on the whole for the date 1517 instead of 1514 (which, is the question) as that of the elder Holbein's departure from Augsburg.—But the most important piece in the number is the set of unpublished documents in relation to the building of the cathedral at Siena, drawn by Mr. Charles Eliot Norton from the archives of the city, and here printed by him with a running commentary. The eight documents run from 1260 to 1388, through the greatest prosperity of the city down to its decline, and the consequent abandonment of the scheme for turning the existing cathedral into the transept of a vaster new one, which resulted after the devastations of the plague in 1348. They constitute as complete and minute a picture as exists, both in spirit and detail, of the mode in which the great monuments were undertaken and carried on by the civic bodies of the middle ages and their workmen; and Mr. Norton's observations are thoroughly luminous and intelligent.

Apropos of the completion of Theodor Grosse's frescoes in the Leipzig museum, Herr Max Jordan, the German translator of Crowe-Cavalcaselle, takes the opportunity of giving (*Im Neuen Reich*, 22) an essay on the art and history of fresco-painting generally, justly enough claiming for his countrymen since Overbeck and Cornelius the credit of having stood alone as revivers of the pure practice—*buon fresco*—and ranking Theodor Grosse as one of the most distinguished of their successors. The artist has filled the vaulted divisions of a hall of moderate dimensions with an abundance of mythological, allegorical, and historical inventions—the successive incidents of the Mosaic Creation, the Birth of Eve, the Fall, the Expulsion, Michael overthrowing Satan, the Four Great Seers of the Old Testament; elsewhere Eros and the Graces, Imagination riding upon a Sphinx, the Fates, the Virtues, Egypt representing Architecture, Greece, Sculpture; Italy, Painting; and Germany, Music.

The *Chronique des Arts* relates the improvement made in the arrangements of the local museum at Orleans since the appointment of its new director, M. Eudoxe Marcille, the distinguished amateur who, with his brother (director of the museum of Chartres), possesses by inheritance the choicest as well as the largest extant collection of the French masters of the eighteenth century.

The snuff-boxes and bonbon-boxes of the Allègre collection have been sold at the Hôtel Drouot with great success, at prices ranging from 4,000 to 25,000 francs.

In a pamphlet recently published at Vienna, entitled *Eine Studie über chinesische Emailvasen*, M. Lippmann, its author, traces in an interesting manner the art and manufacture of Chinese pottery, from the days of the Shang Dynasty (1743–1112 B.C.) to comparatively modern times. Native archaeologists have devoted much time and labour to the exploration of the same field, and the existence of numerous works on the subject, notably the *Po-koo-too*, in sixteen large volumes, and the *Se-tsing-koo-keer*, in forty-two folio volumes, attests the scholarly and imperial interest taken in this branch of antiquarian research. From both of these works M. Lippmann has drawn much of the valuable information contained in his pamphlet, and from their numerous illustrations he has reproduced a few engravings of typical specimens of the art. But M. Lippmann has also studied the art in Europe, and is thus enabled to furnish us with a considerable amount of original matter. In common with other writers, he looks upon "chinesische Emaillerie als Tochter der byzantinischen Emailkunst."

Music.

THE WAGNER FESTIVAL AT BAYREUTH.

Bayreuth, May 22.

It is now scarcely ten years ago since Wagner, in the preface to his dramatic version of the *Nibelungen Saga*, first hinted at the possibility of having his great work performed by the voluntary assistance of his nation. The chances of such an enterprise were at that time the most unfavourable that could be imagined. Although the success of Wagner's first three operas, wherever they had been adequately performed, was an undeniable fact, still his more advanced ideas of the fundamental reorganization of the music-drama had found so little responsive sympathy amongst the German nation—if such a nation could be said to exist at all—that the utter derision with which Wagner's appeal was received by the hostile press seemed but too well justified.

Amongst the causes which have removed all these obstacles and now assembled a crowd of enthusiastic admirers at Bayreuth, I would mention—besides the irresistible power of his genius as realised in the successive works of Wagner—the great political events of the last two years, in which the various German tribes, so long divided by internal animosities and party struggles, have at last recovered the feeling of solidarity. For a philosophic people like the Germans there soon arose the necessity of symbolizing the newly recovered political unity in a work of artistic import; and it was therefore only natural to see the best amongst the nation turn towards the purest sources of old Teutonic inspiration as Wagner has embodied them in his grand dramatic work. The master's call therefore for the means necessary to secure a worthy performance of his Nibelungen drama was responded to with a most promising willingness; and it was the laying of the foundation-stone of a theatre to be erected for the purpose that had assembled the friends of Wagner from all parts of the world.

I shall not intrude upon your space with a description of the ceremony, which proved a failure because of a most pertinacious rain, nor of the banquet, the horrors of which from a culinary point of view would be scarcely realisable to the English mind. The programme of the concert which formed the most interesting feature of the Bayreuth festival consisted only of the Ninth Symphony of Beethoven, preceded by Wagner's *Kaisermarsch*, the latter being chosen mainly as a representative embodiment of German national feeling. With great tact Wagner had refrained from entering into competition with Beethoven's gigantic work, and concentrated all the energy of his mind in the service of doing justice to the great teacher's aspirations. At the same time the choice of Beethoven's Symphony in D Minor was the most appropriate that could be made on this occasion, because it forms as it were the foundation of the great development of modern German, and especially of Wagner's own, music. The principle of this new phase in art, as the present writer has expressed it on former occasions, is the demand for a poetical basis of music; that is to say, a latent impulse of passionate inspiration which guides the composer's hand, and the conditions of which are in themselves by far superior to the demands of music in its independent development. The rules arising out of these demands are in the Ninth Symphony violated, indeed completely overthrown, with a freedom of purpose and grandeur of conception that can be explained only from Beethoven's fundamental idea as it gradually rises to self-consciousness in the words of Schiller's ode *An die Freude*. In his celebrated programme to the Ninth Symphony, which Wagner wrote five-and-twenty years ago, he has interpreted Beethoven's poetical intentions by illustrative quotations from Goethe's *Faust*, connecting in this way the two greatest works that German genius ever conceived. He there declares this symphony to be the struggle of the human heart for happiness. In the first movement this longing for joy is opposed and overshadowed by the black wings of despondency. In the plaintive notes of the orchestra we hear the sad burden of Faust's words:

"Entbehren sollst Du, sollst entbehren."

The second movement, on the other hand, with its quick and striking rhythmical formation, describes that wild mirth of despair which seeks respite and nepenthe in the waves of physical enjoyment. The trio again might be considered as a dramatic rendering of the village scene in *Faust*. The adagio, with its sweet pure harmonies, appears after this like a dim recollection of former happiness and innocence—

"So sad, so strange the days that are no more."

In the fourth movement at last Beethoven leaves the limits of his own art entirely. The repetition of the main motives of the foregoing movements, always interrupted by the tremendous recitative of the double basses, is absolutely unexplainable from a purely musical point of view. It is the highest effort of dramatic characterization instrumental music has ever made, and seeing that it has reached the limits of its own proper power, it has to call the sister art of worded poetry to its aid. Beethoven has done this in a way "in which," to speak with Wagner, "we do not know whether to admire more the master's bold inspiration or simple *naïveté*." To the grand choral piece which follows, the words of Schiller's ode form the best comment. It is obvious how the introduction in this way of words as the necessary complement of musical expression even at its climax of perfection became the stepping-stone to the further development of poetical music as we discern it in what is generally called the "music of the future." It is equally clear that it requires more than the common intellect of the general run of conductors to grapple with the intellectual (not to speak of the musical) difficulties of such a work. Hence there is scarcely another composition in existence which has been injured so much by the traditional routine of musical philistinism. I candidly confess that, although I have heard the Ninth Symphony at least three score and ten times, I never quite understood its wonderfully grand and harmonious structure till to-day. Wagner indeed seems the born interpreter of this monumental work of musical genius. With a wonderful power of congenial receptivity, he conceives the grand intentions of his master Beethoven, and moreover he is in a most eminent degree a conductor. It is difficult to say what are the mysterious conditions of musical leadership; they are certainly nearest akin to the qualities of a great military commander; and one

can only agree with good old Emperor William, who, himself entirely innocent of musical knowledge, said after Wagner's late performance of Beethoven's C Minor Symphony, at Berlin, in his homely way: "Now you see what a good general can do with his army." It is indeed one of the most interesting sights to see the immediate *rapport* established between Wagner and his orchestra as soon as he raises his baton. Each individual member, from the first violinist to the last drummer, is equally under the influence of a personal fascination, which seems to have much in common with the effects of animal magnetism. Every eye is turned towards the master; and it appears as if the musicians derived the notes they play not from the books on their desks, but from Wagner's glances and movements. I remember reading in Heine a description of Paganini's playing the violin, and how every one in the audience felt as if the virtuoso was looking at and performing for him or her individually. A gun aimed in the direction of many different persons is said to produce a similar illusory effect; and several artists in Wagner's orchestra and chorus assured me that they felt the fascinating spell of the conductor's eye looking at them during the whole performance. Wagner in common life is of a rather reserved and extremely gentlemanly deportment; but as soon as he faces his band, a kind of demon seems to take possession of him. He storms, hisses, stamps his foot on the ground, and performs the most wonderful gyratory movements with his arms; and woe to the wretch who wounds his keen ear with a false note. At other times, when the musical waves run smoothly, Wagner ceases almost entirely to beat the time, and a most winning smile is the doubly appreciated reward of his musicians for a particularly well executed passage. In brief, Wagner is as great a virtuoso on the orchestra as Liszt on the pianoforte, or Joachim on the violin.

The result of this masterly performance of the Ninth Symphony will, we have no doubt, be a very beneficial one, the more so as many of the most eminent artists and conductors of Germany were present amongst the audience or performers. We mention only the names of Messrs. Riedel and Swendsen from Leipzig, Cornelius from Munich, Richter from Pesth, and Dannreuther from London. The solo-quartett consisted of Messrs. Niemann and Betz and Mesdames Lehmann and Jachmann-Wagner.

To judge from the energy of Wagner, and the admiring devotion of the whole audience, as shown on this occasion, the final success of the master's grand scheme may be expected with certainty.

I shall take an early opportunity of pointing out the more striking differences between Wagner's interpretation of the Ninth Symphony and the traditional way in which this work is generally performed both in Germany and in this country. This, however, cannot be done without frequent references to score and metronome, and would therefore exceed by far the scope and limits of this letter. F. Hüffer.

NOTE.

Liszt's Concerto for Pianoforte in E Flat was performed with great success at the Sixth Philharmonic Concert, by Mr. F. Hartvigson. This is the third time that the work has been played in London, and by each consecutive hearing it seems to gain more and more upon the audience. The genuine and unanimous applause which rewarded Mr. Hartvigson's brilliant rendering at the most conservative of our musical Institutes seems indeed to indicate a strong current of public opinion in the direction of more advanced art-tendencies. It might be interesting from a psychological as well as from a musical point of view to draw a parallel between the three excellent pianists to whom we owe the reproduction of Liszt's work within the last two years. As far as brilliancy of technical execution and verve is concerned, Mr. Hartvigson need not shun a comparison with either Mr. Bache or Mr. Dannreuther, while we sometimes missed in his playing that poetical appreciation of the finest intentions of the composition which more than fully make up for what the latter artist may here and there want in physical strength. In Mr. Bache we most admire the firm grasp of the whole rhythmical and melodious purpose of the work, as shown in his masterly way of phrasing and declaiming the single musical passages. During the whole performance on Monday we remarked a slight tendency (we must suppose on the part of the conductor) to take the tempo in the cantabile passages too quickly, while Mr. Manns, at the Crystal Palace performance, seemed rather inclined to do a little too much in the other direction.

New Publications.

Atlas der Griechischen Kunstmythologie, herausg. v. Joh. Overbeck. Erste Liefg. Tafel I.–V. Leipzig: Engelmann.

Browning, R. Fifine at the Fair. Smith, Elder, and Co.

Conington, J., Miscellaneous Writings of the late. Ed. by T. A. Symonds; with a Memoir by H. J. S. Smith. Longmans.

Erewhon; or, Over the Range. Trübner.

Gover, C. E. The Folksongs of Southern India. Trübner.

Hawthorne, The late N. Septimius: a Romance. King.

Jackson, Sir G., Diaries and Letters of; from the Peace of Amiens to the Battle of Talavera. Ed. by Lady Jackson. 2 vols. Bentley.

Koberstein, A. Grundriss der Geschichte der deutschen Nationalliteratur. 5. umgearbeitete Auflage v. K. Bartsch. 1. Band. Leipzig: Vogel.

Magyar Népköltési gyüjtemény a Kisfaludy Taisaság megbizásábol szerkesztik és Kiadják Arany László és Gyulai Pál. (Collection of Hungarian Popular Poetry.) Pest: Athenaeum.

Mendelssohn-Bartholdy, Karl. Goethe and Mendelssohn (1821–1831). Translated with additions by M. E. von Glehn. Macmillan.

Palgrave, W. Gifford. Hermann Agha: an Eastern Narrative. King.

Schnorr v. Carolsfeld, F. Zur Geschichte d. deutschen Meistergesangs. Notizen u. Litteraturproben aus den Dresdner Handschriften d. Hans Sachs u. anderer Meistersänger. Berlin: Lobeck.

Vischer, Fr. Der Krieg u. die Künste. Stuttgart: Weise's Hofbuchhg.

Philosophy and Physical Science.

Darwinism in Morals, and other Essays. By Frances Power Cobbe. Williams and Norgate.

This book consists partly of popular essays on religious history and biography, and partly of discussions which, without being less popular in tone, have a more scientific aim, and show more independent thought. Among these latter is the essay which gives the title to the book. Miss Cobbe, while welcoming Evolutionism as rather helpful than hostile to religion properly understood, attacks Mr. Darwin's special view of the evolution of morals: under two heads, "first, his theory of the nature of conscientious repentance, which represents it as solely the triumph of a permanent over a transient instinct; secondly, his frank admission that though another animal, if it became intelligent, might acquire a moral sense, yet that he sees no reason why this moral sense should be the same as ours." On the former point Miss Cobbe argues effectively, first, that the peculiar quality of Remorse (as distinct from regret) is unexplained; and, secondly, that the being in whom "instincts of sympathy and goodwill to his fellows" are normal and selfish impulses exceptional is scarcely ancient—or even modern—man, as history shows him. There is probably some carelessness of statement in Mr. Darwin's exposition of his own theory. If in the "permanent social impulse" we include not merely goodwill towards other men, but also desire of their approbation and dread of their displeasure both in itself and its consequences (not omitting the displeasure of superhuman beings), the view becomes more plausible. And Mr. Darwin seems to have intended to include these, as Mr. Spencer and others have expressly done. On the general subject of evolution in morals, Miss Cobbe's remarks, though intelligent and often eloquent, seem to involve one or two common confusions of ideas. First, the unhappy ambiguity of the term "Utilitarianism" leads her to confound the derivation of the *form* of duty (with the peculiar emotions that accompany it) from experiences of *individual* utility with the reference of the *matter* of duty to the standard of *universal* utility. Otherwise the historical genesis of the moral faculty ought to be comparatively indifferent to her, on her general

principle that "the ancestry does not degrade the progeny." If man has sprung from the Ascidian, and yet is no less man, Duty may have sprung from Pleasure and Pain, and yet be no less Duty. Again, the issue between Utilitarianism and Intuitionism as a theory of Practice is only indirectly connected with any evolutional hypothesis: and a further distinction is necessary between an explanation of common-sense morality as it is and an exposition of morality as it ought to be. Because a utilitarian holds that the current rules of social behaviour have a general reference to the well-being of the community, he does not therefore regard them as the final *axiomata media* of scientific Utilitarianism. This distinction—for want of which both Locke and Mr. Spencer have been unfairly attacked—Miss Cobbe does not sufficiently bear in mind in criticizing Mr. Darwin's well-known suggestion of the hypothetical morality in an intellectualised bee-hive, where "unmarried females would think it a sacred duty to kill their brothers, and mothers would strive to kill their fertile daughters." It is on these habits that the well-being of the bee-community would seem at present to depend; and we may grant that they would be represented as rules in the conscience of an average member of the hive. But a superior bee, we may feel sure, would aspire to a milder solution of the Population-question: and if we compare Mr. Darwin's hypothesis with the *actual* human conscience, we can find a tolerable parallel in the moral sense of an Eleazar or an Alva. And Miss Cobbe does not sufficiently put herself at the point of view of Utilitarianism to see that its principle admits of almost any degree of variation in actual rules without giving up the absoluteness of Duty.

In two essays on "Unconscious Cerebration" and "Dreams," Miss Cobbe, while giving an excellent popular exposition of Dr. Carpenter's theory, bases on it a peculiar argument for the non-dependence of soul on body. In dreams, as due to unconscious cerebration, the real, responsible Ego, the essence of which is Will, is not concerned: hence, argues Miss Cobbe, we find, as we should expect, that the sense of voluntary effort and the phenomena of moral emotion are curiously absent from our dream-life. The argument is ingenious: and if the facts on which it rests are ascertained by a wide induction, they are certainly striking. But Miss Cobbe seems scarcely to contend for their universality: my own experience affords opposite instances: and I should have thought that the consciousness of violent voluntary effort was incident to most nightmares, and that moral feeling was rather both present and absent incongruously (like other dream-phenomena) than absent altogether. Moreover, in the whole discussion, it is not sufficiently observed that the phenomena of dreams are not in themselves unconscious, though involuntarily originated: and that as conscious they cannot be clearly thought as purely material changes.

The remaining essays show the same transparent liveliness of style, the same good sense, wide and ready sympathy, frank and vivacious optimism, as the other writings of the author. Miss Cobbe is an excellent populariser, and treats of the phenomena of religious history in a thoroughly intelligent and well-instructed manner, with much sobriety of judgment and occasionally penetrating suggestiveness. The tone of the essays is not so much scientific as docile to and receptive of science. Pure Theism appears here in a somewhat sectarian attitude, if we may apply the term "sectarian" to indicate a polemical purpose carried out with no bitterness or unfairness, but everywhere apparent: whether she points to the Oriental exaggeration of verbal inspiration, parallels Aryan with Semitic sacred literature, or notices the serpent and tree worship in Eden. Perhaps the best thing in the book is a discussion of "Auricular Confession": unfortunately few of those to whom the question is one of practical importance are prepared to argue it merely on the basis of spiritual experience.

H. SIDGWICK.

Notes of Discoveries and Scientific Work.

Psychology.

Mr. Roden Noel contributes to the June number of *Contemporary Review* a remarkably vigorous and original, but at the same time singularly incoherent article on the Philosophy of Perception. The incoherence is partly due to plethora of matter: Mr. Noel attempts not merely to expound a somewhat complicated theory of his own, but to present it in relation to the views of Berkeley, Kant, Hamilton, Mill, Martineau, with incidental notices of Hegel and others: moreover, Mr. Noel does not confine himself to the Philosophy of Perception, but indulges in swift, abrupt digressions into cognate subjects, which break the continuity of his exposition. But there seems to be some deeper incoherence in his theory itself, due, we think, to a source fertile in confusion in later English philosophy, a Kantian element imperfectly harmonized with indigenous notions. Mr. Noel holds that we have intuitive and certain knowledge of the non-ego, as that which resists our effort: that reflection shows us percipient of this non-ego as having primary and secondary qualities, and that the supposed scientific grounds for rejecting this affirmation are not really valid. But to the question whether these qualities exist, as perceived, out of perception he offers two different answers, between which he seems to hesitate. The first is that secondary qualities, and to some extent primary, are "created in perception . . . . . comparatively dark external qualities being brought into relation with corresponding internal capacities, the vari-coloured flame of consciousness springs between." Whatever may be said for this theory, it certainly does not "satisfy common sense": accordingly, Mr. Noel offers for more complete satisfaction his second answer. Colour, as we perceive it, may be a property of the luminiferous ether: the different undulations may actually be coloured red, blue, &c.: and similarly in the case of sound, though it is less clear that we naturally conceive resonance (as distinct from vibration) to exist in things when perceived. Here again the divergence from common sense is greater than Mr. Noel seems to see: a rose, causing red undulations in the space between it and our eyes, is not the red rose that we naturally believe in. A deeper difficulty emerges when Mr. Noel adds suddenly that "the whole external thing and its qualities . . . . . is phenomenal as well as noumenal. It is in time and space." But if what is in space is phenomenal, primary qualities are only known to us as they appear, *i. e.* other than they are apart from our apprehension: and we seem landed in the first theory again. Part of the article is taken up with a subtle and closely reasoned polemic against Theism—or rather against Divine Creation as an explanation of the origin of the universe.

Geography.

Lake Tanganyika.—The welcome telegram from Zanzibar which confirms Dr. Livingstone's safety also decides the long vexed question of whether Lake Tanganyika belongs to the Nile basin in the negative, and apparently leaves no other possible outlet for the fresh waters of this great lake than the unvisited Lufiji river, which reaches the east coast in Lat. 8° S. It does not, however, contain any opinion as to the ultimate outflow of the Chambeze lake-chain, and this may be to westward.

New Guinea.—A very interesting *résumé* of the efforts now being made to explore this the least known, though perhaps the largest, of the East India Islands, its area being more than double that of the British Isles, is given in *Petermann's Mittheilungen*. The causes which have now made this equatorial island a centre of attraction appear to be as varied as the nationalities among which interest has been excited. A Russian expedition, having the scientific exploration of New Guinea for its chief object, left St. Petersburg in October 1870 (see *Academy*, vol. ii. p. 442), and, passing through the Straits of Magellan by Tahiti and the Samoan Archipelago, rested at Astrolabe Bay, a deep inlet of Papua, in September 1871. Letters received from the leader of the expedition, N. v. Maklai, state that he contemplated remaining at this station for a few months to study the habits and language of the natives before attempting to penetrate into the interior. The Papuans of this coast are exceedingly savage, have no knowledge whatever of the use of iron, and few had ever seen Europeans. An expedition from Italy, under Odoardo Beccari, a botanist known through his travels in Borneo and the Bogos country, and de Albertis, is also believed to be at present in the neighbourhood of New Guinea. Commercial relations have recently sprung up between the islands of Torres Strait and the south coast of New Guinea, and these trade channels may afford useful

openings for exploration. Last year the London Missionary Society founded a number of stations on the south-eastern peninsula, under charge of educated natives of the Tonga Archipelago; the missionaries Murray and Macfarlane, under whose superintendence these stations were established, describe the splendid tropical scenery of Redscar Bay, closed inland by the massive heights of Stanley Mountains, rising 13,000 feet. At this place an earthen jar was presented by the natives to one of the missionaries, and the gold dust used in its composition giving evidence of the presence of the precious metal in this neighbourhood, a vessel carrying sixty gold-diggers was fitted out at Sydney in January 1872 to explore the coast; it suffered shipwreck on the reefs during the passage. A movement favouring a German colonization of New Guinea having been propagated in Australia, the Dutch have been awakened to a sense of their property in the island, and a vessel has left Batavia to take formal possession of that district which does not fall within the nominal limit of their territories in the East Indies.

The Russian Geographical Societies.—The explorations recently carried on under the auspices of the Imperial Geographical Society of Russia and its branches at Irkutsk, Tashkend, Orenburg, and Tiflis, along the whole vast line of Asiatic and European frontier, forms the subject of an essay by Herr Spörer in the above mentioned journal. In the farthest corner of Asiatic Russia, the expedition of 1870 to the land of the Tchukchees has led to the publication of a new general map of North-eastern Siberia, while the meteorological station founded at Verkhoiansk has already added to our knowledge of the climate of the far north. The important journey of the Archimandrite Palladius in the Amur-Ussuri region and Manchuria has already been noticed in the *Proceedings of the Royal Geographical Society;* the map of his companion, the topographer Nachwalnych, is a most valuable addition to Asiatic geography. Of not less import was Prschewalski's expedition to the land of the Ordos tribes and the Koko Nor, though the results of his travels have not yet been made public. In Western Mongolia official journeys have been made to Khobdo and Uliassutai; then we have Fedchenko's exploration through Kokand to the borders of Eastern Turkestan; and the labours of M. Struve, who has determined the accurate chartography and longitudes of many points in Western Turkestan. Kuldsha has been taken possession of by Russia, and this is the starting-point for an examination of the range of the Thian Shan. Along the East Caspian coast the garrisoned positions of Krasnovodsk, Michaelovsk, and Mulla-Kari, appear to be a failure from a commercial and strategic point of view, as they are rendered almost uninhabitable from their barren and waterless condition, and are separated by the desert from the trade of Khiva. The meteorological stations founded at Krasnovodsk and Fort Alexandrovsk, on the peninsula of Mangischlak, on the other hand, are a real gain to science. A railway connecting the Black Sea with the Caspian through Tiflis, as is proposed, would greatly facilitate commerce with Persia. The frontier country of Trans-Caucasia is being examined by the experienced explorers Radde and Sivers, and very interesting results respecting the vertical distribution of vegetation are being collected.

The Movement of Depression of the Andes.—The number of *Ausland* for May 13 gives a list of the altitudes of some of the more important points in the Andes, determined at distinct intervals of time. The heights were found to have diminished on each occasion that they were measured. Quito was found by La Condamine in 1745 to be 9596 feet above the sea; by Humboldt in 1803, 9570 feet; by Boussingault in 1831, 9567 feet; by Orton in 1867, 9520 feet; and by Reiss and Stübel in 1870, 9350 feet. Quito has sunk 246 feet in 125 years, and Pichincha 218 feet in the same period. Its crater has sunk 425 feet during the last twenty-six years, and Antisana 165 feet in sixty-four years. Numbers are given in each case tracing their gradual descent.

A paper on recent geographical work in the United States appears in the *American Journal of Science* for May. During the past years the triangulation of Lakes Superior, Michigan, St. Clair, and Champlain, has been in progress, while other surveys are being carried on by Wheeler, in Nevada and Arizona, of the territory south of the Central Pacific Railway; by Raymond of the River Yukon in Alaska, as well as that of the Fortieth Parallel by Professor King. Many surveys and reconnoissances have been made by the Engineer Corps, or are in progress, of the Western River; among them one of the vicinity of Vicksburg, "the key of the Mississippi valley," was undertaken through a too well founded apprehension that the river will seek a new channel at that point and leave Vicksburg an inland town. The reconnoissance of a second railway route across the continent by way of the Upper Missouri and the Columbia Valley has added greatly to the knowledge of that country.

An important original paper, illustrated with a map, describing the mountainous country which forms a continuation of the highland of Abyssinia to the northward, and its inhabitants, now under Egyptian rule, has been published by "Pasha" Munzinger, the well-known explorer, in *Petermann's Mittheilungen.* An account of this journey by Dr. Beke was given in the *Athenæum.*

The *Zeitschrift der Gesellsch. für Erdkunde zu Berlin*, No. 36, contains a synopsis, extending over more than seventy pages, of books, essays, maps, and plans, that have appeared, either separately or in journals, between December 1870 and the end of November 1871, on matters relating to geography. It is prepared by Dr. Koner, the editor of the *Zeitschrift*, and is very useful for reference.

Zoology.

On a Malformation of the Palate in Young Lions.—In a paper "On Hereditary Transmission of Structural Peculiarities" (*British and Foreign Med.-Chir. Review*, April) Dr. Ogle has collected a number of more or less well-authenticated cases referring to this subject. The observations made on the breeding of lion-cubs in our Zoological Gardens are of some practical interest. The author has been informed by Mr. Bartlett, the superintendent of the gardens in Regent's Park, that he had seen about fifty lion-cubs born in that menagerie, and that more than 90 per cent. had cleft palates. They are unable to suck the mother, and soon perish. On the other hand, in the Dublin Zoological Gardens not less than eighty-six lion-cubs have been successfully reared, this number representing rather more than nine-tenths of those born. Professor Haughton considers that this difference is not attributable to climate, but is due to the different method of feeding the parents; while in London the lions are fed on beef and horse-flesh, with bones which they may gnaw, but of which they are unable to eat any portion, Professor Haughton feeds the lionesses in Dublin twice a week on goat's meat. They devour the entire animal, bones and all, thus acquiring the requisite amount of bone phosphates for the perfect development of the cubs. Any other small animal will answer as well as the goat. Before this plan was adopted in the Dublin gardens, the cubs born there perished from the same malformation of the palate as in London. Professor Haughton's experience is in perfect accordance with another fact, viz. that birds of prey which are taken when very young from the nest, and fed exclusively on meat without bone, never acquire sufficient strength of bone to be able to fly or even to stand. Although they grow to nearly the normal size, their skeleton lacks the earthy matter, and remains so soft that the bones are easily bent or broken.

The Zoological Society of London have just issued the third part of their *Proceedings* for the year 1871, and the concluding portion of the seventh volume of their *Transactions.* There can be no question that these publications are unrivalled in periodical zoological literature, in respect of variety and quantity of contents and beauty of illustration, and are not surpassed by any other similar work as regards the importance of some of the memoirs. And it is one of the greatest boons to the working zoologist that the flourishing state of the finances of the society allows these valuable publications to be delivered to the fellows and members for the low price of a guinea. We could not give here in any detail a list of the contents of this volume of the *Proceedings.* It consists of 823 pages, and is illustrated with 76 plates (most of them coloured), and a large number of woodcuts. Among the 154 communications we find some 20 noteworthy papers on Mammals, 47 on Birds, 10 on Reptiles, 7 on Fishes, 16 on Mollusks, one on Crustaceans, one on Arachnids, 7 on Insects, and 8 on the remaining lower animals.—The seventh volume of the *Transactions* contains 609 pages, and is illustrated with 73 plates, the following being the most recently published memoirs:—7. P. L. Sclater, "On Certain Species of Deer now or lately living in the Society's Menagerie" (pp. 333–352). 8 and 9. R. Owen, "On *Dinornis;*" parts xv. and xvi. (pp. 353–396). 10. W. Peters, "Contributions to the Knowledge of *Pectinator*, a Genus of Rodent Mammalia from North-Eastern Africa." 11. J. Murie, "Researches upon the Anatomy of *Pinnipedia*; part i. On the Walrus" (pp. 411–464). 12. J. Murie, "On the Dermal and Visceral Structures of the Kagu, Sun-bittern, and Boatbill" (pp. 465–492). 13. R. O. Cunningham, "On some Points in the Anatomy of the Steamer-duck (*Micropterus cinereus*)" (pp. 493–502). 14. J. Murie, "On the Female Generative Organs, Viscera, and Fleshy Parts of *Hyaena brunnea*" (pp. 503–512). 15. R. Owen, "On the Dodo; part ii. Notes on the Articulated Skeleton of the Dodo (*Didus ineptus*) in the British Museum" (pp. 513–526). 16. J. Murie, "Researches upon the Anatomy of the *Pinnipedia;* part ii. Descriptive Anatomy of the Sea-lion (*Otaria jubata*)" (pp. 527–596).

Annali del Museo civico di Storia naturale di Genova.—The second volume of this periodical has just been issued; it is published under the auspices of the Marquis J. Doria, to whom his native city is indebted for the foundation of a museum of natural history, which appears to be developing into one of the most important scientific institutions in Italy. The present volume contains the following papers:—1. G. Canestrini, "On Italian *Opilionidae*" (pp. 5–48). 2. P. M. Ferrari, "The *Aphididae* of Liguria" (pp. 49–85). 3. S. Trinchese, "A New Genus of the Family of *Aeolididae* (*Ercolania*, from the Mediterranean)" (pp. 86–132). 4. G. Mayr, *Formicidae borneenses*" (pp. 133–155). This volume is illustrated with thirteen beautiful plates, part of which are coloured.

Faune des Vertébrés de la Suisse, par Victor Fatio. Vol. III.: *Histoire naturelle des Reptiles et des Batraciens.* Genève et Bâle. With 5 plates.—The first volume of this work, containing the mammals, appeared in 1869; the second, which will contain the birds, is in the course of preparation. Although the subject of this volume is partly the same as that of Leydig's *Saurians*, which was noticed in the *Academy*, No. 44 (vol. iii. p. 112), it is treated in a very different manner, the author's original observations being directed more to the habits and external characters of the various species than to their internal structure. The work will be found of great service to the local naturalist, but for the general student it contains too much matter regarding questions of classification, derived from standard works on herpetology. It is, however, of interest to know Dr. Fatio's reasons which induce him to distinguish two kinds of tessellated snakes (*Tropidonotus viperinus* and *T. tessellatus*), and two of brown frogs (*Rana temporaria* and *Rana agilis*).

Chemistry.

The Greenland Meteoric Iron.—Not many metres from the spot on the shore at Ovifak where he found the large iron masses that were described in the *Academy*, Feb. 1 (vol. iii. p. 54), Nordenskjöld observed a rock, different in appearance and composition from the basalt of the cliffs, and enclosing iron not only in granules and spherular masses, but as a vein of the metal several inches wide, and several feet in length. An examination of the iron of this vein forms the subject of a paper by Wöhler in the *Nachrichten der Kön. Gesell. der Wiss. zu Göttingen*, No. 15 (15th May, 1872). The metal has the appearance of grey cast iron, has a bright metallic lustre, is very hard and quite unalterable in air, and has a specific gravity of 5·82. Nordenskjöld noticed that the metal of the larger masses, when heated, gave off a large quantity of gas; Wöhler finds that this iron evolves more than 100 times its volume of a gas which burns with a pale blue flame, and is carbonic oxide mixed with a little carbonic acid. It follows from this, writes Wöhler, that the iron contains a considerable quantity of carbon and a compound of oxygen, and that the metallic mass itself can at no time have been exposed to a high temperature. The iron by this treatment becomes much brighter than before, and is much more readily soluble in acid; but it still leaves a carbonaceous residue. A fragment heated in a current of hydrogen lost 11·09 per cent. of its weight: in other words, it contained that percentage of oxygen. Hydrochloric acid acts but slowly and partially on this metal, evolving first sulphuretted hydrogen, then hydrogen having the odour of a carburetted hydrogen, and deposits a black granular magnetic powder, which, though insoluble in cold acid, generates on the application of heat a gas with a strong odour of a hydrocarbon, and leaves a residue of amorphous sooty carbon and slightly lustrous graphitic particles. By treatment with iron perchloride, the metal dissolved without any evolution of gas, leaving a black residue of about 30 per cent., which, after having been dried at 200°, lost by subsequent ignition in hydrogen 19 per cent. of its weight, water being formed. It is now very readily attacked by hydrochloric acid, evolving sulphuretted hydrogen, and leaving a residue of nearly pure carbon, partly in powder, partly in graphitic scales. Iron and hydrogen chlorides therefore appear to dissolve the free metal only, and to have no effect on that in combination with oxygen and sulphur. The iron has the following ultimate percentage composition:—

Iron	80·64
Nickel	1·19
Cobalt	0·49
Phosphorus	0·15
Sulphur	2·82
Carbon	3·69
Oxygen	11·09
	100·05

As regards the question of the condition in which this large amount of oxygen is present in an apparently metallic mass, Wöhler is at present unable to arrive at a conclusion. From its homogeneous character and crystalline structure, it might be assumed to constitute a compound with iron as yet unknown, a diferrous oxide, Fe_2O, were it not that this view leaves no iron for combination with the sulphur and carbon. As, however, Nordenskjöld has found octahedra of magnetite in another Ovifak iron, Wöhler is disposed to regard the mass as a very intimate mixture of magnetite, of which there would be 40·2 per cent., with metallic iron, its sulphide, carbide, and phosphide, its alloys of nickel and cobalt, as well as some pure carbon in isolated particles. The latter undergoes no change when the magnetite and carbide by the action of heat generate carbonic oxide.

Chinamine, a New Alkaloid in Cinchona succirubra.—Hesse, during an examination of cinchona bark from the Indian plantations, found a new body, to which he has given the name of chinamine (*Ber. Deut. Chem. Gesell. Berlin*, 1872, No. 6, 265). It is soluble in alcohol provided it be not dilute, and is rather readily taken up by ether, separating from its solutions in long white anhydrous prisms, resembling asbestos in appearance. The neutral sulphate crystallizes with difficulty in six-sided plates and short prisms. With chloride of gold, the solution of its hydrochlorate gives a yellow amorphous precipitate, which soon becomes purple and deposits gold, the supernatent solution becoming purple, and afterwards brownish-red. Dilute solutions in acid exhibit no fluorescence whatever, nor does chinamine strike a green colour with chlorine and ammonia. It is barely bitter, but its solutions in acids have a rather bitter taste. It melts at 172° C., and unless kept for some minutes in a state of fusion crystallizes on cooling. The author hopes shortly to ascertain its elementary constitution.

Amblygonite.—Under the name of "Montebrasite," Moissenet and Des Cloizeaux last year described a new mineral species, occurring at Montebras, Creuse, and bearing in its physical characters a great resemblance to the amblygonite of Arnsdorf, near Penig, that Rammelsberg analysed in 1845. The mineral in each case is a fluophosphate of aluminium, lithium, and sodium, the French containing less than half the phosphoric acid and more than three times the fluorine of the German specimen. So great a disparity in composition being difficult to reconcile with Des Cloizeaux's observations of the perfect accordance, as regards crystalline form, cleavage, specific gravity, lustre, and hardness, of "montebrasite" with Rammelsberg's amblygonite, a further examination of the French mineral seemed desirable. This has been made by von Kobell, whose paper, read before the Bavarian Academy, is to be found in the *Jour. prakt. Chem.* 1872, Nos. 3 and 4, 112. His analysis of the Montebras mineral gave results that differed but slightly from those originally obtained by Rammelsberg with amblygonite. Within a few days of the publication of von Kobell's memoir at Munich, Rammelsberg read a paper in Berlin (*Ber. Deut. Chem. Gesell. Berlin*, 1872, No. 3, 78) on the same subject. His results correspond with those of von Kobell in all important respects, with the single and comparatively trifling exception that Rammelsberg finds the alkaline metal of the French specimen to be almost exclusively lithium. Von Kobell and Rammelsberg have consequently shown the mineral of Montebras to be amblygonite, and not a new mineral species. Although Des Cloizeaux noticed a difference in the mineral for the two localities as regards the dispersion of the optic axes, von Kobell contends that this feature alone, which has also been observed in mica and topaz, will not warrant us in regarding them as distinct minerals. Amblygonite, hitherto a rarity, occurs at Montebras in compact masses associated with wavellite and calaite in a bed of tin ore. Rammelsberg, since analysing the mineral a second time, believes its composition to be represented by the formula $3(Li,Na)Fl+2AlP_2O_8$. At a recent meeting of the Chemical Society of Paris (*Revue scientifique*, 27th April, 1872, 1049) it was stated by Pisani that some weeks before the publication of the papers of von Kobell and Rammelsberg he, in a note in the *Comptes rendus*, established the identity of the "montebrasite" of Moissenet with amblygonite.

Diiodhydrin.—This substance, the existence of which has hitherto been doubted, has been prepared by Nahmacher (*Ber. Deut. Chem. Gesell. Berlin*, No. 8, 13th May, 1872) by heating dichlorhydrin with potassium iodide in excess for from twelve to fourteen hours in closed tubes in a salt bath. The dark-coloured product is freed from the iodine which gives it this hue by shaking it with mercury or, what is still better, weak sulphuretted hydrogen water. It is a pale yellow oily body, having a specific gravity of 2·4, and forming at from −16° to −20° a white crystalline mass. Analysis gave numbers corresponding with the formula $C_3H_6I_2O$. It cannot be distilled without decomposition; a strong odour of acrolein is observed, and water, allylic alcohol, and allylic iodide pass over. The author also communicates the results of his investigation of the action of ammonia on dichlorhydrin and diiodhydrin.

Sellaite.—Strüver has recently published a paper, in the *Atti della R. Accad. di Torino*, on a colourless transparent mineral occurring with anhydrite at Geibroula, in Piedmont, and crystallizing in the quadratic system. Small fragments of this mineral melt in the flame of a candle; it is insoluble in water and acids, with the exception of sulphuric acid, which causes the evolution of hydrogen fluoride. The sulphuric acid solution contained 39·64 per cent. of magnesia, and the chemical and physical characters of this mineral led Strüver to consider it a magnesium fluoride analogous to fluor-spar in composition.

Concentrated Ozone.—By varying the form and construction of his ozone tubes, A. Houzeau (*Comptes rendus*, 74, 256) has devised an *ozoniseur* which, with a Ruhmkorff giving a spark from 2 to 3 centim. in length, yields ozone of a highly concentrated kind. He has no difficulty in producing oxygen containing from 60 to 120 milligrammes of ozone to the litre, according as the temperature is 15° or −30°, and he has since constructed an apparatus yielding 188 milligrammes of ozone to the litre.

New Publications.

BERNARD, C. De la Physiologie générale. Paris: Hachette.
BRAUNE, W. Topographisch-anatomischer Atlas nach Durchschnitten an gefrorenen Cadavern. Leipzig: Veit.
EEDEN, A. C. VAN. Flora of Harleem. No. I. Haarlem: Loosjes.
GLADSTONE, J. H. Michael Faraday. Macmillan.
GROTE, G. Aristotle. Murray.
MAHAFFY, J. P. Kant's Critical Philosophy for English Readers. Vol. III. (Kant's *Prolegomena*.) Longmans.

Packard, A. S. Development of Limulus Polyphemus. Trübner.
Paulicki, A. Beiträge zur vergleichenden pathologischen Anatomie. Berlin: Hirschwald.
Quenstedt, M. Die neuen deutschen Münzen. Berlin: Springer.
Report of United States Geological Exploration of the Fortieth Parallel. Vol. V.: Botany. By S. Watson and D. C. Eaton. Washington: Office of Engineers.
Schwarz, A. Der jüdische Kalender historisch und astronomisch untersucht. Breslau: Schletter.
Spicker, Gideon. Die Philosophie der Grafen von Shaftesbury, nebst Einleitung u. Kritik über das Verhältniss der Religion zur Philosophie und der Philosophie zur Wissenschaft. Freiburg i. B.: Troemer.
Thorell, T. Remarks on Synonyms of European Spiders. No. III. Upsala: Lundström.
Thuemen, F. de. Fungi Austriaci Exsiccati. Centuria II. III. Berlin: Calvary.
Tyndall, J. Researches in Molecular Physics by means of Radiant Heat. Longmans.

History.

Von Helfert's History of Austria. [*Geschichte Oesterreichs vom Ausgange des Wiener October-Aufstandes*, 1848. Von Joseph Alexander Freiherrn von Helfert. III.: Die Thronbesteigung des Kaisers Franz Joseph I.] Prag: Tempsky.

In the preface to this (the third) volume of his *History of Austria*, Baron Helfert acknowledges that he has not given it to the world without a certain feeling of anxiety. Twenty-two years is a long period, but still it is not long enough to secure that perfect "objectivity" which, more than any other quality, is required of the historian. This is especially the case in Austria, where of the questions raised in 1848 so many still await their final answer. Some might add that our author, the son of a high-placed official before 1848, and himself under-secretary in the ministry of education when Count Leo Thun was minister, has been too much involved in political controversies for his impartiality to be considered above suspicion. And at the outset of this notice it may be observed that the work is to a certain extent that of an advocate. It is true that the author professes, and has doubtless endeavoured, to place himself in a position above considerations of party. But his own views, and those of the class with which he is connected, necessarily tinge the most conscientiously written narrative. The peculiar sources of information to which he has had access have contributed to this result. The Windischgrätz family placed at his disposal the papers left by the late Prince Alfred, the "Poliorcetes" of 1848. Like the Duke of Wellington, whom he resembled in a certain narrow-minded conservative conscientiousness, the prince seems to have kept copies of all papers of any importance that passed through his hands. His brother-in-law, Felix Schwarzenberg, on the other hand, left not a memorandum behind him; but the omission has been to some extent supplied by correspondence preserved by a member of that house, of one who was intimately associated with both the princes at the time when the ministry Schwarzenberg-Stadion was constituted. Besides these two important sources, Baron Helfert has received a number of private communications from actors or spectators in the drama which he relates. As several of his informants especially desired that their anonymity should be preserved, our author, not allowed to name all, does not name any of them, merely indicating the source and character of each contribution by such notices as "Privat-(Diplomatie)," "Privat-(Staatskanzlei)," and the like. It is amusing to observe how many of those contributed by members of the Austrian aristocracy are written in French. None of these private communications are derived from "liberal" sources either German or Hungarian, a fact in itself sufficiently significant.

With regard to the central event which has given its title to the volume, the abdication of Ferdinand and the accession of Francis Joseph, the author draws on his own experience, having been himself one of the chosen few admitted to witness the scene in the archbishop's palace at Olmütz. Naturally he dwells at great length on that event, its causes and consequences, and in so doing displays very conspicuously the peculiar artifice of his history—a certain trick of literary perspective whereby trifles in which the writer takes an interest are made to obscure events more important, but withal less agreeable to relate. For instance, the most important question with respect to the abdication of Ferdinand was its relation to the Hungarian constitution. But this question is dismissed by a statement that after Schwarzenberg had heard the opinion of Baron Jósika, formerly *Hofkanzler* for Transylvania, the only Hungarian statesman consulted on the point, the latter lost all credit in the eyes of the all-powerful minister-president. What opinion a transcendental cynic like Prince Felix had of a fellow aristocrat is a matter worth knowing; whether the Hungarian constitution was violated or not appears to a courtier and a bureaucrat to be too trifling to be discussed. In fact the parts relating to Hungarian affairs form perhaps the weakest portion of the book. Throughout the three volumes they are discussed in a narrow *incidental* way, which not only does not give the reader a broad general view of the controversy, but does not even afford him materials from which he might form a view of his own. The form in which the history is written, its slavish and inartistic adherence to chronological order, the way in which the author tries to fasten his reader's attention down to the details of revolutionary excesses and follies put before him, while he is as much as possible prevented from looking before and after, from contemplating the wretched obscurantism that existed until 1848, or the absolutist severity that prevailed as soon as the revolution had been crushed—all these literary devices not only throw suspicion on the "objectivity" claimed by the author in his preface, but they diminish the value of his work as a history. One of his principles—that of leaving out of consideration the future development and conduct of his *dramatis personae*—is avowed in the preface to his third volume, and explained as dictated by a feeling of delicacy towards living individuals. As a last peculiarity of method which diminishes the completeness of his history and consequently renders it often obscure is his theory, laid down in the preface to his second volume, that modern Austria begins not with the revolution of March 1848, but with the establishment of the ministry of Schwarzenberg-Stadion at the end of that year. This theory, apparently suggested by his dislike of the revolution, will commend itself to most minds as arbitrary and sophistical. It certainly has the effect of disturbing the natural order of his story, rendering a large part of the second volume an awkward introduction to the first.

The histories of the present day have been divided into historical romances and historical essays. Following this principle of classification, the book before us must be placed in the first division. When the author writes as a philosophical historian, he is generally vague and indefinite. This circumstance makes his second volume, in which he gives a general view of Europe in 1848, decidedly inferior to the first, wholly taken up as it is with the siege of Vienna by Prince Alfred Windischgrätz, and also to the third now before us. As a descriptive historian he has great merits, notably in his account of the bombardment of Vienna and of the desperate struggle in the Jägerzeil, as recounted in the first volume. He continually enlivens the narrative with details at once brilliant

and characteristic of the people he is describing. Who will not recognise the Austrian officers who complained, when the etiquette of the service required their attendance at the head-quarters of Windischgrätz, that there a stiffness prevailed "wie beim Maharadscha der drei Arabien?" He exhibits other qualities of an historical novelist in his full-length portraits of Prince Alfred Windischgrätz, Prince Felix Schwarzenberg, and Count Francis Stadion. We may decline to accept unreservedly his estimate of their characters and abilities, but at any rate he enables us to understand what manner of men these saviours of society were, at any rate as they appeared to intimate and friendly observers. And this in fact is the point of view from which the book may fairly be judged. It is an able, and—if we except a few occasional bursts of loyal invective—a moderate apology for the party which triumphed in 1849 and has since suffered so many reverses, stated by one whose experience and connections especially qualified him as its apologist. As such it will serve to guide and assist some future historian when the present heat of political controversy in Austria has subsided, but can hardly fulfil the fond expectations professed by the author, and be received by the world as the final impartial verdict of history. The time for judging the events of 1848–9 without anger or affection has, it would seem, not yet arrived. ARTHUR J. PATTERSON.

THE HANSEATIC HISTORICAL SOCIETY.

IN Whitsun-week 1871, a new historical society was founded at Lübeck, for the purpose of combining once more all those cities which, in former ages, had been members of the German Hansa. According to a resolution passed at the time, invitations to join this purely literary resurrection of the famous old league were sent to no less than ninety-two towns, maritime and inland, and including those which long since have been separated from the body politic of Germany—the cities of Livonia and Esthonia, as well as of Holland. At the annual meeting which took place at Lübeck on the 21st and 22nd of May last, a very interesting report was brought up by the council. It states that thirty-eight of the cities have not only answered in the affirmative, but are willing to contribute, according to their means, an annual share to support the publications of the society. Considerable sums indeed will be forthcoming from Hamburg, Bremen, and Lübeck, from Cologne and Berlin, and from the principal towns of the Baltic and of Westphalia. Amsterdam, Harderwijk, Venloo, Deventer, Campen, Arnheim, and even diminutive Bolsward and Zutphen, have joined the new fraternity with sums in proportion to their respective importance. Eleven other places have expressed their thanks, and added their regret that they were not able to join in the same way; whilst the remaining forty-two have, up to this time, not thought it worth while to answer at all. Besides this civic membership, there is another individual one, which, since last year's meeting, has risen from ninety to about 120, a gathering of friends and students of mediaeval history, government and city officials, keepers of record offices, professors of universities and high-schools, merchants, lawyers, artists, &c. An annual payment of two thalers will secure to each member a copy of the journal, the first annual number of which is to contain this year's report, and several important contributions to the history and the laws of the Hansa Confederation. During the meeting itself, a circumstantial account was communicated respecting the two chief works which have been taken in hand by the society. The first is to be an edition of the so-called *Recesses*, *i.e.* the transactions of the old Hanseatic parliaments, beginning with 1431, as the earlier ones down to that year are already in course of publication under the direction of the Munich Historical Commission.* The editor of this first series will likewise superintend the new one, the chief labour being entrusted to two young scholars, natives of Livonia, and pupils of Professor Waitz, of Göttingen, Drs. Höhlbaum and von der Ropp. The most important materials for this collection are extant in the archives of Prussia proper and the German provinces of Russia. The second work, which also will soon be begun, is a collection of such documents, charters, despatches, and letters, as have a more general bearing upon the history and administration of the Hanseatic League, and which for this reason cannot be printed in the more local collections issued by the special historical societies of Lübeck, Hamburg, Bremen, Brunswick, Stralsund, Cologne, &c. A third undertaking was unanimously adopted by the late gathering, viz. an edition of the oldest version or versions of the ancient Lübeck code of laws, to which public attention has been directed by an excellent paper of Professor Frensdorff, of Göttingen. Dr. Wehrmann, the principal archivist at Lübeck, then communicated to the society his researches on the origin of the ancient patrician families of that city, and their relations with and difference from the families of the nobility and gentry. Professor Mantels followed with a description of the ways and means by which the old Lübeck traders fetched relics of the saints from England (Canterbury) and from Venice, and Professor Pauli, of Göttingen, discussed the early use and the value of the word "Hansa" in English documents of the twelfth and thirteenth centuries. A visit was also made to the old archives, still kept in a lofty chapel of St. Mary's Church, called the "Threse" (Thesauraria), and the magnificent charters granted by the kings of England to the Hansa merchants, beginning with Henry III., besides many other documents referring to the Steelyard in London, were displayed and commented upon from various sides. It is not unlikely that our own Public Record Office and the Guildhall Records will soon be visited again by some collaborators of the new society, as the early share which the government and the commerce of England took in the propagation of the Hansa has not yet been adequately elucidated. A proper selection for publication amongst the great masses of documents bearing on the subject can never be made without repeated researches in the stores of such incomparable collections. The next annual gathering of the Hanseatic Historical Society will be held at Brunswick, in Whitsun-week 1873.

* See *Academy*, No. 27 (vol. ii. p. 339).

Contents of the Journals and Intelligence.

Ephemeris Epigraphica, part ii. (Berlin and Rome).—Wilmanns shows that the *praefectus castrorum* was the emperor's official, and served to keep in check the senatorial *legati* in command of the legions. Later, when every legion had its own camp, he became also the commander of the legions, the emperor's power having now annihilated that of the other orders in the state.—Bormann treats *de Aedificiorum Urbis Titulis*; and Mommsen continues his *Observationes Epigraphicae*, noting especially the erasure of the names of Diocletian and his colleagues, which was probably done by Constantine's orders.—Dittenberger gives some Attic inscriptions bearing on Roman history.

Revue des deux Mondes, May 15.—Coulanges describes "the German invasion in the fifth century," pointing out that its chiefs were really in the service of the empire, and that it was not, in the full sense of the term, a conquest. Of course the whole tone is sharpened by recent events.

Bullettino dell' Instituto, April.—Gives an inscription of L. Coiedius, who served in Claudius' expedition to Britain with the eighth legion; and one referring to a German king, Aistomodius (?="battle-mood"), found at Carnuntum, near Vienna.—The account of the excavations at Certosa is continued; and an inscription given containing names of Athenian prytaneis of A.D. 126–127, which shows that the old Council of 500 had been restored (it had been 600), or rather that it had been made 507, *i.e.* thirty-nine prytaneis for each of the thirteen tribes which then existed.—Some inscriptions on sling bullets follow.

Gött. gel. Anzeigen, March 13.—Contains a good critique of the present science of statistics. It is shown that the mere figures prove nothing unless the whole inner life of each state is taken into account, which alone can explain and account for its various manifestations.——March 20.—Praises the new *Dictionary of the Low German Dialects* (middle period), by Schiller and Lübben, which is of much interest for English etymology also.—The article on the Νεοελληνικὰ Ἀνάλεκτα discusses the question of rhyme in the Romaic ballads, and especially refers to the article in our thirty-fifth number (vol. ii. p. 508). A notice of Buchner's *Aus den Papieren der Weidmann'schen Buchhandlung* points out how an account of this great publishing house throws light on the history of German literature at the end of the last century—much as a history of our own great publishing firms would do on English literary life. Buchner gives many letters.——March 27.—Goedeke adds some fresh information to that contained in Ranke's *Die deutschen*

Mächte und der Fürstenbund.——April 3.—Brandes analyses the *Ideale und Irrthümer* of Karl Hase (the well-known church historian), who was one of the students who kept alive the idea of German unity in the evil times after the Congress of Vienna, when the kings broke their promise of giving free institutions to the people which had shown such devotion in the War of Liberation against Napoleon. Hase was one of those who suffered imprisonment.—Pitré's *Le Lettere, le Scienze e le Arti in Sicilia negli anni* 1870-1 shows the wonderful revival of literature in the South since Garibaldi once more called Sicily to life.——April 10.—Notices Lübolf's essay on the Christian missionaries in Switzerland before St. Gall, especially St. Beatus, perhaps also of Celtic origin.——April 17.—A notice of Goltz's *Die ländliche Arbeiterfrage und ihre Lösung* is specially interesting just now. The solution of the difficulty depends, in the reviewer's belief, on our giving a greater security to the labourer's position, a permanant home leading to a higher standard in morality, education of children, &c.—Hübner's *Sixte Quinte* is reviewed and stress laid on Sixte's views as being those of the Franciscan section of the church as opposed to the Dominican and Jesuit views and to Philip II.'s schemes.——May 8.—Reviews Rossbach's *Römische Hochzeits- und Ehedenkmäler*, and Koehne's *Tempel d. capitolin. Jupiter*; the last to explain the difficulties connected with the architecture.—Waitz discusses the original authorities for the story of the Maid of Orleans; and Liebrecht a life of Il Conte di Prades as illustrating the constitutional history of Sicily.——May 15.—Analyses Eschenloer's *History of Breslau*, one of the contemporary narratives which the Society of Silesia is publishing, and which illustrate the Hussite movements and the commencement of the Thirty Years' War.—An analysis follows of Könnike's narrative of his suspension by the Bishop of Paderborn; a good illustration of the absolute power of the bishops.—The conclusion, too, of Rogière's *Recueil général des Formules usitées dans l'Empire des Francs du Vième au Xième Siècle* is criticized by Waitz.

Revue des Questions Historiques (Rom. Cath.), April.—Has an article illustrating the constitution of Gaul under the Romans (50 to 27 B.C.), from lately discovered coins and inscriptions; and another on the death of Henri IV.'s mistress Gabrielle d'Estrees, as described in a contemporary letter; stress is also laid on the way in which Sully interpolated, or in fact re-wrote, some of the letters inserted in his narrative.—A document on the seizure of Boniface VIII. at Anagni (from the British Museum) follows, and Masson reviews the third volume of Haddan and Stubbs' *Councils and Ecclesiastical Documents relating to Great Britain and Ireland.*

Von Sybel's Historische Zeitschrift, 1872, part ii.—An article on St. John of Nepomuck (whom Wenceslaw threw into the Moldau at Prague—because of his relations with the queen as her confessor, according to the popular story) traces the historical origin and growth of the legend.—A very full account follows of the negotiations of Kaunitz with France and Russia which brought about the Seven Years' War.—An article on the "German Territory towards the End of the Eleventh Century" shows the nature of the German kingly power in early times, before it became associated with fixed territorial possessions, and so a source of dissension, whereas originally it had been the means of unity.

Dr. Potthast, the Custos of the Berlin Library, and author of the *Bibliotheca Historica Medii Aevi*, will shortly publish the *Regesta Pontificium Romanorum* from 1198-1304, in continuation of Jaffé's well-known work, up to the migration of the Popes to Avignon. No less than 30,000 documents have been excerpted by this indefatigable scholar; 6000 relating to Innocent III. alone, whilst Delisle's elaborate collections contained only 3000 bearing on this pope. It has been awarded a double prize by the Berlin Academy of Science.

New Publications.

Appendice au Mémoire présenté par le Gouvernement de Sa Majesté Britannique. T. Ier: Correspondance concernant la *Florida*, l'*Alabama*, la *Georgia* et le *Shenandoah*. Paris.

Arnd, E. Geschichte der Gegenwart. 3. Bd. (1867-71). Leipzig: Duncker.

Bekynton, Thomas (Secretary to King Henry VI., and Bishop of Bath and Wells), Official Correspondence of. Ed. G. Williams. 2 vols. (Rolls Series)

Bluntschli's Staatswörterbuch. Zürich: Schulthess.

Garnier-Pagès. Histoire de la Révolution de 1848. T. X. Paris.

Hamel, E. Histoire de la République française sous le Directoire et sous le Consultat. Paris.

Langerfeldt, G. Kaiser Otto IV. Hannover: Rümpler.

Matthaei Parisiensis Chronica Majora. Ed. H. R. Luard. Vol. I. (Rolls Series.)

Meyer, Chr. Das Stadtbuch von Augsburg. Augsburg: Butsch.

Ropp, G. v. Der Erzbischof Werner v. Mainz. Ein Beiträg zur deutschen Reichsgeschichte d. 13. Jahrhdts. Göttingen: Vandenhoeck u. Ruprecht.

Schricker, A. Zur Geschichte der Universität Strassburg. (Festrede.) Strassburg: Schmidt's Universitäts-Buchhdg.

Schum, W. Die Jahrbücher d. Sanct-Albans-Klosters zu Mainz. Göttingen: Vandenhoeck u. Ruprecht.

Wellington. Supplementary Despatches. Vol. XIV. Murray.

Philology.

Thucydidis I. With Collation of the Two Cambridge MSS. and the Aldine and the Juntine Editions. By Richard Shilleto, M.A., Fellow of Peterhouse, Cambridge. Bell and Daldy.

In giving to the long expectant public a small part of a work promised, as Mr. Shilleto admits, nearly nine years ago, and contemplated, perhaps commenced, nearly three times that number of years from the present, the editor makes some apologies, which his many literary friends and admirers will read with regret, on the score of over-tasked energies and repeated attacks of bodily ailments. The portion now published bears some marks of being an unfinished and fragmentary performance. There is no preface, properly so called, a very scanty index of a page and a half, and, generally, an avoidance of the many literary topics surrounding the greatest work, perhaps, of the greatest period of Greek literature. These, or some of these, we may perhaps yet hope to see discussed. Meanwhile, as a contribution to verbal and grammatical scholarship, rather than from any special critical novelties or improvements in the text, this work will be accepted with gratitude and thoughtful attention by those who, few in number though they may be, adhere to the school of Porson and Dobree, or of their modern German representative, Cobet.

Mr. Shilleto speaks of his collation of the two Cambridge MSS. which he has consulted in terms rather exaggerating the real labour and time required. A month or three weeks would complete the most accurate and painstaking collation of a single book, where only two MSS. were to be examined, provided, of course, that they were not particularly difficult to decipher. We do not find that any gleanings of special importance have been derived from these two MSS., both of which have been before collated by Arnold and others. But the Clarendon MS., which is known as N, seems one of the best; and it is at least a satisfaction to have before us so very perfect a collation as Mr. Shilleto has given us. He considers the writer of it to be the same as the transcriber of the famous Sancroft MS. of Herodotus, preserved in Emmanuel College Library at Cambridge. This latter MS., which is beautifully written on fine glossy paper, Gaisford and Blakesley assign to the twelfth century, Mr. Shilleto to the fifteenth. It is singular that a difference of *four* centuries should occur in the estimate of such eminent scholars! In the opinion of the present writer, who has often seen it, the Sancroft MS. belongs to the earlier period of the fourteenth century.

It is to be feared that Mr. Shilleto has spent a good deal of labour to but little purpose, in his collation of the Junta edition of 1526. It is evidently a mere reprint of the Aldine, with just here and there a slight correction introduced; but there is not the slightest appearance of any other MS. having been employed.

The critical notes in this edition are couched in terse and often abbreviated Latin; the exegetical notes are in English. Both are, occasionally, we will not say desultory, but ranging off into questions of minute scholarship not very directly bearing on the text of Thucydides. The impression therefore left on the reader is rather that of an overflowing mind drawing freely on its stores in the cause of general scholarship, than of a strict interpretation, such as Poppo has given, of the author's meaning, or the simple notation of readings such as that accompanying Dr. Arnold's text. In

truth, Mr. Shilleto's work is a reaction from the more generally philological character of Arnold's edition, viz. one in which questions of history, geography, and antiquity were freely and genially discussed, and a return to the kind of scholarship from which Arnold's book was itself a reaction, that hard and dry critical and grammatical ἀκρίβεια that constituted the discipline under which most of our eminent classical scholars were trained. In the art of translation Arnold stands paramount; he was not invariably very accurate, but then he had a most happy knack of giving, in beautiful and appropriate English, both the sense and the spirit of the most difficult and entangled parts of the speeches. Mr. Shilleto does not in general translate more than a sentence, and here and there a little more elegance of expression might have been desired. For instance, in chap. xx. the words—τὰ μὲν οὖν παλαιὰ τοιαῦτα εὗρον, χαλεπὰ ὄντα παντὶ ἑξῆς τεκμηρίῳ πιστεῦσαι, Mr. Shilleto renders, "Such have I found older events to be, albeit difficult for one, hardly allowing one, to give credit to every link in the chain of argument." This does not read quite neatly; and is not τεκμηρίῳ rather the ablative than the dative, "though hard to believe in *by* each consecutive proof"? We might wish Mr. Shilleto had said something here on the singular fact, that such a writer as Thucydides, who as late as B.C. 400 was taking every possible pains to investigate early Grecian history, nowhere refers (except once, we believe, in i. 97, to Hellanicus) to any written literature, but always speaks of ἀκοή, "hearsay," and personal research and enquiry. How can this fact be explained, if the common opinions about the antiquity of a Greek literature are true? In his note on chap. xx. Mr. Shilleto admits that "it may be questioned whether Thucydides alludes to Herodotus at all." But to return to ablative *versus* dative; in chap. xxv. Κορινθίῳ ἀνδρὶ προκαταρχόμενοι τῶν ἱερῶν, Mr. Shilleto translates, "in compliment to a Corinthian commencing the initiatory parts of the sacrifice of victims." Rather, one would suggest, "beginning the sacrifices *by* (or with) a Corinthian." Just below, ναυτικῷ δὲ καὶ πολὺ προέχειν ἔστιν ὅτε ἐπαιρόμενοι, Mr. Shilleto gives us a somewhat slip-shod version as the literal meaning, "lifting themselves up that they were," or "lifting up their voice that they were". (superior in naval force). It is simply "elated by the *idea* that they were," &c., ἐπαιρόμενοι meaning δοκοῦντες, νομίζοντες, with a notion of conceit and self-confidence.

There is a difficult passage in chap. xxxiii., where the editors have not generally seen that we should read καταθήσεσθε, and so have been puzzled between the corrupt readings ὡς ἂν μάλιστα καταθῆσθε and κατάθησθε. The future follows the preceding ποιήσεσθε, and the sense is thus quite simple; "you will store up for yourselves our gratitude, with as lasting a testimony of it as men can possibly have." The ellipse after ὡς ἂν, viz. of δράσειαν or some similar optative, is far from uncommon. Mr. Shilleto translates, "you will have an advantage by having received us in our greatest peril, to the end that you (if you receive us) may bestow the obligation with the most certain and never forgotten evidence."

In chap. lxix. Mr. Shilleto gives his high sanction to the (as I think) more than questionable doctrine that χρῆν, ἐχρῆν, χρῆναι, χρείη, &c., which have the regular inflections of an impersonal verb, are contractions for χρὴ ἦν, χρὴ εἶναι, &c., where he regards χρὴ as an indeclinable noun, like θέμις. He says ἐχρῆν is formed on a false analogy; a proposition no one is bound to accept on the evidence of a very doubtful passage in Soph. *Oed. Col.* 504, where χρῆσται is supposed to stand for χρὴ ἔσται. Probably χρεὼν is a neuter adjective, and not a corruption of χρὴ ὄν at all. Compare πλέως, and the nouns χρεὼ and χρέως.

Another doubtful doctrine is that αἴρωσιν in chap. xc. may be an aorist. "There might," he says, "be an aorist ἠῖρα [*sic*] and so a subjunctive αἴρω." But ἠῖρα, if a possible form, would become ἦρα, and αἴρωσιν ἄρωσιν, so that this would be a return to the now generally rejected cacography ἔφηνα for the aorist of φαίνω. The epic aorist ἤειρα is formed regularly from ἀείρω. The passage in the text, on which Mr. Shilleto has a long note, ἐπισχεῖν μέχρι τοσούτου ἕως ἂν τὸ τεῖχος ἱκανὸν αἴρωσιν, is really a confusion between two different constructions, ἕως αἴρουσιν, "whilst they are raising," and ἕως ἂν ἄρωσιν, "till they shall have raised."

In chap. cxx. ὅσοι Ἀθηναίοις ἤδη ἐνηλλάγησαν can only mean, "who have had dealings with the Athenians." It is a strange phrase, no doubt, for ἐν ἀλλαγῇ ἐγένοντο. (Madvig's correction, ἐν ἀλλαγῇ ἦσαν, is a perfectly obvious one, and was long ago made by the writer of this article.) Mr. Shilleto says the verb "seems to convey no meaning except *permutati sunt, mutati sunt invicem.*" We must not always be the slaves of examples, especially in the use of verbs acknowledged to be of rare occurrence.

In chap. xviii. δυνάμει ταῦτα μέγιστα διεφάνη, the meaning seems to be διέπρεπε, "were seen to be the greatest in power among all the rest." Mr. Shilleto says, "were found on trial, when put to the test." Compare διεφάνησαν in vi. 17. In chap. xiii. τριήρεις (λέγονται) πρῶτον ἐν Κορίνθῳ ἐνναυπηγηθῆναι, the ἐν is simply repeated, and perhaps, indeed (as one good MS. has πρώτο), it should be omitted before Κορίνθῳ. Anyhow, it does not seem clear how "the preposition added to the verb gives additional strength."

In chap. xci. Mr. Shilleto proposes αὐτοπτῶν δὲ ἄλλων ἀφικνουμένων, objecting to the article in the vulgate, τῶν δὲ ἄλλων ἀφικνουμένων. This seems only an example of that brachylogy so common with the Greeks—"when the others kept coming (who took a serious interest in the matter)," &c. Ingenious as αὐτοπτῶν may be, it hardly reads well immediately after αὐτοῦ, and at least cannot be considered a necessary alteration. Thus we are not driven to the strait in which Mr. Shilleto finds himself placed, because "τῶν ἄλλων cannot be used for ἄλλων."

Some few further points might be criticized; but scholars will prefer to give this book, as a whole, what it well deserves, a careful and thoughtful perusal throughout, and they will rise better scholars than when they sat down to it.

F. A. PALEY.

La Roche's Iliad. [*Homers Ilias*, für den Schulgebrauch erklärt von J. La Roche.] Berlin: 1870–71.

THE *Iliad* of Professor La Roche appears in a form which does not do justice to its great merits. It professes to be an edition for the use of schools: there is therefore no complete *apparatus criticus*, like that of his *Odyssey*, nor is there any exhaustive discussion of difficult passages. Yet the textual criticism of Homer is materially advanced by the work. Besides making full use of his previous researches (published in his *Text, Zeichen und Scholien des berühmten Codex Venetus*, Wiesbaden, 1862; *Die Homerische Textkritik im Alterthum*, Leipzig, 1866), Professor La Roche has now collated for the first time several other MSS. of great importance, and incorporated the results in this edition. The collations, however, are not given in full: and those who use Professor La Roche's *Iliad* may be at a loss for the key to his mode of referring to his MSS. Such a key, it may be worth while saying by the way, is to be found in the preface to the *Homerische Untersuchungen*, p. v, and in the edition of Professor Ameis, part 2 of the appendix, p. 2. The chief new materials are: the second Venetian MS. and two Florentine MSS., both of considerable value. Two Vienna MSS. (*Vindob.* No. 5 and No. 39), a Stuttgart MS., and two

other Venetian MSS. are of minor importance. The result is, not indeed a critical edition of the *Iliad*, but an improved text, and a valuable contribution to the edition of the future.

In the field of interpretation, Professor La Roche has distinguished himself by a series of researches into the grammar and prosody of Homer, of which the *Homerische Untersuchungen* form only a part. The chief fruits of his conscientious and scholarly labour are embodied in the notes to this edition. In this case, too, the form which he has been led to adopt is unattractive and somewhat inconvenient. If the scholars of the Austrian gymnasia look out all the parallel passages to which references are given, they will certainly learn a great deal about Homer, and learn it on a very sound method; but we fear that in this country at least few have sufficient patience for the task. It must be added that the book is not very carefully printed. Many of the references—usually of so much value—are made comparatively worthless by a wrong figure. Among other misprints not corrected in the tables of errata may be noticed: i. 66 (note), M for Π; ii. 812 (note), ἀνάνευθε for ἀπάνευθε; iii. 296 (note), ψ 220 for Ψ 220; iv. 421 (note), Δ 117 for Λ 117; vi. 119 (note), 876 for B 876; ix. 456 (note), "Vermuthungen" for "Verwünschungen"; ix. 601 (text), κάκιον for χαλεπὸν (i.e. the vulgate is condemned in the commentary, but retained in the text); xi. 419 (note), ἐσσεύαντο for ἐσσεύοντο; xii. 37 (text), μάστιγα for μάστιγι. In one or two places (i. 112, v. 478, vii. 64) the appendix is referred to, but no corresponding note is found there. At i. 87, εἶσι is called a plural, doubtless by an oversight. We cannot agree with Professor La Roche in scanning vii. 88,

νηῒ πολυκλήϊδῒ πλεῶν ἐπὶ οἴνοπα πόντον.

It is to be hoped that Professor La Roche will not merely have ample opportunity in future editions of correcting the printing of his *Iliad*, but that he will enlarge the plan on which it is composed. No one knows better the value of the materials which, as we learn from him, lie still unused and almost forgotten at Florence, in the Escurial, and in more than one English library.* D. B. Monro.

THE PHILOLOGICAL CONGRESS AT LEIPZIG.

The twenty-eighth *Philologenversammlung* took place at Leipzig on the days from the 22nd to the 25th May, and deserves notice in more than one respect. As has been observed in a previous report on the Congress at Kiel (*Academy*, vol. i. p. 59), "the utility of such a meeting is not to be measured by its Transactions," though we believe that this year's *Transactions* (to be published by Messrs. Teubner) will not be inferior to any one of the records of the doings of former meetings; but this time the quickening influence of a large social gathering and mutual exchange of ideas seems to have been realised to a greater extent than ever before. The number of philologers registered at the *Empfangsbureau* amounted, on the third day, to no less than 923, thus nearly doubling the number of the Kiel meeting, then stated by your correspondent to have been more successful than any previous gathering. It would be easy to pick out a long list of names respected and honoured throughout Europe, but it suffices to remind your readers of the fact that Leipzig itself, as it were the centre of the philological life of Germany (the glory of Bonn having, alas! past away for the time being), contains among its professors men of such world-wide fame as G. Curtius, F. Zarncke (the editor of the *Literarische Centralblatt*), Fleischer (the famous Orientalist), and J. A. Overbeck. To these it would be fit to add the equally famous name of F. Ritschl, the *alter sospitator Plauti*, had not this scholar (for reasons which you will allow me to pass over) thought proper to abstain from participation in the meetings, though he did put in an appearance on Tuesday evening, when the newly arrived guests met for the first time in the splendid hall of the *Schützenhaus*, to shake hands and renew old acquaintances. Professor Ritschl had been chosen president in 1869 at Kiel, but when 1870 and 1871 had changed the political aspect of things so much, Ritschl withdrew from this office, and his place was filled by Professor G. Curtius, with the greatest tact and, it should be added, occasionally under very trying circumstances. The opening speech delivered by this illustrious scholar dwelt, as was unavoidable under the present bias of national feeling in Germany, on the great events which had caused the repeated postponement of the meeting from 1870 to 1871 and 1872, and he endeavoured to trace the connection of philological pursuits with the development of national spirit and patriotism. The second part of this speech was specially devoted to the illustration of the growth of Philology itself, when the speaker entered into his favourite subject of the bearing of Comparative upon Classical Philology. The first paper was by the president's brother, E. Curtius (the historian), who gave an interesting account of recent discoveries at Pergamon, together with a sketch of the history of the city. Though one of the earliest towns in Asia Minor, it is not noticed by any writer before Xenophon, and most of the ruins belong to the time of the dynasty of Attalus. It was observed that after the English and French explorers of Asia Minor, Germany was at last beginning to take part in these discoveries, and many of the members were no doubt startled by the communication that our famous Moltke had previously gained laurels in the peaceful task of exploring Asiatic cities and regions. Of great interest were two recently discovered inscriptions, the one of which contains a long list of the names of *Ephebes*, showing that this institution was not confined to Greece proper, but had also made its way to the outlying posts of Greek civilisation.

Among the papers of the second and third day, the foremost place is no doubt due to an excellent and lucid paper by Professor Delbrück, of Jena, on the results of Comparative Syntax. After showing that the syntactical peculiarities of the Vedas greatly resemble those of Homer, it was observed that the finite verb, though best developed in Greek, would appear to have existed in its main features in the original speech of the Aryans, and instances were given of the late origin of a conditional tense in Sanskrit and Greek. It was admitted that the study of the Asiatic languages was the best way of learning to admire the simplicity and neatness of the Greek syntax. The main difference of Sanskrit and Greek was then found in the treatment of the *verbum infinitum*, and the construction of the accusative with the infinitive was stated to be peculiar to the classical languages. All secondary clauses were then proved to have been originally primary and independent sentences, which was illustrated by the peculiar treatment of *oratio obliqua* in Sanskrit and Greek. The early Aryan speech appears to have been destitute of a relative pronoun, and it was maintained that the root *yá* in Sanskrit had originally only an "anaphoric" sense. The question as to the origin of hypothetical sentences was designated doubtful, though it appeared probable that the εἰ of the Greeks was derived from a root with a demonstrative meaning. This instructive paper was followed by some equally interesting observations of Professor Lange, who laid great stress on the necessity of a scientific syntax of the Homeric language, and while allowing the merits of the well-known work of K. W. Krüger, still contested the standpoint of the writer, which was no longer in harmony with the progress of modern Comparative Philology.

After a somewhat tedious paper of Dr. Trieber on the τέλη of the Spartans (which were identified with the Ephori, but distinguished from the general expression οἱ ἐν τέλει), the next paper was read by Director Hasper, of Glogau, on the scene of the *Iliad*. The speaker was opposed to the assumption that Homer's Ilios lay on the same spot as the Ilion of a later age, and inveighed against the futile attempts of the notorious Herr Schliemann to discover the site of Troy in agreement with the tradition of the contemporaries of Alexander the Great. Accurate and elaborate as Dr. Hasper's paper was, we are inclined to attach far greater weight to the excellent observations, subsequently made by Professor W. Clemm, of Giessen, who justly questioned the possibility of deriving direct geographical state-

* Since these lines were written, the first part of Professor La Roche's critical edition has been announced as soon to appear. It is to be based, like the present text, chiefly on the two manuscripts Venetus A and Laurentianus Plut. xxxii. 15 (Hoffmann's Laur. B). The *apparatus criticus* will contain the variations of four others collated by Professor La Roche, besides Eustathius and the fragments.

ments from such a poem as the *Iliad*, whose author should not be treated as a careful writer of military events, but as a poet frequently carried away by his imagination, and whose exactness in geographical details should not be insisted on too much. Director Stier made some observations on Homer's Scamandros, which he identified with the modern Mendré.

Another highly interesting paper was Professor A. Schöne's essay on Greek reliefs, chiefly in connection with inscriptions. The professor has a work on this part of archaeological study nearly ready for publication (copies of which were shown to the meeting), and it may be hoped that his lecture will cause many scholars to study these works, which go far to acquaint us with the various phases of ancient Greek life.

Dr. Müller's elaborate essay on Plotinus could not be heard in full on account of the shortness of the time of the third day, and in the same way the Rev. Mr. Whitford's proposal to form a committee for the framing of a universal linguistic alphabet was dismissed without discussion. Dr. Tischendorf distributed specimens of a new Greek type, imitated from the MSS. of the eighth and ninth centuries.

Among the various Sections the transactions of that on Education were of special importance. It may be stated that the proposal of removing the free Latin Essay (which now forms part of the final examination at German colleges, *Maturitätsprüfung*) was rejected with a great majority, the meeting being of opinion that the power of writing a free Latin composition was, so to say, the central point and test of the classical training of this country. An animated discussion was caused by the spirited and energetic lecture delivered by Director Kruse (of Greifswald), concerning the charges brought against the German colleges, that their peculiar course of studies was onerous and hurtful to the mental and bodily development of the students. Without denying the justice of these charges in but too many cases, the meeting seemed to be of opinion that such perverse results were the consequence of individual faults both of masters and pupils, but not of the existing laws on the degree of knowledge to be attained, though much blame appeared to fall on many of the Prussian *Schulräthe*, who exaggerate their demands to a degree sometimes quite preposterous. Instances of this perversity, which would be amusing if they were not so very sad at the same time, were produced in regard to the exorbitant amount of knowledge chiefly insisted on in a branch of instruction which ought to be excluded from examination altogether, we mean religion. It is to be desired that this discussion will exercise some influence on the Prussian authorities (represented at the meeting by Geh.-R. Wiese) in framing the new law on the Examinations which is said to be shortly forthcoming.

The most interesting features of the Archaeological Section were the explanation of an elaborate plan of the battle of Cannae by Herr Schillbach, of Potsdam, and the exhibition of a large number of coins in the collection of Herr Imhoof, of Winterthur. In the German and Romance Section elaborate papers were read on the laws of *Auslaut* in the Lithuanian, Slavonic, and Gothic languages, by Dr. Leskien; on the German oases in the non-Germanic countries of the Austro-Hungarian monarchy, by Professor Schröer, of Vienna; and especially a capital, and in parts very witty, paper by Professor Hildebrand (one of the editors of the continuation of Grimm's *Dictionary*), on the identification of possessor and possession in popular speech, or, as the author himself entitled it, *über Land und Leute*. There were also papers by Dr. Schuchardt (the author of the well-known work on Vulgar Latin), on some syntactical modifications of initial consonants in the Dialects of the Centre and South of Italy; and by Professor Gröber on a hitherto unknown branch of the *Chanson de geste Fierabras*. The Section for Modern Languages (which was first formed at this meeting, but at once amounted to no less than fifty-eight members) offered a very valuable paper by Dr. Mahn (well-known to the possessors of the latest edition of Webster), on the Iberian element in the Romance languages; but as it chiefly consisted in a number of etymologies, it would be difficult to give an abstract of this lecture. Dr. Schmidt, of Falkenberg, lectured on the pedagogic value of English syntax, a position, as it seems to us, very difficult to prove. It should finally be added that the Oriental Section occupied themselves with a lecture by Professor Sachau, of Vienna, concerning the historian Al Birunî* and a proposed edition of his works, and another by Professor Brugsch on some hieratic papyruses of the museum at Bulak, containing Egyptian rules on the practical conduct of life. Another lecture by the same scholar, on the present state of instruction in Egypt, was not given, owing to his sudden departure. You will excuse my not saying anything on the Mathematical Section; but let a reporter try to be ubiquitous as much as possible, he must sacrifice some parts of the transactions of a congress combining so many various elements as the Philological Congress at Leipzig undoubtedly did.

Hitherto only one side of the Transactions has been sketched; we have to add a few words on the social aspect of the Congress. The arrangements were excellent; the great dinner on the 22nd splendid, the toasts numerous, the convivial enjoyment loud and undisguised, though never boisterous; the wine abundant and prime. On the 24th an express train conveyed the philologers to Grimma, where the city of Leipzig had provided an excellent entertainment at the Gattersburg, on the romantic banks of the river Mulde, and where the beautiful walks in the surrounding woods were visited by large troops of philological excursionists. Capital also was the performance of Beethoven's *Fidelio* at the new *Stadttheater*, which is in itself worth seeing, and which was placed at the service of the philologers by the manager. In fact, it may be added that everybody at Leipzig did their best to welcome their philological guests, many of the citizens having placed rooms at the disposal of the committee, and all sights being thrown open to the visitors. Surely all who were present at this year's meeting will have left Leipzig with the feeling of content and gratitude which was eloquently expressed at the close of the meetings on Saturday by Director Classen, of Hamburg, one of the oldest members of the Congress.

In selecting the place of the next meeting the assembly were led by political and national motives. In this new empire of ours we feel that there is still one brother left outside whom we should be sorry to lose—a feeling enthusiastically expressed in the reception given to an Austrian speaker. The German element in Austria stands in need of any support and countenance that can be afforded to it; and owing to this it was resolved to meet next year at Innspruck, in the Tyrol, whence a kind and pressing invitation had been sent. Professor Jülg, of Innspruck, cordially accepted the resolution in the name of his town; and thus we parted to return to the duties of our work, which had been most pleasantly broken by the Congress, of which I have endeavoured to give you a short sketch.

W. Wagner.

* See *Academy*, vol. ii. p. 506.

NEW PHILOLOGICAL PERIODICAL.

We have too long delayed giving an account of a new periodical which promises to be of great importance to classical philology. The *Ephemeris Epigraphica*, of which the first number appeared at the beginning of the year, is intended to appear four times a year as a perpetual and growing supplement to the *Corpus of Latin Inscriptions*. Instead of being scattered here and there in the various philological journals, and buried under a heap of other matter, all newly found inscriptions will be inserted in its pages under the direction substantially of the same editors as those of the *Corpus*. But inasmuch as the greatest number of new discoveries are made in Rome itself or its neighbourhood, the projectors of the undertaking have done wisely in attaching it rather to the Roman Institute of Archaeology than to the Berlin Academy. The *Bullettino* and *Annali* of the Institute are already known to scholars in this department of learning as the least imperfect repertory of such matters. Nor is it a slight benefit that by this means the editors of the *Corpus* associate with themselves the honoured name of De Rossi.

The usefulness of such a work is self-evident, and we cordially recommend it to our readers' support. English scholars should be urged to communicate to Professor Mommsen in Berlin or Professor Henzen in Rome any new discoveries that may come under their notice either here or elsewhere. Communications may be made in Latin, which is to be the language of the *Ephemeris*, but they will be readily translated by the editors from any modern language. The importance of a single isolated inscription is seldom apparent, though, when compared and co-ordinated with others in the hands of an expert, it may be made to give very telling and decisive evidence. The science of inscriptions is almost as conclusive in its method and results as that of comparative anatomy. A single fragment will often be

enough to restore at least the general outlines of a comparatively long document, and to determine its date and circumstances.

Only for the perfection of such a science it is necessary that all facts bearing upon it should be immediately made known to all who have an interest in it, that they should be sytematically classified and rendered easy of reference, after undergoing a thorough sifting and testing process. The *Ephemeris* will, it is hoped, make the fulfilment of these three conditions possible, supplying: 1. Immediate information; 2. Scientific examination; 3. Systematic arrangement. The final arrangement will not and cannot take place at once, but will be delayed till the time when it is thought fit to issue regular supplementary volumes of the *Corpus*. Of this at present three parts alone are published: I. The most ancient, containing inscriptions up to the death of Julius Caesar; II. Those from Spain; and IV. The Pompeian wall-inscriptions. The first number of the *Ephemeris* contains additions to all of these, as well as dissertations on certain kindred subjects. The supplements to the first volume consist chiefly of writings on works of art, cups, chests, and mirrors, especially from Praeneste and of names from the sepulchres of the same place. It may be a new fact to our readers (though noticed some years ago in the journals of the Institute) that the words on the Cista Ficoroniana are to be read *Dindia Macolnia fileai dedit*, not, as was always read before, *filea*.

The form *Jovos* for *Jupiter*, on a chest also from Praeneste, and the name *Vibis Pilipus*, i.e. *Vibius Philippus*, on an early mirror from the same place, are remarkable. In the additions to the *Fasti Anni Juliani* we notice the remark that the name *Juturna* should be rather *Diuturna* (p. 36), another instance of *Fidi* for the dative case (p. 39), a substantiation of the name *Juno curritis* = *quiritis*, and a reference to a sacrifice to *Feronia*, till now regarded as a purely Latin, not a Roman goddess (p. 41). Among the Spanish we remark especially the *tessera hospitalis*, described and commented on in *Hermes*, vol. v. The Pompeian supplements are but few; but we observe that Herr Zangemeister accepts as a better reading than his own the distich given in the *Academy* of September 15, 1871 (vol. ii. p. 444), *Quoi scripsi semel*, &c., from an early copy by the Bishop of Lincoln.

The rest of the number contains four sets of *Observationes Epigraphicae*, by Professor Mommsen. The first is an explanation of the epigram *Ursus togatus vitrea qui primus pila* (Orelli, 2591), in which he shows that *togatus* is probably not a proper name, but means simply "Roman," and that Ursus was not a freedman. The second is a genealogy of the Junii Silani, and explains their relation to the imperial family. The third, *de fide Leonardi Gutenstenii*, is a curious and useful paper on the frauds of the early editors of inscriptions. The fourth contains some grammatical notes *ex actis Arvalium*, and proves, for instance, that *conlega*, *conlegium* were the forms in use up to A.D. 32, and that afterwards *collega*, *collegium* came into use except during the reign of the antiquarian Claudius. The second number, recently published, contains no additions to the *Corpus*, but some interesting papers and discussion. G. Wilmanns traces the history of the *Praefectus castrorum* and *Praefectus legionis* in connection with the establishment of a purely military power. W. Dittenberger discusses some Attic *tituli ad res Romanas spectantes*. E. Bormann emends and combines fragments of three inscriptions on public buildings in Rome, the first of which is important. Lastly, Professor Mommsen continues his *Observationes Epigraphicae* with his usual acuteness and wide experience. J. Wordsworth.

Contents of the Journals and Intelligence.

The Indian Antiquary, part v. (May).—Sketches of Mathurâ; by F. S. Growse. [Continued; accounts of the twelve *Bans* (*vanas*) or forests, mentioned in the *Mathurâ-mahâtmya*, and connected with Paurânic legends; also of the twenty four *upabans* which are said to refer mainly to Râdhâ's adventures, and to have no ancient authority whatever.]—On the Treatment of Oxytone Nominal Bases in Sanskrit and its Derivatives; by J. Beames. [Sanskrit nouns ending in accented *a* are shown generally to end in the mediaeval languages in *au*, and in the moderns in *o* or *â* (viz. *â* in Hindi, Bengali, Panjâbi, Uriya and Mârâṭhi; *o* in Gujarâti and Sindhi); while Sanskrit nouns in unaccented *a* end in mediaeval languages in *u*, and in the moderns in *u* or *a*, or entirely reject the final vowel.]—The Cave of the Golden Rock, Dambula, Ceylon; by T. W. Rhys Davids. [Sir E. Tennent mentions one inscription in this rock-temple, which was translated for Turnour by Mr. Armour. Mr. Davids has discovered eleven more, and now gives the oldest and most interesting inscription. From this inscription it appears that the temple was founded, not by Walagam Bâhu about 86 B.C., as stated by Tennent, but in the time of Devânampiya Tissa (B.C. 246), the ally of Aṣoka, and friend and patron of Mahindu, who introduced Buddhism in Ceylon.]—An Old Canarese Inscription from the Belgâm District; by J. F. Fleet. [Taken from a stone tablet which stood originally in front of a small temple of Śankara in the bed of the river Malaprabhâ.]—The Hot Springs of Unai; by W. Ramsay.—Oudh Folklore: a Legend of Balrampur; by W. C. Bennett.—Bhavabhûti in English Garb; by K. M. Banerjea. [Account of Bhavabhûti's Sanskrit dramas *Mahâvîracharita* and *Uttararâmacharita*, translated by Pickford and Tawney respectively.]—Review [favourable] of P. Boyd's translation of the Sanskrit Buddhist drama *Nâgânanda* with an introduction by Prof. Cowell; by A. H. B.—On the Ancient Remains in the Krishna District. [From the Report of the late Mr. J. A. C. Boswell to the Madras Revenue Department.]—The Asiatic Societies. [Extracts from their Reports and recent publications.]—Notes on the Bhariahs; by C. Scanlan. [This hill-tribe is here considered to belong to the great Gond family, though in their language and some of their customs they differ totally from the Gonds, with whom they neither eat nor drink nor intermarry. They acknowledge, however, the law of Camjhana, which imposes a servitude of some years on a man, wishing to marry into a family, who cannot afford the usual marriage settlement and to give presents to the bride's relatives. There are eighteen Bharia *gots*, or clans.]—Notes, Queries, &c. [Amongst others, a query, by H. Blochmann, on the age of the use of tobacco in India.]

The Phœnix, November to February. (Philological articles.)—The Casket of Gems, a Tale from the Chinese; by Dr. Birch.—Buddhist Philosophy; by B. H. Hodgson (continued).—The Sûrangama Sûtra; by S. Beal.—Sunt'aun p'u, the Siamese Shakspeare.—Outline of a Japanese Drama.—Japanese Proverbs.—Reviews: De Rosny's *Anthologie japonaise*; and Turretini's *Atsume Gusa*; by W. G. Aston. [Both works, especially the former, deficient on the score of accuracy, but useful for general readers.]

The Indian Government has, if we may trust the reports of Indian newspapers, resolved to send out an European scholar to occupy the Sanskrit chair in the Government College of Madras, temporarily held by a native student, M. Seshagiri Shástri. If such is really the case, it is to be hoped that the choice of the government will fall on a genuine Sanskrit scholar; as such a one alone can be expected to command the respect of native students, and to impart a new life to Sanskrit studies and literary research, which, in spite of the vast and tempting materials there offering themselves to the enthusiastic student, have for many years been at a very low ebb indeed.

Professor Albrecht Weber has just finished the second volume of the *Taittirîya-Saṃhita*, containing Kâṇḍas 5 to 7. He has added to this volume a special representation and criticism of the Padapâṭha of the *Taittirîya-Saṃhitâ*—a survey of the ritualistic employment of the single Anuvâkas—the text of the *Kâṇḍânukrama*—an alphabetical list of the ṛik-pratîka, not only for the Saṃhitâ, but also for the Brâhmaṇa and the Âranyaka. The Anuvâkapratîkas for the three texts have likewise been added.

New Publications.

Ahlwardt, W. Bemerkungen üb. d. Aechtheit der alten arab. Gedichte. Greifswald: Bamberg.

Anthologia palatina, Epigrammatum cum Planudeis et appendice nova epigrammatum veterum. Ex libris et marmoribus ductorum, annotatione inedita Boissonadii, Chardonis de la Rochette, Bobbii, partim inedita Jacobsii, metrica versionis Hugonis Grotii et apparatu critico instruxit F. Dübner. Graece et Latine. Vol. II. Cum indicibus epigrammatum et poetarum. Paris: Didot.

Böhtlingk, O. Indische Sprüche. Sanskrit u. deutsch. 2. verm. u. verb. Aufl. Leipzig: Voss.

De Rosny, Léon. Variétés orientales historiques, géographiques, scientifiques, bibliographiques et littéraires. 3ième ed. Revue et corrigée. Paris: Maisonneuve.

Leo, H. Angelsächs. Glossar. 1. Abth. Halle: Buchh. d. Waisenh.

Möbius, Th. Die altnordische Sprache. Halle: Buchh. d. Waisenh.

Prätorius, Fr. Beiträge zur Erklärung der himjarischen Inschriften. Halle: Buchhandlung des Waisenhauses.

Sayce, A. H. An Assyrian Grammar for Comparative Purposes. Trübner.

ERRATA IN No. 49.

Page 201 (*a*), line 34, for "Alcasyarquivir" read "Alcassarquivir."
" " " line 3 from bottom, for "Förtechning" read "Förteckning."
" " (*b*), line 24, for *Oswald und Orendel*, read *Oswald* and *Orendel*.
" 202 (*a*), line 26, for "Bisschopp" read "Bisschop."
" " " line 12 from bottom, for "Borman's" read "Bormans'."
" " (*b*), top line, for "But *en* as a double negative" read "But the omission of *en* as a double negative."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 51.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Monday, July 15, and Advertisements should be sent in by July 10.

General Literature and Art.

Rude-Stone Monuments in all Countries; their Age and Uses. By James Fergusson, D.C.L., F.R.S., V.P.R.A.S., F.R.I.B.A., &c. Murray.

THIS valuable and interesting treatise is the offspring of two other works by the same author, namely, his *Handbook of Architecture* (1854), and his *History of Architecture* (1864). In 1860, also, Mr. Fergusson contributed an article on the subject to the *Quarterly Review*, entitled "Stonehenge;" and in 1870 a further article in the same journal, entitled "Non-Historic Times," announced his latest views on the megalithic monument question.

Mr. Fergusson, therefore, may fairly claim the right of speaking with some authority, as an architect and antiquary, on the history and nature of these monuments, although it may not be correct to assume, as he does, that "no other antiquary . . . . has gone so carefully and fully into the whole subject" (pref. p. vii) as he has done. Neither should it be held as conclusive evidence in favour of the correctness of Mr. Fergusson's opinions that no refutation followed the expression of these opinions in the *Quarterly* articles, especially as the articles in question appeared without that degree of weight and authority which the announcement of the writer's name would justly attach to them. An erroneous opinion may be many times expressed, and yet escape correction.

Failing other opponents, however, Mr. Fergusson becomes in some measure his own refutor. "On many minor points," he says, "I have offered suggestions which I do not feel sure that I could prove if challenged." These were made, he adds, "because it oftens happens that such suggestions turn the attention of others to points which would otherwise be overlooked . . . . ; while, if disproved, they are only so much rubbish swept out of the path of truth" (p. ix). This practice may be allowable in a debating society, or may be adopted with advantage in contributing to a journal like *Notes and Queries;* but in a work of scientific character it is both inconvenient and objectionable. Where a subject is, moreover, already overlaid with difficulties such as yet retard the solution of this megalithic question, it is hardly justifiable for a writer of good authority to add to those difficulties by putting forward as statements founded on evidence what are merely tentative suggestions. Mr. Fergusson evidently feels this too, for he is rather severe on others guilty of a somewhat similar offence.

The author's opinion, as he candidly tells us, differs widely from that generally received. It has happened before now in the world's history that one man has been right and the rest of mankind wrong. But the reason which gives Mr. Fergusson confidence in the soundness of his views is merely that he has spent, as he says, the greater part of his life in studying the architecture of all nations. The study of a question so complex as that presented by these megalithic remains might well occupy even the whole of a man's life without yielding the desired result; for the builders of these monuments have left no record of their erection, no legible inscriptions, nor "architectural features to reveal their history." And, even as Mr. Fergusson observes, the contents of these monuments being of a mixed character, consisting generally of bones, stones, iron, bronze, and gold, little dependence can be placed on the presence of any one class of objects to fix the age of these monuments "till it can be shown at what date their use did really cease" (p. 14). Reversing the process, Mr. Fergusson, instead of deducing the age of the monuments from the nature of their contents, endeavours to prove the age of the contents from that of the monuments in which they are found, the latter being by far the more difficult task.

The author's views regarding the age and nature of the class of Rude-Stone Monuments which form the subject of his work are briefly stated in the following propositions:—I. That they are generally sepulchral, or connected with the rites of the dead. II. That they are not temples in any usual or appropriate sense of the term. III. That they were generally erected by partly civilised races after they had come in contact with the Romans, and most of them may be considered as belonging to the first ten centuries of the Christian era. (P. 27.)

To the first of these propositions few competent antiquaries will object. The second will also find few dissentients, for the notion that dolmens were used as sacrificial altars by serpent-worshipping Druids is now well nigh exploded, although this class of remains will probably continue to be known for a long time to come by the name of "Druids' altars." Moreover, the qualification, "usual or appropriate sense," does not exclude the probability of dolmens and stone circles having been frequented for the celebration of funeral games in pre-Christian times. But the third proposition fixes the age of these monuments at too recent a date to receive the assent of archaeologists, unless based on indubitable evidence. And this evidence is wanting. It is not to be denied that sepulchral tumuli were erected in these islands, as well as on the continent, at dates long within the Christian era; but it does not follow that similar monuments were not also erected centuries before it. Even if it was clearly proved that King Gorm and Queen Thyra were buried in the tenth century in the mounds in Jutland that bear their names (the chambers in which, it is to be remarked, were formed of oak, not of stone; p. 297), it may not be quite certain that the tumuli were erected at the time, for there is abundant evidence to prove that even as late as the sixteenth century the practice of burying in ancient mounds was not altogether abandoned, in these islands at least. Of this a reliable instance is recorded in the *Annals of Loch-Cé*, an Irish chronicle (Rolls Publ. 1871), under the year 1581, where it is stated that an eminent person was buried at (or in) the *duma* of Ballintober, in Connaught. This *duma*, or tumulus, must have been then of great antiquity.

Mr. Fergusson disputes that any of these megalithic structures belong to a pre-historic or even pre-Christian age. There is no evidence of their erection before those eras, he says, and therefore they must have been built later. They are not mentioned by the classic writers, and therefore could not have existed in their time. But he fully appreciates, of course, the weakness of such negative evidence. On the other hand, he seems to disregard too much the value of historical traditions, which assign to the monuments an age far beyond the limit he allows. These are only cobwebs of fable, woven by "poets and pedants," which he feels no

remorse in brushing away, substituting his own "impressions" for national traditions, and this sometimes in such an arbitrary manner as to leave no room for argument. Speaking of the history of King Arthur, he says: "This is not the place to examine so large a question. It will be sufficient to state what I believe to be the main facts. Those who do not admit them need not read further." (P. 133.) By adopting his suggestion the incredulous student will miss the incorrect etymology of "Cat Coit Celidon," the scene of one of Arthur's battles, which Mr. Fergusson gives four pages further on, where he says that "*Coit*," the second member of the name, "only so far as the dictionaries tell us, means 'coracle,' and" (as *Cat* means a battle) "would seem to indicate a struggle in boats." But *Coit* is explained by the ninth-century glossarist Cormac (*voce* Salchuait) as "a name for a *wood* in Combrecc," or Welsh. The English word "cot" had not then been adopted into Gaelic dictionaries.

"It is probable, after all," Mr. Fergusson says, "that it is from the Irish annals that the greatest amount of light will be thrown on the history and uses of the megalithic monuments" (p. 175). But this light will hardly be evolved by his process, which consists in setting aside as totally unreliable the system of chronology and regnal lists on which these annals are based, and bringing together events and personages separated in the annals by wide periods of time. It suits Mr. Fergusson's theory of modernisation to bring into immediate contact the Tuatha De Danann dynasty, whose era the Irish annalists refer to a period long antecedent to the Christian era, and the dynasty of King Crimthann (circa A.D. 84); but if there is any element of truth in the historical traditions preserved in Irish MSS., from St. Patrick's age at least, the Tuatha De Dananns were so long extinct in Crimthann's time that they had already passed into fairies and gods, abiding in those hills and mounds some of which are now known to be chambered tumuli. And so far from the Four Masters having, "like truly patriotic Irishmen," carried back the history of their country to the Flood, they constructed no system of chronology themselves, but confined their labours to digesting the records which had descended to them from remote times. Granted that the minute details of a battle cannot be transmitted by oral tradition for a period of two thousand years, it is nevertheless credible that the bare record of important events may be preserved through that channel for at least ten centuries. The Gaelic-speaking people of the highlands of Scotland and Ireland still recite long lays and stories which Mr. John F. Campbell, that most excellent of *Shanachies*, will truly tell us have not existed in writing for perhaps six hundred years. On the subject of writing, too, Mr. Fergusson is not always a safe guide. Whether the art of writing was known in Ireland in or before the reign of Cormac Mac Art (A.D. 218–266), or was introduced by the Christian missionaries in the fifth century, as some authorities believe, has not yet been satisfactorily settled, but that it was extensively practised before the year 600 is very certain. This, however, is not the opinion of Mr. Fergusson, who considers that before the year 600 it was very little practised. In that year, he says, the Irish did not possess even a copy of their most celebrated literary monument, the *Táin Bó Chuailnge*, because "a mission was sent to Italy to copy one said to have existed there" (p. 196). But in the very passage from which he has drawn this conclusion (O'Curry's *Lectures*, p. 29), it is expressly stated that the copy in question had been carried eastwards (*i.e.* out of Ireland) at some previous time, by a "saoi," or sage.

Mr. Fergusson's examination of the history, extent, and character of the Irish monuments has been of too cursory a kind to justify him in expressing himself so positively as he does regarding their age. "There may be other rude-stone monuments in Ireland," he says, "besides those described or alluded to in the preceding pages, but they can scarcely be very numerous or very important" (p. 237). Any one acquainted with the still unpublished materials of Irish history must know that the monuments hitherto discovered do not amount to a tithe of those mentioned in the Irish MSS., under various names, and referred to various ages and persons; and of those hitherto brought under notice, not one-fourth has attracted his attention. The magnificent three-chambered dolmen on the summit of Sliabh-Claire at Duntrileague, in the county of Limerick, has escaped him, although it has a history; and the majestic circle and standing stones near Lough Gur, in the same county, are not noticed. The ancient traditions repecting these latter remains, which were certainly taken down at the earliest period of written history, indicate that in the first century of the Christian era their age and uses were totally forgotten. A hundred others might also be enumerated, including the huge pillar-stones at Punchestown, near Naas—the remains of the "chorea gigantum," which Geoffrey of Monmouth describes (or others like them) as having been removed to Stonehenge.

The author's personal investigation of the Irish monuments, though fruitful and instructive, was really very limited, for he seems to have altogether passed by the province of Munster, with its numerous remains of antiquity. He has certainly been industrious in consulting published authorities on the subject of his work; but it is not his fault that the most accurate sources of information are as yet unavailable to all but the few acquainted with the tongue in which they are written. Until these are published, all attempts at deciding the vexed question of the age of these structures must prove futile. One or two instances may be sufficient to show the danger of arriving at conclusions on imperfect data. The sepulchral remains near Cong, in Mayo, and at Carrowmore, in Sligo (which Mr. Fergusson at one time attributes to the Tuatha de Dananns, and at another to the Danes), are represented by him as marking, respectively, the battles of a Southern and Northern Moytura. This "no Irish antiquary has ventured to doubt," he says. It is not because there are not good grounds for doing so, at least as regards the Southern Moytura, or Moytura-Cunga. That there were two battles of Moytura fought in Ireland before the Christian era seems certain; but the most ancient MSS. represent them as fought in the same place, and somewhere in the north of Connaught. Before the seventeenth century, the stony neck of land between Loughs Mask and Corrib was not regarded as the site of a battle of Moytura-Cunga, or Moytura of Cong; and the account of the first battle of Moytura, of which Mr. Fergusson seems to have read a translation, does not countenance the presumption that it was fought in a spot so unsuited to a great battle. There is no place near Cong called Magh-Tuiredh, and apparently there never was; but the existence of Cunga (or "Cunga-Feichin," Fechin's *angustia*, St. Fechin, ob. A.D. 664) probably suggested to the Four Masters, who were among the earliest to identify the first battle of Moytura with the southern Cong, the propriety of locating the site of the battle there.

But there were other places named *Cunga*, or Cong, in Mayo and Sligo; and an older authority than the Four Masters places the field of battle of Magh-Tuiredh-Cunga to the north-west of Loch-Cé (Roscommon county), and consequently in the county of Sligo (see *Annals of Loch-Cé*, introd. pp. xxxvi–xxxix).

Mr. Fergusson finds, as he thinks, an important piece of evidence to support his theory in the history of a dolmen near Ballina, on the west side of the river Moy, which he

assumes to have a date, and that date some time in the sixth century. It is, he says, the grave of four persons who were executed for murdering the grandson of a man who died A.D. 428. In this, however, Mr. Fergusson has been misled by Dr. O'Donovan; for the Irish MS. which the latter quotes as his authority (*Book of Lecan*, 237*b*), does not state, as he assumes, that the culprits were buried on the western bank of the Moy, opposite to Ard-na-riag (so called from their execution, *riag*), but implies that they were interred on the summit of the hill which is now known as Ardnarea, on the east side of the river.

When quoting others, however, Mr. Fergusson is not always correct himself. At p. 144, for instance, he cites Petrie's authority for the statement that a coin of Valentinian had been found *in* the mound of New Grange, whereas Petrie only said *on* the mound. His most serious offence in this line is where he attributes to the late Dr. J. Henthorn Todd opinions which are totally opposed to those entertained and often expressed by him. After fixing the era of the Firbolgs to his own satisfaction (B.C. 50), he says, "since the above was written, I have been gratified to find so eminent an authority as Dr. Henthorn Todd . . . arriving, by a very different road, at very nearly the same conclusion;" and quotes the assertion that the Firbolg "conquest of Ireland was not much older than Caesar's time, if it were not a good bit later," from "*Irish Nennius*, translated by J. H. Todd, Appendix C." There is no such appendix to the work; and the statements here fathered on Dr. Todd are found in No. 21 of the Additional Notes (p. c), which were all supplied by the late clever scholar, but fanciful critic, Mr. Algernon Herbert, as Mr. Fergusson might easily have seen by the initial (H.) at foot of the note, and the statement which Dr. Todd was careful to add in the title-page, fixing upon Mr. Herbert the responsibility for the opinions put forward in these Additional Notes.

Nevertheless, although Mr. Fergusson's views as to the age of these monuments may not meet with general acquiescence, every archaeologist must thank him for producing a very valuable and interesting work, well written and beautifully illustrated. W. M. Hennessy.

Fifine at the Fair. By Robert Browning. Smith, Elder, and Co.

The story of Mr. Browning's new poem—the outward action of the characters—is of the simplest. A Frenchman and his wife, Elvire, stroll out at Pornic, where the Loire and the sea unite; they visit a summer fair where the husband admires the peculiar beauty of Fifine, the dancing-girl; they walk down to the beach and to the Druidical remains, and so return to their villa, where there is pushed into the husband's hands a letter—the enigmatical result of that largess of coin he had slipped into the pleading tambourine of the spangled dancer. But the story—the slight action—is the least important part of the poem of between two and three thousand lines spoken by the husband of Elvire to Elvire, momentarily jealous—nay, pained, a little unreasonably—by the admiration Fifine has evoked, and by that outburst of praise of a Bohemian life and lawlessness—an outburst of feeling suggested, surely not created, by the flitting figures at the fair. The monologue, though spoken to the man's wife, and though often argumentative, is in truth meditative; and it is the meditation of a man who has the liveliness to feel Bohemian charms—the effervescence of spirit or of sense "frenetic to be free"—who has the capacity, denied alike to puritan and libertine, to see in life more ways than one, and yet the strong good sense to know that law is better than lawlessness, and the seemingly restricted sphere more fruitful than the search through space.

"Each step aside just proves divergency in vain.
The wanderer brings home no profit from his quest
Beyond the sad surmise that keeping house were best
Could life begin anew. His problem posed aright
Was—'From the given point evolve the infinite!'
Not—'Spend thyself in space, endeavouring to joint
Together, and so make infinite, point and point:
Fix into one Elvire a fair-ful of Fifines!'
Fifine, the foam-flake, she: Elvire, the sea's self, means
Capacity at need to shower how many such!
And yet we left her calm profundity, to clutch
Foam-flutter, bell on bell, that, bursting at a touch,
Blistered us for our pains. But wise, we want no more
O' the fickle element. Enough of foam and roar!
Landlocked we live and die henceforth: for here's the villa-door."

The key-note of the poem is struck by some couplets in the first act of Molière's *Don Juan*. Elvire, understanding neither his absence nor his excuses, addresses her husband:—"Vous plaît-il, Don Juan, de nous éclaircir ces beaux mystères?" And before he, who is so voluble to Sganarelle, has stammered out a reply, she tells him that he can ill defend himself, that he should arm himself with a noble effrontery, and declare that in his sentiments towards her there is no change whatever. Now in Mr. Browning's poem the speaker has followed this advice. Armed with a noble effrontery—albeit he is anything but a mere reproduction of the Don Juan of the earlier dramatic poet—he plunges into the wide subject of the nature of man's love for woman and of his admiration for and liking of women; and in the diffuse *apologia* built up of countless illustrations, similes, subtleties, and ingenuities, he is sometimes all sophistry and sometimes all justice. Sometimes he deserves the *naïve* remark of Sganarelle: "Je ne sais que dire; car vous tournez les choses d'une manière qu'il semble que vous avez raison; et cependant il est vrai que vous ne l'avez pas;" and sometimes, as in the passage already quoted, his conclusions are full of wisdom and virtue: so that on the whole he is a character unusually attractive for a great analyst to examine—for a great painter to depict. And here, in the one hundred and seventy pages of this book, is his heart exposed as on a dissecting table; and Mr. Browning, with his keen instrument in hand, points out what is morbid and what is healthy in his complex organization.

Would that his exposition were always lucid! Difficult it is, and perhaps must be, by reason of its subtlety; but surely there is here and there a wilful obscurity, which will restrict the book for the most part to the large but not yet enormous circle of Mr. Browning's warm admirers. Is it possible, some may ask, as they stand amazed at the difficulties of *Fifine at the Fair*, that the poet has written of purpose an enigma—to the Rosamund's bower of this labyrinth can they only reach who grasp the necessary thread? No, indeed; but it is probable that Mr. Browning, conscious that in our day most reading is careless reading, is not sorry to give men what they *cannot* read carelessly, and that sometimes in doing this—say in *Fifine*: not in *Balaustion*: not in *Hohenstiel*—he does much more than is needed to dispel the indolence which is the mode. Now and then he is wantonly obscure, and now and then he writes in a French idiom, not an English—talks of "white nights," for instance, instead of sleepless nights—he who has done so much in *The Ring and the Book* and in many another work (yes, in this very volume) to preserve or to recall the sturdy English banished from novel and newspaper.

Of the general mode of treatment followed in this poem, and of the poem's place amongst Mr. Browning's works, a little must here be said. As a poem for the most part of *intime* life and thought, with no more background, no more local colour, than the due presentation of character requires, it may be considered an analysis comparable chiefly with

the *Scènes de la Vie privée* of Balzac. In this way, it is related to *Any Wife to any Husband*, to *Dis Aliter Visum*, and to *James Lee*. These indeed are but some important members of that family group of Mr. Browning's poems of which *Fifine* itself must now be accounted the head. But as an elaborated exposition of individual and peculiar character, the new book claims kinship with the "apologies" of *Bishop Blougram* and of *Prince Hohenstiel-Schwangau*, and it introduces us to a personage hardly less subtle and complex than these, though his part is played upon the Pornic shore instead of among the intellectual refinements and cavillings of theologians, or on the crater of a volcanic "society" requiring to be "saved."

In treating the subject that is broached and probed in *Fifine at the Fair*, most writers would have constructed a dialogue: the husband would have spoken first, and then the wife. But there is greater subtlety in Mr. Browning's method of making the husband frame for the wife her answers, retorts, objections, and embody these, together with his own discourse, in one long monologue; for it gives room for utterances from three points of view and types of character, instead of only two. The husband speaks in the main for himself; but at times he speaks for the wife as she would really speak, and at times he speaks for her as there could only speak the woman he *imagines* her to be.

Save in the prologue and epilogue, the book is written in couplets of twelve syllables to the line—spirited verse, often with the buoyancy and now and then with the directness of *Hervé Riel*, and, except for occasional roughness, not open to the conventional charges preferred against the versification of this poet. He also can jingle rhymes as well as another, though generally if one thinks of him with a great rhymer such as Victor Hugo, one thinks of him by way of contrast, as of one whose poetry contains the greatest quantity of thought with (often: not always) the least amount of splendour, while Victor Hugo's contains the greatest superficial splendour with the least possible amount of thought. With the one poet, manner is the chief thing: with the other, matter. And Browning at his best has in truth the terseness in fulness which is the special note and most unfailing sign of the great men in the greatest literatures—he has, when at his best, the pregnancy of Horace, Goethe, Balzac.

Of details, it may first be said that *Fifine at the Fair* contains two especially fine and suggestive illustrations, which should strike everyone—nor those the least who consider that work so substantial as the whole of this requires an often pondered judgment and the test of years. One is that parable of the householder's comparative regard for Rafael and for Doré: the other, the parable of the half hewn, half shapeless block in which only the sympathetic mind could trace the undreamt-of value of the work of Michel Agnolo. The laudation of the unfettered life of wandering gypsies —natural enough to most men in a mood that is fleeting—will remind at once of *Waring* and of "the wild joy of living," sung so splendidly in *Saul*. The portrait of Fifine herself—to mention another detail, and to end with it—is in the face delicate and strongly individual, and in the attitude vivid and bold.

> ". . . . Either ear is cut
> Thin as a dusk-leaved rose carved from a cocoa nut.
> And then, her neck! Now, grant you had the power to deck,
> Just as your fancy pleased, the bistre-length of neck,
> Could lay, to shine against its shade, a moonlike row
> Of pearl, each round and white as bubble, Cupids blow
> Big out of mothers' milk,—what pearl moon would surpass
> That string of mock-turquoise, those almandines of glass,
> Where girlhood terminates? For with breasts' birth commence
> The boy, and page costume, till pink and impudence
> End admirably all: complete, the creature trips
> Our way now, brings sunshine upon her spangled hips,
> As here she fronts us full, with pose half frank, half fierce;
> . . . . . No other than Fifine
> Points toe, imposes haunch, and pleads with tambourine."

The portrait is completed, and in a sense exalted, elsewhere in the book, by the description of that occasional scorn with which Fifine surveys the crowd that admires her.

> "Know all of me outside: the rest be emptiness
> For such as you . . . . . .
> I'm just my instrument: sound hollow: mere smooth skin
> Stretched o'er gilt framework, I: rub-dub, nought else within—
> Always for such as you!—if I have use elsewhere—
> If certain bells, now mute, can jingle—need you care?"

Frederick Wedmore.

Notes sur l'Angleterre. Par H. Taine. Paris: Hachette.
Notes on England. By H. Taine. Translated by M. F. Rae. Strahan and Co.

M. Taine's *Notes* (the result of visits made to England in the years 1861–62 and 1871), together with the able contributions of M. Esquiros to the *Revue des deux Mondes*, will have the effect of establishing the long controverted fact that it is possible for a Frenchman to write of England without falling into a series of grotesque misrepresentations in regard to what concerns our social life and domestic habits. One of the leading French philosophers has come over with the intention of studying us, and the wish to like us, and if he has failed in the latter, it is owing to differences of idiosyncrasy between his nation and ours, the development of which is the chief object of his book. Moreover, on reading his opening pages descriptive of the meteorological caprices of London, we feel that we can hardly overestimate the objective spirit which is, on the whole, so commendable in this work. What indeed must be the feelings of a foreigner who awakes one morning to find darkness not only visible but tangible, in a hideous yellow fog clinging to the face of London, and in the author's own words we give his assurance that his tenacity of life was put to the test by his first experience of a rainy Sunday in it:—"Un dimanche à Londres par la pluie: boutiques fermées, rues presque vides; c'est l'aspect d'un cimetière immense et décent. Les rares passants, sous leur parapluie, dans le désert des squares et des rues, ont l'air d'ombres inquiètes qui reviennent; cela est horrible. Je n'avais pas l'idée d'un pareil spectacle, et l'on dit qu'il est fréquent à Londres. Petite pluie fine serrée, impitoyable; à la voir, il n'y a pas de raison pour qu'elle ne dure pas jusqu'à la fin des siècles; les pieds clapotent, il y a de l'eau partout, de l'eau sale, imprégnée d'une odeur de suie. Dans le Strand surtout, et dans le reste de la Cité, après une heure de marche, on a le spleen, on conçoit le suicide." It is easy to conceive what, under these depressing circumstances, must be the effect produced by our mean and irregular street architecture—irregular in a fashion which can only be rendered tolerable by the beauty of colour so conspicuous for its absence. And, in realising the general sense of ugliness and discomfort which must have weighed him down, we may pardon M. Taine for pointing out Somerset House as a mark for particular reprobation, and the Wellington "Achilles" in the Park, which, seeing that it is a copy of an antique "Slave holding Horses," in the Capitol at Rome, is hardly a fair example of British aesthetic depravity.

In the Parks, and in the fashionable houses open to him during the season, he made careful studies of the different specimens of mankind to be found there. Nor does he confine his selection of types to both sexes in the upper classes of society. Ladies of fashion, women-servants, M.P.'s, country squires, clergymen, guardsmen, footmen, are all equally brought under contribution — classes dif-

fering from one another in most respects, but made kin by three touches of British nature, viz.: the consumption of hetacombs of tasteless meat and watery vegetables, the preference for the strongest of liquids, and an insensibility to the caloric properties of pickles. Notwithstanding, he favours the continental impression that these ogres as a rule make excellent husbands and wives. The praise he freely bestows on the beauty of our women, he modifies in the epigram, "La laideur est plus laide que chez nous." He seems to have been unfortunate in the frequent intrusion upon his vision of the original of the conventional French caricature "l'Anglaise pour rire"—the gaunt middle-aged bespectacled female, who is clothed, but not dressed, and is remarkable for the prominence of her teeth; the prevalence of which latter peculiarity causing him to wonder whether it may not be connected with our carnivorous habits, a solution so ingenious that we are quite ashamed to spoil it by the prosaic suggestion that it is probably owing to the narrowness of our jaws. At the other extreme, we have the coarse red-faced type of Englishwoman—the "female Bull," who so distressed the sensibilities of Nathaniel Hawthorne. Taking the English and French woman at their best, he is unable to refrain from summing up the contrast by comparing the former to a comely, tasteless, rosy peach, and the latter to a strawberry fragrant with perfume and delicious to the taste. With regard to the English "Miss," she comes in for the regulation amount of enthusiasm and poetry with which she is traditionally invested in the minds of his countrymen; but, on the whole, it is not in dealing with types that M. Taine is furthest from M. Assolant.

Like his illustrious countryman Montalembert, he wanders through our public schools and universities with feelings of generous envy and wondering admiration. In contrast to the unhappy overworked French scholars, deprived of a vestige of independence, pursuing their studies between four walls in a crowded street, or for diversion walking out in strings of two abreast, there was something idyllic to him in the boys whom he met in straw hats wandering about the country in the neighbourhood of Harrow, or observed reading astride on the bannisters; and in attempting to do justice to the glories of Oxford he is evidently under the pressure of feelings which find a weak vehicle in words. At the same time it has not escaped him that our system of training, although admirably adapted for forming the character of youth, leaves the intellectual side comparatively untouched.

And although the child is father of the man, and the mind of an ordinary Englishman may be felicitously compared, as it is by him, to Murray's handbook, full of facts but without ideas, we must correct the libellous inference that the minds of our schoolboys are store-houses of facts. The personal independence and impatience of all but moral restraint which permeates our educational system he greets again under a new form in the *sans-gêne* of the House of Commons, in spite of its informality unquestionably the most dignified representative assembly in the world; for which advantage it is probably largely indebted to the position occupied by the Speaker, who is certainly a fortunate contrast to the President of the French Chamber, stamping his foot and ringing his bell, like the usher of a school trying to keep a set of unruly boys in order.

In short, speaking broadly, he sees nothing but what is most praiseworthy in all that regards the practical side of our national life; while he is unqualified in his disapproval of all that concerns our taste, and especially in the remarks on our aesthetics provoked by visits to the National Gallery, Kensington Museum, and International Exhibition, is he obviously uncompromising in the antithesis. It is evident that he can get up no rhapsodies over our Lelys, and Knellers, or even over our Reynoldses and Gainsboroughs; while he hints that taking our school of art as a whole, we have never reached the level attained by Ingres or (Heaven save the mark!) by David. Moreover, it is difficult to acquit him of a deliberate intention in quoting as examples of Turner's style no works of his which were executed before his genius burst all bonds, and rioted at last to such excess that in the straining after effect the intention disappeared in the effort, and what was never meant to be realistic ceased to be even suggestive. In our pictures, as in everything else about us, our critic finds the practical element obtrusive; for is not the entire attention of our painters concentrated on the psychological aspects of humanity, until we have arrived at the pitch of endowing even our portraits of dogs with the expression of a human soul? Poems, the fitting medium for which should be the pen, not the brush, crowd the walls of our exhibitions. The philosopher, the student of human nature, sets his seal on our canvasses, but, in our anxiety to "point a moral and adorn a tale," where is Beauty to whom Art should be but the handmaiden? The poet is there—the skilful workman, but where is the artist? He intimates that, in our dislike to the merely sensuous, we seem to him to have fallen into the positively repellent. At the same time he is incorrect in treating pre-Raphaelitism as an indication of the national taste, instead of as a very partial reaction from it, and we can assure him that there are many on this side of the water who, like himself, are unable to recognise anything but a defamation of nature in representations of scarlet poppies stuck at intervals in apple-green turf; apple-green graveyards in which each separate blade of grass is shaped, and shines like a penknife; rasping sunsets which might be intended for fireworks; and similar atrocities which result from the attempt to paint nature as she is, instead of as she looks.

As we have nearly done with M. Taine, we make haste to sum up his general experiences. He was fortunate enough, when leaving England last year, to fall in with a friend who, like him, had been studying ourselves, with whom he compared notes, which resolved themselves into a comparison of the forms of civilisation in England and France. "Laquelle vaut le mieux?" They are of one mind in giving to England the superiority of political constitution, which is stable, and not in danger of being unmade and badly remade every twenty years; in the material advantages which they attribute to the established form of belief—inculcating self-control and the culture of the will; in the greatness of capital accumulated in the country, together with our superior physical resources. On the other hand, France is vindicated by her climate; by the distribution of wealth which gives to none a large share, and yet enough to all; while her home life and social gatherings are characterized by greater intimacy, more politeness, more of the elements of real enjoyment than in England. They hold that these points tend to render "l'Anglais plus fort, le Français plus heureux." Evidently to M. Taine, France is a lovely and charming coquette—wilful, distracting, but whom, in spite of her faults, it is impossible not to adore, while England is personified in his eyes by the worthy sensible type of womanhood for whom it is difficult to feel anything but the greatest possible esteem. He is at great pains to impress his appreciation of the more solid qualities which claim his regard, and those who take umbrage at his opinion that our food and our women are equally insipid and ill-dressed, may console themselves by thinking that, when he was among us last year, there were other points of contrast between the two sides of the Channel.

Frances Mary Charlton.

THE PARIS SALON, 1872.

[Second Article.]

It shows the break-up of traditions in French art that work like that of M. Carolus Duran should receive respectful treatment at the hands of official criticism in the *Revue des deux Mondes*. M. Duvergier de Hauranne is the critic; and he is scarcely at all scandalised; yet M. Duran's two portraits might scandalise much less conservative instincts than those to which the *Revue des deux Mondes* usually gives expression. They are the extreme negation of everything like correct canons or discreet instincts in art; they have more than all, the crying colour, the vulgarities and violences, which used to be supposed the peculiar appanage of our own school. One lady is red-headed and stout, and sits in an iron-grey dress on a sofa of purplish maroon, flourishing a scarlet fan; the carpet being light green, and the background light greenish blue. The other stands up, in attire and surroundings equally full of gorgeous display and contrast; there is an indescribable, almost a revolting, coarseness in both; but yet the execution has a showy brilliancy as well as a real mastery which seems to silence remonstrance, and makes these the two most applauded things of the exhibition. Next after them, the portrait of M. Thiers by Mlle Nélie Jacquemart is looked at, but is not good; it has a certain emptiness and pomposity, as if the painter had been thinking more about the sitter's office than about his character, which suit ill with such a vivacious *bourgeois* countenance; the same lady has done better in previous years. There is a very good level of refined portrait-painting, both of male and female subjects, maintained in the work of M. Delaunay, M. Lefebvre, M. Liévin de Wynne, M. Saint-Pierre; while M. Ricard, without loss of his old sense of dignity and likeness, gets greener than ever in colour, and seems generally weakening; and M. Hébert sends from Rome a lamentably vaporous and insubstantial "Marquise," betraying, we would say, ill-health as well as the effort at over-spirituality. M. Baudry, of the Institute, quits his occupation of decorator to the new Opera to send a small portrait of M. Edmond About, executed with almost the wiry minuteness of enamel, but very living in expression and likeness; the sitter is in travelling furs and cap, relieved against a blue ground. Two portraits not as much noticed as they deserve, because they are entirely without routine attractiveness, are those painted by M. Gaillard, the engraver; one of them in particular, the ugly head of a shrewd middle-aged woman of house-keeper type, is a marvel of precise and patient realism and a fine example of draughtsmanship. M. Jalabert and M. Giacomotti are both remarked for portraits of precisely the opposite kind—more or less flattered ideals of graceful costume and coquetry. M. Jalabert in particular has probably never done so well as in this head of Mme Canrobert, with its pleasant tones of grey and pearl.

Next after the most conspicuous of the portraits above named, or on a level with them, the pictures bearing upon late events have attracted the popular pressure. Few of these are good; one of the best was M. Détailles' "Prussian Baggage-train in the Snow," with a great deal of clever expression in its personages, and a singular directness and ready impromptu of execution; but this has been warned off the gallery walls in deference to German sensibilities. There remain the two illustrations of the Metz campaign and its disasters, furnished by M. Protais; the "Coup de Canon," by M. Berne-Bellecœur; the "Défense de St.-Quentin," of M. Armand-Dumaresq; "The Wounded Bugler at Reichshoffen," by M. J. L. Brown. Of these artists, M. Protais has been long known for his mechanical trick of drawing and grouping French infantry soldiers to order; those of this year are neither better nor worse drawn and grouped than usual; the distant masses being generally disposed with considerable skill and effect, the nearer individual figures having the quality of wood, and being in this case still further spoilt by an ill-conceived tragedy and over-done sentimentalism. In another way, M. Armand Dumaresq's picture is broken up, vulgar, and bad; the white charger and rider of M. Brown have a certain undeniable vigour and daring, but it is too horrible a cynicism which thus covers everything with spouted blood, and seizes the moment of sudden and maddest agony in man and beast. Another war picture, called "L'Oublié"—a wounded mobile left to freeze, and struggling for the last time to lift himself against the weight of his knapsack—has the same quality of cold painfulness and intolerable horror. M. de Bellecœur does best by far with his battery interior; there is a precise simplicity and a somewhat bald lifelikeness in the gunners' figures which suggest photography; indeed the picture looks like a composition very carefully compiled upon the data of a class of photographs which have been common enough. It is done with a quiet firmness of idea and execution, and an excellent tone and gradation in the landscape.

In the landscapes of the year there are some notable decadences. It is some time since M. Cabat, of the Institute, has abandoned nature and study, in his scenes of wild Breton country and Druidic forests, for a fictitious or at least artificial grandiosity; and his "Stormy Weather" and "Druid Fountain" of 1872 are examples which show the fiction or artifice growing more and more confirmed. Quite as dignified in reality, and infinitely more sincere and unpretending, are the two large landscapes (also from Brittany) which M. Camille Bernier sends under the title of "January" and "August"; the latter, indeed, with its solidly and candidly painted range of farm-buildings and timber stack amid great trees, is perhaps the capital landscape of the exhibition. M. Daubigny seems disposed to rest on his laurels, or to trust to those which his son may be on the path to earn; his picture of a cooper at work, and of the windmills of Dordrecht, are black, hard, and empty in comparison with his best work; while the "Fishers' Return" of the younger (Karl Pierre) Daubigny is little more than a sketch, although a powerful one, in imitation of his father's large impressive manner. Corot, again, is not himself; his view near his house at Ville d'Avray, and another near Arras, are both of them exaggerations of his exquisite specialty—the foliage too systematically flaky, the high lights too regularly dispersed, the cool grey tones and pleasant sylvan composition carrying too much the sense of the studio and of convention. And what is worse is that M. Corot has to see himself caricatured by imitators, who find the surface aspect of his work, and effects of his predilection, easy to catch; of these M. Caillou is one of the most to be deprecated. M. Chintreuil, on the other hand, is a pupil of Corot, yet anything but a slavish one; his large landscape, with a moist spring haze dimming and mystifying the scale and outline of everything, and an avenue of orchard trees in blossom and dripping in the soft weather, is one of the most promising in the gallery. Were it not that M. Émile Breton had done much the same sort of thing often before, one would say that his "Winter Morning" and "Winter Evening" deserve very great credit; the former of them, at least, is an admirable piece of snow effect—a stream, a cottage, tall willows, having each spray thick with snow, brambles and bushes marked with it, the sky threatening still more, and though its colour is white, showing somehow lurid and opaque against the stronger white of the earth and trees. For good landscapes with animals, one may note the Breton moors and horses of M. Théodore Valério, the wilder and remoter traveller's picture of M. Tournemine, showing with much power and spirit a fight between an African elephant and lion.

Sidney Colvin.

NOTES.

Neither French nor German art-periodicals for the current fortnight offer much news of interest. An article of Franz Hottner in the *Zeitschrift für bildende Kunst* pronounces Kundmann's monument to Schubert (formally inaugurated at the end of May) a successful solution of that difficult artistic problem.—The continuation of Bode's valuable papers on the painters of Haarlem deals with the Ruisdael family, and is illustrated by two powerful etchings of the chief of the name; one from the hand of Unger, the other from that of L. Fischer.—In the *Gazette des Beaux-Arts*, M. Beulé continues his notes of the Athenian excavations, which will by and by form an entertaining supplement to the well-known *Acropole d'Athènes*.—The two most important critical notices of the Salon (apart from the feuilletons of the daily papers) are by M. Paul Mantz in the *Gazette des Beaux-Arts*, and by M. Duvergier de Hauranne in the *Revue des deux Mondes*.

Cav. Gennaro Vigo has discovered a copy of the *Annals* of Matteo Spinelli da Giovenazzo, which settles the controversy respecting their genuineness, and secures to Naples the credit of having produced the first historian of Italy who wrote in Italian.

New Publications.

Aus Moscheles' Leben. Nach Briefen u. Tagebüchern hrsg. v. seiner Frau. Leipzig: Duncker u. Humblot.

De Tocqueville, Alexis, Correspondence and Conversations of, with Nassau W. Senior. From 1834 to 1859. Ed. by M. C. M. Simpson. 2 vols. King.

Grillparzer's Sämmtliche Werke. Band 1, 2. Cotta.

Hofmann, R. Die Gemäldesammlung d. grossherzogl. Museums zu Darmstadt. Darmstadt: Diehl.

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Theology.

KALISCH ON LEVITICUS.

A Historical and Critical Commentary on the Old Testament. With a New Translation. By M. M. Kalisch, Phil. Doc., M.A. *Leviticus.* Longmans. Part I., 1867; Part II., 1872.

It is a remarkable coincidence, which creates some slight presumption in favour of their common hypothesis, that the sixth part of Bishop Colenso on the Pentateuch, and the second of Dr. Kalisch on Leviticus, should have appeared almost simultaneously. The former work is the more comprehensive of the two, and its consideration may therefore be postponed. The latter forms part of a commentary the first volume of which, on Exodus, appeared in 1855, and was conservative in tendency; the second, on Genesis, in 1858, and was distinctly critical in spirit; the third, on the first part of Leviticus, in 1867; and the fourth, completing that book, in the present year. It is singular that so fruitful a writer should have met with such slight recognition from English students. Even Mr. F. C. Cook and his conscientious fellow-workers seldom mention his name. The only exception, so far as we know, among native authors, is the learned Scotch Roman Catholic, Dr. W. Smith, though the fragmentary examination which he bestows (*Book of Moses*, &c. vol. i. pp. 504–516) entirely fails to do justice to the cumulative argument of Dr. Kalisch. This strange neglect of an eminent scholar cannot be accidental, and it may facilitate our task if we premise a few remarks on the causes which have combined to produce this result.

The first which occurs to us is the un-English cast of Dr. Kalisch's style; a venial fault, which must not prevent us from recognising the remarkable degree in which he has mastered the difficulties of our language. The next is his excessive accumulation of details, a defect which borders so closely on a virtue that we can only regret its deterrent influence on readers. The third is of more importance, because it threatens to postpone indefinitely a fair consideration of the author's opinions. We refer to his growing theological dogmatism, and particularly to some inconsiderate controversial effusions in the first part of his work. Let no one misunderstand us. We are not pleading for any evasion of the difficulties involved in the traditional theology. We simply ask that the historical investigation of the Scriptures may be kept distinct from a criticism of their contents entirely based on modern scientific theories. And this on three grounds: first, that the necessary gifts for such different kinds of criticism are seldom found united in the same person; secondly, that many Biblical students are accessible to a historical argument, but object to a rough and ready inference from the impossibility of miracles and predictions; and, thirdly, that an internecine war between modern criticism and the religious views of the majority is highly prejudicial to the interests of general culture. A special reason for the slight success of his *Leviticus* may be the author's unwise assumption of originality. He appears to ignore the fact that the hypothesis which he so ably maintains is the common property of a small but influential band of recent critics.

It is now ten years since a learned Jewish scholar, Dr. Julius Popper, made a strictly scientific attempt* to show that the account of the construction of the tabernacle in Exod. xxxv.–xl., and that of the consecration of Aaron and his sons in Lev. viii.–x., received their present form long after the Babylonian exile; in other words, that the supposed earliest of the Pentateuch records, so far from being homogeneous, has been retouched and added to on more than one occasion. Whether from the severity of its style, or the obscurity of its author (although it was reviewed favourably by no less a critic than Dr. Geiger), this important work seems to have fallen almost dead on the learned world. But its leading idea could not long be ignored. It represented a natural reaction against the subjective method of previous critics. It also supplied, or professed to supply, a firm historical starting-point for further researches. Accordingly in 1866, Dr. K. H. Graf, influenced perhaps by the teaching of his countryman, Professor Reuss, of Strassburg, revived the old theory of the post-exile origin of the sacerdotal legislation. But his work,† small as it is in extent, was far from being a feeble echo of Vatke and George. Its ability has not yet perhaps been sufficiently recognised, but some of its effects are already visible in the avowed adoption of similar views upon Leviticus, &c. by such able critics as Lagarde, Merx, Kuenen,‡ and, we may now add, Colenso. These particulars are not only important bibliographically. They prove the existence of a powerful current of critical opinion. And without detracting from that independence which the author so justly prizes, we think that a simple mention of these facts would have increased the tenability of his position.

But our readers will be impatient for a few particulars concerning the second part, which has lately appeared. They will perhaps recollect that Dr. Kalisch, in his first volume, began to analyse Leviticus into a number of sections or codes "written, enlarged, and modified by different authors," all of them later than the Deuteronomist, "in harmony with the necessities and altered conditions of their respective times." (Part i. p. xx.) This view is carried out at much greater length in the second volume, which deals with the remainder of the book of Leviticus, beginning at chap. xi. On comparing the laws of purity and diet, the sabbath and the festivals, the sabbatical year and the jubilee with the parallel passages of Deuteronomy, Dr. Kalisch discovers that the regulations of Leviticus presuppose such an advance in hierarchical organization, and in moral and spiritual culture, as would alone be sufficient to indicate a more recent origin. Another parallel is drawn between certain passages of Leviticus and the prophecy of Ezekiel. The directions relating to the priests, the sacrifices, and the festivals, framed by the latter for his ideal state (Ezek. xliii.–xlvi.), are found to be "greatly at variance with those of Leviticus," from which it is inferred that "the book of Leviticus did not exist, or had at least no divine

* *Der biblische Bericht über die Stiftshütte* (Leipzig, 1862).

† *Die geschichtlichen Bücher des Alten Testaments* (Leipzig, 1866).

‡ It is strange that Dr. Kalisch only refers to an incomplete French translation of Kuenen's *Onderzoek*. The matured opinions of the latter must be sought in *De Godsdienst van Israel* (twee deelen; Haarlem, 1869, 1870).

authority, in the earlier years of the Babylonian captivity." Passing on to Lev. xxvi. 3–46 (which Bleek himself admits to be much later than Moses), Dr. Kalisch finds the destruction of the Jewish state and the misery of the exiles so vividly described that this section can only have been written at "an advanced period of the Babylonian rule." Another step is gained by investigating the laws relative to the sin-offerings and the high-priesthood, the day of atonement and the year of jubilee, "the existence or full development of which cannot be proved until long after the captivity." The day of atonement, with which the year of jubilee was associated, was unknown, according to Dr. Kalisch, in the time of Nehemiah, "and we shall probably be near the truth if, considering the spirit of the concluding chapter on votive offerings and tithes, we place the final revision of Leviticus and of the Pentateuch at about B.C. 400." (Part ii. pp. 637–639.)

There is little that is peculiar to the author in the process by which he arrives at this conclusion. We still desiderate a shorter and clearer view of the argument, such as would be supplied by a translation of Graf's *Die geschichtlichen Bücher* or the second volume of Kuenen's *Godsdienst.* It is evident, however, that Dr. Kalisch has been influenced by contemporary criticism in a much less degree than Bishop Colenso, and his mode of expressing an argument is by no means devoid of originality. We select the following as a favourable specimen; it is taken from a most interesting essay on the day of atonement:—

"But simultaneously with the historical, the inward and spiritual expansion of the Hebrew festivals was worked out. This expansion was the fruit of that growing conviction of the sinfulness of man, and of his need of expiation before a holy and perfect God, which is the main attribute of a pious frame of mind, and which, if manifested with earnestness and purity of purpose, invariably indicates the last and highest stage of religious life. We have on previous occasions attempted to describe this feeling of moral dependence and self-humiliation, as evinced in the Hebrew Scriptures, and especially in the Pentateuch; it was naturally fostered and strengthened by the misfortunes and struggles of the exile, which the guilty and remorseful conscience of the nation readily attributed to past iniquities; and it gave rise to the *sin-offerings*, the latest development of the noblest class of sacrifices, those of expiation. As these grew in depth and popularity, they were associated with all festive and solemn days, and were superadded to the older holocausts and thank-offerings. They could not, before the Babylonian exile, have been invested with the minute ceremonials and the subtle gradations specified in Leviticus, as we have before proved; in the first temple, they could not have been presented in the manner described by the Levitical legislator, because that temple had no curtain against which the blood could be sprinkled; in fact, they attained their highest and final form only during the time of Zerubbabel's temple. And the crowning stone of that religious edifice, which demanded the incessant labour of more than a thousand years, was the day of atonement as instituted in Leviticus. It combined, as in one focus, all the scattered rays of spiritualism, which in successive periods had helped to dispel superstition and frivolity; and it kindled a flame of devotion which, if rightly directed, might well cleanse the heart from egotism and pride, and raise the mind from worldliness to a yearning after light and truth.

"Thus the vast circle was completed: the festivals of the Hebrews, like nearly all their institutions, had passed through three distinct phases—the natural or cosmic, the historical or commemorative, and the ethical or spiritual—and they were by this process more and more enlarged, enriched, and refined." (Part ii. pp. 276, 277.)

It is not surprising that speculations like these should have met with a vehement opposition not only from the "orthodox" but even from many disinterested critics. The former were not unnaturally startled (*a*) at the supposition of "fraud" in a system of such high authority; the latter at (*b*) the bold originality of conception ascribed to the Levitical legislators, which contrasted, according to them, with the otherwise unproductive character of the age of Ezra, and (*c*) the sudden extinction of the freer and more childlike views of religion inculcated by the prophets. And both, perhaps, were influenced to some extent by (*a*) the apparent improbability that a system of modern origin should be accepted by the nation as the code observed by their ancestors. These are serious objections, and deserve a more detailed discussion than we are allowed to give. But with regard to (*a*), it is not out of place to refer to that distinction between the divine and the human element in the Scriptures which is accepted by all *modern* Protestant writers on inspiration as "the very basis of their reasoning." (See Dr. Hannah's *Bampton Lectures*, 1863, p. 256, note 3.) From such a point of view it is not *à priori* improbable that a disproportion between the religious and the moral standard should be traceable even in the work of an inspired writer, like Leviticus. If we further admit, as all moderate students of the Hebrew Bible are beginning to do, the claims of literary criticism, the occurrence of "pious frauds," as they are called, in the Old Testament is raised to a positive certainty. It may be questioned, however, whether "fraud" is quite the right word for these phenomena. It is possible, as many facts noticed by Geiger tend to show, that Ezra and his successors invested revelation with a sort of "germinant" character, that is, that they regarded their religious books not as historical records, but as forms of truth with an indefinite capacity of expansion. Hence, perhaps, we may account for the reconstruction of Jewish history in Chronicles, and the reorganization of the established religion in the middle books of the Pentateuch. With regard to (*b*), we need only ask, what evidence is there for the unproductive character ascribed to this period? Prophetic inspiration, indeed, was on the wane, and finally died out altogether, but the later portion of the Hagiographa is sufficient to redeem the credit of that silver age. To objection (*c*), two forms of answer may be given. We may either follow Dr. Kuenen (*Godsdienst*, ii. 142–146), and infer from Neh. xiii., compared with Malachi on the one hand and Ruth and Jonah on the other, that an influential party was opposed to the Levitical innovations; or we may point out, with Dr. Kalisch in the passage quoted above, that the national religion had passed into a new phase, and had gained in depth what it had lost in childlike simplicity. The last objection (*d*) loses much of its force when we consider the importance of the priestly element in the post-exile period, and the facility with which new laws could be imposed, under the garb of antiquity, on those who had grown up in ignorance of the past. And whether probable or not, a minute interference with the text of the Pentateuch is not obscurely indicated by the curious legend of Ezra reproducing the law from memory by divine assistance. It is true that our earliest authority (4 Esdras xiv. 21, 22, 37–42) is later than the Christian era, but this very circumstance confirms the antiquity of the legend. The success of Ezra's innovations, and the general recognition of the Pentateuch as the law of Moses, would naturally obscure the tradition, so far as this seemed to detract from the credit of the latter. And the supernatural circumstances of the story were only too congenial to the growing superstition of the age.

But whatever view be taken of the author's conclusions, there can be no two opinions as to the value of his method. He is not one of those who pretend to discover secrets by a faculty of divination. He lays no undue stress on the analysis of style, nor on the argument *à silentio*, remembering that the facts revealed by the former are susceptible of various explanations, and that the absence of testimonies to the existence of a law is not decisive of its non-existence. His method is, in a word, to proceed from the known to the unknown. We cannot, however, help regretting that he has left one side of his question untouched. It is well known that Graf, followed in part by Colenso, draws a broad line

between most of the narratives in the "Fundamental Record" and the sacerdotal legislative portions; Kuenen, on the other hand, maintains in a certain sense the unity of the Record, and at the same time its post-exile origin. The subject is important, and we should have been glad of more light from Dr. Kalisch. As for the Levitical legislation, we know that, whether framed after the exile or not, it only attained canonical authority in the Persian period. To a great part of the nation it had therefore been practically non-existent. But to the date of the primary Elohistic narratives no one can plead indifference, for upon it depends, to some extent, the possibility of retracing the outlines of Israelitish history.

And here we part from the author for the present. His results are for the most part so new to English students, and so liable to misapprehension, that we feared to distract the reader's attention by critical digressions. The illustrative sections of the work, especially those on the day of atonement, the sabbatical year, and the year of jubilee, are a pure gain to Biblical science. The philological notes are careful and erudite, and provoke fewer objections on the score of tact than the corresponding sections of *Genesis*. We hope to return to the purely critical portion in reviewing the sixth part of Bishop Colenso. T. K. CHEYNE.

Explanation of the Old Testament. [*Beiträge zur Erklärung des Alten Testamentes*, enthaltend elf Abhandlungen, exegetisch, kritisch und historisch behandelt von Laur. Reinke. Achter Band.] Giessen: Roth.

As contributions to the study of the Scriptures, this work has two distinctive features entitling it to notice. It is true that it appears at least thirty years too late to exert any influence on the current of critical opinion. Controversy has passed into a new phase, with which, in spite of one or two references to Graf, Dr. Reinke is evidently not familiar. But as a tacit protest (the more valuable as coming from a Roman Catholic) against the *odium theologicum*, and as a specimen of true scholarly work in a modest but very necessary sphere, we can conscientiously recommend the book. Omitting the dissertations on the Sabbath, on Gen. i. 1, on the Cherubim, on the history of Manasseh, on the "Book of the Law" found under king Josiah, on the standing still of the sun and the moon, on Prov. xxiv. 16, and on Melchizedek, the reader may consult with profit the fourth, "On the pretended alteration of the Masoretic text, Isa. xix. 18," in which Dr. Reinke maintains the received reading, and renders "City of destruction" (of idolatry); the seventh, "On the causes of the difference of the ancient interpretations of Isa. xvi. 1, Ps. xci. 6, and cx. 3;" and the eighth, "On the variations of the ancient versions in some other passages of the Psalms." Dr. Reinke opposes the view of Geiger, which has been gaining ground among some Protestant critics, that the Masoretic text has undergone deliberate falsification. Without any pretence of brilliant discoveries, he has performed a useful work in restoring the readings or misreadings of the Hebrew exhibited by the versions. We will only regret that he has not paid more attention to Hebrew palaeography, as a means of accounting for the growth of various readings. T. K. CHEYNE.

St. Thomas of Aquin: His Life and Labours. By the Very Rev. Roger Bede Vaughan, O.S.B. Two Volumes. Hereford: Hull, late Head, 1871–1872.

THE controversy on the Origins of Christianity shows signs of being exhausted if not decided soon, for the same limitations in the materials which prevent the contest from coming to an issue will at last prevent its going on at all. When this point is reached, if not sooner, criticism will be forced to return to an examination of the contents of theology as it appears at its full development. As there is more than one point of view in which orthodox theology may be said to culminate in the great constructive movement of the thirteenth century, we are inclined to welcome any introduction to this period, and to its great central monument, the *Summa Theologiae*. For it cannot be denied that an introduction was wanted, at least in England, when the great English historian of Latin Christianity frankly confesses that he had never once read the masterpiece of Latin theology through. His sketch of the subject is not unworthy of it; but, as might be expected, he does not avoid serious misrepresentation of the Angelic doctor. Dr. Vaughan's book is written with two objects: it is intended both to present a picture of the saint and to serve as an introduction to his works. For the latter purpose the book is provisionally useful, and we congratulate the writer on this qualified success: his work ought really to be tried by the standard of a fifteenth-century edition of a classic, and tried by this standard it is really creditable; though the plan is decidedly better than the execution. There is no other book in English to which the reader could be referred for a conspectus of the speculative movement of the twelfth century, of the text-books in use, and the like, or again of the points at issue between the mendicants and the university. We do not think that Father Vaughan states the last question accurately; but at least he has the merit which Mr. Mill has recognised in Mitford's *History of Greece*: he puts his error into a shape in which it can be understood and discussed. The existence of monasticism was not at stake: what was really at stake was its influence and authority in the world. The expulsion of the regulars from Paris would have been an anticipation, not of the suppression of the monasteries, but of the suppression of the Jesuits, and even here the anticipation would be on a very small scale. This mistake prevents the writer from perceiving the strength of William of Saint Amour's case upon purely Catholic grounds. Perhaps the victory of the regulars may have postponed that revolt of the intelligence of Europe which began in the fifteenth century and was consummated in the eighteenth, but it certainly secularised the regulars themselves. Dr. Vaughan is happier in seizing the character of the revolt which was suppressed. No author has brought into such relief the strange combination of astonishing vigour and utter emptiness in Abelard, who is claimed, with reason, as a perfectly sincere though vain and presumptuous Catholic. In St. Bernard and Abelard the antithesis between monasticism and scholasticism reaches its climax; in St. Thomas the writer finds the synthesis of the two of which there had been a brilliant adumbration in the occasional writings of St. Anselm. This synthesis is the governing thought of the book, and the writer is carried away by it. In his enthusiasm he constantly allows himself to mistake insistance for development, and becomes tedious without ceasing to be incomplete. For instance, he devotes a great part of his second volume to the relation between St. Thomas and the doctors of the primitive Church. The comparison is perfectly relevant. St. Thomas stands in much closer relation to the fathers than a thinker like St. Anselm, or a thinker like Duns Scotus; but it is hardly the beginning of an explanation to assure us repeatedly that the monastic spirit was common to all. In fact, Dr. Vaughan is so inflated with the grandeur of his subject that he has written a book which, with some of the merits of a voyage of discovery, has all the pretensions of a monumental work. These are the more ungraceful for being combined with the *naïvetés* of childlike fervour and the crudities of an able

man who has put off writing too long. It is unnecessary to add that the author sees nothing of the imperfections of the great works written when every book had to be a library; that he is never weary of vaunting "the Angelical's" superhuman memory in spite of the fact that the industrious piety of the Venice editors continually fails to verify the references of the saint; that he has no eyes for the grotesque and arbitrary nature of the materials which made up the staple of the traditional thought of the middle ages; and that it never occurs to him that much which his hero laboured to defend was in itself purely accidental, and derived its only permanent value from the ideal reasons which he invented for its protection against the frivolous criticism of an inconsequent dialectic. When we have made these allowances, and all the allowances that can be demanded by a world which is old enough to have a right to be fastidious, the *Summa* will still remain one of the books which impress us most strongly with the wisdom of their author, in Joubert's sense of wisdom, "rest in light." Of course the greatness of such men as Spinoza or even Butler depends upon their method and their point of view; it is not to depreciate them to say that the matter of the *Sermons* and of the fourth and fifth book of the *Ethics* is continually contained and transcended in the *Prima Secundae*, but the statement may serve to give some measure of the intellectual range of Aquinas. He lived for his work, and he died in it: like Socrates, his concentration of thought was so intense as to pass into long trances, from which he had to be roused by shaking his *cappa* to recall him to sublunary things. As he grew older, the trances became longer, more frequent, more ecstatic; at last he could write no more: all that he had written seemed to him mere straw in comparison of that which had been shown: in one sense, he had broken down under his work; in another, he had risen above it. Dr. Vaughan's account of the closing scene is so beautiful as to make us regret that he has so often buried the human element of the life under a mist of second-hand panegyric, where translations from papal bulls and quotations from dull Tridentine doctors figure oddly enough between historical pictures after the Dean of Westminster and less infelicitous echoes of the least severe manner of Newman. G. A. Simcox.

Intelligence.

It gives us much pleasure to notice that the vacancy caused at Tübingen by the death of Oehler has been filled up by the nomination of Prof. Diestel, of Jena.

A correspondent proposes to remove the obscurity of Ps. cxxxvii. 5, by giving תשכח the sense of תכחיש. He will find that he has been anticipated by Schlesinger in Cahen's French Bible, who renders "qu'elle s'engourdisse." The Targum would seem to have read אשכח, which is at any rate more defensible palaeographically than Dr. Weir's ingenious emendation in No. 49. א and ת are easily confounded in the archaic Hebrew alphabet; cp. Jer. iii. 8, Ezek. xxiii. 13, Ruth iv. 4, Exod. xx. 24 (unless the Masoretic reading אזכיר is directed against the worship at the high places).

Dr. Geiger points out (*Jüd. Zeit.* 1872, pp. 133–136) that Prof. de Lagarde's conjecture in the *Academy* (vol. iii. p. 12) is really a development of some remarks by himself in the German Oriental *Zeitschrift*, 1867, p. 469, &c., and by Prof. Bickell in his *Conspectus* of Syriac literature. If however acrostics were really employed by psalmists, he remarks, we should certainly find them in the oldest liturgical passages of the Jews, whereas these are only distinguished by alphabets. Acrostics do not appear before the ninth century.

New Publications.

Baumstark, C. E. Christliche Apologetik auf anthropologischer Grundlage. 1. Band. Frankfurt a. M.

Strack, Dr. Prolegomena critica in vetus Test. Hebraicum, quibus agitur (1) de codicibus et deperditis et adhuc exstantibus, (2) de textu Bibliorum Hebraicorum qualis Talmudistarum temporibus fuerit. Fasc. primus. Leipzig.

Philosophy and Physical Science.

La Morale nella Filosofia Positiva. Studio critico di Giacomo Barzellotti, Professore di Filosofia nel R. Liceo Dante di Firenze.

S. Barzellotti's title is likely to mislead English readers, as the "morale" of which he treats is not that of Comte, with which he does not seem to be familiar, but English utilitarianism, in connection with the empirical psychology which may be considered the reigning school of philosophical thought in our island. His choice of a title is partly due to the loose notion attached to the term "positivism" in Italy. Never was there a movement of ideas, our author informs us, more wanting in consciousness of its own tendency and in vigorous criticism. It is a school formed of the *débris* of old philosophies, under the strong but indefinite impulse of the general liberal movement of Italian society, in which Comte and Littré, Büchner and Moleschott, Mill, Bain, and Spencer, are quoted as concordant authorities. "Discordi in ogni cosa, fuorchè in negare ciò ch' essi chiamano teologia e scolastica (e la sognano dappertutto), quando si chiede loro chi affermino un' opinione, una dottrina qualunque, allora ci si rivelano inconsapevolmente materialisti, egheliani od empirici, tutto in una parola fuorchè positivisti conseguenti." This confusion of methods (to which we could find a pretty close analogue in England, only that we do not usually call the motley result "positivism") S. Barzellotti has proposed to remedy by a careful study of the "English positivists," especially Messrs. Mill, Bain, and Spencer, who alone, he says, follow a path "che può condurre il positivismo a produrre quel più di cui è capace." This path is the application of the positive method to subjective pyschology, which may be regarded as peculiarly English; for M. Taine, as S. Barzellotti says, may be considered to belong to the English school. "Mentre il Comte si sbarrava da sè la via maestra della scienza, l' osservazione subbiettiva, e i Tedeschi per troppo trascenderla ne compromettavano i resultati più certi, e gl' Italiani, intenti a ricostituirsi in nazione, non avevano la forza di mandare innanzi di concerto psicologia e metafisica, gl' Inglesi accettavano dalla Francia la parola d' ordine della ricerca positiva, ma in omaggio a un' antica tradizione salvavano la psicologia dal naufragio delle dottrine filosofiche." We have then in the volume before us a careful study of this line of English thought, especially in its ethical development, by a critic at once hostile and favourable: hostile, as belonging to an opposite school, but favourable in so far that he is perpetually led to praise the English writers, in contrast to their continental analogues, for moderation, subtlety of analysis, and patient fidelity of observation.

Our author's reading in English philosophy has been considerable, and the general views and criticisms which he gives us are close and definite, and always instructive, even where they involve misapprehensions. Indeed, he seems to grasp more clearly and completely than most English antagonists the peculiar position of the Associationist psychology; and he describes the distinctions and mutual relations of the different writers with much subtlety and delicacy of apprehension. And for the not unfrequent errors in detail which I have to notice in his work, there are two kinds of excuse. Firstly, the disposition, at once excellence and defect of English philosophers, to sacrifice systematic coherence to fidelity of reflective observation, makes the historical study of them peculiarly complicated and perplexing; and, secondly, such a historical study is at present in the most rudimentary and imperfect condition among ourselves. We cannot perceive without some sense of shame that some of the most serious of S. Barzellotti's blunders may be traced to English writers of repute. To-

Mr. Lecky, I think, he chiefly owes the most fundamental of all: the confusion of egoistic and universalistic hedonism under the common term of utilitarianism, which continually vitiates his historical *aperçus* and causes his criticism to miss the point. If anyone understands the ethical controversy that extends from Socrates to the present time as a dialogue between *two* schools of thought, "Intuitivist" and "Utilitarian," and so considers the difference between Epicurus, Hobbes, and Helvetius, on the one hand, and Bentham and Comte on the other, as quite secondary and subordinate, he misses the true clue for tracing the progress of moral thought generally, and is especially liable to misapprehension in following the complicated and varied portion of the controversy that has been carried on in England since Hobbes. The truth is that utilitarianism in the Benthamistic sense, the system which fixes as the right end of human action the "greatest happiness of the greatest number," does not originate (in England) with Hobbes, but with his antagonist Cumberland; and was for some time in friendly alliance with the intuitional method as represented by (*e.g.*) Clarke. Butler was the first to point out clearly the at least apparent discrepancy between Virtue (as commonly understood) and the general happiness. In Hume's hands, utilitarianism, presented as a mode of *explaining* morality, was felt to have a destructive tendency and fell under suspicion; but it was not till Bentham that it was offered as a method for determining conduct, absolutely complete in itself, the conclusions of which were to overrule all traditional precepts and supersede all existing sentiments. Herein lies the originality of Bentham, which our author quite misses. Of this, perhaps the blame is partly due to Dumont (through whom Bentham is generally known on the continent), who, though an excellent populariser of the system in its political and social development, blunders sadly when he tries to expound its ethical principles. Again, S. Barzellotti's neglect of Shaftesbury, perhaps the most important of the different turning-points in the course of English ethical thought, may be referred to his study of Professor Bain's Ethical Systems. In regarding Locke (who held that ethics, by a steady contemplation of the relations of its fundamental notions, might and ought to become as perfect a science as geometry) as an adherent of "l'Etica sperimentale," he only endorses an almost universal error: but one is curious to ascertain how he comes to class Mackintosh with James Mill, and to say that ethical enquiry ". . . nello Stewart . . . si restringe al sentimento e perde di vista la ragione."

These latter mistakes, however, are unimportant, except as illustrating the difficulty of gaining at second-hand an accurate knowledge of the English moralists. But the whole work is pervaded with the misapprehension of Comte's relation to the English writers criticized, which the title indicates. This misapprehension is double, and in two opposite directions. On the one hand, S. Barzellotti overrates the amount which our school owes to the French thinker in respect of method. It is not that he is insufficiently acquainted with the lines of English thought before Comte with which the speculations of Mill, Bain, and Spencer, are naturally connected; he himself points out and characterizes this connection, and admits that the English have a certain right to repudiate the title of being adherents of Comte. But he seems to refer to Comte the impulse which caused phenomenalism (as for clearness' sake I prefer to call it) to pass from the purely critical attitude which it presents in Hume to the comprehensive construction at which it aims in Mill, Bain, and especially Spencer. Now it is impossible ever to estimate exactly the influence of any thinker on his contemporaries; but it may safely be said that, if we ignored Comte altogether, and considered the above-mentioned writers in relation to their English antecedents only, we should not find in them any unnatural and inexplicable originality. If we confine ourselves to empirical psychology, with which our author is especially concerned, we find that the most important step had been taken by James Mill and Brown; all that their successors had to do was to advance further on lines of thought clearly marked out, with a more conscious and reflective application of the method of physical science, and availing themselves more of the aid of physiology. Nor again is the Neobaconian logic of Mr. Mill less essentially English, in the main, than his empirical psychology. It is almost solely in his sixth book when he comes to apply his logic to the moral sciences that the influence of Comte becomes prominent.

But it is precisely this side of Comtism that our author almost ignores. That his acquaintance with the "utopia positiva" is not close may be inferred from his assertion that it was nearly being realised in Paris under the Commune: and again from his praise of Mill's moderation in repudiating Comte's "principii excessivi della riforma civile" (!). Hence, when he pronounces that "niuno indagine morale, degno di questo nome, può trovar luogo nelle dottrine positive di Francia," we perceive that this judgment is founded entirely on *à priori* arguments. And these arguments have much force: only they really tell against Comte's methodical consistency. A strictly "objective" study of mankind as a collection of organisms placed in certain temporal and spatial relations to each other, mutually dependent for their preservation, but occasionally acting on each other destructively, affords no basis for any systematic direction of conduct. But Comte's objective psychology does not exclude notions whose content belongs entirely to introspective observation: it only insists on employing them uncriticized, just as the unreflective mind furnishes them. And so his sociology deals throughout with facts not expressible in terms of matter and motion: facts that have indeed an objective aspect, but a very obscure one, and whose significance is entirely subjective: as, *e. g.*, the law of the three stages of belief. Hence Comte's exclusion of empirical psychology does not prevent him from having a characteristic and coherent view of ethics: it only gives his utilitarianism an unreflective, unanalytical stamp. At the same time, by not taking the attitude of introspection, he naturally relieves himself from the necessity of reckoning with the claims of the egoistic reason, which become prominent in this attitude. It is interesting in this aspect to compare him with Bentham. Both thinkers take universal happiness as the end of human action: but when the individual's Practical Reason demands from Bentham a demonstration of his end, he ignores its *rationality* and labours to provide the individual with motives instead of reasons: while Comte ignores its *practicality*, and offers historical and phrenological reasons which are not to the point. It would have been well if S. Barzellotti had noticed this: because his chief criticism is directed to Mill's Utilitarianism: and the perplexed and perplexing character of this is due to the effort to combine the self-sacrificing sociality of Comte with the socialised selfishness of Bentham, and yet to answer the question which both evade. The moral man of Mill is to be "disinterested" like Comte's: yet he is to be controlled entirely by "sanctions" (pleasures and pains) like Bentham's: at the same time an attempt is made to demonstrate to his reason that universal happiness is the true end of action. S. Barzellotti criticizes closely some of the weak points in this composite result: but he misses the full explanation of them to which his line of study should have led him. He notices Mill's confusion of rational and emotional elements in moral action, or more particularly

of the dutiful and sympathetic impulses, which have a phenomenal distinctness undeniable on any system. And he argues effectively against the contemptuous treatment of the question of the objectivity of moral rules, as belonging to transcendental metaphysics and practically indifferent: whereas it is a fact of inner experience that on the belief in such objectivity depends the force of the moral impulse to obey them, in so far as strictly moral. Nor is his assumption that "il bene dell' individuo" is "mossa inevitabile dell' utilismo" unwarrantable as regards Mill, though it leaves Comte out of sight; but he does not unravel the curious intrication of methods by which Mill passes from the individual to the universal good.

His attack, however, is principally directed against the psychological rather than the strictly ethical theory of the Associationist writers: that is against their "reduction" of the free choice of good which moral action implies to completely determined pursuit of pleasure and avoidance of pain. His argument is divided into parts, each of which is given separately: the first considers the question of Freedom and Determination apart from the direction of voluntary effort: the second concerns the possibility of exhibiting the impulse towards virtue as a complicated and peculiarly modified case of the natural and universal tendency to seek pleasure. In both parts his reasoning is careful and intelligent: but in neither does it go precisely to the point. He thinks that Mill fails to discern the quality of freedom in volition, because he restricts introspective observation to *past* phenomena, represented in memory: but the point of Mill's argument is that freedom, implying the ability to do something other than we actually do, is intrinsically incapable of being immediately observed: we can only be conscious of actualities, not possibilities. Nor, in discussing the Associationist derivation of virtue, does our author fairly meet the analogy to which Mill's term "mental chemistry" appeals. He merely asserts that the aggregation of phenomena of one kind (sensations active and passive) cannot account for the existence of a phenomenon qualitatively or (as he says) *formally* different: but what the Associationists contend is that the difference is only apparent, as the difference between a compound and its elements in material chemistry. We all agree that the elements of a salt, &c. are present in the compound substantially the same, though changed in form; so, it is maintained, are the complex and derivative phenomena of mind *substantially* identical with the simpler and more elementary.

As I have been forced to dwell chiefly on what have appeared to be mistakes and misapprehensions in S. Barzellotti's treatise, I must conclude by saying that it is, in spite of them, throughout instructive, interesting, and well written.

H. Sidgwick.

Notes of Discoveries and Scientific Work.

Geology.

On the Geology of the Eureka Settlement in Nevada.—At the Academy of Sciences of California, Prof. Whitney exhibited a collection of fossils formed by Mr. J. E. Clayton in Nevada, near the 116th meridian, and not far from the mining settlement of Eureka. These fossils are of great interest, in that they represent the primordial or Potsdam beds of the Silurian era, and exhibit the same combination of genera and species of the *Lingulidae* family of the Brachiopods and the *Paradoxidae* family of Trilobites which characterize this group farther east. The same *Agraulos* (*Arionellus* of Barraude, and *Crepicephalus* of D. Owen, Meek, and Hayden) which occurs in the Big Horn Mountains, near longitude 167° is found in this collection from the 116th meridian. There is also a *Conocoryphe* (*Conocephalites*), but *Agraulos* is most abundant. The brachiopods appear to be represented by at least two genera, *Lingulepis* (*Lingula*) and *Obolella*. The lithological character of the rock in which these fossils occur is likewise of importance, as it is not a sandstone, but a limestone.

The Muschelkalk of the Eastern Alps.—There has hitherto existed a wide gap between the Muschelkalk of the Alps and Germany as regards their palaeontological features. E. von Mojsisovics (*Verhandl. der k. geol. Reichsanst.* 1872, No. 9, 191) has recently made the interesting discovery of a rich Cephalopoda fauna in the Lower Muschelkalk of Monte Cucco, near Friaul, in the Alps, containing new forms of Ammonites, though the greater part are closely allied to the species of North Germany occurring in the Lower Wellenkalk, such as varieties of the species *Am. Ottonis*, v. Buch, and others. It is remarkable that this newly discovered horizon of the *Am. Balatonicus*, which is a variety of *Am. Ottonis*, has also been found in Hungary in the Bakonyer Wald, a continuation of the Alps to the eastward, where it falls below the niveau of *Arcestes Studeri*, and rises above the beds of the *Rhynchonella decurdata*.

Nummulitic Limestone from the Neighbourhood of Modena.—G. Mazzetti publishes in *Extr. dall' Annuario della Società dei Naturalisti* (Modena, 1872), thirteen new fossil species from the nummulite limestone of Montese, near Modena. In the marly variety of the limestone, there are *Marginella*, *Mitra Michelotti*, *Terebellum*, *Cassis variabilis*, *Natica mammillaris*, *Pecchiolia argentea*, and others; and from the hard limestone were obtained *Avicula*, *Cardium*, *Terebratula Montesii*, *Schizaster canaliferus*, and two Echinodermata of the family of *Cidaris*.

On Atolls or Lagoon Islands.—At the meeting of the Geological Society of London on 8th May, S. J. Whitnell endeavoured to show that the areas of atolls are not at present sinking, and referred to an instance, that of Funafuti or Ellice Islands, where he thought signs of a slight upward movement could be traced. He called attention to the occurrence of furrowed appearances or a series of ridges or mounds in some islands, and attributed them to the action of a single gale.

The Glacial Phenomena of the Yorkshire Uplands.—At the same meeting, J. R. Dakyns stated that in Derbyshire and Yorkshire, south of the Aire, there is no glacial drift on the eastern slope of the Pennine chain, except where it is broken through by the valleys of the Wye and of the Aire and Calder. The basis of the Aire and the country northward is thickly covered with drift, which contains no rocks foreign to the basis, and thus points to formation by local action. The author ascribed this to the glaciation of the country, partly by glaciers, and partly by a general ice-sheet. Evidence of the latter he finds in the fact that drift occurs only on one side of the valleys, namely, on the leeside of the hills with respect to the source of the drift material. The action of glaciers may be traced in the great amount of scratched and rounded pebbles in the mounds of drift, which increase with the distance from their source, the presence of vast piles of drift at the junction of valleys, due doubtless to the shedding of the lateral moraines of two glaciers, and the existence of mounds of pebbles and of an alluvial deposit wherever a rock-basin crosses a valley. The Kames or Eskers, which are frequently met with in the valleys, he ascribes to the deposition of moraines in the sea instead of on land.

A Boulder Clay Section in Cheshire.—At the same meeting, D. Mackintosh directed attention to the occurrence of numerous seashells in a bed of Lower Boulder clay at Dawpool, of as completely glacial appearance, structure, and composition as any clay to be met with along the shores of the Irish Sea, and differing in no essential respects from the Pinel, which runs up the slopes and valleys of the Lake district. He pointed out a number of very important distinctions between the Lower and Upper Boulder clays of Cheshire, referring especially to the light grey or blue facings of the latter beds, and gave a list of a number of large boulders, greenstone and Criffell granite predominating, among the smaller stones Silurian grit being most prevalent. The author likewise explained the mode of striation of the stones found in the clay, and the position they occupied in reference to their flattened surface.

Notes on the Peninsula Mangischlak and the Aleutian Islands.—Dr. E. von Eichwald has published an interesting volume, entitled *Geognostisch-paläontologische Bemerkungen über die Halbinsel Mangischlak und die Aleutischen Inseln* (St. Petersburg, 1871). On the peninsula of Mangischlak, in the Caspian Sea, are found Lias and Middle Oolitic strata and several horizons of cretaceous age. The coal-beds of the peninsula are connected with strata which contain the *Am. Parkinsoni*, and the cretaceous strata are especially rich in fossils. In respect to the volcanic islands of the Aleutian archipelago, the author is of opinion that they are stratigraphically connected with the peninsula of Alaska, in common with which they have exhibited a slow movement of upheaval. Besides crystalline schists, numerous eruptive rocks of the trachyte and basalt groups have been noticed. Fragments of *Lichas* make the occurrence of the Silurian form probable. Other doubtful Palaeozoic deposits are mentioned, and some Neocomian beds described.

On Fossil Apes.—In *Extr. delle Atti della Società italiana di Scienze naturali*, vol. xiv. fasc. xv. 1872, C. J. F. Major gives a digest of what is at present known respecting fossil monkeys, from which we gather that at present nineteen species have been determined. Of the

sub-order *Lemuridae*, there are no fossil representatives, though the Eocene genus *Caenopithecus* forms a link between the *Lemuridae* and the *Simiadae*. The *Arctopithecini* are represented in the Brazilian caves by two species of *Tacchus*. The remainder of the cave-species of Brazil belong to the *Platyrrhini*, and all the other fossil monkeys are *Catarrhini*. The *Cynomorpha* are represented by three to four species of *Semnopithecus*, three species of *Macucus*, and one species of *Mesopithecus*; the *Anthropomorpha* are represented by four species, of which three belong to the genus *Hylobates*, and the fourth is allied to the ourang-outang.

On the Gasteropods of the Miocene and Pliocene Formations of Modena.—Professor F. Coppi has just published in Modena a monograph on the Gasteropoda of the Miocene and Pliocene beds of this province, and describes in this most important work eighty-three species of the families of the *Dentalidae*, *Caliptraeaceae*, *Tubispiratae*, *Turritellidae*, *Tornatellidae*, *Bullaceae*, *Solariadae*, *Turbinaceae*, *Xenophoridae*, *Naticidae*, *Cancellaridae*, *Ceritaceae*, *Muricidae*, *Conidae*, *Ficuladae*, *Chenopidae*, *Cassideae*, *Buccinidae*, *Olividae*, *Cypracadae*, and *Volutidae*.

Botany.

The Leaves of Drosera.—M. Ziegler has contributed to the Académie des Sciences of Paris (*Comptes rendus* for May 6) a series of observations on the irritability of the leaves of the sundew (*Drosera*). He finds that the hairs on the leaves exude from their extremity a small drop of glue, by which insects are caught. After an insect becomes attached, the exterior threads bend over it, covering it like the fingers of a hand, and do not straighten again till some days after, when a fresh drop exudes for a fresh prey. Albuminoid animal substances, if held for a moment between the fingers, acquire the property of making the hairs of the *Drosera* contract; except by contact with a living animal these substances exert no action on the hairs; and they lose their singular property by being repeatedly moistened with distilled water, and dried each time in a water bath. In order to prove that the contraction of the hairs is not caused by animal heat, the substance was cooled before placing it on the leaf. The sensitiveness of the hairs disappears after repeated application of the albuminoid substance, and their properties then appear to become reversed, showing similar sensitiveness to sulphate of quinine, which again restores them to their original condition of sensitiveness to insects after application for a sufficient length of time. In all cases the contraction of the hairs is slow, commencing visibly in about a quarter of an hour, and is often not completed till after several hours.

The Marine Algae of St. Helena.—In the last number of the *Journal of the Linnean Society* (No. 67, May 29) is a list, by Dr. Dickie, of the seaweeds of the island of St. Helena. The number is only eighteen, including one representative of the olive, thirteen of the red, and four of the green series; with three exceptions, they are very dwarf. When the very remarkably endemic character of the original land-flora of the island is considered, it is very singular that, with two doubtful exceptions, there is not a form of marine plants peculiar to the island; all are species more or less widely diffused, and most of them occur on both sides of the equator. About one-half are Cape forms, and one is Australian. The total number is very small for an island ten miles long by seven broad. The island of Kerguelen, much farther removed from any continent, has thirty-nine species, eight being olive, nineteen red, and twelve green; and of these five are, as far as is known, peculiar to the island, all the others being derivative; and, like those of St. Helena, many of them have a wide distribution in both hemispheres; a few are South American species.

The Flora of the Island of St. Paul.—The volume of the *Verhandl. der zoologisch-botanischen Gesellsch. in Wien* for 1871 contains an account of the flora of the island of St. Paul, in the Indian Ocean. There is a long list of marine Algae, and a few Lichens, Hepaticae, and Ferns; but the number of flowering plants recorded is only nine, constituting, probably, the poorest phanerogamic flora in the world. Of these, six are grasses, one a sedge, there being besides a *Plantago* and a *Sagina*; the two latter only are new and undescribed species. As the seven remaining species are all widely distributed plants, one at least being European, and are among those most easily propagated involuntarily by human agency, they have most probably been introduced. The number of flowering plants actually native is thus in reality reduced to two.

Effects of the Eruption of Vesuvius on Vegetation.—Sig. G. A. Pasquale contributes to the *Accademia delle Scienze fisiche e matematiche* of Naples a paper on the effects of the recent erruption of Vesuvius on the plants in the neighbourhood, of which the following is a *résumé*. The newest vegetation has suffered from contact with the ashes, though the effect has been neither a scorching nor drying-up. The action has not been a mechanical one, for a mere closing of the pores of the epidermis could not have caused death in so short a time. The closing of the pores and stomata undoubtedly produces a secondary effect, but only after the lapse of some days. No change has been observed similar to that produced by the vapour of boiling water. The action of a high dry temperature occurs only in places in the immediate vicinity of Vesuvius. Neither an acid nor an alkaline reaction is shown by any change of colour, except a few instances of a change to blue of rose, orange, or violet coloured organs, which might be attributed rather to an alkaline than an acid reaction; but these are few and doubtful. Many phenomena concur in pointing to chloride of sodium as the chief agent in the destruction of vegetable tissue. The salt was present in sufficient abundance in the falling ashes to be readily discernible to the sight, and is also met with as an efflorescence on the ashy soil.

Structure and Source of the Wax of Plants.—Prof. de Bary publishes a paper on this subject in the *Botanische Zeitung*, thence abstracted in *Nature*. The wax does not appear to be a simple coating on the surface, and to form a continuous layer, as though laid on with a brush. It is found to be a dense forest of minute hairs of wax, each having one end on the epidermis, the other either rising straight up or rolled and curled amongst its neighbours. This matting of the waxen hairs is often sufficiently dense to give the surface, when viewed by the microscope, the appearance of a continuous layer, though a good section of the leaf or skin of the fruit indicates its true structure. The question as to what part of the epidermis or subepidermal tissue forms the source of the wax is most beautifully and clearly answered. Prof. de Bary states that it is impossible to discover the slightest trace of wax in the cell contents, or to entertain the theory that chlorophyll is partly made of wax. The locality in which the wax can first be detected is the cuticle and the cuticularised elements of the epidermis cells.

Physiology.

The Functions of the Laryngeal Nerves.—Dr. Navratil, the author of a paper in the *Medical Times and Gazette* for June 15, draws the following conclusions from his experiments:—1. The *N. laryngeus superior* has no influence whatever on the motory sphere of the larynx. 2. The *N. laryngeus inferior seu recurrens vagi* is the nerve which supplies the muscles of the larynx; the expansors, contractors, and dilators of the vocal cords are under its influence. Hence any interruption of the functional powers of this nerve causes paralysis of the corresponding half of the larynx. If both recurrentes are interrupted in their functions, all the muscles of the vocal cords become inert, and the vocal cords assume the position seen after death. 3. The *N. accessorius Willisii* has no influence whatever on the muscles of the larynx. 4. The division of the vagi is attended with fatal consequences; but an animal may live for some time after the division of the recurrentes. Hence they conclude that the assertions of Claude Bernard, according to whom the *N. accessorius Willisii* over the jugular foramen might lead one to conclude that the nerve inosculated with the motor fibres of the vagus nerve at that point, and that the observed paralysis of the glottis contractors was rather to be ascribed to this circumstance; whilst in their experiments Willis's nerve was divided in the spinal canal, consequently before any commixture took place.

The Antagonism between the Actions of Physostigmia and Atropia.—A long and valuable paper, with this heading, by Dr. T. Fraser, appears in the third part of vol. xxvi. of the *Transactions of the Royal Society of Edinburgh*, which has just been published. Two or three instances of antagonism have already been traced, notably that between the lethal action of prussic acid and the physiological action of atropia, and that between the lethal action of muscaria and the physiological action of atropia. The physostigmia examined by Dr. Fraser is well known in ophthalmic surgery as Calabar bean, and its active principle, eserine or physostigmia, possesses the remarkable power of contracting the pupil, whilst atropia, the active principle of belladonna, produces wide dilatation. Dr. Fraser experimented with rabbits and dogs, and used an alcoholic extract of the bean, the base having been converted into a sulphate by the addition of dilute sulphuric acid. This was so potent that 0·12 of a grain was sufficient to kill a rabbit weighing three pounds. Experiments made with sulphate of atropia showed that from 20 to 24 grains were required to kill a rabbit weighing three pounds. In both instances the solutions were applied by subcutaneous injection. To show the antagonistic action of sulphate of atropia to physostigmia, a small quantity of atropia, 0·17 of a grain, or from that quantity to 0·5 of a grain, was injected beneath the skin, and, after a few minutes had elapsed, a poisonous dose of the physostigmia was injected. Symptoms usually made their appearance indicating the toxic influence of both drugs, but after a time the animal recovered. After the lapse of some days, when it was quite restored, the same quantity of the extract of physostigmia was injected without any atropia, and it was usually found that the animal died. It is thus incontestably shown that atropia exerts a powerful counteracting influence to the lethal action of physostigmia. Further experiments showed that whilst $\frac{1}{67}$ of a grain of sulphate of atropia is too small a dose to prevent death after a dose of physostigmia one and a half times as large as the minimum lethal amount, $\frac{1}{50}$ of a grain is suffi-

ciently large to do so, and that doses of sulphate of atropia ranging from $\frac{1}{50}$ of a grain to $4\frac{1}{10}$ grains are able successfully to counteract this dose of physostigmia; on the other hand, death occurs when the dose of sulphate amounts to $4\frac{3}{10}$ grains. This effect can be explained by supposing that there are certain actions of both physostigmia and atropia which do not counteract one another, but whose sum exerts a fatal influence. Similar experiments were made with different proportions of the two drugs, and the results are given very clearly in a diagram.

The Influence of Respiration on the Circulation.—In a paper on this subject by Dr. Ewald Hering (contained in vol. lxiv. of the *Sitzungsberichte* of the Vienna Academy, and republished by Stricker in the current part of the *Medicinische Jahrbücher*) are given the results of a considerable series of experiments on dogs, undertaken with the view of determining the influence of respiration on the circulation. He states that during an examination of the influence of the vagus on the respiratory movements, he found artificial inflation of the lungs to exert a remarkable influence on the cardiac movements. If air be blown in through a canula, and its escape prevented by a stopcock, the beats of the heart increase in frequency. In his experiments he introduced one end of a T tube into the trachea, and attached a second orifice to a manometer, while the third was left free, so that the animal might breathe by it, or through it insufflation might be carried on; a manometer was also introduced into the carotid. It was found that, when the tension of the air within the lungs was augmented, the pressure of the blood in the arteries fell to an extent increasing in proportion to the pressure of the air in the lungs. This effect is obviously due to the greater resistance the blood experiences on entering the chest, and to the obstacle the expanded lung presents to the passage of the blood through its capillaries. The heart's beats increased in frequency at the same time, and in proportion to the tension of the air in the lung; where the cardiac movements had previously been slow, they sometimes rose to three times their previous number. The animals were always under the influence of opium. Four questions suggested themselves in regard to this increased frequency of the beats. 1. Is it due to the greater pressure under which the heart acts? 2. Is it owing to the altered conditions of resistance to the current of the blood? 3. Does it arise from disturbances in the exchange of gases; or 4. Is it occasioned by a forcible dislocation of the heart. He considers the arguments in each case at length, and finally arrives at the conclusion that the acceleration of the cardiac beats on insufflation of the lungs is affected reflectorially through the vagi; the action of the centres of the inhibitory fibres of these nerves being lowered by the excitation of the sensory fibres distributed to the lungs.

Experiments on the Movements of the Uterus.—Dr. Oser and Dr. W. Schlesinger, in a communication to *Stricker's Medicinische Jahrbücher*, Jahrgang 1872, part i.), give the following result of their enquiries: By suspension of the pulmonary respiration through rapid loss of blood from the system generally, or by arrest of the flow of blood to the brain, a condition of excitation is established in the brain which causes movements of the uterus.

Detection of Syphilis by Examination of the Blood.—A controversy conducted with considerable acerbity on both sides is now in progress at Vienna. Dr. Lostorfer, who is supported by Professor Striker, maintains that peculiar corpuscles, which undergo definite changes, are recognisable by the microscope in blood that has been withdrawn from the patient, and kept a day or two with due precaution in moist air; that such is the case is strongly contested by Professor Wedl and others. Professor Stricker states in a paper contained in his *Jahrbücher* (Jahrgang 1872, part i.) that he furnished a considerable number of specimens of blood to Dr. Lostorfer, some taken from syphilitic, some from non-syphilitic persons, and that, except when the preparation was spoiled before being kept the required length of time, Dr. Lostorfer always, or almost invariably, detected those that were from syphilitic patients. Should this observation be confirmed by other enquirers, it will constitute an important step in pathology. Dr. Lostorfer carefully abstains from stating that these corpuscles are the *cause* of the disease, and merely maintains that they constantly accompany or are associated with it.

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Mayer, J. R. Mémoire sur le mouvement organique dans ses rapports avec la nutrition. Traduit de l'allemand et suivi d'une note sur l'unité des forces et la définition de l'électricité par L. Pérard. Paris: Masson.

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History.

Lives of the Archbishops of Canterbury. By W. F. Hook, D.D., F.R.S. Vol. IV. New Series. Reformation Period. Bentley and Son.

The readers of Dr. Hook's *Lives of the Archbishops* had long been awaiting with more than ordinary curiosity the appearance of the last published volume, containing the life of Parker, nor will they on the whole be disappointed. Not indeed that there is much to interest or attract us about Parker himself personally, who was a conscientious, painstaking, methodical man, of good average abilities and considerable pertinacity, but wholly devoid of originality of mind or character, and with little enthusiasm. He is one of those safe and colourless characters who owe their place in history solely to the accident of position; and it is worth noting that his selection for the primacy was deferred—partly through his known reluctance for so perilous an eminence and partly through Elizabeth's anxiety to conciliate the Catholics—till after it had been offered to Dr. Wotton and probably also to Abbot Feckenham, who had been chaplain to Bishop Bonner, and refused by them. There is nothing about Parker of the zeal and vigour of Beckett, or Anselm, or Laud, and so little enthusiastic was he in the cause of the Reformation that, although deprived of his preferments under Mary as a married man, and perhaps also on account of his feeble complicity with the Northumberland plot, he remained otherwise unmolested through her reign, which Foxe naturally calls being cruelly persecuted. And this must have implied at least his outward conformity to the established worship, which we are told he "utterly disliked." He was, in short, a man with some of the weaknesses, but without the positive vices, of Cranmer, and of considerably more learning and sounder judgment. But the meritorious efforts of his biographer cannot rouse at best more than a very languid interest in Parker personally; the real importance of his life depends, of course, on the prominent part he was destined to play in the organization of the Anglican system. It was under his primacy, if not from his hand, that what came afterwards to be called the *Via Media* first took shape as a distinct scheme of eccle-

siastical doctrine and discipline; for the brief interlude of Edward's reign left no permanent traces behind it, except the doubtful legacy of two not very homogeneous Prayer-books, of which Elizabeth avowedly preferred the first, but eventually adopted the second, with some modifications, in deference to the Protestant or Puritan party, whom it was felt necessary to conciliate. It was, in fact, in Elizabeth's reign and during Parker's primacy that the English Reformation took place, so far as it can be assigned to any definite period and identified with certain specific acts; and it is, moreover, on the validity of his consecration that the Anglican claim to episcopal succession mainly hinges. On both grounds the history of his primacy has a critical significance for the ecclesiastical and the theological student, quite independent of the faults or merits of the man himself. And in this aspect only do we propose to consider it here.

Dr. Hook is careful to insist on the legal and historical continuity of the national Church before and after the Reformation, and it may at once be allowed, quite apart from the further question about validity of orders, to which we shall advert presently, that he is fully justified in doing so. There was certainly no legal break in the chain, and, except for the formal renunciation of papal supremacy, no profession of establishing the Church on a new basis, still less of establishing a new Church. The changes introduced in doctrine and worship were acquiesced in by the entire body of clergy and people, with a few insignificant exceptions: only the bishops for the most part stood out, but without attempting, like the Nonjurors afterwards, to perpetuate a separate succession. The *congé d'élire* for Parker's election, which speaks of the see of Canterbury being vacant "by the natural death of the most reverend father and lord in Christ, the Lord Reginald Pole, Cardinal, the last archbishop thereof," and provides for "another archbishop and pastor" being chosen in his place, contains no more hint of any transition from one creed or communion to another than the *congé d'élire* for any of his predecessors or successors. To say this is not to prejudge the theological issues involved, one way or the other. But the point is of considerable historical importance, and the author has done quite right in emphasizing it. His treatment of another cognate subject does not seem to us equally satisfactory. It is true, no doubt, that on Elizabeth's accession there was an extreme Protestant or Puritan party, greatly strengthened, if not created, by the suicidal severities of the former reign, while the immense majority of the nation was still Catholic at heart, though perhaps only a minority felt strongly about communion with the Roman see, and fewer still were prepared at all costs to adhere to it. But Dr. Hook's sharply defined classification of "Anglo-Catholics," "Romanists," and "Protestants," is surely an anachronism both in form and substance, and it is further complicated by his sometimes contrasting "Protestants," — who are elsewhere termed "ultra-Protestants"—with "Reformers," such as Henry VIII., Elizabeth, and Cardinal Pole, while he sometimes uses the word Protestant, in a sense more analogous to what it bears or used to bear in Ireland, as synonymous with "Anglo-Catholic." Nor can we admit that the queen belonged to this middle party in any other sense than that she was ultimately driven into it by the impossibility, on the one hand, of conciliating Paul IV., and the consequent political necessity of coming to terms with the Protestant section of her subjects and the Protestant interest in Europe generally. Had Julius III. been still alive, or had Pius IV.—who was apparently willing even to sanction the Anglican Prayer-book, as it stood, on condition of his authority being acknowledged—succeeded a year earlier, she would almost certainly have retained the nation in communion with Rome. The still more pronounced sympathy of Sixtus V. came a full quarter of a century too late. Her religious convictions, such as they were, were indubitably Catholic, but always held in subordination to her political interests and the impatience of foreign dictation which had been more or less characteristic of English sovereigns since the Conquest, and was hereditary in the Tudor line. But if Dr. Hook is arbitrary in his classification of parties, he is quite equally so in his estimate of their theological standard. The Protestant or Anglo-Catholic party, for instance, is said to have had no great objection to the mass, while unable to tolerate transubstantiation or the elevation of the host, which they considered idolatrous. Yet transubstantiation is just as much presupposed by the sacrifice of the mass as by elevation. The sacrifice is not a mere commemoration of that on the Cross, still less a repetition of it, but is identical with it. And unless the body of Christ is really there, it can as little be offered in sacrifice as become the object of worship. And what makes this confusion of thought the stranger is that Dr. Hook quotes at length in a later portion of the volume what he justly considers (*pace* the Judicial Committee) a very important letter of Bishop Gheast, the compiler of the Twenty-eighth Article in its present form, explaining it in a sense precisely accordant with the Tridentine doctrine of transubstantiation; "I said unto him, though he take Christ's Body in his hand, received it with his mouth, and that, *corporally*, *naturally*, *really*, *substantially*, *and carnally*"—the last term goes beyond the Tridentine statement, and looks almost like σαρκοφαγία—"yet did he not, for all that, see It, feel It, smell It, or taste It." In other words, the substance is changed, but the accidents remain.

There are other questions both of doctrine and fact which Dr. Hook seems only able to look at through strong Anglican, or, if he prefers the phrase, Anglo-Catholic, spectacles. Thus, to give one or two examples, he talks of "the Romanists," by which is meant Roman Catholics, "attributing to the Fathers the same kind of inspiration as was vouchsafed to the Apostles," a charge which might be more plausibly urged against some writers of his own school. The Council of Trent is oddly enough stated to have been "convened to define the faith according to the private judgment of the persons composing the assembly," as though such was its professed object. Still more oddly the want of learning among the mass of the Catholic clergy —which the Reformation, by the way did remarkably little to remedy—is ascribed to the time and mental energy absorbed by "a conglomeration of ceremonial details," as though the ritual of the mass, once mastered, had any more tendency to absorb and "dissipate the mind" than the rubrics of the Common Prayer-book, or as if Anglican services were not to the full as long and exhausting as those of the Latin rite. Elsewhere orders and marriage are called sacraments in the same sense as "the regal unction"! To speak again of "the Romish sect established in England by Cardinal Wiseman" consists as little with accuracy of fact as with the ordinary courtesies of literature, and is the language, not of historical criticism, but polemical spite. But a passing reference to such incongruities must suffice.

Considering its crucial importance to the claims of Anglicanism, we are rather surprised that Dr. Hook should have contented himself with so brief and unconnected a notice of the controversy about the Apostolical Succession, which he nevertheless designates "the fact which lies at the very foundation of the Church." All he has to say about it is comprised, with the admixture of several other matters, in the last fifty pages of a chapter nearly three times that length, and is chiefly to be gathered from the notes. He

may be right in opining that the dispute originated in ignorance or wilful misrepresentation, but at all events so vital a point, after being hotly contested for three centuries, requires not to be shelved, but to be settled. The objections to Parker's consecration may be summed up under three heads. There is first the question whether the alleged ceremony took place at all; secondly, whether the persons who took part in it were competent to convey the episcopal character; and, thirdly, whether they adopted the necessary means for doing so. On all and each of these grounds the validity of the consecration has been challenged.

1. The first objection may be most readily dismissed, for since Dr. Lingard's exposure of its "utter futility," no respectable controversialist would dream of maintaining the Nag's Head fable, first put forward in 1604, nearly fifty years after the event, in a work published by a Jesuit named Holywood, at Antwerp, and afterwards reproduced in five or six different versions. Suffice it to say here that there is overwhelming evidence to the issue of the *congé d'élire* for Parker's election, the royal assent to it, and mandate directed to seven bishops, ordering them, or any four of them, to confirm and consecrate him, to his confirmation by four of them on December 9, 1559, and his being publicly recognised as archbishop by the queen, and acting as such, on and after December 18, but not before. Dr. Lingard considers these facts alone conclusive as to his consecration on December 17, even were there no direct and positive testimony for it. But there is such testimony in abundance, quite independent of the authenticity of the Lambeth register, which, however, "there exists not the semblance of a reason," adds Lingard, for calling in question: and it is confirmed by the express assertion, frequently repeated both in public and private, of the Catholic Earl of Nottingham, who was himself present at the ceremony. The evidence for the fact will be found collected in the eighteenth chapter of Dr. Lee's learned and lucid work on the *Validity of the Holy Orders of the Church of England*, to which Dr. Hook is very largely indebted, though he has only once referred to it. We wish, by the way, that in citing Lingard's letter he had given it entire as it is given by Dr. Lee, instead of omitting, without any notice, paragraphs that offend him. It is on the second and third objections, and especially on the third, that the controversy really hinges. We cannot of course do more than very briefly summarise the salient points.

2. It is argued then, admitting the fact of the consecration, that Barlow, who performed it, had never been consecrated himself, and therefore had no power to consecrate others. To this there is a twofold reply. In the first place, allowing for argument's sake that Barlow was no bishop, the validity of Parker's consecration would not be prejudiced thereby. For the three who took part with him in the rite had unquestionably been consecrated—one of them, Hodgkins, according to the Sarum Pontifical—and it is equally certain that consecration conferred by a single bishop is *valid*, though, for greater security, the co-operation of three is required by canon law for its *regularity*. And if it is objected that the Anglican Ordinal does not, like the present Roman, direct the assisting prelates to pronounce the sacramental formula, so neither did the Sarum or York Pontificals, in use before the Reformation; but it is moreover expressly recorded that in Parker's case all four of them did pronounce the words. There is no real need however for dwelling on these points, for of the fact of Barlow's consecration there cannot be the shadow of a reasonable doubt. The indirect evidence for it is overwhelming, and the only shred of evidence to set against it is the omission of any entry in the Lambeth register, to which it is enough to reply that the record of nine other consecrations performed by Cranmer, including that of Gardyner, as also of some performed by Archbishop Warham and Cardinal Pole, are equally wanting. Cranmer especially was notorious for his carelessness in keeping the registers. Lingard, after recounting the positive grounds for assuming that Barlow was consecrated, thus describes the argument urged by those who deny it:—"Why are we to believe these impossible, these incredible suppositions? Is there any positive proof that he was no bishop? *None in the world.* All that can be said is that we cannot find any positive register of his consecration. So neither can we of many others, particularly of Bishop Gardyner. Did any one call in question the consecration of these bishops on that account? Why should we doubt the consecration of Barlow, and not that of Gardyner? I fear the only reason is this—*Gardyner did not consecrate Parker, and Barlow did.*" To raise the question of jurisdiction is simply irrelevant. That, on the received Roman view, lately endorsed by the Vatican Council, none of Parker's consecrators had or could have any jurisdiction, precisely because they were out of communion with Rome, is too obvious to require a moment's discussion. But it is also certain that, on the strictest Roman Catholic principles, the defect of jurisdiction would prejudice the regularity only, not the validity, of their acts.

3. The third objection is the most comprehensive and important, involving as it does various controverted questions both of doctrine and of fact, though it is not, as far as we can see, even once referred to by Dr. Hook. To argue it out would demand a treatise. We must be content to state results. The adequacy of the Edwardian Ordinal, maimed and meagre as it confessedly is, has often been admitted by Catholic divines, and certainly follows from the principles laid down by such high liturgical authorities as Martene and Morinus. It is implied in the brief addressed by Julius III. to Cardinal Pole, and acted on by him, and must have been expressly recognised by Pius IV. if the statement be accepted, for which Dr. Hook adduces strong evidence, that he offered to sanction the Elizabethan Prayer-book and Ordinal, as "comprehending all that is necessary to salvation." If, however, the question is mooted, it can only be met by an appeal to "comparative liturgiology," and this test has been exhaustively applied in seven successive chapters of Dr. Lee's work on the subject, dealing with a series of Eastern and Western forms universally allowed to be sufficient. The comparison makes it clear beyond possibility of cavil that the sufficiency of the Edwardian Ordinal, which differs in some points for the worse from that of 1662, can only be contested on grounds which would prove a great deal too much. The omission of the *traditio instrumentorum*, which has been chiefly relied on, is an objection which refutes itself; for the formula was only introduced into the Latin Church in the twelfth, or at earliest tenth, century, and has never been adopted in the East, as is expressly admitted by Perrone. There remains, however, the question of *intention*, and much ingenuity has been expended on the attempt to show that Barlow and Scory, two of Parker's consecrators, were heterodox on sacramental doctrine, and cannot therefore have intended to confer the episcopal character. If it were so, there would still be two of the four consecrators whose orthodoxy is not impugned, but the whole enquiry is really beside the mark. The intention required by the Council of Trent for valid administration of sacraments is simply "intentionem saltem faciendi quod facit Ecclesia" (*Sess.* vii. *can.* 11). A sacrament ministered, *e.g.* by a priest who was drunk or asleep, or acting in joke, would be invalid. But it certainly does not mean that his theological apprehension of its

nature must necessarily be correct, so long as he really intends to do what the Church does, or what Christ ordained. Bellarmine distinctly lays down this principle: "Non est opus intendere quod facit Ecclesia *Romana*, sed quod facit Ecclesia *vera, quaecunque illa sit;* vel *quod Christus instituerit*" (*De Sacram.* lib. i. c. 37). And in the performance of a public act the intention of those concerned to do what they are ostensibly engaged in doing must be assumed in the absence of any outward sign to the contrary, or doubt would be thrown on the validity of every sacrament ever administered. There can be no doubt whatever as to the act Parker's consecrators were commissioned to perform, and were on all sides understood to be performing. It was to consecrate a bishop, neither more nor less, and Dr. Hook argues fairly enough from the preface to the English Ordinal that the word bishop is unquestionably there "employed in the sense which has always been attached to it in the Catholic Church." Nor can there be a shadow of doubt that it was so employed and understood by Elizabeth and her advisers in Church and State. There is then no ground for doubting that the consecrators of Parker, publicly using that ordinal, intended to make him a bishop; nor would the validity of their act be affected if it could be shown that one or more of them held heterodox opinions about the grace of the sacrament.

Here the discussion, as far as Parker's case is concerned, might close. But it seems hardly respectful to so high an authority to pass over in silence Dr. Newman's recent contributions to the general subject in two letters to the *Month* for September and October, 1868, and a Note in his recently published *Essays Critical and Historical* (vol. ii. pp. 74 *sqq.*). Dr. Newman, however, professedly deals with considerations "independent of any question arising out of Parker's consecration," and, indeed, of historical, or, as he calls them, "antiquarian arguments," altogether; and it is of these alone that historians, as such, can be expected to take account. The arguments urged in the letters to the *Month* are of an *à posteriori* kind, such as the carelessness of the Anglican clergy in administering baptism, their irreverence about the Eucharist, and the like, which will appeal with very various force to different minds according to their theological or other bias, and their estimate of the facts alleged. The inference suggested would rather point to some possible break in the chain of succession after Parker's time. In the Note to the *Essays*, published last year, the argument is ultimately resolved into the further, and distinct, question of the exclusive claims of the Roman Catholic Church. "Catholics believe their orders are valid, *because they are members of the true Church*," and are not, therefore, called upon to adduce detailed evidence of the fact; whereas the *onus probandi* lies upon Anglicans, and, if we rightly understand the illustrious author, it is a burden they are, *from the nature of the case*, incapable of sustaining, because "there is no security for the transmission of the apostolical ministry, except as continued in that Church which has the promises," *i.e.* the Roman Catholic Church; "the orders depend on the Church, not the Church on the orders." And thus the argument is merged in the wider question of the notes and limits of the Visible Church. Into that discussion we shall not, of course, enter here, and with two general remarks on Dr. Newman's line of argument, this review must be brought to a close. In the first place, it is obviously not so much a plea in disproof of the validity of Anglican orders as a demurrer to the need for any discussion of a point which might be at once admitted if the Church of England were a true Church, but which, as matters are, is both immaterial and incapable of proof. It is obvious, in the next place, that the argument, as stated in the *Essays*, tells equally against the security of the ordinations of the Greek and Russian Churches, and various heretical bodies in the East, which are, like the Anglican, incapable of mathematical proof, but have never been called in question, and are admitted by the theory and practice of the Church in communion with Rome.

It will be gathered from what we have said that there is much of interest in Dr. Hook's last volume, though it might well have been more skilfully put together. We may add that, besides other blemishes already referred to, it is disfigured by several strange slips of the pen or printer's errors—it is not always easy to say which—and that an alphabetical index, and a much fuller and more careful arrangement of marginal analysis and dates, is a crying *desideratum*.

H. N. OXENHAM.

NEW INSCRIPTIONS.

SOME months ago the casual upturning of a marble slab on Monte Cavi gave us the date of the abdication of the decemvir Appius Claudius and his fellow-tyrants, and now another slab discovered on the Forum Romanum furnishes us with that of the first triumph of King Romulus himself, and though few scholars of the present day may be inclined to give credit to this statement, even the most sceptical, we trust, will look with interest, and indeed with reverence, to these morning-mists of fable ushering in a long series of splendid and real triumphs; on the old duel between King Romulus, of newly founded Rome, and King Acron, of Caenina, now brought down to the first new-year's day of the new republic. The brief fragment runs thus:

ROMVLVS · MARTIS · F · REX · ANN *ii*
DE · CAENINENSIBVS · K · MAR*tis*
romulus MARTIS · F · REX · II . . . .
de antemnatibus . . . . . .

The only two authors who give us extracts of that part of the triumphal table which regards Romulus are Solinus and Plutarch. Solinus tells us (c. i. 20): *Romulus . . . de Caeninensibus egit primum triumphum et Acroni regi eorum detraxit spolia . . . rursum de Antemnatibus triumphavit, de Veientibus tertio*; Plutarch (*Rom.* 25) gives the date of the third triumph, the ides of October. These dates, though not really historical, nevertheless are curious enough. No doubt the two dates hitherto known of the triumphing of the son of Mars, the first king of Rome, coincide intentionally with two great festivals in honour of the god Mars, the kalendae Martiae being the feriae Martis of the old Kalendaries, and in fact the birthday of the god himself (*C. I. L.* i. p. 387), the ides of October the day of the slaughtering of the victorious horse in the Campus Martius in honour of the same divinity (Marquardt, *Handbuch*, iv. 277). It may be noticed too that the old *fable convenue* does not lack the accurate dates and the showy pragmatic appearance with which historical falsification has always decked its creations. Rome was founded on the 21st of April of the year 1, of course, the year beginning then on the 1st of March. For four months the new commonwealth was conducted, if not on strictly monastic principles, still without any assistance of the fair sex; but on the Consualia, the 21st of August, matrimony was introduced by the wholesale operation commonly known as the rape of the Sabine women (Plutarch, *Rom.* 15; Varro *de L. L.* c. 20). The autumn and winter, apparently, were given to diplomatic operations between the Romans and the various tribes that had suffered by the rape; as usual, they waited for spring in order to begin the war. But King Acron of Caenina was more forward than the rest, and began operations early and alone (*προεξανέστη τῷ πολέμῳ*, says Plutarch); so it came about that the first new year the republic saw was inaugurated by the entrance of the victorious king, carrying on his shoulders the trophies of the enemy slain by his own hand on the battle-field. When the great battle between the Sabines and the Romans was fought, the intervening ladies already were mothers.

The students of Roman law and classical antiquities may hope to get a monument of the same kind as the famous tables of Salpensa and Malaca, the only remnant of the privileges

granted by republican and afterwards by imperial Rome to their Latin cities. Mr. Ramiero de P. Caballero Infante y Quaro, a rich proprietor of Seville, has lately acquired three bronze tables, of two or three columns of thirty lines each, containing administrative regulations of the early imperial epoch. The fact is certain, as I have been informed by trustworthy and learned eye-witnesses; but nobody is allowed to copy them, as the proprietor reserves to himself the privilege of the first publication. Nobody certainly will grudge it to him, if only he will make rational and moderate use of his right of proprietorship, and give soon what the public may justly claim as part of the grand heritage of ancient Rome. TH. MOMMSEN.

Intelligence.

Dr. Aloys Sprenger, the well-known Semitic scholar, who for many years was resident in India, and is now living in Switzerland, proposes to write for the *Journal* of the Royal Asiatic Society a series of essays on the Early Geography, History, and Commerce of Arabia. Two of these papers have already been read at recent meetings of the society, and will, we understand, appear in the number of the society's *Journal* about to be published. In his first essay, Dr. Sprenger contested the views of those scholars who consider the Ishmaelites as the ancestors of the Northern Arabians. The indigenous traditions of the Arabians, which assign such an origin to the Ma'addites, can, he argues, be distinctly traced to the Jews, and are therefore valueless; and even Mohammed had different notions regarding Ishmael after his flight from Medina from those he had held whilst residing at Mecca. The principal point Dr. Sprenger endeavours to establish is that the Ishmaelites were extinct in the fifth century of our era, and that, therefore, long previous to the Moslim conquest they had ceased to form a distinct race.—Dr. Sprenger's second paper treats of Aelius Gallus' campaign in Arabia in 18 B.C. He shows it to be probable that the work *De Expeditione Arabica* of Juba II., King of Numidia, and son-in-law of the Triumvir Antonius, was written for Augustus previous to Gallus' expedition, as a kind of report on the country about to be invaded. The account of Arabia and of the expedition given by Strabo, the personal friend of Gallus, was, Dr. Sprenger argues, on the contrary, written so as to represent Arabia as a complete *terra incognita*, and thus to exonerate Gallus from any blame for having failed to conquer that country. Dr. Sprenger then examines the geographical statements of these writers, especially those of Juba as given by Pliny, and endeavours to identify in a most interesting and ingenious manner the various names of places and tribes mentioned. Of his identifications the most important is that of the *Minaeans* of Greek writers with the *Kindites* of Arabian and Byzantine historians. Dr. Sprenger's papers will be found to throw much new light on this obscure chapter of ancient Arabic history.

Contents of the Journals.

Von Raumer's Historisches Taschenbuch, 1872, contains a biography of Maria, the wife of the Palatine Frederick III., one of the excellent women of the Reformation period, whose great-grandson married Elizabeth, daughter of our James I.—There is also an account of the Huguenot emigrants in Germany; we may compare the corrupted names with those in England, *e.g.* de Ruffignac corrupted into Roughneck.—Some light is thrown on the destruction of the Anabaptist state at Münster in 1535 from a contemporary (legendary) narrative.—A description of the Marquise du Deffand's life (well known to us from Horace Walpole) is given to illustrate the social state of the eighteenth century.—Of our own time, we have sketches of Maximilian II. of Bavaria, so celebrated in the world of artists, whose political idea was to balance and unite Austria and Prussia by a league of the little states under the leadership of Bavaria.—On the other side, Giesebrecht gives us his recollections of Rudolf Köpke, one of the patriots of 1848, who just lived to see his scheme of German unity carried out in 1866—the intermediate time was spent in literary work on the national history of Germany. The interest of the whole number is thus mainly biographical.

Von Sybel's Historische Zeitschrift, 1872, 3rd part, contains an important article on the Icelandic sagas about the early times, especially that of Egil—the statements of which we can check from the information given by Ohthere, the voyager to King Alfred, about the state of the North at that time, and from the Anglo-Saxon Chronicle—since Egil is made to visit Athelstan and take a decisive part in the great battle against the Celtic and Norse invaders of England. The result of the enquiry is in both cases unfavourable to the authenticity of the saga.—A description is given of the election of Pope Urban VI. in 1378, which led to the great schism during which three popes were excommunicating each other.—An account of "the Jesuits in Syria" is interesting just at this time.—"The Regency in Greece, 1833–5," is a narrative of the unlucky attempt of the Bavarians, well intentioned but pedantic men, to govern during King Otto's minority.—Among the shorter notices is a review of Freeman's *Essays* by Pauli; and a reply by Büdinger to Dummler's essay on the historian Bishop Liudprand of Cremona.

Bullettino dell' Instituto, May, describes the various articles found at the Emporium, some of which show an active commerce with Spain; the origin of the curious Monte Testaccio is also discussed, which is composed of fragments of pottery from the Emporium—the breakage of the imports during centuries: the inscriptions on some of the uppermost fragments bring us down to the fourth century A.D.—Jordan describes the Septizonium of Severus (the etymology of the word is difficult) as consisting of three rows of pilasters only.—Henzen gives the new fragments of the Fasti found in the Forum, the most interesting of which is described by Professor Mommsen in his letter to us (see p. 257).

New Publications.

BACON, F., Letters and Life of. By J. Spedding. Vol. VI. Longmans.

BOECKH, A. Gesammelte kleine Schriften. 6. Bd. Akad. Abhandlungen. Nebst einem Anhange, epigraphische Abhandlungen aus Zeitschriften enthaltend. Leipzig: Teubner.

BURTON and DRAKE. Unexplored Syria. 2 vols. Tinsley.

CALENDAR OF CLARENDON STATE PAPERS IN THE BODLEIAN. Vol. I. Ed. by Rev. O. Ogle. Clarendon Press.

CALENDAR OF STATE PAPERS; Foreign Series of the Reign of Elizabeth, 1566–8, preserved in the State Paper Department of H. M. Record Office. By Allan J. Crosby. Longmans.

ELLIOTT, The late Sir H. M. The History of India as told by its own Historians. The Muhammadan Period. Posthumous papers, edited and revised by J. Dowson. Trübner.

Philology.

Nonii Marcelli Peripatetici Tubursicensis de Compendiosa doctrina ad filium collatis quinque pervetustis codicibus nondum adhibitis cum ceterorum librorum editionumque lectionibus et doctorum suisque notis edidit Lud. Quicherat. Paris: Hachette.

THE present generation is probably more familiar with the name of Nonius than any since the Renaissance, if not indeed than any since the work was first published; for it may safely be asserted that at no other period has the study of remains been more absorbing than the present, and the widely extended circulation of Ribbeck's *Tragicorum* and *Comicorum Latinorum Fragmenta*, Vahlen's *Ennius*, Riese's *Varronis Saturae*, Peter's *Historicorum Romanorum Relliquiae*, and other collections of a like kind, present no name so habitually as his. Nonius is, in fact, our great repository of early Latin fragments; of Lucilius alone, five hundred passages, according to M. Quicherat, are preserved by him. He is besides the only ancient author who has preserved considerable excerpts from the lost works, particularly the *Saturae*, of Varro; and no one who has not studied these can have any clear conception of the manysidedness of Latin literature in the splendid period of Cicero, Catullus, and Lucretius. Of all the great Roman writers, Varro seems to have been the most deeply learned in the language and antiquities of his country; but the fragments of the Menippean satires show him besides in the double character of a humourist and an innovator in language; and are interesting enough to make us wish that we could have bought only one of them by the sacrifice of part of his equally voluminous, but much more religiously preserved contemporary.

The MSS. of Nonius go back to the ninth century. This seems to be the date of the valuable Harleian, excerpts from which had been published before, particularly in Riese's *Varronis Saturae*, but which M. Gustave Masson has collated throughout for M. Quicherat. Of the great value of this codex I can speak from experience, having collated a large number of the fragments of Lucilius in it; and there can be little doubt that no restoration of the more obscure Nonian passages can be considered certain until the first reading of

Harl. has been carefully made out. In some places it preserves traces of a reading prior to the corruption which, in common with other MSS., it adopts; in others its agreement with the rest of the early MSS. enables us to decide with certainty in favour of readings or spellings hitherto rejected as improbable. For instance, at p. 125, *ientare*, *ientaculum* is written in Harl. throughout *icientare* (*ieentare*), *icientaculum;* this is also found in three others of the MSS. collated by M. Quicherat; and it is in all probability right, as Ribbeck has seen, though M. Quicherat adheres himself to *ientare*, *ientaculum*. So again Harl. gives *permities* not only at p. 153, where Roth and Gerlach also give it from their MSS., but at p. 218, *pestem permitiemque catax quam et manlius nouius* (*nouis* is a later alteration), and in the quotation from Attius; and here also, I think, rightly, against Roth and Gerlach's MSS. So, again, at p. 131, the passage from Varro's Catus *male enim consuetudo diu inprobo rata est inextinguibilis*, for so it is written in Harl., explains its own corruption, *i.e. inroborata*. Here most of the MSS. are in the second stage of corruption, *improrata*, whence the *importata* of many editions. Besides Harl., the chief MSS. newly employed by M. Quicherat for his edition are—(1) M, the Montpellier, much mutilated, but of independent value; (2) P, No. 7667 in the library of Paris, partially collated by Reuvens for his *Collectanea*, 1815; (3) C, or Colbertinus, 7666 of the same library; all these belong to the tenth century; (4) O and Q, two Paris MSS. of the fifteenth century, on paper. Besides these he has availed himself of the collation of the excellent Wolfenbüttel codex, which makes Gerlach and Roth's edition so authoritative, as well as of others at Basle, Berne, Geneva, and Leyden. With such resources the new edition of Nonius cannot fail to be interesting: though the actual variations of the new MSS. are perhaps less considerable than might have been anticipated. The conjectures of a long series of critics are on the whole adequately represented in the apparatus; and owing to the small size of the type in which the apparatus is printed, the reader is not distressed by anything like a disproportion between the text and the notes. Moreover, the references are given, book and line, side by side with the extracts; and much time is hereby economized. Again, verse is printed as verse, prose as prose; and though it is not to be forgotten that in some cases what looks like prose may be really verse, *e.g.* in passages of Varro's *Saturae*, yet it is better to read what is uncertain verse as prose than what may be prose as verse. In fact, M. Quicherat's edition of Nonius is to an ordinary reader a sufficiently attractive book not to repel, and perhaps to attract, him.

The case is however very different with an advanced student of Latin. To such the edition of Roth and Gerlach will, if I mistake not, still be *the* edition. For it presents with unexampled clearness and unrivalled fidelity the *exact text of Nonius*, with its corruptions, misspellings, and even mistakes as they are in the MSS.; an advantage almost incalculable in an author where so much is necessarily uncertain, and where so large a part of the gain of perusal consists in the careful study of recurring palaeographical or orthographical confusions. It has been elsewhere observed by me that in no author is the interchange of *v*, *b* more frequent than in Nonius; it may be added that in no author, it would seem, have the MSS. preserved on the whole, if we take the Harleian and one or two others as our guides, a more careful orthography. This remark is much more important than at first sight it may seem: for we are dependent on Nonius for the greater part of the fragments of all the lost writers of the early period of Latin literature. If then, at p. 113, where a passage of Sisenna is quoted, the words *fera bite* occur twice, is it certain that Sisenna wrote *fera uite*? We do not reason so in other cases; where *permities* is repeated, we accept the repetition as significant and real. We accept *rinoceros* as the probable spelling of Lucilius, on the showing of Nonius; he may also have written *cocsendicas*, *cocsendicibus*. At any rate, once give up the principle of following the best MSS., and uncertainty is the inevitable result. The few pages of early inscriptions in the first volume of Mommsen's *Corpus*, and the very limited number of words which they contain, are, to say the least, a very inadequate standard for the spelling of the whole ante-imperial period.

From this point of view, then, it is impossible to overrate the merits of Roth and Gerlach's *Nonius*, a book, in its way, of unique correctness and fidelity. For the same reason it is impossible to speak with entire satisfaction of M. Quicherat's performance. Take as an instance p. 229: Tarditas generis feminini. Masculino Varro Vimarco: *ne me pedatus uersuum tardor (neprenet tarte cum pritymon certum;* so R. and G. M. Quicherat changes *Vimarco* to *Bimarco*, *pedatus* to *pedatu primo*, *neprenet t. c. p. certum* to *Refraenet, arte quum premo ῥυθμῶν sertum*. It would surely have been better to have indicated that a disyllable is lost in the first line than to introduce a word which, like *primo*, spoils the evenness of the metre: in the second line, *refraenet arte rhythmon*, all are probably right; *cum premo* is doubtful; it might as easily, or more so, be *cum parit* (*perit*, then *pit*); *arte* is thus ablative and *rhythmon* accusative: *certum* is not to be altered. Take again the interesting fragment from Lucilius, p. 428, where the poet distinguishes *poesis* from *poema*. M. Quicherat has not only altered this unnecessarily, e.g. *quidve hoc intersiet illud* to *q. h. intersit et illud*, but actually introduced a metrical enormity. The MSS. give *primum hoc quod dicimus esse poema pars est parua poema* (*poesis*, some MSS.) *idem epistula item queuis non magna poema est illa poesis opus totum totaque illa summa est una Θέσις ut annales Enni atquestoc unum est hoc maius multo est quam quod dixi ante poema*. This is given by M. Quicherat thus:

> Primum hoc quod dicimus esse poema
> Pars est parua poesis ut est et epistola quaeuis.
> Illa poesis opus totum; tota Ilias una
> Est θέσις, aut Annales Enni; atque hoc [opus] unum
> Est maius multo quam quod dixi ante poema.

This, to say the least of it, is no improvement on the conjectures of previous editors. It is more natural to suppose, with L. Müller, a lacuna before *epistula:*

> Pars est parua poema . . . . .
> Epistula item quaeuis non magna poema est.
> Illa poesis opus totum; tota Ilia summa est
> Una poesis ut Annales Enni; atque si (h)oc unum est,
> Hoc maius multo est quam quod dixi ante poema.

Poesis for θέσις is an old conjecture of Mercer's; the rest is little more than drawing out the words of Nonius; there is nothing to show that Lucilius did not shorten *hoc* as Seneca did after him; the meaning is clear. "Again any particular letter of no great length is a poem; but that other word *poesis* means a complete work: thus the complete whole of the *Iliad* is a single *poesis*, like the *Annals* of Ennius; and if this is *one*, it is a *one* that is much greater than the short poem I spoke of before." In the last words he seems to answer a possible objection: "if *poema* is a single piece of poetry, *poesis* would seem to be an aggregate: how then can it be one? Answer: it is one as a whole, and differs in its oneness by being much larger than a single *poema*."

Again, if M. Quicherat prints his own clever conjecture συνάρθμιοι in the corrupt article *gralatores*, p. 115, might he not have admitted Lachmann's admirable emendation of the passage from Varro's *Eumenides*, p. 119? Part of it, at least, seems certain, and is in the great critic's best style. Nor can it be denied that such arbitrariness in spelling as is too

perceptible throughout this edition of Nonius is unsatisfactory, and unworthy of M. Quicherat's reputation. If the MSS. give *adtendere harundo conubiis gargaridians caelum coicere deicere Medientius dimittere ilico holerorum*, on what principle do we find printed *attendere arundo connubiis gargarizans coelum coniicere deiicere Mezentius demittere illico olerorum*? If *dissicit delica* are allowed to remain, as they rightly are, why change such interesting remains of ancient Latin as the use of an abl. *qui*, after a plural noun in the article *gralatores*; especially when, as has been pointed out by M. Meunier (*Mémoires de la Société de Linguistique*, i. p. 24), the same writer Varro seems to have written, *L. L.* ix. 67, *unguenta quoi nunc genera aliquot*? These cases might be multiplied; they detract from the value of a work otherwise full of interest, and perhaps indispensable to every future student of Nonius. R. Ellis.

THE MANUFACTURE OF INSCRIPTIONS.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—The organization in Jerusalem for the forgery of inscriptions, to which I have already, by your kind permission, referred (*Academy*, vol. iii. pp. 179, 180), would seem to be assuming larger dimensions. A stone, with twelve lines, which has lately been produced, is either in new characters (though some are Nabataean) or, more probably, is a forgery. But my special object in writing to you is to state that M. Shapira, the merchant, is not, as I conjectured, the deceiver, but the deceived. The doubts which I expressed as to his character arose partly from private enquiries and partly from the impressions received by myself and others in visits to Jerusalem. I have now the pleasure of informing you that these doubts are unjust to M. Shapira. According to the testimony of reputable persons in Jerusalem, such as the Bishop, who is staying at Basel, he was even honourable enough to refuse to sell a stone of (to him) doubtful genuineness except on the understanding that he should be free from blame should the inscription turn out to be spurious. It is to be hoped, however, that people in Jerusalem will bestir themselves to find out the real forgers. I regret not to have been better informed in the matter. Shapira, as a correspondent tells me, had already been three years a Christian when he came to Jerusalem. A. Socin.

Basel, May 27, 1872.

Intelligence.

The 38th annual meeting of the Congrès scientifique de France, started and organized by the well-known archaeologist, M. de Caumont, is held at Saint-Brieuc, in Brittany, on the 1st of July and following days. The work of the Congrès is divided into five sections:—(1) Natural, physical, and mathematical sciences; (2) agriculture and useful arts; (3) anthropological and medical sciences; (4) history and archaeology; (5) philosophy, social economy, literature, and fine arts. Amongst the lectures which will take place, we may notice the two most interesting of the 4th and 5th sections: M. Morvat will give the complete collection of the Latin inscriptions discovered up to this time in Brittany (about forty-two in number, we believe), and will explain them—M. Morvat has already published, two years ago, very interesting *Études philologiques sur les Inscriptions gallo-romaines de Rennes* (Paris: Franck)—and M. Luzel will deliver a lecture on the authenticity of Breton popular ballads, and of M. de la Villemarque's *Barzaz-Breiz.*

At a meeting of the Society of Biblical Archaeology on June 4, Dr. Eisenlohr, of Heidelberg, communicated a paper on the religious and political revolution described in the Harris papyrus. He considered the latter to express the Egyptian view of the events which were the immediate cause of the Exodus. We are happy to add that this fine hieratic papyrus is probably on the point of being added, if it is not already added, to the national collection.

Contents of the Journals.

Philologus, vol. xxxi. pt. 4.—M. Schmidt: On *Anonymus de Musica*, § 98. [Attempts to settle the rhythmical character of the examples given in this passage.]—Fr. Matz: H. Brunn's "Second Defence of the Pictures of Philostratus."—G. R. Sievers: On the History of Herodian. [A series of detached notes.]—K. Georges: Miscellaneous Observations.—D. Campe: Horace and Anacreon. [An investigation into the amount of imitation of Anacreon to be found in the Odes of Horace.]—K. E. Georges: Τετραγράμματος.—H. W. Schäfer: On the Circumference of the Earth according to the Ancients. [Examines the estimates connected with the names of Aristotle, Archimedes, Eratosthenes, and Posidonius. Rejects the notion that they were derived from Babylonian and Egyptian learning. The method of Eratosthenes was thoroughly correct, but it is impossible to say how nearly his result was so.]—L. Urlichs: On Eustathius.—N. Wecklein: The Aeschylean Literature of 1859–1871. [Supports the critics whose method depends wholly on the Medicean manuscripts and its scholia; also those who find symmetrical arrangement in speeches like those of the Seven against Thebes.]—H. S. Anton: Corn. Nepos, *Milt.* 8, 2.—F. W. Munscher: On Xenophon, *Anab.* iv. 8, 2.—On *Parta tueri.* [By several writers.]—Th. Wiedemann: Excursus on the Dissertation, "On the Age of Curtius Rufus." [Continued from last number.]

Zeitschrift für die österreichischen Gymnasien, vol. xxi. No. 10.—On the Concords in Greek Syntax; by J. La Roche. [A valuable contribution to Greek grammar. The treatment of concords in Greek has usually been based upon the rules framed by Latin grammarians. The writer confines himself to the language of Homer and the early poets, *e.g.* Alcaeus: nor does he attempt to explain the peculiarities which present themselves. But nowhere can be found a fuller or better arranged digest of usages.]—H. B. Heller reviews a number of recent works on the *Oedipus Rex.*——No. 11.—Mähly: On Phaedrus. [Suggests various emendations.]—A. Conze, the well-known professor of archaeology at Vienna, gives a valuable notice of eighty-seven recent works on his subject. Perhaps his remarks upon Michaelis' *Parthenon*, and on Brunn's revolutionary *Problems in the History of Vase-painting*, are the most interesting.—W. Foerster reviews various recent editions of the *Oedipus Rex.*

Philologischer Anzeiger, vol. iv. No. 1.—Of the reviews of new works in this journal we may notice the following:—P. 42: C. W. on the third edition of Schömann's *Greek Antiquities.* [Suggests a few slight points which have escaped the aged author, who in most cases is thoroughly abreast of the latest investigations.]—P. 46: Review of C. Trieber's *Enquiries into the History of the Spartan Constitution.*—P. 50: Review by R. E. of Michaelis' *Parthenon.* [Warm and discriminating praise of this admirable work.]——No. 2.—P. 69: C. Liebhold reviews Volquardsen, *On the Mythus in Plato.* [Good; especially for the digest of previous enquiry into the same subject.]—Review of Professor Ramsay's edition of the *Mostellaria.* [Unfavourable.]——No. 3.—P. 120: Review by A. H. of Blass' edition of Antiphon and of Dinarchus, in the Teubner series of texts. [Laudatory.]—P. 140: A. Forbiger's *Hellas and Rome* (a popular representation of public and domestic life of the Greeks and Romans); pt. 1, Rome in the Time of the Antonines. Reviewed by O. [Compared quite unfavourably with Becker's well-known *Charicles* and *Gallus.*]——No. 4.—P. 189: W. reviews Merkel's edition of the Laurentian MS. of Aeschylus; printed at the Clarendon Press. [Fully appreciates the value of this fine work.]—A. Philippi, *Contributions to a History of Athenian Citizenship*; reviewed by H. Frohberger. [Justly recommends this interesting essay to all students of Greek and Roman history as original and correct in its main views, fairly exhaustive in its reference to authorities, although occasionally too polemical in tone.]

The Pandit, vol. vi. No. 72.—The *Śabdakhaṇḍa* of the Chintâmaṇi, with a comment (continued).—*Brahmamîmâṃsâbhâshya.* [Adhyâya I. pâda 1, sûtras 1–18.]—Râjaśekhara's drama *Viddhaśâlabhanjikâ* (concluded).—Sanskrit text and English translation of the *Vidvanmanoranjinî*, a commentary on Sadânanda's *Vedântasâra*, by Râmatîrtha (continued; by A. E. G. and G. D.).—Supplement: Catalogue of Sanskrit Manuscripts (continued; vols. 72–75 of the *Dharmaśâstras.*)

New Publications.

Bar Hebraeus. Œuvres grammaticales, éditées par l'abbé Martin. 2 vols. Paris.

Konze, J. De Dictione Lycophronis Alexandrinae aetatis poetae. Münster: Regensberg.

Müller, F. M. Ueb. die Resultate der Sprachwissenschaft. Strassburg: Trübner.

Persius, The Satires of. With a Translation and Commentary by J. Conington: to which is prefixed a Lecture on the Life and Writings of Persius. Ed. by H. Nettleship. Clarendon Press.

Plath, J. H. Die vier grossen chinesischen Encyclopaedien der k. bayerischen Staatsbibliothek. 1. Der Wen-hien-thung-Khao von Ma-tuan-lin. München: Franz.

Tischendorf, C. Testamentum Novum Graece. Editio critica minor ex viii majore desumpta. 1. Hälfte. Leipzig: Mendelssohn.

ERRATUM IN No. 50.

P. 228 (*a*), line 41, for "sunny" read "snowy."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 52.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The next number will be published on Thursday, August 1, and Advertisements should be sent in by July 29.

General Literature.

Lamartine. Sa Vie littéraire et politique. Par Ch. de Mazade. Didier.

Twenty-five Years of my Life, and Memoirs of my Mother. By Alphonse de Lamartine. Translated by Lady Herbert. Two Volumes. Bentley.

FOR thirty years, from 1820 to 1850, if the suffrages of the reading public in France had been taken, an overwhelming majority would have placed Lamartine at the head of the list of living authors; and the result would not have been very widely different if the votes had been weighed instead of counted, for though there were some writers who had a following of more enthusiastic admirers, each of these had also a body of influential opponents; Lamartine was at once the favourite of the masses, and at worst coldly esteemed or gently satirized by the extreme factions in literature. As Louis Blanc said of him in 1849—it was meant as an accusation—"he had not the art of making mortal enemies," and it is only mortal enemies who defeat their own purpose by embalming their adversaries in their best invective. At the present day Lamartine is the type of a past rather than an unpopular fashion: he is forgotten without being disliked. But a man who occupied at first so much and then so little space in the eyes of his contemporaries deserves to be studied at least as a man, if not as a writer, for the more insignificant he appears in that character the more need there is to explain the personal ascendency by which he imposed on the world. M. Charles de Mazade's little book, his contribution to the *Revue des deux Mondes* during the siege of Paris, comes opportunely to invite the sober, critical judgment to pronounce itself once before the author of the *Méditations*, of *Jocelyn*, and of the *Histoire des Girondins*, is silently shelved amongst the second-rate, or the sixth-rate, classics of French literature. M. de Mazade does not bestow much thought on the question whether Lamartine is a real poet at all; that, like most of his countrymen, he is still disposed to take for granted; but he counts the vagaries of the spoilt child of fortune and society as so much on the wrong side of the balance-sheet of fame; he makes the poet responsible for the failures of the politician, the inaccuracies of the historian, but he omits to derive confirmation—which is scarcely, however, superfluous—of the reality of Lamartine's imaginative inspiration from the fact that he had neither judgment, learning, nor character enough to enable him to play all or even one of the parts in which he did as a fact make a not inconsiderable appearance. It may seem to be a distinction without a difference, but we are inclined, instead of blaming the poet for all that the man was not, to give the poet credit for all that he was; instead of saying: *Le Lac* is good poetry, but its author is "only a poet," or he would have saved society in 1848, we should say: the author of *Le Crucifix* must be a poet after all, for he conjured the spirit of anarchy for a day, with no help save from a few abstract principles, by the might of which he floated during three months in the van of a liberal revolution, for which he had otherwise no natural affinity or inherited sympathy. On the other hand, it is certainly a fault or a weakness in the poet, as poet, that the elevated ideal character which he half wished to be, half thought he was, required to be rounded and completed by qualities and glories of an extra-poetical nature.

In this respect Lamartine was a victim to the literary tendencies of his time, to the taste for sentimental introspection which made it a condition of popularity that poetry must be not merely good in itself, but must contain the very soul and marrow of the poet, his whole subjective consciousness, the most intimate experiences of his heart. It is not, of course, altogether unreasonable to expect that a great poet shall have a great soul; but, after all, the man and his work are necessarily distinct, and the attempt to confound and identify the two is answerable for what seems to us theatrical and insincere in Goethe, Byron, and, on a smaller scale, in Lamartine. They acted well, but they acted at an audience which was not precisely immortal, and so far they put their memory at the mercy of a stage tradition; their importance was partly historical instead of purely artistic. For Goethe and Byron there was compensation; the former almost succeeded in resuming in his own poetical autobiography (forming the greater part of his works), the intellectual and moral life of two generations; and Byron, whose genius was naturally objective, gained rather than lost in the richness and power, with which he represented his one hero's figure relieved against a background of the finest scenery in southern Europe, from the belief, calamitous only to his friends and relations, that it was incumbent on him in private life to approach as far as possible to the ideal creation of his fancy. With Lamartine the case was different. The volume of *Méditations poétiques*, which obtained a brilliant success in 1820, the poet being then twenty-nine, was an innovation in form rather than in matter. To love like St. Preux, to weep like Werther, and to accept the consolations of religion like René, was not an original programme, but to do each and all of these in flowing, harmonious verse, which was "like neither Delille, nor Luce de Lancival, nor Esménard"—the popular authors whom his publisher advised the young Lamartine to study—was to do something which had not then been done in France, and, as it proved, to secure a reputation which, as reputations go, cannot be called undeserved.

M. de Mazade says of him that he transforms into poetry the sentiments which women and children share with men. In other words, he is the poet of emotional mediocrity; his muse satisfies the aspirations of the many simple souls to whom a rudimentary art has become a second nature, and whose sentiments are scarcely more complicated than if they were primitive, though their vigour has been much attenuated in passing into the conventional mould. The beauties of uncultivated nature were a new discovery to the generation which preceded Lamartine, and to his contemporaries there was still something new in the idea of a natural, intimate harmony between the moods of man and the changes of the outer world. Lamartine had a more than commonly vivid sense of the resemblance between life and a water-course, between falling leaves and fading hopes, between lovers' tears and the dew of heaven, between birth and death and night and morning, and in general of the analogy between material and spiritual existence. Melancholy without despair, hope without enthusiasm, tenderness

without passion, piety without intolerance, loyalty for the king and loving words for the people—it was the *juste milieu* itself incarnate in rhymes, which were not incorrect nearly so often as the Orleanists tried to make out.*

His ideas were never profound, and twenty years was more than long enough for them to become commonplace, as the speculative parts of *In Memoriam* and *Locksley Hall* are commonplace now; but "commonplace" only means that the opinion is too familiar, the truth too obvious, to be worth stating. And this is scarcely a reproach to a poet, since art should deal with the eternal and immortal verities, and a truism is as good as a truth if it can carry off as rich a lyrical disguise. Granting that Lamartine's themes are trite, and his treatment of them somewhat monotonous, it is just the oldest stories which bear repetition best, because their application is being always renewed; subjects of perennial interest carry their recommendation in the reader's consciousness, and he neither expects nor wishes to be told of emotions he cannot share. The emotions which everyone knows by sight, or a closer experience, inspire Lamartine's lyrics, and though the delicate excellencies of the most refined French poetry are apt to escape the dull perceptions of a foreigner, the readers of Lamartine will be struck by a something which evaporates in paraphrase or translation, the aroma rather than the bodily presence of poetry, like a spirited variation on a stupid air, which almost disguises the intrinsic meagreness of the melody; in fact, by the presence of those merits of poetical style which almost any one can feel, though it takes a Sainte-Beuve to analyse and describe them, and which suffice to make a few admirable poems, though they do not alone make a really great poet. In Lamartine there was a possible Herrick *doublé* with an actual Cowper, and the combination did not prevent his writing some lyrical pieces neither too long nor too ambitious to be perfectly finished and satisfactory works of art. Here his misfortunes begin. There are many immortal poems, including the best anonymous songs, which are the works of men who, under the most favourable circumstances, would never have been anything but what are called minor poets. The neglect of this truth in the early days of the romantic movement was the cause of grievous disappointment and disenchantment to authors who had the misfortune to outlive a premature celebrity. To write a good stanza, a man must be a great poet, and once a poet, always and altogether a poet; at least so it seemed to Lamartine and the readers of the *Méditations*.

"Aimer, prier, chanter, voilà toute ma vie,"

he observes in the character of *Le Poète mourant:* and two-thirds of the task presented no appreciable difficulties: he had really been in love with the lady he calls Elvire, the Julie of *Raphaël*, and the best proof of his sincerity is that in his most senile *Confidences* he never gave her name to the public; but even without such a personal source of inspiration he might have sung the resigned sighs of a conventional lover as successfully as the religious aspirations which a conventional mother instils into the candid soul of a conventional child. In these cases he is only indirectly concerned in the sentiments he expresses, but the third part of his life is song, and here perforce the subject and object melt into one. The poet, that is to say, Lamartine, loves, prays, and sings, and his song is the record of his life, but his loves and prayers may be past, future, or altogether imaginary, whereas it is an indubitable historical fact that he composes verses, for they are printed in many editions. The poet is the hero of his own poetry, and if he has not a commanding individuality like Goethe, and cannot like Byron originate an ideal type—inventing it first and imitating it afterwards—he is reduced to celebrating a conventional poet, and compelled to spend his days in considering what course of conduct the eternal fitness of things prescribes to the greatest poet of the age.

This preoccupation had a twofold effect upon Lamartine: it modified his poetry and it modified his life. The naïve self-conceit which is so amusingly satirized in Alfred de Musset's *Conte*, Le Merle Blanc, is partly accounted for by the fact that two characters, he himself and an ideal poet, were inexplicably confounded in his poetical soliloquies, so that the beautiful locks and limpid eyes which might be harmlessly attributed to the one, often gave a drolly egotistical look to descriptions of the other. And this was not the worst; when he had exhausted the subjects for occasional verse which presented themselves spontaneously, he felt obliged to conceive the plan of a great work, concerning which it is sufficient to say that, while *Jocelyn* formed one book or episode of it, *La Chute d'un Ange* formed another. Lamartine had the pen of a ready writer, and he was quite capable of enriching the world with the remaining twenty-two volumes demanded by his scheme if he had not contracted other engagements, also at the bidding of his ideal self. For this superhuman moral epic, even if it had been written, would have been at most a literary monument, and the hero-poet, according to him, has a threefold mission. From his earliest youth, he tells us, he had traced out in advance the programme of his life: his youth was to be devoted to poetry; a history, vast, philosophical, tragical, a history in the style of Tacitus, was to employ his mature age; and then with advancing years he was to plunge resolutely into the *mêlée* of practical politics and immortalise himself, either at the head of armies or—at the Hôtel de Ville. It is true that Lamartine, as M. de Mazade observes, was one of the men who possess in the highest degree "la faculté de l'inexactitude," and this account of his youthful aspirations, written when he was no longer young, is naturally somewhat coloured by the memory of intervening occurrences. But the romance is founded on fact, for besides the prophecies of his coming political greatness put into the mouth of Lady Hester Stanhope, in the *Voyage en Orient*, published at the beginning of his parliamentary life, as early as 1830 on his reception at the Academy, he had described the man of coming emergencies—orator, counsellor, poet—in terms which, with a speaker like Lamartine, can only be understood as referring to himself. "Sainte-Beuve l'a dit, Lamartine, l'académicien de 1830, prophétisait le Lamartine du gouvernement provisoire, avec cette nuance pourtant que certainement Lamartine avait fait ce qu'il avait pu pour que sa prophétie ne restât pas un vain mot." And this is exactly what spoils the sublimity of his *rôle*. Some are born great, some achieve greatness, but Lamartine was ever thrusting greatness upon himself, and an ideal of greatness constructed *à priori* by fixed principles and symmetrical rules, is wanting in one of the first conditions of poetical beauty, spontaneity.

Yet, even in politics, he is something more than a mere man of talent, though he is that as well. Where his personal vanity did not come into play, he had generous instincts and sound intuitions, and he was often unjustly judged because this or that party interest, which expected to find a tool in the poet, was baffled by encountering instead a somewhat *doctrinaire* statesman. M. de Mazade seems to do at once rather more and rather less than justice to

* Madame de Genlis was one of Lamartine's severest critics; but then Lamartine's maternal grandmother had been under-governess to the children of the Duke of Orleans, and she was employed to counteract the influence of Madame de Genlis, and bring Mademoiselle d'Orléans back from Spain when the "Orleans party" was intriguing with Dumouriez.

Lamartine as a politician. That is to say, he tries him by the highest standard, and makes it almost an accusation that, tried by that standard, his career was not a success. But if we refuse to take Lamartine at his own valuation as the "homme d'élite" predestined to be at once the Homer and the Moses of a new liberal-romantic Israel, his failure was by no means absolute, and very far from disgraceful. All men but the very greatest are measured by their contemporaries. For fault of better, Thiers and Guizot were the Pitt and Fox of the monarchy of July; nature intended Lamartine for the Burke. In 1848 he raised a laugh in the chamber by the incautious expression, "En politique, Messieurs, j'ai beaucoup voyagé." The phrase was characteristic of the man, who, with all his desire to *pose* in the most becoming attitudes, really meant to be candid, and by unintentional self-betrayal of this kind was actually much more candid than he knew of. But his political "travels" only ranged from one disinterested and unpractical conception to another. As a legitimist and as a republican he took what seemed to be the most chivalrous side. The king is one against many, therefore there is something generous in undertaking his defence; but the people are weak, helpless, and oppressed, and to become the champion of the liberties of all is newer, less lucrative, and therefore even more generous. But his policy showed the same want of original vigour as his verses. His opinions rested on sentiment or instinct, and he was unfit either to lead a party bound together by fixed pledges or to found one consisting exclusively of personal adherents who would be content with a policy based on the character of their chief. When he was elected deputy for Dunkerque and asked where he should sit in the chamber, he replied: In the ceiling, for there was no room for him in any of the existing parties. And this was perfectly true, for he had not the practical experience of statesmancraft required of the man who is to direct a majority in times of peace, while he was without fixed principles or aims to inspire a consistent opposition. If the parliamentary conflicts of the reign of Louis-Philippe had related more to measures than to men, Lamartine would have been an intelligent but erratic critic, an uncertain but a conscientious ally, and he would have gained in importance by occupying a definite position as a liberal freelance. But for this it would have been requisite that Thiers and Guizot should each have had something that could pass for a policy, and had that been so, it would not have been left to Lamartine to determine the government of France on the evening of the revolution. M. de Mazade naturally looks at 1848 by the light of 1871, and tacitly suggests a parallel between Lamartine and the present *chef du pouvoir exécutif*, of which the effect is to blame Lamartine, since he could not establish a popular republic, for not having instead proclaimed a regency or a dictatorship. But this is doing injustice to his one political accomplishment, a Cassandra-like insight. He was more constant in his antipathies than in his loves, though he had two of each. The divine right of the Bourbons to the throne and the divine right of the people to liberty claimed his allegiance in turn, but Napoleon and the Orleanists were double-dyed usurpers, inasmuch as they sacrificed liberty without an extenuating pedigree. If the mother and child that implored his protection in 1848 had been of the elder branch, it would have been the crowning moment of his life as he knelt to offer his homage, but he justly felt it would be absurd to sacrifice the cause of the people—and his own popularity—for the sake of "la royauté illégitime d'Orléans."

He was equally well advised in rejecting the other part offered him, though the motives which actuated him at the time are less obvious, so that we may, if we please, give a moment of poetic inspiration credit for the forbearance which certainly did not arise from self-distrust. It is easy to exaggerate the importance of Lamartine's share in the revolution of February; he himself gives us every encouragement to do so; but the sudden and unprovoked collapse of his popularity shows us how hollow and insecure it must have been from the first. The revolution which he represented—for a French revolution is never one and indivisible—was sentimental, literary, Girondist, middle-class, but the vast majority of the middle classes cared as little for the republic then as now, and it was not thrust upon them by the same imperative political exigencies. The strength of the revolution was in the street, but Lamartine was powerless amongst the crossing factions and neutralised by the rising celebrities that he encountered there. There was Blanqui and a band of conspirators for the sake of it, the advocates of revolution *en permanence*, *i.e.* any government that a day at the barricades could upset; there was the democratic and social republic, the dream of the honest working classes and their heroes, Barbès, Albert and Louis Blanc; behind these there was the red revolution, which took its leaders day by day from the malcontents of the other factions, and depended for its strength in the last resort upon what Louis Blanc had described long before, the great *armée du mal*, consisting of all those who have been reduced by vice to misery, or by misery to vice. (In the days of June its effective strength was estimated at 40,000.) Then there was the Bonapartist faction, which had intelligences amongst the conspirators, and especially amongst the reds, where Louis Napoleon seems to have played the same mysterious and disastrous part as Égalité in the first revolution. And when we add to these all the shades of reaction throughout the country, we can judge what chance a moderate, aristocratic liberal like Lamartine would have had of establishing himself as dictator, even supposing he had known what to do next. It is true that for a moment, owing to the fears of the reaction and the prudence of the republicans, Lamartine's name, as the symbol of compromise, united 259,000 votes in Paris alone; but only six weeks later, that is, at the beginning of June, the list of popular favourites was headed by Caussidière, the ex-prefect of police, with 147,000 votes, while Lamartine was nowhere with Ledru-Rollin. The man who had no enemies had no friends, and it is on the whole well for his reputation that either vanity or a worthier motive made him refuse to become the tool of interests and ambitions not his own. He retired into private life with his head on his shoulders, with clean hands, and with the recollection of half a dozen moments when he had prevailed with a passionate, puzzle-headed mob to forget that it was hungry and angry, and to fancy that the happiness which, more or less consciously, it was clamouring to receive from the state, consisted in conscious virtue, the admiration of Europe, and the privilege of embracing an eminent poet and historian on both cheeks. During his tenure of power his summary of a day's work used to be, "Je viens de faire cent discours et d'embrasser cent mille hommes!" and after all there must be good in a mob that can be pacified with a fraternal kiss and fine words. Of course more than this is needed to govern a country, but Goethe did not exactly govern Weimar, nor Byron, Greece. And though we have a right to smile at the disproportionate pleasure which Lamartine certainly derived from the accessories of his popularity, his critics are not altogether blameless for the state of things which stimulates such vanity as his. We are too curious in our hero-worship: a mere Washington or Pitt we should think humdrum and commonplace, and yet when a Lamartine at the Hôtel de Ville enters into the spirit of our secret cravings and the impromptu *coup de*

théâtre proves a complete success, we are so unreasonable as to complain because, after all, it is—theatrical.

Of Lamartine's old age the less said the better; he wrote for money, and he wrote about himself and his own urgent need for money to avoid the painful necessity of selling the natal soil about which his readers knew so much. What he wrote had little to recommend it, except a slender biographical interest and "cette intarissable et harmonieuse parole" which unfortunately Lady Herbert has not succeeded in reproducing. The *Twenty-five Years of my Life* go over the same ground as the *Confidences*, but are in places a little fuller; for instance, they reveal that Graziella was really a cigar-maker, not a coral-worker, as falsely represented in the romance. But in other respects they are no more accurate or authentic than his other auto-biographical writings. Some of his statements can be checked from the Memoirs of his mother, or extracts from her journal published with the Life; for instance, it appears that it was in 1819, not, as he describes, during the Hundred Days, that he lodged in an uninhabited fisherman's hut on Lake Leman with no society save a stray dog and the fisherman's daughter. In Lady Herbert's English, Madame de Lamartine is almost more readable than her son. She was a woman of fine character and some genius, which, however, seldom found its expression on paper, for the journal which she kept regularly was a mere record of domestic affairs, pious resolutions, and ultimately matrimonial negotiations for her daughters. In external circumstances her life was very like that of Eugénie de Guérin, but the care for a whole family, of which Alphonse was one, gives more breadth and variety to the parts of human interest, though on the other hand there is much less of sentiment and poetical reverie in the matron. Another point in which she corrects and supplements her son's reminiscences relates to his first volume of poems. Twenty copies of his *Méditations poétiques*, privately printed and circulated amongst friends, had procured him a considerable drawing-room reputation which preceded by a year and no doubt materially furthered the success of the published volume. H. Lawrenny.

LITERARY NOTES.

The *Westminster Review* for July contains an interesting article on the Greek lyric poets, characterising with great delicacy and precision the Aeolic school of subjective passion and the Doric school of choral harmony. The writer points out that the latter, though developed within the sphere of Dorian civilisation, was not worked out by Dorian poets. Aeolian passion and Ionic sentiment took possession of the Doric chants, of which the words had previously been bald, childish, and empty, and worked them out into a magnificent literature. The article closes with a rather severe appreciation of Simonides and his successor, Bacchylides, both of whom are considered as somewhat mechanical artists. Pindar is reserved for a separate study.

Under the title, "Eine verjährte Mystification," Th. Creizenach furnishes the *Allgemeine Zeitung* (July 4) with a very curious illustration of the danger of taking history from newspapers. In the autumn of 1814 Goethe paid two short visits to his native town, and on the last of these occasions, according to both Viehoff and Lewes, a solemn representation of *Tasso* was prepared in his honour. His box at the theatre was hung with garlands, and he himself was crowned with wreaths taken from the busts of Virgil and Ariosto; it was an ovation like that of Voltaire at the Théâtre Français. We are now assured that there is not a particle of truth in the whole story; on the contrary, Goethe visited Frankfort, and so little honour was shown him in his own country that, to put the town authorities to shame, an enthusiastic admirer of his, Privy Councillor Willemer, invented, wrote, and sent to the *Morgenblatt* (September 28, 1814) a circumstantial account of all that ought to have taken place at the theatre, but did not. The report was printed in good faith and copied by other journals. The *Morgenblatt* discovered its mistake, and spoke of the forgery (December 31) as an ingenious and successful joke; but, as often happens, the contradiction failed to reach those who had believed and helped to disseminate the false news.

Paul Stapfer, in the *Bibliothèque universelle et Revue suisse*, hazards the opinion that, of all the contemporary historians of France, M. Guizot is the only one possessing a thoroughly healthy mind, sound and happy like an ancient classic. His *Histoire de France racontée à mes petits enfants* illustrates his impartiality and breadth of view, while there is more grace and picturesqueness than in the works of his youth and maturity.

The *British Quarterly* has an interesting article—though written too expressly from a Protestant point of view to be strictly scientific—of William of Occam and his connection with the Reformation. The reviewer considers Occam's originality, though not his influence and importance, to be somewhat overrated: regarding him rather as "the great English schoolman, less qualified to invent theories than to combine and apply to practical use principles already enunciated." Thus he did not so much revive or develop nominalism as popularise it by associating it with the current doctrines of the Byzantine logic (of Psellus). Nor is his theological scepticism, or rather criticism, properly original: he adopted from others the mystical position that the truth of the dogmas is apprehended by faith and not rationally demonstrable: but he deprived this mode of apprehension of its exceptional and hypermystical character by exhibiting it in harmony with his general theory of knowledge: according to which all scientific propositions inadequately represented the truths of intuition, though in theology the inadequacy was greatest. The clear vigour of Occam's anti-papal polemic the reviewer attributes to the union in him of an earnest though moderate mysticism with a practical nominalism. Other writers have attributed to realism a powerful influence in creating and perpetuating the ideas of pope and emperor as the most perfect concrete expressions of civil and spiritual power: here, it is argued, we see nominalism leading to the demand that the symbol should *adequately* represent the thing symbolized, and so to the attack on the pope as a false representation of Christ's sovereignty.

Art and Archaeology.

Photographs of the Acropolis at Athens. By W. J. Stillman. Taken with Dallmeyer Lenses. Marion and Co.

A handsome portfolio of twenty-six photographs by Mr. W. J. Stillman will be appreciated by those who have had the happiness to visit the Acropolis of Athens—may go no little way to console others who are now out of hope to do so—they may hasten the more fortunate who have still time and opportunities before them. Well chosen general views give first (5) the northern and most extended aspect of the hill of Athene, confronted boldly by the lower but hardly less renowned hill of Ares—"Mars' Hill"—the Areopagus, and new Athens that the traveller has to endure, below. We move to the right, and in No. 3 the height crowned by the memorial of obtrusive Philopappus becomes visible intermediately in the distance, and now the old Turkish town is before us; a wider detour brings us in No. 4 to the south-east of the Acropolis and the banks of the Ilissus, and Philopappus is now away to our left; the Parthenon nearer to the edge of its enclosure on this side rises clear against the sky, on the slope below it is the great theatre, and on the plain the columns of Jupiter Olympius are brought into view to complete a scene that satisfies the eye by its composition, but can never satiate imagination.

These three views of Athens give the complete circuit of the Acropolis, and combine picturesqueness with an adequate expression of relative distances and magnitude which is far from detracting from the value of the monuments.

From the last general view we can see one direct path to the newly excavated Dionysiac theatre (No. 2); above it are the ruins of the Choragic monument, from the summit of which the seated Dionysus, now in the British Museum, looked down on his own theatre; there the beautiful marble chair is still in its place, from which, as we learn by the inscription on it, the priest of Dionysus Eleutherius was a spectator as his god was exhibited breaking the vain bonds of Pentheus and asserting the rights of exalted enthusiasm; or struggling out of a shabby scrape in Hades by now blustering in the disguise of Hercules, now cringing in that of a slave and appealing to his priest among the audience by name to help him as a boon companion in trouble (Arist. *Frogs*).

After a view of a rudely regular entrance to the Acropolis of Roman adjustment (No. 1), recovered by excavations of Beulé, we pass in (No. 6) to the foot of the ascent—once so majestic, now strewn with the ruins of steps and colonnade—the pedestal of Agrippa, the mediaeval watch-tower on either side jostling Attic art and Attic glory; one front of the re-erected naos of Victory without wings is shown on the right—seen more completely in No. 7—in both a symbol of the irony of fate, and yet in a sense an assertion of a tenacity of renown not desperate even yet.

Passing through what once was the western portico and the noble central doorway in the wall that once closed the sacred precinct, we are (No. 8) in the eastern portico of the Propylaea, of which the columns, though shaken, are at least erect. One effect of the shifting of the drums by earthquakes has been to exhibit more distinctly than in other cases their heights and divisions. We observe, in consequence, that in this work of Mnesides they are unusually numerous—as many as ten in a column of only 25 feet high, against no more than eleven in the Parthenon shaft of 33 feet. The lines of the beds also that are studiously set by Ictinus at different heights in adjacent columns are seen here to rule through the entire hexastyle.

Of the other photographs, five are devoted to the Erechtheum, nine to architectural subjects of the Parthenon, and three to sculptural. Nos. 9 and 18 give the east and west fronts of the Parthenon, with sufficient foreground to convey the proportion of the structure to the circumjacent area; and in No. 17 the eastern is represented again nearer at hand, for the sake of details. Nos. 11, 14, and 13 give views of the cella east and west and northern ambulatory looking west; No. 15 the interior of the portico below; and No. 12, as seen from above—an originally selected view, showing the sculptured frieze that still remains in position and details of construction; the protected and weathered surfaces and peculiar cleavage and fracture of Pentelic marble are given with surprising reality.

Taken altogether, we would scarcely desire a series of photographs to more completely represent the dignity and refinement, the scale and harmony, of the Parthenon and its surroundings. Peculiar interest attaches to photograph 16, which presents the "Profile of Eastern Façade showing the Curvature of the Stylobate"; that is to say, the intentional and studied variation of the lines of the steps from true horizontality—perhaps the most remarkable of the numerous adjustments that the Greek architect imposed upon himself for the sake of countervailing certain slight distortions produced to the eye by contrast of lines. That such was their practice had been read in both Greek and Latin authorities, though the fact was only half believed, the statement perhaps only half understood, until recently verified by the monuments. The publication of Mr. Penrose's minute survey of the Parthenon by the Society of Dilettanti left but sorry excuse for doubt thereafter, though perhaps we have no right to wonder that the evidence should wait in vain for recognition from architects over-occupied or from theorists committed to the supreme value of zeal however blind no matter—of thought estimated by some gauge irrespective of mastery of the art of effective thinking, or, lastly and latest, of the spontaneous evolution of genius from the crude handicrafts.

The existing fact concurs with the ancient averment, that the Greek observed that architectural lines in certain collocations however truly horizontal in construction failed to appear so to the eye, and therefore intentionally, though at the cost of infinite adjustments, constructed them on a curve to correct the illusion and render them horizontal in appearance. The principle may be illustrated on the smallest scale, and is still more salient to observation in the largest. Inscribe a square within a circle, and the accuracy of the circle seems impaired; it is difficult to regard it as other than a set of segments that would intersect if continued at the angles of the square. By close observation the distortion proves to be shared between the curve and the right line that subtends it; the bow is exaggerated, the straight line sags—dips towards the middle. By a due series of experiments it is found that lines meeting or tending to meet at an angle have their apparent divergence modified; acute angles appear more open, and obtuse less so—the eye in each case approximates the divergence to a right angle. The same occurs therefore in the contrast of an inclined with a vertical line, and had its due acknowledgment from the Greek when he inclined forward the face of an anta that was seen in combination with a column. The difference may be slight, so is that between a sharp note and a flat to some ears; the eye of a Greek, even though not an architect, seems to have been quite as sensitive as the ear of an opera conductor.

There can be no doubt that Mr. Penrose is correct as against Vitruvius in arguing that in the front of a Greek temple the primary compensation was demanded—not on the stylobate, but by the contrast of the raking lines of the pediment with the horizontal cornice—the curvature of the stylobate following in great part as a consequence, though also required independently to countervail the strong contrast of the inclined outline of the angle columns. Abundant exercise for these observations may be found, at least in clear weather, without quitting London, in buildings of all styles. A modern Gothic spire neighboured ill-advisedly by the slope of a high-pitched roof, would seem to have its axis deflected from the perpendicular. Look from the Green Park at the segmental hoods of windows of Bridgewater House that drop on outer ledges of cornice, and these will be seen to turn up visibly like the brim of a hat; the seeming sinking of the cornice was in some degree relieved by the varied lines of sculptured groups, as we may observe in the pediment of the British Museum, but the optical disturbance still is unsubdued.

The stylobate and the cornice must needs be made to appear parallel, and thus the application of the artifice to one would in any case affect—involve—the other. The edges of the steps and the lines of the entablature, usually understood to be straight lines, are therefore in the Parthenon and some other of the best examples of Greek Doric convex curves lying in vertical planes, or, strictly, are composed of straight sides of large polygons, giving approximation to a curve more or less easy according to the number of sides. The front architrave of the Parthenon is composed of only seven stones with six intermediate joints, giving angles that would touch points in a very large circle; the stylobate as composed of twenty-one pieces, or at least of fifteen sets, gives a polygon of more sides; the joints under the two

central columns out of eight are perpendicular; those under the adjacent columns north and south are inclined north and south respectively—coincide, in fact, with radii of the large circle of the general curve. These adjustments are brought out still more palpably by Mr. Penrose's measurements of the lower drums of the columns, which are worked with extremest accuracy, and show the differences in height on opposite sides that must ensue from their lower beds being effectively on a slope.

The total rise above a level line joining the angles of the top step is 0·228 of a foot, or as nearly as may be 2¾ inches. The photograph 16 is taken in very quick perspective, with an horizon at about the level of the second or middle step, and by the rapid foreshortening the rise from the angle to the centre of the steps—required, in the words of Vitruvius, to prevent the line seeming sunk like the bed of a channel—becomes distinctly observable.

We have here a palpable illustration of the words of Mr. Penrose—"The amount of curvature is so exquisitely managed that it is not perceptible to a spectator standing opposite to the front, at least not until the eye has been educated by considerable study, founded on knowledge of the fact. It may indeed easily be remarked by any one who places his eye in such a position as to look along the lines of the step or entablature from end to end."

"Greek art," says Dr. Thirlwall, "is the only art that perfectly satisfies the taste." That this should be so may seem less extraordinary when we appreciate what delicate sensibility and infinite study are implied in adaptations so minute as these, of which the very value depended on their eluding observation.

It is to be desired that some good opportunity may yet occur for investigating the application of these principles to Ionic architecture. The observations of Vitruvius upon them apply, in fact, in the first instance, to this style, and his term, *scamilli impares*, that seems to suit so exactly the "unequal stools" of the diversified lower drums just noticed, is applied by him to stones below the Ionic plinth, and modified for the purpose of effecting, in the first instance, rather than accommodating, the already established curvature. The Ionic temples which have been recovered by the Dilettanti Society since this problem was really appreciated have been too much disturbed by violence and earthquakes for their foundations to supply materials for comparison. Apart from an examination of the Erechtheum directed to the solution of this equally artistic and scientific problem, our hopes must turn to the support of Mr. Wood in his great discovery and the complete uncovering of the mighty podium and stylobate of Diana of the Ephesians.

W. Watkiss Lloyd.

History of Aesthetic. [*Aesthetik als Philosophie des Schönen und der Kunst.* Erster Band: Kritische Geschichte der Aesthetik von Plato bis auf die neueste Zeit. Von Dr. Max Schasler.] Nicolai'sche Verlagsbuchhandlung, 1871.

The period of original speculation in Germany has long been passed, but the productive activity of the national mind has not ceased; it has but taken a fresh direction—it has turned to the labour of consolidating and methodizing the results which have previously been obtained. Throughout the eighteenth and nineteenth centuries a great variety of theories of art have been thrown up. These theories, which have been recreated or remodelled with every fresh turn taken by philosophical speculation, are scattered up and down the works of various writers, sometimes incorporated into the general systems of great philosophers, sometimes occurring in the detached essays of less known men. Dr. Max Schasler comes in on all this mass of literature, and in the manner of an encyclopaedist reduces the whole to order. He begins with the beginning, *i.e.* with Plato, and carries us up to the latest moment of production. He is indeed not without claim, if not to an original theory, at least to an original point of view, but this will probably be found by readers to be of less value than his historical analysis.

The introductory chapter and the three books which contain this critical history of aesthetic are now before us. They form a complete work, independent of that Philosophy of the Beautiful and of Art which is announced to follow in connection. In the introductory chapter, Dr. Schasler suggests that the history of aesthetic may be divided into three great epochs. First, the period of intuitive (unsystematic) perception; secondly, the period of reasonable system; finally, the period of philosophical speculation. Ancient aesthetic is comprised in the first period; in the second is placed the aesthetic of the eighteenth century; and the third embraces the aesthetic of the nineteenth century up to the present time. In each period, Dr. Schasler again includes three subdivisions of unsystematic, systematic, and speculative treatment. These subdivisions seem to be not only unnecessary and confusing to the reader, but frequently oblige the author to force his facts to correspond to their situation.

After a brief notice of the precursors of Plato, Dr. Schasler proceeds to give full quotations and extracts from the various dialogues. The aesthetic of the Greeks, he says, in its first stage invariably subordinated the Beautiful to the Good. The justification of art lay, in so far as it was serviceable to the Good. Speaking in general terms, this was also the doctrine of Plato, and was carried to its extreme limit by the Cynic and Cyrenaic schools. The next stage commences with Aristotle. In opposition to the Platonic conception of mimesis as mere copying of nature, Aristotle employs the term in the sense of the embodying of the idea, and ranking as such far above reality, which is always more or less incomplete. Mimesis is the cause of the beautiful in art; katharsis its aim and operation. Katharsis is taken by Dr. Schasler in the sense of purifying the emotions, according to the old interpretation, and he does not seem to be aware that this interpretation has been challenged and made at least doubtful by Professor Bernays, who assigns to the expression a totally different meaning. With Plotinus, we enter on the final movement of the ancient period. This movement was based on the tenet of the Alexandrian school that the absolute idea, as the principle of all self-movement, was the source of all being. Plotinus conceives self-movement in respect of the beautiful as the objective embodiment of the ideal: he thus passes beyond the purely subjective signification of the Platonic mimesis, and beyond the Aristotelic limitation to mere artistic activity. For he attains to the higher conception of the objective embodiment in sense after the pattern of the idea. With Plotinus the beautiful is no longer reality to which art has given form, but the idea itself as embodied in reality. The vital element of all existence is the idea as the principle of form; this is the fundamental principle of Plotinus' aesthetic.

After the decay of the aesthetic of the ancients we have a blank of something like a thousand years, resulting from the total change of sentiment respecting art. In that division which marked the development of the middle-age spirit in contrast to the unity which distinguished the ancient, art was bound to spiritual content, and therefore always subservient. The aesthetic interest was absorbed by the theological. With the renaissance movement the yoke was cast off, and art freed went on its way; but not until it had, so to say, run through the whole domain of nature, did the want

arise for a theory of the then complete content. Here commences a new period in the history of aesthetic, which became possible towards the end of the seventeenth century, and the foundation of which was laid by Baumgarten in the middle of the eighteenth. The aesthetic of the English and French at that time, on account of its essentially unmethodical character, can only be regarded as popular, and precursor of the German. After Baumgarten came Winckelmann and Lessing, who freed aesthetic from the pedantic character which marked it under Baumgarten's hands; but it remained for the Kantian school to destroy the narrow limitation to the antique, and, turning criticism to reflection, to deduce speculatively the idea of the beautiful. Fichte gave but occasional attention to the question of art, the arts, and the beautiful, and his philosophy, resting on the principle of purely subjective idealism, was but ill adapted to form the basis of a system of aesthetic. The two Schlegels carried the principle to its fullest consequences, but Adam Müller must be taken as the chief representative of the romantic-aesthetic school. That he makes no sign of anything like real philosophical treatment of his subject is perhaps the best testimony that the romantic school, *i.e.* subjective idealism, had shown itself incapable of a scientific theory of aesthetic. Schelling accomplished the next step when in his *System of Transcendental Idealism* he developed and brought into play the principle of objective idealism. But in aesthetic, as in everything else, he eventually runs off into mere fantastic mysticism, and we find ourselves landed in *Gottesdienst* as the ideal drama. Solger, Krause, and Schleiermacher, without quitting the common basis, took up more important and individual positions, and formed the transition to Hegel. After all, even in the hands of Schleiermacher, objective idealism had not been fruitful as far as any essential advance in the theory of aesthetic was concerned. It had righted the balance between thinking and being in but a clumsy fashion, which left them still a distinct dualism; it remained for Hegel to bring them out of this position of mere polarization into identity. This was done when he proclaimed the Absolute identical source both of the world of nature and of spirit. From this standpoint might be achieved that exact scientific treatment which had before been impossible. Hegel has indeed done more for the subject of aesthetic than any one; and Dr. Schasler, though he fastens on certain evidences of defective method, and lays what seems an almost unnecessary stress on his want of acquaintance with the practical details of the domain of art, confesses that the aesthetic of Hegel is a vast treasure, full of pregnant thoughts and deep insight into the very essence of art. With Ruge, Rosenkranz, and Vischer, closes the list of those Hegelians who have specially busied themselves with aesthetic. Dr. Schasler then makes use of Herbart and Schopenhauer as representatives of a realistic reaction, and concludes by assigning to himself the task of attempting a fusion of the two opposing forces, idealism and realism, in so far as they affect the theory of the arts. This is to be done, he thinks, by taking as sole starting-point the abstract aesthetic idea, and ascertaining first that there exists in the human organism a concrete substratum corresponding to it. By this means, he says, will be avoided the vitiating defect of all previous systems, viz. that of starting from pure supposition. Thus closes the first volume, which contains the critical history of aesthetic; the philosophy is, we understand, already written, and will shortly appear in print.

It will be seen from the above that the desire to methodize and co-ordinate according to a preconceived scheme has somewhat fettered the author. The scheme has gradually become a sort of Procrustean bed. Giants are compressed to fit it; dwarfs are stretched to fill it. Take, for instance, the position which Dr. Schasler assigns to Aristophanes, who, he says, with sound and healthy criticism swept away Platonic cobwebs, and was the precursor of Aristotle. Here the position is forced both critically and chronologically. Then, again, when we come to the modern school, we find undue weight attached to Herbart and Schopenhauer, simply because the scheme demands representatives of realism to set up over against the idealism of Hegel. But to that instinct for completeness and order which has forced the author to submit himself unquestioningly to his scheme is due also the admirable form of this book. In the perfection of method and arrangement, in the thoroughness of treatment, we recognise the same wonderful capacity for organization which distinguished the soldiers of Germany in the field, and which is here brought to bear in a department of literature in which it was seriously needed.

E. F. S. Pattison.

Children in Italian and English Design. By Sidney Colvin. With Illustrations. Seeley, Jackson, and Co.

This eloquent essay, reprinted from the *Portfolio*, is a good specimen of that best and most legitimate sort of writing on art which has for its aim the adjustment of a special knowledge of artists and their work to the needs and interests of general culture. Its subject is the treatment of children by Blake, Stothard and Flaxman, as prominent examples of the temper and mode of work of a whole school of English artists three generations ago; and this gives the writer an opportunity of analysing the general characteristics of those three great designers in a very happy and interesting way. His object has been to show that "there exists what may be justly called a modern sentiment towards children and appreciation of them, in a sense in which no such novelty of sentiment or appreciation exists between grown-up people towards each other"; and again, "how that observant home-tenderness, that new, subtle and affectionate intimacy with children, of which Reynolds had first given signs in his portraits of them taken individually, had got to be part of the regular endowment of the age, and had sunk down even into the lightest incidental work and ornament in which its more finely gifted artists revealed their prevailing temper." Sir Joshua Reynolds, notwithstanding the wonderful variety and perfection of his delineation of childish character, is excluded, because in portrait-painting the general temper and sentiment of the artist are controlled by the exigencies of his special function and the necessity of dealing directly with the special and individual traits of the subject in hand; and what Mr. Colvin wishes to seize and analyse is a "type," a "mode of conceiving childhood generally"; and he rightly looks for this in "design of the independent or ideal kind," work which the artist "does out of his own head," like the designs in Blake's *Songs of Innocence* or Stothard's illustrations of books.

In the chapter on Blake, which is illustrated by two plates full of that peculiar mingling of sweetness and strangeness which characterise the work of this great artist, he dwells at length on the original of the *Songs of Innocence*, the text of which has been lately reprinted, bringing clearness into the bewildered beauties of that singular *mélange* of design and verse. Afterwards, illustrating what he says here, as in other parts of his book, by vignettes introduced with pleasant effect into the printed page, he defines a certain affinity between Stothard and Blake, two artists at first sight so incompatible or contrasted, lingering pleasantly over the *rapports* of Stothard with his time, and giving some interesting details on the early history of English engraving, showing

by many incidental indications and a well selected epithet here and there an unusual knowledge of that perplexed subject, the general history of English art; seeing these things always in close relation to the artists who produced them, and those artists themselves in close relation to their times. "Stothard's age," he says in a characteristic passage, "and its ways in England had enough charm in them to have become pleasantly ideal to us, in the sense in which it takes something more than mere lapse of time to make an age ideal; and he, like the stronger souls between whom we have set him, was a votary of the ideal within his age itself; he knows how to add the necessary touch, to accent or generalise the costume, to find grace in frilled shirts and large lappets, and knee-breeches and stockings, to sweeten and dignify the type, to group and harmonise the figures just within the fitting measure. And in his landscape and accessories he makes just the abstraction required by the pitch of the subject and the conditions of the scale and material. Stothard was a real student of outer nature both in general and detail (his tender passion for flowers is one of the prettiest things which Mrs. Bray, his daughter-in-law, tells about him in her *Life*); and his miniature landscapes of hill, lake, park, garden, and woodland, or cottage and thicket, have the elements which speak most directly to the quieter side of the landscape faculty in us."

And the same skill with which Mr. Colvin has struck upon the remote affinity between Stothard and Blake is shown in the passages in which, on the other hand, he distinguishes the qualities of Stothard from those of Flaxman—designers who have so much in common, and whose qualities for the superficial observer so easily fade into each other—thus discriminating admirably those three distinct faculties. "Unlike Stothard, Flaxman works in an atmosphere, above that of historical or romance associations, in which ancient and modern are reconciled under an almost identical ideal," presenting this ideal "in a mode which I have called architectonic," the limbs of his figures "being conceived as masses for adjustment in something like rigid geometrical or architectural figures." The frontispiece of the book is a design of Flaxman's photographed from an example in Mr. Colvin's own possession—a design quite monumental and grand, though worked out with a few simple lines and tints; and on page 46 he suggests in a few words altogether worthy of it what he thinks may be the meaning of this design.

And by way of further defining, through contrast, that exact phase of sentiment in the treatment of children by English artists which he wishes to discriminate and explain, he has prefixed some notices of the very different treatment of children by the Italians of the middle age and the Renaissance, artists who saw in children not their common human relations, but referred them "to other and more remote relations suggested by religion and imagination," looking for supernatural or symbolical types in them, so that "the burden of the supernatural which," as he well says, "is always in some degree the unnatural rests inevitably on all their delineation of them." Here too Mr. Colvin shows an equal knowledge and appreciation of a kind of art so different from that of England in the Georgian era, unravelling distinct threads of feeling here also, and showing how to a true culture workmen so far apart as these early Italians and those later Englishmen suggest no incompatible interests, but with full congruity lie easily enough together in that *House Beautiful* which the genuine and humanistic workmen of all ages, all those artists who have really felt and understood their work, are always building together for the human spirit.

It will be seen from what has been said that although this book is of no great length yet it ranges over a great variety of subjects. And out of all this Mr. Colvin has untwisted with singular skill this one particular thread of the treatment of children, presenting only what he feels clearly and can present with true effect. Thus the little book has a real unity, touching on many diverse things, but kept together by its main thread, so that it might easily be expanded into a larger volume. Such work is only possible where there is great general knowledge of art. Instances of this general knowledge are everywhere scattered up and down this essay. Mr. Colvin gives us, for instance, by the way, on page 16, a clear characterisation of that obscure artist, Honoré Fragonard, and does an act of historical justice in passing. But this true knowledge in aesthetics is shown best of all by the impression he gives one that in passing over so many phases of art he seizes a fresh *nuance*, a fresh variety of impression and enjoyment from each; you feel that beyond mere knowledge, mere intellectual discrimination, each one of them is a distinct thing for him, and yields him a distinct savour. Walter H. Pater.

ART NOTES.

The incompetence of those persons who think themselves competent to furnish the public with translations from the German is as manifest as ever. Any one who has blundered through Schiller's *Thirty Years' War* and a couple of plays of Kotzebue's thinks himself qualified to translate every author on every subject. A flagrant example of this state of things is furnished by the translation of German essays which has been lately given to the world by Holzendorf and Virchow as the *German Quarterly Magazine*. The first number for 1872 contains, amongst other articles, one on Albrecht Dürer, by Dr. Hermann Grimm, the well-known author of the *Life of Michel Angelo*, whose *Select Essays* were recently reviewed in these pages (*Academy*, vol. iii. pp. 124, 125). Dr. Grimm had not the opportunity of seeing the translation before it appeared in print, and now—too late for alteration—he finds that not only is the entire essay badly translated, but that it is full of passages in which the author has been completely misunderstood, and has the most ridiculous and absurd statements put into his mouth. Here is one specimen: Dr. Grimm writes, "Deutschlands grosse Männer sind niemals gross gewesen durch das, was sie leisteten im engeren Sinne." This statement the translator gives us as "Germany's great men have never been narrow-minded." And after this fashion, on every page, occur some four or five bits of egregious nonsense. "One more perversion," says Dr. Grimm, in a letter now lying before us, "is especially annoying to me,"—"such an opinion upon Buckle, Englished in such an incomprehensible and incorrect fashion, that it is utterly impossible to make out from it what I intended to say."

The Berlin sculptor, Johannes Pfuhl, has just finished his colossal marble statue of Baron von Stein. The commission was bestowed on him about four years ago, when he obtained the first prize for his design in public competition. The statue has been exhibited to the public in the atelier, and was unveiled on July 9.

Dr. W. Rossmann, who is widely known by his talented book of travels, *Vom Gestade der Cyklopen und Sirenen*, has been named professor of art-history and aesthetics to the art-school in Weimar.

Some works undertaken in connection with the construction of a new street at Lucera have brought to light a statue of Venus, a marble vase, and portions of a mosaic pavement. The Venus is about seven hands high, and is undraped; at her feet are a child and a dolphin. The figure is broken, but no piece is wanting, and the Italian papers speak of it as good work, without assigning any date. The vase bears the inscription: "Divo Commodo." The authorities have undertaken to carry on the excavations, and there is every likelihood of their being richly rewarded, for Lucera is the ancient Luceria, and the soil teems

with antiquities. The chief ornaments of the cathedral itself (originally a mosque built by the Saracens) are the columns of verd antique, which come from the temple of Apollo once standing on the same site. Many pieces of sculpture and Roman inscriptions have already been found within the area of the ruined castle, which stands about a quarter of a mile distant from the city itself.

An interesting contribution to the literature of household art has recently appeared in Felix Lay's *Südslavische Ornamente.* The book is published by Fischbach in Hanau, and contains twenty careful chromolithographs of carpets, needlework, articles of jewellery, &c., all of South Slavonian design, and is accompanied by an explanatory and critical text.

Mr. J. Tattersall's collection of modern pictures and a valuable collection of pictures and water-colour drawings were disposed of on Saturday, July 6th, by Messrs. Christie, Manson, and Woods. The collection was especially rich in the works of David Cox. The following are some of the most important: five sketches in sepia, 135 guineas; three drawings in water-colour ("Harbourne Lane," "Watering Horses," "Ploughing"), 140 guineas; two drawings ("A Hayfield," "Cader Idris"), 110 guineas; "Greenwich Hospital," with boats and figures, 105 guineas; two views on the Welsh coast, 100 guineas; "Milking Time," and "Looking up the Vale of Meanwrog," 108 guineas. All these were by Cox, but upwards of seventy-five sketches and drawings by this artist were sold. R. P. Bonnington, "The Rialto," 135 guineas; "River Scene," 115 guineas. Amongst Mr. Tattersall's pictures may be mentioned: "Highland Landscape," by Cooper, 138 guineas; and "Mountain Spring," by Poole, 145 guineas. On the same day a couple of examples by Courbet, "The Forest," and "Female Figure," fetched 180 guineas; a small river scene by Constable, 75 guineas; Vandyke's portrait of Judge Morton, exhibited in 1866 at the National Portrait Exhibition, 165 guineas; Sir Joshua Reynolds, "A Girl Sketching," from nature, 145 guineas; Nasmyth, "View on the Thames," 170 guineas.

New Publications.

BERTOLI, A. I primi due Secoli della Letteratura Italiana. Milano: Vallardi.

BOCK, F., u. WILLEMSEN, M. Die mittelalterlichen Kunst- u. Reliquien-Schätze zu Maestricht . . . . archäologisch. u. historisch beschrieben u. s. w. Köln u. Neuss: Schwann.

CARDINAL DE RETZ, Œuvres du. (Mémoires.) Tom. I. et II. Paris: Hachette.

JOURNAL et CORRESPONDANCE de André-Marie Ampère, publiés par Mme E. C. Hetzel. Paris: Techener.

KLEIN, J. L. Geschichte des Dramas. IX. Gesch. des Spanischen Dramas. 2. Bd. (See *Academy*, vol. ii. pp. 190, 191.) Leipzig: Weigel.

SOUVENIRS de la maréchale princesse de Beauvau (née Rohan-Chabot), suivis des Mémoires du maréchal, recueillis et mis en ordre par Mme Standish (née Noailles). Paris: Techener.

STAHR, A. Kleine Schriften zur Literatur u. Kunst. 2. Bd.: Biographisches u. Kritisches. Berlin: Guttentag.

Physical Science.

*RECENT WORKS ON CHEMISTRY.**

[FOURTH ARTICLE.]

XI. **The Rock Salt Deposits of Stassfurt.** [*Ueber die Steinsalzablagerung bei Stassfurt.* Von C. Reinwarth.] Dresden: G. Schönfeld, 1871.

XII. **Organic Chemistry and Materia Medica.** [*Die organische Chemie und die Heilmittellehre.* Von A. W. Hofmann.] Berlin: August Hirschwald, 1871.

XI. THIS short monograph is by one who may almost claim to be the discoverer of the Stassfurt Salt Deposits.† A residence at that place so long ago as 1838 enabled him to study the geologic features of the country on the northern side of the Harz, and to ascertain what likelihood there was of salt existing there. The attention of the Prussian government having been drawn to the matter, borings were made, and salt was found. Numerous researches, geological, chemical, and technical, subsequently led to the utilisation of the potassic compounds found in the deposits, and thereby to a great extension of the mines. In 1868–70 Reinwarth revisited the place, and acquired a knowledge of the work carried on. His observations he has embodied in this pamphlet, of which the following is an abstract.

Stassfurt, which formerly was a small agricultural village with a little saltwork, is situated some twelve miles to the south-west of Magdeburg. The formation on which it stands is the "bunter Sandstein," and consists of red and micaceous slates, beds of oolite, and large deposits of red clay with gypsum and anhydrite. There are very extensive beds of brown coal and several salt springs.

The first borings were made in 1839, when there was obtained a substance containing much magnesic salts, and it was not till after piercing this layer that rock salt was reached. This layer, containing salts of magnesium and potassium with gypsum, was for the time viewed as worthless, and was called "Abraum" salt. In 1851 two shafts were sunk—one in Prussia, the other in Anhalt—and in 1857 mining operations were started.

The whole salt deposit is upwards of 1300 feet thick, and consists of four groups, or regions. 1st. The lowest is the rock salt, which is compact, crystalline, and transparent. Sometimes it has a greyish colour, and it contains isolated cubes of a bright blue tint. The deposit is uniform, but it is divided into layers by very thin threads of anhydrite, which are supposed to indicate the successive depositions of salt which have occurred. In commerce the salt, according to its appearance and purity, passes under different names. It contains from 95–96 to 98–99 per cent. of common salt, the chief impurities being the potassic and magnesic chlorides and calcic sulphate. Organic matter is apparently absent, but gaseous hydrocarbons have been found in cavities in the upper layers. It is largely used, of course, for household purposes, but it is likewise consumed in fish-curing, agriculture, cattle-feeding, soda and glass making, and so on. The 2nd is the polyhalite group. Common salt predominates, but there is a notable quantity of salts of magnesium, calcium, and potassium; otherwise this group has no marked characters. The 3rd is termed the kieserite region (after Kieser, the president of the Berlin Academy), and it consists principally of magnesic sulphate with one molecule of water of crystallization, mixed with salt and carnallite. The main feature of this region is this abnormally hydrated magnesic sulphate. 4th. The Abraum salt—which has now become the most interesting of the whole, both chemically and industrially—consists mainly of carnallite, a double chloride of potassium and magnesium, which occurs both of a white and red colour, and contains traces of other salts and brilliant scales of micaceous ferric oxide. Several minerals have been found in this region: for instance, sylvin, native potassic chloride; kainite, consisting of potassic chloride and magnesic sulphate; tachydrite, a yellowish deliquescent double chloride of calcium and magnesium; stassfurtite, magnesic borate, a heteromorphous form of boracite, under which name, indeed, this mineral was formerly erroneously known.

Having described the four regions, the author devotes the rest of the paper to an account of the potash industry, which, from the extent of Abraum salt disclosed both in the Prussian and Anhalt workings, may be hereafter developed to an almost unlimited extent. The Anhalt deposit is characterized by the quantity of kainite, which is found above the carnallite. This substance is used partly crude and partly calcined for

* See *Academy*, vol. ii. pp. 455–458.

† Leonhard und Geinitz, *Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie*, 1871, p. 315.

spreading on the fields; and it is also used for preparing pure potassic sulphate.

The chief Stassfurt manufacture, however, is of potassic chloride. The raw material from the mine contains 50 to 60 per cent. of carnallite, 10 to 15 per cent. of kieserite, and 25 to 30 per cent. of rock salt, and the operation is based upon the superior solubility of the carnallite. When, accordingly, the raw substance is treated with warm water insufficient for complete solution, the carnallite is dissolved mainly. This solution on cooling deposits chloride of potassium and sodium. The mother-liquor on evaporation gives chloride of sodium, and double sulphate of magnesium and potassium, and the liquor from this by concentration chloride of potassium, or artificial carnallite. By greater concentration more carnallite is got, which on treatment like natural carnallite yields very pure potassic chloride. The strong solution that remains consists chiefly of magnesic chloride and bromide, and is employed for making pure magnesic chloride and bromine.

The residues, mentioned above, of kieserite, anhydrite, and rock salt, are utilised in various ways; crude and purified sulphate of magnesium are made, and chloride of magnesium. These salts are said to be largely used in this country in finishing light cottons and increasing their weight; magnesic chloride has been applied to artificial stone making, to extinguishing fires, and for other purposes. Bromine also is produced to the extent of 30,000 kilogrammes (about 30 tons) per annum (p. 22).

The potassic chloride, got from the carnallite as above described, is recrystallized, by which the percentage is raised to 95–98, but usually only 80 per cent. is supplied. This salt is largely consumed in preparing saltpetre, by double decomposition with nitrate of sodium. Potassic carbonate is also made from it by Leblanc's process, and quantities are used in soap-boiling, bleaching, the glass and alum manufactures. It is also used to a very large extent not only on the Continent and in this country, but even in America, as a fertilising agent. This branch of the manufacture has extended with the knowledge that potassium exercises a marked influence upon certain crops, and is indeed absolutely required by them.

At this point the author indicates a difference of which the agriculturist would do well to take heed, that, namely, between the amount of potash actually contained as potassic sulphate in a potash-manure and the amount of potassic chloride equivalent to a certain amount of potash (pp. 29–31). The manures prepared at Stassfurt, which are advertised under a great variety of names, and are recommended for as great a variety of crops, are either simply potassic salts (chloride alone, sulphate alone, or a mixture) more or less pure, or are phosphatic or other manures to which a certain proportion of potassic salts has been added. The consumption in this way, as has been already remarked, is considerable; of 270 million kilogrammes (not quite 270,000 tons) of potash salts raised in 1869, 25 to 30 million kilogrammes were made up for manures, and the quantity will in all likelihood increase.

The author discusses (pp. 35–39) the tax on salt and its influence on the whole industry. He points out how heavily it presses upon those least able to endure it, and how it prevents the Stassfurt salt from competing with the English. In the case of salt for cattle-feeding or for manufacturing purposes the tax is removed, but the salt by mixture must be rendered unfit for domestic use. The regulations on this point are strictly enforced, and when salt is sold the use for which it is intended must be stated in writing (p. 38).

The demand for potassium compounds is increasing rapidly every year, and there are some twenty works in full operation at Stassfurt, following different methods for extracting the chloride and preparing the different salts. The usual indications of a manufacturing district are obvious: chimneys, smoke, railways, dense population, no vegetation; and the bright material side of a great industry in full glow. But the author mentions that there is also a dark side (p. 21).

This paper being occupied mainly with the industrial question alludes only incidentally to the manner in which the deposits have been formed. The generally held view is that the salts have solidified from a slowly evaporating salt lake, and that the order of deposit represents the different solubilities of the salts; the least soluble rock salt depositing first at the bottom, and the Abraum salt, consisting of the most soluble salts which crystallized only when the water had evaporated completely away, existing of course at the top. The Stassfurt basin appears to have been nothing else than a great salt pan, and some of the double salts found in it have been obtained by careful evaporation of sea water. But while this view may be on the whole correct, there are questions, to answer which it does not attempt. The formation of stassfurtite, for example, which is found in isolated masses distributed irregularly, is not understood, and the production of kainite must have been effected under conditions which have not as yet been imitated in the laboratory.

Other deposits containing potassium exist in other parts of Europe, and in particular at Kaluscz, in Gallicia. From a variety of circumstances, however, operations at these places have not become so extensive as at Stassfurt, so that in the meantime the main supplies of the potassium compounds come from the great Magdeburg basin.

XII. On the 2nd of August last, the anniversary of the foundation of the Medico-Chirurgical Friedrich-Wilhelm Institute and Military Medical Academy in Berlin, Dr. Hofmann delivered a very clever address, taking as his text the services to Materia Medica rendered by Organic Chemistry. The author begins with tracing the boundaries of organic chemistry as they at present exist. It is shown that, while the chemical elements seldom form more than two to five compounds with each other, there is a prominent exception in the case of carbon and hydrogen. Of these two elements, not only a very large number of compounds is known and described, but from the knowledge gained by their study it would appear that there is hardly a limit to the number of possible hydrocarbons. Among those known are bodies, solid, liquid, gaseous, of the most varying physical and chemical properties.

Into these hydrocarbons other elements, oxygen, chlorine, nitrogen, &c., can be worked in a variety of ways and with the production of changes the elucidation of which is at present the chief task of chemistry. So much has been achieved as to enable chemists, with some amount of certainty, to forecast the changes and to anticipate the constitution and properties of bodies resulting from a reaction.

The interest in these hydrocarbons and their derivatives is much heightened when it is known that it is of them mainly that a great part of plants and animals consists. Thus the hydrocarbons are combustible, and yield as products carbonic anhydride and water. So, too, do plants and animals. From this circumstance the hydrocarbons and their derivatives were called organic, it having been by the study of organisms that chemists first became acquainted with them. At first, discoveries were rapidly made, but inability to produce even the simplest compounds found in an organism led to the supposition that these bodies were of a kind and were the effects of forces differing from any that could be imitated by art. This view, however, has now changed, and bodies which were formerly obtainable from

plants or animals alone can now be fabricated by the chemist, who has at his disposal only the elements composing them.

Still, while the earlier partition-walls which were raised between organic and inorganic chemistry have almost entirely disappeared, the remarkable properties of the carbon compounds will continue to separate them from other bodies and to demand separate study and treatment.

Having thus displayed the compass and nature of organic chemistry, the author next recapitulates the services rendered by it to materia medica.

The first step in the progress of organic chemistry was the result of improved methods of analysis. By a more skilful use of solvents, for example, complex mixtures were separated into proximate constituents, better defined in form, composition, and properties. Belonging to this stage is the separation from opium of morphia and other bodies, of prussic acid from bitter almond oil, of valerianic acid from valerian root. Of these materia medica took possession. Soon, however, came a change in the mode of investigation. The definite proximate principals themselves were subjected to the action of the most powerful chemical agents, under varying conditions of time, concentration, and temperature, and thus entirely new bodies were got. During this period other alcohols were discovered, and one of these—amylic alcohol—was found in the distillers' residue called fusel oil. It had been found that spirit of wine and wood spirit, by oxidation, yielded each an acid; and amylic alcohol was subjected to the same action. How great was the surprise when it was found to be identical with valerianic acid got from the root. This was a boon to materia medica, for so long as the root was the only source, the acid was scarce, but when it was found that it could be derived from a fluid, to be rid of which most speedily was the aim of the distiller, the acid was at once prepared on a large scale, and converted into the valuable zinc and bismuth valerianates. Similar instances, described at length by the author, are afforded by lactic acid, now got from sugar, succinic acid, from malic acid, and benzoic acid, manufactured from hippuric acid. There are natural products, too, such as oil of mustard, which are prepared now, not from their native sources, but artificially, by the reactions which the study of their constitution in the laboratory has shown will produce them; and it is likely that with the progress of synthesis drugs got hitherto only by analysis and in small quantity will be fabricated extensively from their proximate constituents.

In the preceding instances, the gain to materia medica lay, not in absolutely new bodies discovered, but rather in the methods by which bodies already known and used could be obtained more abundantly. Absolutely new bodies, however, gradually came to light, and a rich crop of these has been yielded by the method of destructive distillation, a method which has largely extended the field of organic chemistry. In particular, two of these bodies, creosote and carbolic acid, have proved of the greatest value in surgery and hygiene.

The next stage was that of substitution. The effect of strong nitric acid in decomposing complicated bodies was tolerably well understood, but cases had been observed in which the new products were not simply oxidized, but contained nitrogen derived from the acid. Hence, for a time, every substance was subjected to its action, and many important compounds were discovered—nitrobenzol, picric acid, xyloidin, gun-cotton (to which the author might have added nitroglycerin). From gun-cotton, collodion has been prepared, which, in so far as it is used in surgery, is a contribution to materia medica.

Of more importance than nitric acid as a means of transforming bodies is chlorine, the effect of which has been examined with great minuteness. Of the almost countless bodies containing chlorine, chloroform and chloral are for the physician of the highest interest. The author describes the discovery of these bodies and of their properties at too great length for us to follow. He points out the purely scientific discovery of the properties of chloral, and shows that Liebreich's was one of the comparatively few instances of a discovery made deliberately. Its success is evinced by the fact that, whereas previous to its medical application not more than two or three pounds in all had been prepared, chloral hydrate is now manufactured in Berlin alone at the rate of a couple of hundred pounds every day.

A further extension of the doctrine of substitution has produced equally remarkable results. Bodies have been found to change entirely their physiological properties by the addition of one or more elements, or even by a change in the way the elements are combined. For instance, antimony in its tartrate is emetic, and arsenic in its oxide and hydride is highly poisonous, whereas the stibonium compounds and cacodylic acid have lost these properties. Still more recently there has been described a remarkable change of properties in strychnine and other alkaloids by the substitution of part of their hydrogen by methyl.

These are subjects of almost unlimited extent, which hitherto have attracted almost no notice. What the tendency is to be is obvious. Just as in dyeing different colours are now attained, not by mixtures, but by changes in the constitution of the colouring matter itself, so physiological effects will come to be produced, not by a mixture of drugs, but by a change in the constitution of the substance.

This address is an ingenious blending of historical development of chemical ideas and methods with a matter-of-fact account of one of the economic applications of them. At first it appears a simple and perhaps even apologetic statement of facts; but attention discloses an under-current of argument which is none the less powerful that it is marked. It contains, indeed, a tacit protest against the maintenance of a supposed difference or antagonism between scientific and technical chemistry. Very clever, too, is the manner in which the author at starting gets rid of the encumbering epithet "organic," and yet avoids the phrase "carbon," chemistry, though it be by a sacrifice, or at least an inversion, of the whole history of the subject. Into this we have not space to enter. The address will be found worthy of perusal.

John Ferguson.

Notes of Discoveries and Scientific Work.

Chemistry.

The Meteorite of Ibbenbühren, Westphalia.—This stone was seen to fall on the 17th June, 1870, its descent being attended by the usual phenomena of light and sound. A fragment became detached at the time, and was found between three and four hundred paces from the aërolite. The latter weighed about two kilogrammes, had a density of 3·4, and was covered with a uniform black crust. It was recently examined by Prof. Vom Rath, who has communicated his results to the Berlin Academy (*Der Naturforscher*, No. 19, 153). The mass of the stone is white, or of a greyish-white colour, and encloses numerous crystalline granules, having a pale yellowish-green hue. The two constituents are identical in composition, being a bronzite $(MgFe)SiO_3$. The meteoric bronzites are distinguished from terrestrial species by their large proportion of iron oxide. We are now acquainted with four meteorites each consisting of a single silicate: the Chassigny stone, of olivin; the Bishopville meteorite, of enstatite; and those of Manegaum and Ibbenbühren, of bronzite.

Aldol.—Wurtz has announced the discovery of an organic compound exhibiting at one and the same time the properties of an alcohol and an aldehyde (*Revue scientifique*, No. 49, 1171). With acetic acid it forms an acetic ether like aldehyde, while with nitrate of silver it produces a

metallic mirror. The new body, which is regarded as belonging to a type differing from those already known, is formed by the action of a mixture of water and hydrochloric acid on methylic aldehyde at a low temperature. After the lapse of eight days the liquid is to be neutralised, extruded with ether, and after the removal of this solvent by evaporation, the residue is to be distilled in vacuo. In this way a colourless liquid is obtained, which in about twelve hours acquires the consistence of thick syrup of sugar. According to more recent information (*Ber. Deut. Chem. Gesell. Berlin*, No. 11, 533), the new alcohol possesses the composition $C_4H_8O_2$, and has a density of 1·1208 at 0°, of 1·1094 at 16°, and of 1·0816 at 49°·6. Its co-efficient of refraction is for the sodium line 1·458. If aldol be heated to 100°, with three times its weight of anhydrous acetic acid, two acetides are formed; one boils in vacuo at 100°, and has the composition $C_4H_7O(C_2H_3O_2)$, the other passes over between 150° and 160°, and appears from analysis to agree in composition with diacetate of crotonaldehyde, $C_4H_6(C_2H_3O_2)_2$. Nitric acid oxidises aldol with great energy, forming oxalic and other acids which have not as yet been investigated. Phosphorous pentachloride acts on aldol with great violence, and converts it into a chloride, $C_4H_7Cl_3$, that undergoes decomposition by distillation, forming hydrochloric acid, and, it is probable, the chloride of crotonaldehyde, $C_4H_6Cl_2$. The ether of aldol, $(C_4H_7O_2)_2O = C_8H_{14}O_3$, boils, under a pressure of 2 ctm., at 137°, and separates from water in crystals that melt at 155°. Both aldol and its ether act very powerfully on Fehling's copper solution. When treated with dilute hydrochloric acid or nitric acid, aldol breaks up into water and crotonaldehyde and some resinous products. Wurtz directs attention to the important part that methylic aldehyde probably plays in vegetation in respect to the production of certain substances met with in plants. He shows that methylic aldehyde may arise from a partial reduction of carbonic acid:

$$CO_2 + H_2O - O_2 = CH_2O,$$

of which several molecules may, by a condensation analogous to that observed in ethylic aldehyde, produce bodies that in several cases are alcohols, and in one aldehyde. Carbohydrates are instances of this.

Zeunerite.—A. Weisbach, in a letter from Freiberg, published in the *Jahrbuch für Mineralogie* (part ii.), states that the supposed chalcolite accompanying the new minerals trögerite and walpurgine, recently found in the Weisser Hirsch Mine of Neustädtel, is likewise a new mineral species. It completely resembles chalcolite as regards lustre, hardness, colour, crystallization, and cleavage, but differs from it in density, the latter approaching 3·2. Zeunerite contains no phosphoric acid, and varies from chalcolite in containing arsenic acid in the place of that acid. The mean of two analyses accorded with the formula

$$3CuO, 6U_2O_3, 2As_2O_5, 12H_2O,$$

that of chalcolite being

$$3CuO, 6U_2O_3, 3P_2O_5, 12H_2O.$$

Heterogenite.—Under this name A. Frenzel describes (*Journal für prakt. Chem.* No. 9, 407) a new mineral occurring with lithiophorite in the Wolfgang Meessen Mine at Schneeberg. It is an amorphous substance of a black or brownish-black colour, has but little lustre, and forms uniform masses; its hardness is that of calcspar, and it has a specific gravity of 3·44. It has a composition corresponding with the formula $CoO, 2Co_2O_3, 6H_2O$. It was at first taken for asbolan, but contains too small a quantity of manganese for qualitative determination. Associated with it are pharmacolite and a red-coloured calcspar.

Ozone.—It has been observed by Prof. H. H. Croft, of University College, Toronto (*American Jour. of Science*, June, 465), that a syrupy solution of iodic acid, prepared by Millon's method, if evaporated over sulphuric acid, emits a strong odour of ozone as soon as crystals begin to form. The experiment has been made repeatedly, and no change is noticed when a few crystals begin to form, but the strong smell of ozone is noticed as soon as the crystallization has fully set in. Mr. Sterry Hunt, by way of accounting for this phenomena, ascribes it to a partial deoxidation similar to that which produces ozone when permanganates are decomposed; the author, however, considers this explanation insufficient.—L. Casius has determined (*Ber. Deut. Chem. Gesell. Berlin*, No. 11, 520) the co-efficient of absorption of ozone by water. Ozone was formed by Soret's method, and passed through water for two hours at temperatures from 0°·5 to 3°. The water at the end of this time possessed in a high degree the characteristic odour of ozone. Potassium iodide turned it brownish-yellow—an excess of the water easily destroying the colour and converting the iodine into iodic acid, while litmus and indigo are readily bleached. A solution of thallium oxide soon deposited brown flocks of peroxide. Silver leaf remains unchanged in ozone water for any length of time, provided it be entirely immersed in the liquid; if any air be present, peroxide is formed, and the smell disappears. According to an examination made by Bunsen's volumetric method, 1000 cc. of water take up in addition to oxygen from four to five cub. cent. of ozone.

The Inorganic Constituents of Blood.—An elaborate paper, treating this question, and containing the results of many analyses made by the author in the laboratory of Prof. Stricker, is published by A. Jarisch, of Vienna, in the *Ann. der Chemie*, June, 1870, 236. A mean of four analyses of the blood of the dog gave the following number as constituents of 100 parts:—

Phosphoric anhydride	0·1103
Sulphuric anhydride	0·0358
Chlorine	0·2805
Potash	0·0342
Soda	0·3748
Lime	0·0112
Magnesia	0·0058
Iron oxide	0·0948

A paper by Boussingault was read before the Academy of Sciences (*Revue scientifique*, No. 49, 1171) on the constant presence of iron in the tissues. He finds that the flesh of a large species of snail contains about the same amount of iron that is found in beef, the former being 0·0036 per cent., the latter 0·0048 per cent. The white blood of Mollusca contains, he believes, about the same amount of iron as the red blood of Vertebrata.

Zoology.

The Sense of Sight in Birds.—Dr. R. J. Lee has come to the conclusion (*Proc. Roy. Soc.* May) that in Birds perfection of sight depends on the power of accommodation of the eye to distance and on the development and character of the ciliary muscle: a conclusion which is supported by M. Tegetmeier's observations on pigeons. He expresses a belief that "homing," as it is termed, in the Antwerp pigeon is the result not of instinct, but of observation. These pigeons have to be trained stage by stage, or they are certain to be lost. The best of them refuse to fly in a fog or in the dark. They seek in new localities some known landmark, and their gyrations gradually increase till they descry some familiar object, when they recollect their route and fly straight ahead. The objection that no pigeon can possibly see two hundred miles ahead is in direct opposition to aëronautic experience, Mr. Glaisher, at an altitude of half a mile, having been able to trace the course of the Thames from the Nore to Richmond.

Recent Fossil Man.—In the *Popular Science Review* for July, Prof. Morris gives a short report on the recent discovery of a sub-fossil human skeleton in a cave in the south of France, with some introductory remarks on the few cases in which the remains of man have been found associated with those of extinct animals. The most recent discovery was made early this year in one of the great caves (Baoussé-roussé) of the Italian frontier (near Mentone), by Dr. E. Rivière. The skeleton, which is that of an ordinary-sized man, is entire, with the exception of the ribs that have been broken by the pressure of the superincumbent soil. The legs crossed in a natural position, and the arms folded near the head, seem to indicate that the man to whom they belonged died during sleep (?), and that his remains were carefully covered over without disturbing the earth beneath. Mr. Moggridge believes that it is an instance of interment during the stone age, and late in that period.

Note sur les Singes fossiles trouvés en Italie, précédée d'un aperçu sur les quadrumanes fossiles en général. By Forsyth Major.—Some fossil remains of monkeys found in the valley of the Arno, and of Pliocene age, are considered by the author to have belonged to a species closely allied to, if not identical with, the monkey still found living on the rocks of Gibraltar (*Macacus inuus*). A mandible discovered at Monte Bamboli, in Tuscany, is referred by Gervais to the genus *Cercopithecus*. Fossil remains of monkeys are extremely rare; in Europe they have been found only at the following localities: Woodbridge, Suffolk (the Eocene *Eopithecus*); Würtemberg, Swiss Jura, Zürich, and the south of France (Montpellier).

Ceratodus.—An abstract of Dr. Günther's papers on this fish appears in the *Popular Science Review* for July, with addition of some later observations. The author draws attention to the remarkable fact that the Ganoid family of *Sirenidae* coincides, as regards geographical range, with the Teleosteous family of *Osteoglossidae*, and shows that representatives of both these natural families, which externally are so similar and structurally so dissimilar to each other, are found in the same freshwaters of the tropical regions of America, Australia, and Africa. It is only in the East Indian Archipelago that the Ganoid representative of the Teleosteous *Osteoglossum formosum* has not yet been found. *Osteoglossum formosum* has hitherto been met with in Sumatra, Banka, and Borneo; and as scarcely anything is known at present of the inland fishes of the latter island, the author thinks it highly probable that a Ganoid fish may be discovered there.

The *Bulletin de la Société impériale des Naturalistes de Moscou*, vol. xliv. Nos. 3 and 4, contains the following zoological papers: 1. J. Borsenkow, On the Development of the Ovary of the Fowl, and its development during the first period of life; pp. 11–60. 2. J. H. Hochhuth, Enumeration of Coleoptera hitherto found in the Russian provinces of Kiev and Volhynia (continued); pp. 85–177. 3. L. Sabanéef, Catalogue of the Mammals, Birds, Reptiles, and Fishes of the Middle Ural; pp. 210–278 (written in Russian). 4. Chaudoir, Remarks on the Catalogue

of Harold and Gemminger; pp. 279–287. 5. H. Trautschold, On the Primogeniture of Trilobites. The last paper is polemical, and directed against Barrande, who, in his work, *Les Trilobites* (1871), showed that the appearance and distribution of the first organisms in the strata of the primordial era is decidedly opposed to the Darwinian doctrine. He maintained that the lowest organisms do not precede more highly organized animals, and more especially that the higher Trilobites existed long before the lower Cephalopodes and Acephales. Trautschold's case against Barrande is based on the following arguments: 1. The fact of our not finding *Foraminifera*, with the exception of the very doubtful *Eozoon*, *Acephala*, &c., or their representatives, in strata where we should expect them, cannot be taken as a proof of their non-existence, since the sea-water in which they lived differs to a great extent from the salt-water of the present period in its chemical composition, containing a far less quantity of salts; and it consequently follows that those animals were probably not provided with hard shells, which alone could have been preserved. 2. A striking example of the gradual change of animals in the progress of time is afforded by the fossil shells of a high sea cliff near Kertsch, where it can be demonstrated that the forms of *Cardium* in the higher strata are the descendants of those having very different shells in the lower. 3. It is difficult to suppose organisms living under constantly varying conditions should undergo no change. Every kind of organism has a limited period of existence only; some, being unable to survive a change of external physical conditions, perish; others, according to their innate power of accommodating themselves to such a change, or according to the more or less favourable conditions of their surroundings, are developed into lower or higher forms. Low and high organisms will consequently be found in association at all times and in each horizon.

We regret to have to record the death of two eminent zoologists. Dr. William Stimpson, Secretary of the Chicago Academy of Sciences, the indefatigable investigator of marine Invertebrates, died at Ilchester, Maryland, on the 26th May. The total destruction of his magnificent collections of specimens, books, and manuscripts, by the Chicago fire proved too terrible a blow for a man of his delicate constitution.—Mr. T. C. Jerdon, the celebrated Indian ornithologist, died last month at Upper Norwood. Only about a year since he returned to Europe with the purpose of arranging the collections made during the last two years of his travels in India. The cause of his death was chronic dysentery, from which he had obtained but temporary relief.

Dr. Kuno Fischer, the eloquent writer and lecturer on philosophy, has accepted a chair at Heidelberg.

New Publications.

Barrault, E. Parallèle des Eaux minérales de France et d'Allemagne. Paris: Baillière.

Eucken, R. Die Methode der aristotelischen Forschung in ihrem Zusammenhange mit den philosophischen Grundprincipien d. Aristoteles. Berlin: Weidmann.

Goppelsröder, F. Zur Infection des Bodens und Bodenwassers. Basel: Schweighäuserische Verl.

Grevillea: a Monthly Record of Cryptogamic Botany and its Literature. Edited by M. C. Cooke. No. I. Williams and Norgate.

Neumayer, G. Die Erforschung des Süd-Polar-Gebietes. Berlin: Reimer.

Reichardt, H. W. Ueber die botanische Ausbeute der Polar-Expedition des Jahres 1871. Wien: Gerold's Sohn.

Respighi, L. Relazione sul suo Viaggio scientifico nelle Indie Orientali. Roma: Botta.

Wigand, A. Die Genealogie der Urzellen als Lösung des Descendenz-Problems. Braunschweig: Vieweg.

Young, C. A. The Sun and the Phenomena of its Atmosphere. Newhaven, Conn.: Chatfield.

History.

Matthaei Parisiensis Chronica Majora. Ed. H. R. Luard. Vol. I. The Creation to 1066. (Rolls Series.)

Official Correspondence of Thomas Bekynton, Secretary to King Henry VI., and Bishop of Bath and Wells. Ed. G. Williams. Two volumes. (Rolls Series.)

The *Chronicle of Matthew Paris*, the monk of St. Albans, who wrote under Henry III., was printed by Archbishop Parker in such a way that the historian has never yet had justice done to him. Editors at that time corrected the copy made for them from the original manuscript by a careless transcriber, so as to get something like sense out of it, but seldom referred to the manuscript for themselves. Even Henry Wharton pleads this excuse for the state of some of the passages which he has printed in the *Anglia Sacra*. Parker, however, altered even more than such an excuse would justify; and it only needs a slight comparison of the real text as given by Mr. Luard with the first edition in 1571 to discover the real state of the case.

The early part of the *Chronicle* is based on a previous compilation made at St. Albans; and the question of the real authorship is difficult. It is nearly identical with the similar Chronicles known under the names of Roger of Wendover and Matthew of Westminster; and yet these have been quoted, as if independent authorities, even by writers like Lappenberg and Earle, not to mention Sharon Turner. In reality, says Mr. Luard, the earlier portion of "Matthew of Westminster" is a transcript, with additions and omissions, of the MS. of Matthew Paris at Corpus Christi College, Cambridge—a transcript made at St. Albans itself, and then lent for transcription to other monasteries: the earliest of the many MSS. of Matthew of Westminster is in the Chetham Library, at Manchester; and this is the source of all the rest. In one place the Corpus MS. has "Athelmus Wintoniensis" (an error for Wiltoniensis) "co," for "comes" —the MSS. of Westminster read "cor," except the Eton MS., which has "episcopus": Parker prints "episcopus," and on the strength of this an Athelm has been inserted in the lists of the bishops of Winchester. Similarly, Roger of Wendover, in his first part, seems to copy the same compilation as the Corpus MS. of Matthew Paris. The author of this laborious compilation, used by Paris and Wendover as the basis of their histories, and the source of the popular compendium called by Matthew of Westminster's name, is unknown, having been soon thrown into the shade by the greater fame of his successors. Perhaps he was the author of the *Life of Offa* also, of which he quotes pieces; and he must have written just about the time of the struggle which led to the granting of Magna Charta. He consulted a very large number of sources, which Mr. Luard has most carefully traced out, but he has been the author of endless confusion in early dates and facts; the MS. of the *Anglo-Saxon Chronicle* which he used was the "Peterborough" one; but he did not always understand it. It shows how little we have really lost by the destruction of the monasteries, that we still possess almost every author which he did. The list of authors used by him is given by the editor; and it is especially interesting as showing what, probably, was the extent of the historical library at St. Albans, in the earlier part of the thirteenth century; we may compare it with other lists in Edwards' *History of Libraries*. Perhaps an annal of Northumbria and one of Kent lay before him, which are not now known to exist, and one or two Saints' Lives; but the Historical Commission may still find them for us. In one place, when copying Henry of Huntingdon, he interprets "secunda usus fortuna" as meaning "being victorious on a *second* occasion," and has actually introduced an account of a second victory, A.D. 836. He translates the Anglo-Saxon *thriddan healfre* "three and a half," instead of "two and a half;" and where the *Chronicle* calls a comet "feaxede (hairy) star," the compiler says, "vexede sterre." Such was the St. Albans compilation, which Matthew Paris used as the basis of his history, making, however, certain corrections and additions. With his notes on Merlin's prophecy, we may compare the very curious commentary by John of Cornwall, in Greith's *Spicilegium Vaticanum* (Frauenfeld, 1838), pp. 99–106, which

quotes some of the original Celtic words, a fact which does not seem to be generally known. For the really valuable part of Matthew Paris, we must wait for Mr. Luard's following volumes, where his careful editing will be of material service to the cause of English history. Petrie's *Monumenta* only gave the parts of authors which were valuable as original authorities; but it is impossible to criticize or value aright the work of any mediaeval writer unless we have before us the whole history as he conceived it, and can see how he carried out his conception. The relation of the mediaeval chroniclers to each other is still a very vexed question, to which Mr. Luard has here contributed some material evidence.

We pass into a very different region when we take up Bishop Bekynton's *Correspondence*. The manuscript in the Lambeth library is a Letter-book, compiled probably under Bekynton's immediate direction, and extending over a period of more than half a century—from the reign of Richard II. to the latter part of the reign of Henry VI. The documents illustrate both the foreign relations and the domestic condition of England, and throw light on the private life and character of one of the most able and active ecclesiastics of the time—a time when the servants of the Crown were rewarded with high offices in the Church, as the approved method of paying them for their services. Sir Harris Nicolas had already translated Bekynton's journal of his embassy to Bordeaux, and prefixed a memoir of the author, to which many particulars may be added from the work before us. Unhappily his collection of political documents for England and France during Henry V.'s reign, in the Cottonian collection, was so much damaged by the fire as to be scarcely legible. A third volume, about the English claims to the crown of France, survives. Bekynton was born at the village of that name, just north of Frome, in Somersetshire, about 1390, and educated at Winchester and New College, and was therefore resident in the university during the memorable controversy with Archbishop Arundel, in 1411. He then transferred himself to the service of Duke Humphrey of Gloucester, and received several church preferments. In 1432 he was sent to France to negotiate a truce, and in 1439 accompanied Cardinal Beaufort in the embassy to Calais, his journal of which has been published by Sir H. Nicolas, in the fifth volume of *The Proceedings of the Privy Council*. He had been just previously named secretary to the king, and on his return was "appointed his reader nearly every day." A letter to Abbot Whethamstede, of St. Albans, illustrates the ingenious ways used to evade the Mortmain Act. The abbot first suffered the lands to be seized by the king's escheator, and then begged them as a donation from the crown, through his friend, Duke Humphrey. The correspondence with the Curia Romana well illustrates the "omnia Romae cum pretio," which was as true of the ecclesiastical as of the civil capital of Europe. The pope's secretary, Biondo of Forli, sends Bekynton, as a small return, his "Decads" of History, of which Mr. Williams prints part of the fourth book, hitherto almost unknown, relating to the state of Italy in 1441; but also giving a very interesting account of a papal mission to Abyssinia, of the church in that country, and of its submission to the see of Rome—the Abyssinian part being what our editor has extracted for us. The ambassadors said that their rivers flowed "in lacum tantae magnitudinis ut mare videatur et vulgo appelletur, aut in Nilum, cujus originem apud se notissimam esse contenderunt, exonerari." Another passage says, "Simbolum Graeco more absque 'Filioque' singulis horis dicunt." In 1442 Bekynton was sent to Bordeaux to negotiate Henry's marriage with a daughter of the Count of Armagnac; and it is the diary kept by one of Bekynton's suite which Nicolas published in 1828. It gives a vivid picture of the manners of the time, and it is important for its bearing on the history of the English domination in the Duchy of Aquitaine, as it trembled to its fall. The ambassadors rode from Windsor by Abingdon, Devizes, Wells, Glastonbury, Taunton, and Tiverton to Exeter: the diary is very business-like — "ad coenam cum J. Whaddam, vicomite comitatus Devoniensis. Post coenam magister Roos equitavit versus Powderham, et pernoctavit cum domino Philippo Curteney milite." They sailed from Plymouth, and harpooned a shark during a calm. On their return they landed at Falmouth, the mission having wholly failed. The frost, which blocked up the Garonne with ice, also congealed the colours of the artist Hans, whom Henry had charged to take faithful portraits of the three young ladies; and Hans, apparently, only completed one picture. Soon after this, Bekynton was made Bishop of Bath and Wells, after having just before accompanied William Waynflete, then Provost of Eton, to Cambridge, with the first detachment of king's scholars (as our editor is careful to note). There are other very interesting notices about the universities; and we may specially notice the letter of the university of Paris against the new university which the English had set up at Caen, under Michael de Tregury, Fellow of Exeter College, Oxford, and afterwards Archbishop of Dublin. Nor are indications wanting of coming change. A letter to the general of the order of the Carmelites sets forth such irregularities and abuses in the monastic system as appeared to thoughtful minds to forebode its utter ruin and subversion. There are also constant complaints of the way in which the pope gave English benefices to foreigners neither residing nor able to reside, ignorant of the language, not knowing their people nor known of them. At the Benedictine abbey, also, of St. Séver, in Aquitaine, the prior and a few monks had procured from the pope the appointment of a boy of sixteen—otherwise canonically disqualified (being the illegitimate son of a count)—as their abbot, and had forged letters from the citizens, thanking the pope for his admirable appointment. Such flagrant abuses of irresponsible power, gradually usurped by successive popes, had always been impatiently borne by the English people; and there are indications in these volumes that a spirit of resistance was beginning to manifest itself, both in clergy and laity, which culminated a century later in the assertion of the regal, as against the papal, supremacy. One memorable example was given at this very time, in the treatment of Archbishop Chicheley by the imperious Martin V.; who further imposed an entire tenth, to be levied in England, for the Bohemian war. The popes as little understood the temperament of the national character as they did the nature of the English constitutional government. We have also some illustrations of the proceedings of the Councils of Constance and Basle. The anxiety manifested by the King of England, in common with the Emperor Sigismund and the princes of France, to prevent a collision between Eugenius IV. and the Council of Basle, and to inculcate on both sides moderation and forbearance, was, as might be expected, quite thrown away. As to the attempt at reconciliation between the Eastern and Western churches, it is evident that the mutual suspicions and jealousies of the pope and the council sorely perplexed the Greek envoys. On the whole, these volumes give a good picture of England as it was, before the outbreak of the Wars of the Roses; and we cannot but speak highly of the way in which they are edited. If there is a fault to find, it is that some of Bekynton's letters, illustrative of his embassies, already printed by the Camden Society, have not

been added, since they form an almost indispensable part of the series, and would have taken up very little room. We trust that these volumes may be followed by other series of letters and documents, which are at least as necessary as chronicles for our history. Not that all the chronicles are as yet reprinted according to the original plan. Henry of Huntingdon, and Rudborne, the Winchester historian, are as yet untouched; and there is even a Latin translation of the *Anglo-Saxon Chronicle* at Lambeth as yet unprinted. The Germans are making every effort to complete their series both of chronicles and of documents; but the publication of our series of charters, so well begun by Sir T. D. Hardy, has unhappily been long suspended. There are yet a number of the smaller *Annales Monastici*, not included in Mr. Luard's edition, which await an editor to trace out their sources and give them a good index. It seems ungracious, when so much is well done, to ask for more; we can only plead that good editions are apt to make us discontented with those that are old and defective. Mr. Williams' preface, of part of which we have given an abstract above, is especially good and readable. The similar preface to Mr. Luard's work is yet to come. C. W. Boase.

The Opposition of the Estates of Bohemia to King Ferdinand I. in the Year 1547. By Professor Karl Tieftrunk. [*Karla Tieftrunka odpor stavuv czeskych proti Ferdinandovi I. L.* 1547.] Prague: Franz Rzivnacz.

The Bohemian Museum has just published a most interesting and elaborate work in the Bohemian language, on a little known but very important historical epoch. It details the share of Bohemia in the first unsuccessful attempt at resistance after the time of Luther on the part of those who were not Catholics against the papal and imperial supremacy in the lands of the German empire. Had it met with greater success, the bloody history of the Thirty Years' War would in all probability never have been written.

Professor Tieftrunk has availed himself of contemporary sources of unquestionable authority, especially the manuscript *Diary* of Sixtus of Ottersdorf, then chancellor of the Old Town of Prague, who took a prominent part on the side of the estates, which is in the Bohemian Museum; and the *Acta*, compiled and printed upon the suppression of all resistance by the orders of Ferdinand himself, after careful search had collected for destruction all documents, letters, &c. that might testify against his proceedings. Good use has also been made of the archives of Bohemia, of the records in the "Landtafel," of the treasures of the Bohemian Museum, and the archives of the city of Prague.

Professor Tieftrunk commences his work by an introductory essay upon the new and important elements in Bohemian society, which had arisen since the suppression of the democratic Hussites or Taborites. These were (1) the *Jednota Bratrská*, or *Unitas fratrum Bohemorum*, from which descends the present exemplary community of the "Moravian" Church; (2) the Burgher Estate, which in intellectual and political development had risen far above the two orders of nobility, the *Pani*, or Lords, and the *Rytirzi*, or Knights. He also describes the low condition into which the parliaments of the three estates had fallen, and the chicanery by which the king circumvented all efforts to maintain the liberties of the realm and the estates, at the gradual destruction of which he was steadily and consistently aiming with the characteristic unscrupulousness of a Hapsburg.

The first book contains an account of the commencement of the contest between Ferdinand and the estates in 1546, when the Protestant princes, John Frederic, Elector of Saxony, and Philip, Landgrave of Hesse, were put into the ban of the empire by the emperor, Charles V., whose undoubted aim was the establishment of his own and the papal supremacy in the most absolute form. Reciprocal covenants of inheritance had long existed between Saxony and Bohemia, and Ferdinand induced the upper and lower orders of nobility, against the will of the burgher estate, to consent to their renewal with Maurice of Saxony, the ally of Ferdinand's brother, the emperor, to the exclusion of the Protestant elector. He then proclaimed war against the elector in execution of the ban, summoned the country to his aid and invaded Saxony; but was unable to effect much, as the militia of the estates was not bound to follow his banner beyond the frontiers.

The second book relates Ferdinand's preparations for a new campaign against Frederic of Saxony in 1547, and the commencement of opposition to his policy, which both the Utraquists and the Brethren saw to be aimed at the eventual destruction of their liberties and religion.

In the third book we find a detailed account of the resistance made by the estates to the royal policy, the citizens of Prague and afterwards the greater part of the estates entering into a "Friendly Agreement" to defend the liberties and constitution of the country, with all due respect to the person of the king. The estates also negotiated with the elector, but declined to render him any active assistance, though they raised an army themselves, elected a general, and forbad any Bohemian to cross the frontier in aid of the king against the elector, with whom they considered themselves to be at peace.

The fourth book relates various abortive negotiations, which vainly attempted to put an end to the differences between the king and the estates; and also the junction of the forces of Ferdinand with those of his brother, the emperor, at Eger, and the vacillating conduct of the estates at the crisis.

In the fifth book we find the results of the disastrous battle of Mühlberg, in which the elector was defeated and taken prisoner, and the commencement of the successful endeavours of the king to detach the greater portion of the two orders of the nobility from the burgher estate.

The sixth book relates the punishment of the estates, especially of the "royal" cities, above all, that of the Old and New Towns of Prague, the whole of whose landed property, rights of toll and dues, was confiscated, their leading men, Sixtus of Ottersdorf included, imprisoned and tortured, and the communities obliged to surrender to the king at discretion. All the other towns and such nobles as the king thought fit to summon, and who did not seek safety in flight, were compelled to deliver themselves up to him in a similar manner. Torture and cruelty were freely used, in order to obtain evidence for the suspicion of the king, that the intention of the estates had been to dethrone him and place the crown on the head of the Elector of Saxony. No such intention had existed, and no evidence was obtained. The confiscations, the details of which are given, were enormous.

The seventh book details the political, legal, and religious changes introduced by Ferdinand I. into Bohemia after the above events. It commences with an account of the "Bloody Parliament," so called from being opened by the execution of four leading men, two belonging to the lower order of nobility and two to the burgher estate. After this the parliament naturally assented to every demand of the crown, and, in fact, to the conversion of Bohemia from a limited monarchy into almost a despotism, the independence of the cities being entirely destroyed, and their authorities placed under the surveillance of royal officers, while but a

shadow of their former power was left to the estates. In the country the especial wrath of the king fell upon the *Unitas fratrum*, large numbers of whom were compelled to quit Bohemia, so that henceforth Moravia, which had not shared in the resistance of the estates to the crown, became their chief seat, and produced not only their most celebrated men, *e.g.* J. A. Comnenius, but also the Kralitz Bible. John Augusta, who was considered the head of the *Unitas*, was taken in 1548 by an act of the basest treachery, tortured, and imprisoned for sixteen years.

The "Friendly Agreement" of the estates is printed as an appendix to the work.

It is difficult to refuse admiration to the consummate craft and consistency with which Ferdinand proceeded towards the realisation of his projects, never taking an over-hasty step, nor shrinking from making or breaking a promise, as circumstances might require. On the other hand, the indecision and weakness of the estates in general, with perhaps the exception of the citizens of Prague, is very noticeable, as compared with the vigour and steadfastness displayed by the Hussite Bohemians, when under Ziska and his successors they bade defiance to the whole power of Rome and the empire, aided by every device that religious bigotry could bring to bear.

Professor Tieftrunk has done good service both to his country and to history by this opportune and excellent work, the style of which is both clear and elegant, and which deserves to appear in a translated form in a language more accessible to the general run of historical students than the Bohemian.

A. H. Wratislaw.

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Philology.

Markham's Translation of Ollanta. Ollanta, an antient Ynca drama, translated from the original Quichua, by Clements R. Markham, C.B., Corresponding Member of the University of Chile. Trübner and Co., 1871.

Having already had occasion to review in the *Academy** a Spanish translation of *Ollanta*, published three years ago by M. Barranca, of Lima, I may refer the reader to my former paper for a short sketch of the drama, and for two or three of the most interesting passages in it. Thus I shall have more space to discuss the questions relating to the origin and genuineness of the play.

As Mr. Markham justly remarks—

"The all-important question is whether the drama was handed down from the time of the Yncas, and merely committed to writing by Dr. Valdez, who divided it into scenes, and inserted the stage directions; or, whether Dr. Valdez was the actual author, and composed the work himself in a classical, and, in his day, almost archaic language."*

In the above-mentioned review I had tried to prove

"that *Ollanta* is not a production of early times, but was written long since the completion of the conquest, by a man who did not possess any means of information beyond what we do now."

In the preface of his edition, Mr. Markham affirms that *Ollanta*

"is an ancient Ynca drama, handed down orally in order to be performed before the native chiefs, until 1780, and then committed to writing from the mouth of Indians by Dr. Valdez, the friend and sympathiser of the last of the Yncas. The old priest merely made the divisions into scenes, which suggest themselves; and introduced the stage directions in accordance with what he had himself seen when the play was acted by the Indians."†

Mr. Markham's reasons for so thinking can be summed up as follows:

1. His own collation of a copy taken from the original manuscript of Dr. Valdez gives classical Quichua in every single instance where a corrupt or Hispanicised word or phrase occurs in the von Tschudi version.

"This proves that all the corrupt forms in the von Tschudi version arise from the carelessness of a copyist, and that they have no existence in the original documents."‡

2. "Moreover, the drama contains many words and grammatical forms, some of which I have indicated in the notes, that are archaic and long since disused."

3. "The only object of a Spanish priest"—for such was the condition of Dr. Valdez—"in composing such a work would be to inculcate Catholic doctrine; and not to preserve the memory of ancient pagan rites in absolute purity."§

1. Mr. Markham's copy was taken by Don Justo Pastor Justiniani, descendant of the Incas, from the original manuscript of Dr. Valdez, and given to Mr. Markham himself by Don Pablo Justiniani, Don Justo's son, and now curate of Laris. Thus, the text of the present edition is older and purer than that already published by Tschudi, and gives many corrections and additions, several of which are of considerable length. When Ollanta, pardoned by *Inca Kapak-Yupanki*, thanks him for his generosity, Mr. Markham adds to the three lines of Tschudi's version—

"O Inka! this is too much
For a man who is nothing.
Mayst thou live a thousand years!"

the following tirade:

"I am as thou makest me,
Thou dost give me succour:
Crippled, thou makest me stand;
Fallen, thou raisest me up;
Poor, thou enrichest me;
Blind, thou givest me sight;
Dead, thou restorest life;—
Thou indeed teachest me to forget."‖

When Ima-Sumak tries to force her way to the Inka, in Tschudi's edition she says but four lines:—

"What dost thou love most?
Leave me to the father!
Do not prevent me!
Lo! there is some one dying!"

* See the *Academy* for January 1870 (vol. i. p. 89).

* Markham, *Ollanta*, p. 8. † *Id.* pp. 10, 11. ‡ *Id.* p. 8. § *Id.* p. 10. ‖ *Id.* pp. 106, 107.

while Mr. Markham's text runs as follows:

"Why should it be a day of joy?
What dost thou love most?
Leave me to the father,
Let me speak to the Inca!
Do not prevent me!
Let me pass the door!
Lo! there is some one dying!
Lo! there is sickness, even to death!"*

However, the greater part of the variants are only correct readings of dubious passages, which enable us to restore almost all the corrupt lines in Tschudi's version.

In one place, at least, it seems to me that the text, as given by Mr. Markham, proves the presence of an unmistakable Spanish word in the original manuscript of Dr. Valdez. The passage to which I allude is to be found at the end of the first scene.† Ollanta, after a long conversation with the high-priest of the sun, Huillka-Umu, calls his attendant:

"Piqui-Chaqui, where art thou?
PIQUI-CHAQUI.
I have slept like a stone,
And have dreamt bad dreams.
OLLANTA.
What?"

Now Piqui-Chaqui has dreamt of an animal tied up; but in the three editions of the drama the names of the animal do not agree: in Tschudi's edition it is an ass (*asnuta*), in Barranca's, a llama (*llamata*), in Markham's, a fox (*atocta*). To this confession Ollanta replies:

"Certainly thou art the animal."

Piqui-Chaqui, who is the clown in the play, seeing that his lord is angry, tries to pacify him with a joke. In Tschudi's edition, which makes him dream of an ass, he identifies himself with the said donkey:

"Therefore my *ears* grow longer."

In Barranca's edition he becomes the llama:‡

"Wherefore my *neck* grows longer."

In Markham's edition he says:

"Therefore my *nose* scents better;
Therefore my *ears* grow longer."

Of the two lines, the first only is applicable to a fox; the second can be understood of no animal except an ass. Had *atocta* been the true meaning of Valdez, the line—

"Therefore my ears grow longer,"

could not have been found in his manuscript; for Valdez, in characterizing the fox, would not have given him the long ears which appertain to the donkey. Since it is found in the original manuscript, it is necessary to admit that the long-eared *asnuta* was named in the same manuscript. From this I conclude, first, that *asnuta* was the real reading, and that the first copyist of the work, Don Pablo Justiniani, or some other, meeting with a Spanish name of a Spanish animal in what he considered to be a pure Incasic drama, took it for a blunder, and substituted for it the Quichua *atocta*, a fox, with the joke corresponding to this change—

"Therefore my nose scents better;"

or, again, that Valdez himself wrote two readings of the same passage, the one running thus:

PIQUI-CHAQUI.
Huc *asnuta* huatasccata.
Of an *ass* tied up.
OLLANTA.
Ccanpunim chaycca ccarcanqui.
Certainly it thou art.

PIQUI-CHAQUI.
Chaycha huiñancay rincripas.
Therefore my ears grow longer.

And the other:

PIQUI-CHAQUI.
Huc *atoccta* huatasccata.
Of -a *fox* tied up.
OLLANTA.
Ccanpunim chaycca ccarcanqui.
Certainly it thou art.
PIQUI-CHAQUI.
Chaycha chuñuyan senccaypas.
Therefore my nose scents better.

Barranca's edition, if exact, gives a third version; but then Barranca had not the opportunity of knowing Mr. Markham's manuscript. The two versions were probably condensed into one by the copyist.

2. In the notes, Mr. Markham indicates but two archaic forms which frequently occur in the drama; one in the genitive-ending *c* or *cc* (*k*) in place of *p* or *pa*; the other, the ending *chis*, *chiz*, instead of *chik*. In reference to the genitive-ending in *c*, *cc*, I must observe that some Quichua scholars consider it as more modern than the *p*, *pa* ending. Mossi, who remarks the fact, tries to explain it by saying that "the *p* of the genitive began to be pronounced like *pf*, then became *j*, which, as we have said, is written with *c* at the end of the words. This is the reason why the *p* became *c*: therefore in the common style of pronunciation they no longer write the genitive with a *p*, but with a *c* when the word ends with a vowel."* Mossi's explanation is, I think, inadmissible; but from what he says, we must admit that *in the common style of pronunciation* the genitive-ending in *c* is now used, and not obsolete. As for the form *chis*, I have heard it pronounced *chiz*, with the *z* instead of the *s*, by the wandering *collas*, who, with their medicine-bags, penetrate as far as Buenos Ayres and Montevideo. The change of *c* into *z* at the end of the words is a dialectic peculiarity which is not confined to *chis*: in some parts of the Tucuman all the words ending in *c*, *k*, are pronounced as if they ended with *z*, *s*: *chau misa ruraс padre* becomes *chau misa ruraz padre*, "the priest who has said half the mass;" *angel chac Diosta munac* is spelt *angel chaz Diosta munaz*, "he who loves God as much as an angel."

3. In my review of Barranca's *Ollanta* I tried to show that "the social state depicted in *Ollanta* is not a heathen one: it is, in fact, a sort of conventional state, the outlines of which have been drawn by a writer who picked his science out of books, and did not possess more original documents than we possess at the present day." I must confess that, even after reading Mr. Markham's paper and translation, I have not altered my opinion, and therefore beg permission to refer the reader to my former paper for the exposition and development of my argument. As to Mr. Markham's objection, "that the only object of a Spanish priest in composing such a work would have been to inculcate Catholic doctrine, and not to preserve the memory of ancient pagan times," besides being a Spanish priest, Dr. Valdez was "the friend and adherent of the last of the Yncas." He might quite well have written a political play like *Ollanta*, with the object of placing before the eyes of the Indians a view of the former grandeur of their country, and exalting the power and generosity of the Incas, as other priests have written religious ones, like *Usca-Paucar*, to propagate the Catholic faith amongst the Quichua tribes.

Thus much for the controverted question of the genuine-

* Markham, *Ollanta*, p. 110. † *Id.* p. 33.
‡ Barranca, *Ollanta* (Lima, 1868), p. 8.

* Mossi, *Gramática de la Lengua general del Perú, llamada comunemente Quichua* (Sucre, 1857), pp. 7, 8.

ness of *Ollanta*. As to Mr. Markham's edition, I cannot but highly commend the accuracy he has everywhere displayed in achieving a very difficult task. "The Quichua and the English are given in parallel columns. The different readings in the von Tschudi version, of which there are many, are given in italics, and the passages in my version, which are omitted by von Tschudi and Barranca, are also indicated," being included between brackets. In fact, it is the best and certainly the most critical work which has been published on the Quichua language and literature since the days of the old Jesuit grammarians. G. Maspero.

The Liflade of St. Juliana. By the Rev. O. Cockayne and E. Brock. Trübner and Co.

The present publication of the Early English Text Society gives two texts in full on opposite pages, one from a British Museum MS. (Royal 17, A. xxvii.), the other from the Bodleian MS. 34, the former edited by Mr. Brock, the latter by Mr. Cockayne, each editor giving a translation of his text at the foot of the page. A later rhymed version from the Ashmole MS. 43 is given as an appendix; but the chief value of the book lies in the two earlier texts, which seem to be contemporary, although R. is full of omissions, and is altogether inferior to the Bodleian MS. In language and style the work bears the closest resemblance to the *Ancren Riwle*, *Hali Meidenhad*, and the lives of St. Margaret and St. Catherine, all of which Mr. Cockayne considers to have been written by Richard le Poor, bishop of Salisbury from 1217 to 1237.

As might be expected from the similarity of subject the Juliana has nearly the same vocabulary as the last named works. Still, it has several hitherto unrecorded words. An interesting example is the adjective *eðluke* (p. 71)—"me leadde hire ant leac forð, ant heo wes eðluke"—apparently an adjective formed on the analogy of the Old English *caðfynde*, &c. from *lucan* in its peculiar Middle English sense of "pull." The word is correctly rendered by Mr. Brock, "easy to lug," but Mr. Cockayne has "she was easily (led)," seemingly taking *eðluke* as an adverb equivalent to the Old English *eaðelice*, which would, however, appear as *eðeluke*, not *eðluke*. The translations are on the whole very accurate, but some of the renderings require criticism. "Unwurð hit is me" (p. 15) is translated by both editors, "unworthy it is of me," but it seems preferable to take *unwurð* in the well-authenticated sense of "contemptible." Mr. Cockayne's translation of "þes were . . . þat tu hauest . . . se forð þi luue ileuet" (same page), as "to whom thou hast *so far* thy love committed," gives *forð* a very questionable interpretation: it seems safer to take it as meaning "henceforth," of which there are numerous examples in the older poetry. Mr. Cockayne translates "unwreste unwihtes" by "*cunning* evil ones (p. 39), but there is no reason for departing from the usual meaning of the word, which is simply "worthless," "wicked." In the first line of p. 43, he translates "belzeebub þe balde þurs of helle" by "B. the bold *portent* of hell," although it is not easy to see why he was not satisfied with "giant," which is Mr. Brock's rendering. In "settest for his sake all þat þe i worlt is" (p. 61), the rendering "settest," of both editors, is over-literal: the verb is constantly used in the Old English poetry in the sense of "create"—one of the examples given by Grein is, "of lame ic þe leoðo gesette," where the literal translation would be quite unmeaning.

In many parts of his version Mr. Cockayne has fallen into the common error of confounding translation with mere transliteration. Thus, "þen muchele witti witege ysaie" (p. 39) appears in his version in the shape of "the great witty prophet Isaiah," although "witti" means simply "wise," and conveys not the slightest idea of "wit." In the same way he translates "euch heafdes bikeoruen" (p. 67) by "*carve* off the head of every one"; "as beliales budel bet" (p. 59) by "as belials *beadle* bad;" and "seli meiden" (p. 47) by "*seely* maiden." This style of translation not only makes the old language ridiculous, but also exercises an injurious influence on English scholarship, by deadening the modern reader's perception of the changes (often very delicate) of meaning which many old words preserved in the present English have undergone. Henry Sweet.

The Harrowing of Hell. [*Neue Bearbeitung des altenglischen Schauspiels.* Von Dr. Eduard Mall.] Berlin: Th. Grimm, 1871.

One of the most striking characteristics of our time as compared with the past centuries is the change in the mode of studying literary monuments. Whilst an often rather narrow aesthetical horizon limited the researches of our forefathers to the classical periods of some few literatures, and whilst they either accepted as genuine the documents of these literatures transmitted to us in an often very disfigured shape or continued the process of wilful or unconscious alteration begun by the long series of their predecessors, our own generation has brought into prominence two new principles intrinsically linked together. The historical and critical methods of dealing with materials dominate at this moment in every branch of science, and have had the further effect of vastly increasing the number of the students of literature, by bringing to light not only a great number of almost unknown literatures, but also an immense quantity of highly important documents belonging to those already cultivated, and creating a totally new method for the re-establishment of the original form of literary productions. The activity of modern philologists is now mainly directed to two main questions: to the origin and successive development of the various branches of literature, and to the determination of true shape and form of the texts which have been preserved to us.

In both of these respects Mr. Mall's *brochure* on the oldest English "Mystery" is of great interest, and deserves our best thanks, though we differ from him in more than one essential point. Mr. Mall gives us a new edition of the *Harrowing of Hell*, printed twice already by Collier and J. O. Halliwell from a London MS., and once from the Auchinleck MS. by Laing and others.

The literary value of the *Harrowing of Hell* is clearly determined by the leading place it occupies amongst similar productions. It would be vain to ascribe to it great value from a purely aesthetical point of view. There is no originality of conception, the subject being taken from religious traditions, and having been treated poetically in England since the Anglo-Saxon period. We even possess a poem in this latter language in the latter part of Caedmon's paraphrase. Neither is there any artistic refinement, exquisite language, or elaborate characterization of the *dramatis personae*. The greatest merit of the poem is its entire simplicity. Dr. Mall with justice rejects the opinion of Mr. Th. Wright, who considers the *Harrowing of Hell* a mere dialogue; but he does not sufficiently appreciate the fact that the introduction to the poem preserved in one MS. (and that which Mr. Mall considers the best) calls our poem especially a *strif*. This would seem to indicate that we have to seek the origin of the drama, at least in England, in the large field of literature known by the names of "strif," "dispute," "debat," &c. For the *Harrowing of Hell* introduces Christ and Satan maintaining the justice of their respective causes, and has a distinct action as well as *dramatis personae:*

standing thus midway between the mere dialogue and the drama. If this view be correct—and it might be borne out by *many* English and foreign analogies—a new train would be given to the investigation of the origin of the drama which might be well worth pursuing.

Mr. Mall based his text on the two MSS. already published and a third preserved at Oxford, and supplies a complete *apparatus criticus* in the notes. The method adopted by him he has explained in an introduction at once sound and interesting. It is the first time, so far as I know, that the critical method, adopted in editing Greek, Latin, German, and Romance books, has been seriously applied to an English text. It is with no desire to depreciate the merit of the editor if I permit myself to differ from him in the way he has put his method in practice. I have already mentioned that the poem has been preserved in three MSS. Mr. Mall maintains that the Oxford copy (O) and the Auchinleck MS. (E) are derived from a common source, inferior to that from which the London copy (L) is drawn. He consequently takes L for the basis of his text, and rejects not only all readings preserved only either by O or by E, but also several readings common to both. An examination, however, of these latter has not persuaded me of their inferiority to those of L, consequently I do not accept the common origin of O and E. But further, after accurately examining the readings common to L and E, I have been convinced of the inferiority of several of them to the reading preserved by O; and this leads me to hold that L and E are copies of one common source differing from that of O; and that wherever O corresponds with either L or E, its reading is to be adopted. Without entering into a more detailed discussion, I would only add that with my view of the relation of the MSS. I regard it as a great advantage that the critical text should preserve far more faithfully the shape of the text as transmitted to us. Criticism ought to be always as conservative as possible. The reasons brought forward by Mr. Mall against the readings of O and E are, in my opinion, of no great importance, and are inapplicable to a literary production so far removed from artificial refinement. To give a single instance, vers. 139, 140. Mr. Mall adopts the reading of L :—

I haue herd wordes stronge
Ne dar I her no lengore stonde.

O reads :—

Ich haue j herd wordes harde
Ne am ich namore zatewarde.

I herd wordes stronge
Ne dar ihc dwellen er nout longe.

E omits the two latter verses, and preserves only the two former, which are, on the contrary, wanting in L. Mr. Mall maintains rightly that the omission of the two latter verses are due to the scribe of E, considering the repetition of the same thought in two consecutive phrases as superfluous; but I do not see why the scribe of L may not have omitted the first two lines on similar grounds, the more so inasmuch as L offers several such omissions, as, *e.g.*, after vers. 78, 149. The original contained, I believe, all the four lines as they are preserved by O. Prolix repetitions of this kind exist in all productions of the same period, and it is scarcely fair to apply a modern aesthetical standard to poems of the thirteenth century. However this may be, Mr. Mall's edition, offering, as it does, all the various readings of the MSS., enables every reader to select those which he may prefer. In establishing his critical text, Mr. Mall has also paid a minute attention to the linguistic aspect of the question, by making an accurate study of the rhymes. He establishes that the poem was written in the Midland part of England, that only E, the youngest of the MSS., has preserved this dialect with tolerable accuracy, the other two offering all the characteristics of southern dialects. The difficult metrical question Mr. Mall has not touched, and though investigations into the metrical laws of a poem are always a great help for establishing the true text, it is hardly well to begin with so small a poem the almost uncultivated study of Early English metric. Subjoined to the text are some valuable critical and philological notes, and an excursus on the literary value of the poem.

Edmund Stengel.

Traité de Berakhoth du Talmud de Jérusalem et du Talmud de Babylone, traduit pour la première fois en français par Moïse Schwab. Paris: Imprimerie nationale.

M. Schwab, a name hitherto unknown in the field of Semitic or even of Hebrew literature, here presents us with an attempt at a French translation of the Talmuds of Berakhoth. He is certainly not without predecessors. A German translation of both Talmuds of Berakhoth was published by Dr. Rabe in 1777; another of the Babylonian Talmud of Berakhoth, with copious notes, by Dr. Pinner in 1842. Anyone who has read a few pages of these translations, or of those of Ugolini, will agree with us that the permanent value of their contents is not greater than that of the Brahmanas, and may be led to question whether it is worth while to translate the Talmud at all. In our opinion the Talmud ought rather to be excerpted on the plan of an encyclopaedia; a beginning has already been made by special works on its history, geography, zoology, medicine, &c. But if a translation be required, we must certainly stay our hands until M. Rabbinowitz has finished his collation of the Munich MS., and until the Vatican MS. has been thoroughly examined. A critical edition of the Arukh, the *Kamus* of the Talmud student, and the publication of R. Tanḥum's dictionary of the Mishnah, still buried in the Bodleian, are also much to be desired. With these aids a body of really critical Talmudical scholars might perhaps undertake to translate the chaotic work known under the name of Talmud. Neither M. Schwab nor his collaborators (philologists, as he says, who are too modest to give their names) have any of the requisite qualifications. It is even more astonishing that the very scanty notes which are appended contain no reference to M. Rabbinowitz's *Variae Lectiones* on the Babylonian Talmud on Berakhoth, nor to Dr. Frankel's remarkable work on the history of the Talmud of Jerusalem. It is true that M. Schwab in his preface expresses regret that he had not met with the work in time. This is difficult to reconcile with the fact that the present writer's review of Dr. Frankel's book in the *Academy* (vol. i. pp. 191, 192) was rendered into French by M. Schwab in 1870.

The work under notice has already been condemned by the two leading Talmudists of France, M. J. Derenbourg, "membre de l'Institut," in the *Revue critique*, and by M. Trenel, Director of the Rabbinical School in Paris, in the *Univers israélite;* and we have not the slightest doubt that Dr. Geiger and Prof. Grätz will do the same, if they think it worth while, in their own periodicals. The verdict of these scholars is final, and the following remarks are merely added for the satisfaction of the readers of the *Academy*.

A pretentious but superficial and inaccurate preface opens the work. Its chief authorities are—not Zunz, Frankel, Munk, Krochmal, Rapoport, Luzzatto, Fürst, Geiger, Grätz, &c.—but three popular review articles. The bibliographical notes are devoid of references, and are most untrustworthy; thus the Basel edition of 1578 is mentioned (p. xlix) as the third, while it is really the sixth. Among translations, M. Schwab omits that of Rabe, which, though not famous, is certainly better than his own, and might have saved him

from numerous errors. "En dehors de la Mishnah," he says, "part minime et très-facile" (?), "on n'a traduit en latin que quelques traités fort courts de jurisprudence, et le docteur Pinner a fait une traduction allemande (qui laisse beaucoup à désirer) du premier volume de la série du Thalmud de Babylone." The truth is, there is a Latin translation by Ugolini of not less than *sixteen* treatises of the Talmud of Jerusalem (*i.e.* about half the collection, putting aside the Siphré, Siphra, and the Tosiftha), including Z'ra'im, a partial translation of which is announced *avec un cœur léger* by M. Schwab. It is clear that M. Schwab has formed no just idea of the difficulty of translating the Jerusalem Talmud, extant in a single bad Leyden MS., hybrid in language, and perhaps (see *Academy*, vol. iii. p. 117) a late compilation. A commentary on part of Z'ra'im in the Jerusalem Talmud has taken Dr. Frankel twenty-four years, and is not yet finished; what a contrast to M. Schwab! Much as the latter finds fault with Dr. Pinner's work, he has taken it for the basis of his own translation, except that he entirely neglects the notes, and sometimes misunderstands Dr. Pinner's rather peculiar German. We shall therefore pass over this part of M. Schwab's work, as it is not our present object to criticize Dr. Pinner.

It would be unreasonable to expect us to have tested every word of M. Schwab's version. We have done the same as his learned French reviewers, viz. opened the book at random and compared the rendering with the original. We thus lighted on the end of the 6th and the end of the 7th chapter, where the Talmud, speaking of thermal springs, mentions one in a place called "between the two palm-trees" (cf. the names of places compounded with the word "oak"). M. Schwab translates (p. 124), "C'est une eau qui coule de source entre deux palmiers." According to the Talmudic law, a bath for the purpose of purification must contain forty Saah (measures), and the question is raised whether the forty Saah could be said to be complete, if there were liquid sand at the bottom. M. Schwab renders (p. 126), "La chaux trempée" (?), "dit-il, sert à boucher" (?) "les fentes d'une baignoire." Here Rabe renders correctly, "Wie man dünnen wässerlichen Leimen mit der Tuke zusammenrechne, das Maass von vierzig Saah voll zu machen." On p. 452 we read, "Celui qui abandonne au ciel le jugement à prononcer sur le voisin." We should like to know what this can be except a literal rendering of Dr. Pinner's words, "Und wer da überlässt das Urtheil über seinen Nachbar dem Himmel"? Geographical words, and the names of the doctors of the Talmud, are generally misspelt, as M. Derenbourg has shown in the *Revue critique*.

The most valuable part of M. Schwab's work is, perhaps, the indices, which are unusually difficult to make for a chaotic composition like the Talmuds. Ad. Neubauer.

THE MANUFACTURE OF INSCRIPTIONS AT JERUSALEM AND AL-ṢAN'Â.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—With reference to Dr. Socin's letters in recent numbers of the *Academy*, allow me to make the following statement.

I saw a few weeks ago a squeeze apparently taken from an inscription of twenty-one lines, each character being, if I remember rightly, about an inch and a half in length and a quarter of an inch in depth. The material was a piece of very coarse brown paper, several feet in length and breadth. This squeeze was accompanied by a letter, giving some particulars of the discovery of the inscription, &c., and by two or three small specimens of the stone on which it was said to be engraved, a very hard red porphyry. A copy was also sent at the same time of another inscription, partly in Phoenician and partly in Nabathean characters, said to be engraved on a pillar. Both are to all appearance forgeries. The writer of the letter, which was addressed to a distinguished British nobleman, was—M. Shapira, of Jerusalem. I wish that M. Ganneau would communicate to the readers of the *Academy* what he may chance to know of these matters.

As to Ḥimyaritic inscriptions, many of the tablets that now come to us from Aden are forgeries. Such may, I think, be seen, for example, in the Museum of the Royal Asiatic Society. The offender in this case is a Jewish coppersmith at al-Ṣan'â, to whom the well-known traveller, M. J. Halévy, very foolishly communicated some of the copies of inscriptions which he had taken. The mode of procedure, as made known to me by Baron von Maltzan, is very simple. One of Halévy's longer inscriptions is divided by transverse lines into four, and thus furnishes four bronze tablets, which are worth at Aden two or three pounds a piece. Ḥimyaritic seals and other articles are also coming into the market there.

Let travellers and collectors therefore be very careful, and look with suspicion at every antique coming from Palestine or South Arabia.

Cambridge, July 9, 1872. Wm. Wright.

NOTE.

Herr M. Jordan writes to correct an error which slipped into our report of the Philological Congress at Leipzig (*Academy*, vol. iii. p. 239). The author of the paper on Greek reliefs was Dr. Richard Schöne, professor at Halle, not his brother, Dr. A. Schöne, of Erlangen, to whom we had attributed it.

Contents of the Journals.

Götting. gel. Anzeigen, May 22.—Frankel on the Targum of the Prophets; rev. by Nöldeke.——June 12.—Waddington's Greek and Latin Inscriptions of Syria; rev. by Nöldeke.—Benni's Tradition of the Syriac Church of Antioch; by H. E. [A defence of the papal supremacy by the archbishop of Mosul; chiefly valuable from its fragments of old Syriac hymns.]——June 26.—Sciaparelli's *Vocabulista in arabico*; by H. E. [The vocabulary is accompanied in the MS. by a composition in Arabic, which H. E. proposes to consider as a Sura, written in imitation of the Koran, to refute the Moslem argument from the sublimity of its style.]

Centralblatt, June 8.—Grill's critical edition of Veṇisaṃhara, and Boyd's translation of Nâgânanda; rev. by A. W.——June 15.—*The Indian Antiquary*, Nos. 1–3; and Notices and Catalogues of Sanskrit Manuscripts; rev. by A. W.

Monatsschrift für Gesch. u. Wiss. des Judenthums, June. (Philological.)—Miscellaneous notes on the Rabbinical language and antiquities; by J. Perles.—Karaite bibliography; by P. F. Frankl.—The double pronunciation of the Hebrew Resh; by Dr. Grätz. [Extracts from a MS. of the Bible at Cairo, and from Saadia's commentary on Sefer Jezira, from which it appears that the soft sound of R in conjunction with Z, S, D, T, TH, was not considered euphonious. Grätz suggests that Resh and Zain may have been related in sound; cp. the characters for them in Arabic. The Slavonic Z is pronounced like *rsh*. If R were so pronounced in certain cases in Hebrew, it could not well be combined with Z.]

New Publications.

Kudrun. Herausgegeben u. erklärt von Ernst Martin. Halle: B. des Waisenhauses.

Le Clerc, Guillaume. Fergus, Roman von. Herausg. von Ernst Martin. Halle: B. des Waisenhauses.

Maio, Angelo, Appendix ad opera edita ab. Continens quaedam scriptorum veterum poetica, historica, philosophica e codicibus collecta. Romae: Spithoever.

Mélanges gréco-romains tirés du Bulletin de l'Académie impériale des Sciences de St.-Pétersbourg. Tom. II. Livr. 2. Leipzig: Voss.

Nigra, Costantino, Reliquie Celtiche, raccolte da. I. Il Manoscritto irlandese di S. Gallo. Torino: Loescher.

Radloff, W. Die Sprachen der türkischen Stämme Süd-Sibiriens u. s. w. 1. Abth. 4. Thl. Leipzig: Voss.

Schiller, K., u. Lübben, A. Mittelniederdeutsches Wörterbuch. 1stes Heft. A—Arnt. Bremen: Kühtmann's Bchg.

Seelisch, R. De casuum obliquorum apud Valerium Maximum usu Liviani et Tacitei dicendi Genesis ratione habitâ. Diss. Münster: Mitsdörffer.

Thiele, R. Prolegomena ad Hymnum in Venerem Homericum quartum. Halis: Typ. Orphanotroph.

Treitel, Leop. De Philonis Judaei Sermone. Dissertatio. Breslau: Schletter.

ERRATUM IN No. 51.

Page 258 (*a*), line 2, for "Ramiero de P. Caballero Infante y Quaro" read "Francisco de P. Caballero Infante y Zuazo."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 53.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Thursday, August 15, *and Advertisements should be sent in by August* 12.

General Literature.

The Pretenders; a Norwegian Drama. [*Kongs-Emnerne;* historisk Skuespil. Af Henrik Ibsen. Tredje, gjennemsete Udgave.] Copenhagen.

This saga-drama comes to us almost as a new work, for the original edition, published at Christiania in 1864, won for itself little beside local reputation, and has long been out of print. Since that year, however, the fame of its Norwegian author has most rapidly increased; two separate translations of this very poem have appeared in Germany, and a revised and almost rewritten edition of the original is sent forth by the leading publisher of Copenhagen. Ibsen has been very slow in gaining maturity; almost a contemporary of the well-known B. Björnsen, the latter writer, though younger, far outstripped him in precocity; but while some of Björnsen's earliest works are the best he has produced, Ibsen has steadily risen in power and scope, till his last dramas exceed in ability anything that his rival has done or is likely to do. The literary life of Ibsen divides itself into two very distinct periods; the earlier of these may be termed the historic, and the dramas that developed themselves in it were all founded upon incidents in the chronicles of mediaeval Norway; of these the one under review was the last, and unquestionably the best. The later period may be styled the polemical or satirical, and the poems which belong to it are all lyrical dramas attacking various follies in the Scandinavian society of to-day. The first of these was *Kjærlighedens-Komedie*, "Love's Comedy," published in 1863. The two periods accordingly overlap one another.

Kongs-Emnerne, "The Pretenders," or, to be literal, the "materials out of which to make a king," has for its theme the struggle for the vacant throne of Sverre, in the first half of the thirteenth century. This epoch, the most romantic in saga-history, has been a favourite with the northern poets, from Öhlenschlæger down to Björnsen. In this case, the time is chosen which immediately followed the death of King Sverre. A troop of claimants clutched at the falling crown, but two stood out above the rest, and drew the eyes of all men upon them, Hakon Hakenssön and Skule Bårdssön. Between these the choice really lay; Hakon was putative son of Sverre, and Skule brother of an earlier king. Ibsen's drama begins with a scene in which all the heads of the nation, gathered before Bergen Cathedral, wait for the ordeal of hot iron to decide whether Hakon is truly Sverre's son or no. The ordeal declares in the affirmative, and Hakon, so assured by heaven, gains perfect confidence in himself, and in the justice of his cause, while Skule doubts and hesitates. Thus the keynote of the poet's estimate of each character is struck at once: Hakon's strength is his calm self-sufficiency, as Skule's weakness is his vacillating self-mistrust. Hakon becomes king, does everything to conciliate Skule, makes him duke, marries his daughter, but to no avail. In Skule there is ever the same fiery craving for equality with Hakon, for the name and right of king. But, while Hakon possesses to an eminent degree the good fortune and august bearing of an old-world king, Skule, as his rival says, "has all superb gifts of intellect and courage, is made to stand nearest to the king, but never to be king himself." Hakon's great new idea is to make Norway not a kingdom only, but a nation, to break down provincial feuds, and make the people one and indivisible. How Skule plagiarises this idea, finds it gives him a power over men's hearts that no thought of his own ever gave him, how by its help he rises to brief kingship through much blood, and falls at last before the innate power of will that makes Hakon king by every right human and divine, can only be roughly indicated here. The main characters are drawn with great subtlety and finish, and are relieved by the delicate portrait of Queen Margaret, wife and daughter of the rivals, and by that of Bishop Nicolas, a crafty and witty priest, utterly selfish and unprincipled, but devoted to the interests of his church. The dramatic power displayed in this poem quite raises it out of any mere local interest, and gives it a claim to be judged at a European tribunal.

The original publication of *Kongs-Emnerne* was hampered by the coeval appearance of a play, *Hertog Skule*, on the identical subject, by the popular poet, A. Munch. It was as when Mr. Morris' *Defence of Guenevere* immediately preceded the *Idylls of the King*. At first, Munch's piece was naturally received with higher applause than Ibsen's, but time has already worked its revenges for the younger writer. Munch's drama is graceful and correct, but possesses nothing of the piercing insight into human passion that *Kongs-Emnerne* displays. The latter work is not written in verse, but in very simple, stately prose. One wonders that a poet with such a gift for flexible versification as Ibsen has proved himself to have should have been contented with prose; still, prose is far better than the pompous metre in ancient Pistol's vein that clothes most modern tragedies. Here and there a little lyric, like a jewel, breaks the dialogue. I miss, with regret, one that used to adorn the last act, when the women rejoice over Skule, as he goes to his death, roused into heroism at last.

The spelling of this edition is quite new and curious. It has evidently been the result of an interesting experiment, an attempt to break down the slight but exasperating barrier between the Dano-Norwegian and the Swedish languages. In this book Ibsen, writing Danish, spells it as much as possible like Swedish; the capital letters, commencing nouns, are dropped; all mute vowels are thrown out. For instance, the Danish *giöre* is spelt *göre*, that it may approximate the Swedish *göra*. If the languages could be induced to meet one another halfway after this fashion, it would wonderfully simplify the study of Scandinavian literature. At present the two languages repel a student with a double difficulty; and, as if this was not enough, a fanatical clique of Norwegian writers is trying to found a third tongue there.

Edmund W. Gosse.

Poems of Albert Möser. [*Nacht und Sterne.* ("Night and Stars.") Neue Gedichte von Albert Möser.] Halle: Barthel.

There are two of the later German poets—R. Hamerling and A. Möser—who attract in an especial degree the attention of their countrymen, and it is to the most recent work of the latter that we wish to call the attention of the English public. The first collection of Möser's poems appeared in

1865, and a second edition, enlarged, in 1869, both of which were warmly received by those qualified to appreciate the largeness of the poet's views, his fervid enthusiasm for all beauty, and his wonderful mastery of form. His *Neue Gedichte* possess these qualities in a still more eminent degree; they show us the poet's inmost nature; we clearly perceive the soil where his poetry grew, the elements whence it derived its nourishment. Möser draws his inspiration from classical literature; his poetry is saturated with the spirit of antiquity. The hymns especially remind us of the choruses in the ancient tragic poets; in the absence of rhyme the idea develops itself more freely, and the rhythm rises and falls in harmony, so as to give its full and just expression to the thought, which, with Möser, is generally predominant over feeling, and chiefly occupied with philosophical contemplation of the universe. Borne on "melancholy wings of thought," he struggles

> "To solve the enigma
> Of the sphinx of the worlds,
> To fathom the primaeval
> Eternal mystery of life."

The poet is a disciple of Schopenhauer—like Hamerling, the author of *Der König von Sion*, *Ahasverus in Rom*, &c.—and his prevailing mood is one of melancholy reflection on the nothingness, the fleetingness of existence—"since nothing is constant but change"—the painful fragmentariness of human life and action, the misery of existence, and the sufferings of mankind. But all these different elements are outweighed by a passionate admiration for all that is beautiful, whether a living woman, or an antique marble goddess; for he never craves to possess what he admires so fervidly; his longing for the ideal is disinterested, for he has felt that the object of our struggles loses its charm as soon as it is won, and that the absolute beauty after which the poet aspires is to be found nowhere but in his own bosom.

Poetry, the power of expressing the love which burns within him for all that is noble and good, and the objects which kindle these sentiments, these are the poet's stars in the gloomy night of existence. The songs and hymns sometimes remind us of Heine by the gracefulness of their form. A canzone, "Sacrifice offered for the Dead," noble in form and substance, is dedicated to a fallen friend and pupil, as well as a short cycle of deeply felt poems, where, however, one line of the burden, "Poor lad, poor lad!" is poor, and weakens the general effect. A succession of graceful-sounding *Ghaselen* is nevertheless not wholly satisfactory: the deep earnestness of the poet's mind does not harmonize with the playful verse; the thought is too weighty for its vehicle, and the consequence is an apparent artificialness in the whole. The true character of the *Ghasel*, which, by a continually recurring repetition of rhymes and images, aims at exciting one lasting sensation with scarcely perceptible variations, is missed. Sonnets of perfect finish, and spirited distichs, of which a few are graceful imitations of the antique, conclude this volume, which in euphony and harmony far surpasses everything that later German poets have produced, and is only exceeded by Goethe and Heine, who touch by a simplicity so nearly akin to nature that they make us forget how much of it is due to art. M. Benfey.

Erewhon; or, Over the Range. Trübner and Co.

Since the time of Gulliver the description of fictitious societies has been a favourite medium for satire on the existing, and the rapidity of progress in both inventions and ideas has made such works especially popular of late. To make such a *jeu d'esprit* effective, a writer must have not only satirical power, but also a vivid and accurate imagination. In *The Coming Race* the fiction was ingenious, picturesque, and well sustained, but the satire was slight: in *Erewhon* the invention is slight, and wants those touches of definite imagination which give reality. The introductory chapters, indeed, which describe the hero's adventurous journey over the range which separates Erewhon from the known world are very well written: within the realm of reality the author's imagination does not fail him; but no sooner has the hero reached the wonderful region in which our interest has been aroused than all is either familiar or indefinite. Erewhon (Nowhere) and its people are very like England and the English; we are told that everything differs a little from its European counterpart, but the features of that difference are not presented to the imagination. In Erewhon many habits and opinions are the reverse of ours, like the name of the place, but that is all; nor is this principle carried out thoroughly. In short, the fiction is so slight that, instead of stimulating interest, it overlays the satire with an irritating vagueness. The Erewhonians worship the goddess Ydgrun, who differs in no way, except in the arrangement of the letters, from Mrs. Grundy: indeed, by an amusing slip, the name is once printed Grundy. They profess an attachment, which they do not feel, to certain institutions, of which no definite conception is presented to the reader, called "musical banks;" these are, in plain English, churches, and their "cashiers" are ministers of religion. The Erewhonians subject their children to what is called the "birth-formula:" under this *alias* the usual arguments against infant baptism are adduced. They worship personifications of justice, strength, &c.: by this device the belief in the personality of God is somewhat feebly satirised. A passage about the "cashiers of the musical banks" will show how slight is the imaginative element:

> "In fact it was a career from which retreat was virtually impossible, and into which young men were generally induced to enter before they could be reasonably expected, considering their training, to have formed any opinions of their own. Few, indeed, were those who had the courage to insist on seeing both sides of the question before they committed themselves to either. One would have thought that this was an elementary principle—one of the first things that an honourable man would teach his boy to do, but in practice it was not so. I even saw cases in which parents bought the right of presenting to the office of cashier at one of these banks, with the fixed determination that some one of their sons (perhaps a mere child) should fill it."

One can see no reason why these things should not have been said of English parsons instead of Erewhonian bankers, except that it would then be seen how commonplace they are.

The most interesting part of the book is that which advocates (apparently) the theory that what we call moral vice is but the result of nature and circumstances, and therefore ought not to be subject to moral reprehension. The Erewhonians pity moral vice, but punish physical. The swindler is handed over to the doctor, and his friends enquire after his progress with tenderest solicitude, but the culprit who is convicted of consumption is scouted by his friends, and imprisoned with hard labour for the rest of his life. Yet these people recognise the same moral distinctions as we do: for they perceive an advantage in honesty, and condole with the dishonest; and what advantage has honesty over dishonesty except the moral one? The author has attempted to describe what cannot be conceived—persons who recognise the distinction of right and wrong, and also that of praise and blame, yet do not praise the right, or blame the wrong. To make his fiction conceivable, either the Erewhonians must have no moral ideas, but regard all vice, physical and moral, as disease—awarding neither praise nor blame to either—or they must bring all vice into the moral categories, and punish both for illness and for sin. The

former is probably the author's real meaning, that all vice is disease, and that, accordingly, we ought to have no moral ideas. How does he propose to get rid of them? On the whole this is not a very powerful statement of the medicinal theory of punishment.

There is a chapter on universities, and an ingenious speculation on the possibility of machines developing into rational beings; here and there we meet with a poor joke, or a bit of doubtful Latin, but it is a dull book throughout.

R. S. Copleston.

LITERARY NOTES.

La Crónica de los Cervantistas, of which four numbers and a supplement have been issued, is the fruit and the sign of that remarkable revival of interest in Cervantes and his works which is just now so active in Spain. According to the prospectus of the editor, Don Ramon Leon Mainez, it is intended to be a faithful echo of all the admirers of *El Príncipe de los Ingenios*, a medium for the interchange of opinions and ideas relating to his life and works, and a storehouse of criticism and illustration on all points connected with Cervantic literature. The publication fairly fulfils this promise, although we cannot help wishing that a better proportion had been kept between the critical faculty and the patriotic spirit, between the facts and the raptures. The first number, dated appropriately the 7th of October, the anniversary of the battle of Lepanto, contains, in addition to glorifications of him who to all Spaniards is the hero of that day, an article by Don José Maria Asensio, one of the most eminent of Cervantistas, refuting the notion of the biographers, that the allusion to "Filena" in the *Viage al Parnaso* is to an early poem now lost. Señor Asensio shows that "Filena" is a misprint for "Silena," a name which occurs in the *Galatea*, and is a reference not to a poem but to a mistress—the object of Cervantes' Portuguese amour, and the mother of his daughter Isabel. Señor Mainez himself contributes an article devoted to the superfluous demonstration against one Sbarbi, a priest, that Cervantes was no theologian. The second number contains, besides Sbarbi's answer, a record of all the honours intended to be paid to Cervantes on the anniversary of his death in the various towns of Spain, and a useful bibliography of minor works relating to the author of *Don Quixote*, by Don Cayetano Alberto de Barrera. There is a monograph, by the geographer Fermin de Caballero, on the country of Don Quixote, proving that his place of birth was Argamasilla de Alba, and not any other of the numerous towns which have contended for the honour. Don Manuel Cervantes Peredo pronounces on the "hidden meaning" of his namesake, that there is no hidden meaning—that in *Quixote* "all is exoteric and nothing esoteric." The third number continues the account of the anniversary celebrations and Barrera's bibliographical notes, and introduces an English Cervantist, Mr. A. J. Duffield, who asks for help from Spanish scholars in overcoming some difficulties in the text of *Don Quixote*, with a view to a new English translation. The religious and literary functions which were performed on the 23rd of April in honour of Cervantes form the especial subject of a black-bordered supplement. In the fourth and last number is a tribute, by the editor, to the memory of Fray Juan Gil, the Redemptorist, to whose courage and devotion Cervantes was mainly indebted for his release from captivity in Algiers. Don Leopoldo Ruis writes, with needless severity, of a foolish continuation of *Don Quixote*; and Don Francisco Lopez Fabra enumerates the editions of the immortal work which have appeared in all languages, reckoning 87 in Spain and 191 in other countries; to which Don Manuel Cerda adds an elaborate collation of the first editions of the *Galatea* and the *Quixote* in Spanish.

The *Allgemeine Zeitung* (July 10) communicates to its readers some passages from the autobiography of Grillparzer, which will form the tenth volume of his collected works. It promises to be of much interest, for, though not a friendly, Grillparzer was a very intelligent critic of the many fashions in literature which he lived to see begin and end: as a case in point we may cite his remarks on the tendency of artificial unanimity to lead to over-frequent changes of popular taste. His account of the treatment of *König Ottokar* by the censorship is curious; his pilgrimage to Weimar, on the other hand, was not very different in result from others we have read of. His estimate of his own merits is very simple: "the best of those who have come after Goethe and Schiller," but he himself did not mean this as high praise.

The *Deutsche Reichszeitung* has brought down on itself the wrath of all admirers of Goethe by some rash and quite unproved assertions and insinuations to the discredit of Frederika Brion, which profess to rest on continuous Sesenheim tradition. Goethe's defenders declare that so far as any tradition reflects upon Frederika, it is one which connects her name with that of the Roman Catholic curate of Sesenheim, some time after Goethe's departure from Alsace. But what is far more certain than either scandal, and fatal to both, is that Frederika and her love affair were completely forgotten in Sesenheim when the third volume of *Wahrheit und Dichtung* appeared, and made her home a place of pilgrimage, where of course the faithful were regaled with traditions according to their tastes.

M. Th. Bentzon begins a series of sketches of American humorists with an account of Mark Twain in the *Revue des deux Mondes* (July 15). His criticisms are quite unexceptionable, but he seems to have been misled by the advertisements of a certain type of publisher, so that he exaggerates the popularity of his author, while expressing surprise at its extent.

Art and Archaeology.

NEW FRAGMENTS OF THE FRIEZE OF THE PARTHENON.

It is now about twenty years since, in a letter printed in vol. v. N. S. of the *Transactions of the Royal Society*, I drew attention to the fact that, scattered about in various places on the Acropolis at Athens, were small fragments of the frieze of the Parthenon. In the valuable work on that temple recently published by Professor Michaelis (see *Academy*, vol. ii. pp. 412-414), he has very happily adjusted several of these fragments to their places on the frieze. There are, however, on the Acropolis, a number of other fragments of the frieze which Professor Michaelis never saw, and which have been lying about the Acropolis for many years so intermixed with fragments of other sculptures that it has been no easy matter to pick them out. This has been recently done by Signor Martinelli, a Swiss formatore resident at Athens, by whom casts of these fragments have been made for the British Museum. On confronting these casts with the slabs of frieze in the Elgin Room, I have succeeded in adjusting to their original places the fragments noted in the subjoined list, the references in which are to the plates of Michaelis.

(1) The most important of these fragments is one which connects the horses, xxi., with the charioteer and his *apobates*, xxii. in plate 12, whereon is represented the part of the procession on the north side of the temple nearest the east end. The new fragment is evidently the one which I saw on the Acropolis in 1852, and which I describe in my letter already referred to as "A fragment of the frieze consisting of the tails of two horses, and the front rail, ἄντυξ, of a chariot." The right hand of the *apobates*, xxii. 65, rests on the rail. It will be seen by reference to Michaelis that the right-hand corner of the same slab was broken away when Stuart drew it. One of the new casts, however, supplies this missing corner, on which are, of course, the remaining forelegs of the four horses. It is interesting to observe that this composition of two chariots, xxi.–xxiii., has only been recovered since the publication of the work of Michaelis. The two fragments which form the upper part of xxii. long remained in the Museum as isolated fragments, and are published as such in the *Museum Marbles*, viii., frontispiece.

(2) In plate 12, x., a new fragment supplies the feet of figure 38, and some of the drapery of No. 37, which is divided in half here by the joint.

(3) In the eastern frieze, plate 14, viii., the head of fig. 61 and the faces of 58, 59.

(4) *Ibid.* vii. 49, right foot of male figure at corner of slab.
(5) *Ibid.* iii. 19, feet of male figure.
(6) In the south frieze, plate 11, the remainder of the chariot-wheel, part of which is shown in xxix. 71.
(7) *Ibid.*, remainder of the chariot-wheel shown in xxv. 61.
(8) *Ibid.* plate 10, xvii., forefeet of horse 45, and part of hind-quarter of next horse.
(9) *Ibid.* xix., upper left corner of slab showing horse's mane.
(10) Western frieze, plate 9, xiv. 26, the right-leg of the figure on the left. This leg was missing when Carrey drew this slab.

In plate 12, iii., Michaelis gives a fragment of the forelegs of the cow, and the legs of fig. 7, with which he combines the legs of fig. 8. A fragment of a cow's hindquarter broken in two pieces probably belongs to this group, and I am disposed to add the hindlegs given by Michaelis, plate 13, xxvii. D, though no actual adjustment of these two fragments one to another can be made from the casts. If the fragment with the hindquarter is rightly attributed, the length of the next slab, iv., may be approximately fixed, for immediately behind the hindquarter the marble is cut for a joint.

Of the fragments I have here enumerated, several might have been long since re-united to the slabs still remaining on the Acropolis to which they belong, if the sculptures now lying about there had been collected into one place, and examined by some one experienced in putting together ancient sculpture. The composition of the frieze of the Parthenon is so precious that no amount of labour or expense should be grudged which can tend to the recovery of the missing groups.

Considering the length of time during which the pieces recently united to the frieze have remained unexamined at Athens, we cannot feel sure that every extant fragment of it is known. It is matter of notoriety that at the time of Lord Elgin's visit, travellers were in the habit of carrying off such portable fragments of the frieze as they could obtain, and there is clear evidence that more than one slab was barbarously mutilated for this purpose. Among the morsels so carried off were (1) the fragment which so long lay unknown at Marbury Hall, where it was discovered by Mr. George Scharf in a box under the staircase, and generously presented to the Museum by its owner, Mr. Smith Barry; (2) the fragment so long preserved in the Villa Cataio, and now in the possession of the ex-grand duke of Modena; (3) the head purchased by the British Museum at the Pourtalès sale; and (4) the head at Karlsruhe (Michaelis, plate 13, xxvii. B). Who shall say how many more such precious relics still sleep in the oblivious dust of private collections? C. T. Newton.

ART NOTES.

M. François Forster, one of the most distinguished engravers of the French school, died recently at Paris, at the advanced age of eighty-two. M. Forster was the intimate friend and compatriot of Léopold Robert, and many interesting details concerning him and his earlier life will be found in the "Correspondance inédite de Léopold Robert" which M. Charles Clément is at this moment bringing out in the *Gazette des Beaux-Arts.* Amongst his principal works may be cited the "Vierge au bas relief," after Leonardo da Vinci; "Sainte Cécile," after Paul Delaroche; "Énée et Didon," "Aurore et Céphale," after Gros; and the "Trois Grâces," "Vierge à la légende" and others, after Raphael, his favourite painter.

M. le Baron Cloquet has recently presented to the Louvre collection one of the finest pieces of Palissy ware in existence. It is a very large oval dish. The border is composed of foliage; in the centre lies a lobster holding in its claws a dying fish. The state of its preservation and the perfection of its enamel leave, it is said, nothing to be desired by the most fastidious amateur.

The statue of Ronsard was inaugurated at Vendôme on the 23rd of June. It is the work of M. Irvoy, professor of sculpture at the art-school of Grenoble.

We learn from the *Chronique des Arts* that the administration of the Louvre have recently acquired a very good picture by Poterlet, an almost unknown painter who died at Paris in 1835, at the early age of thirty-two. The subject of the picture is the dispute between Trissotin and Vadius in the *Femmes savantes.*

A very fine collection of English medals has been recently purchased by MM. Rollin and Feuardent, the well-known Parisian antiquaries.

A memorial to Winckelmann has been erected in the hall of the staircase of the Japanese Palace at Dresden. The memorial consists of a bronze portrait medallion in relief, by Brossmann; the marble tablet which forms the background was executed from a design by Richard Steche. The memorial was solemnly uncovered in commemoration of the hundredth anniversary of Winckelmann's death, which occurred June 8, 1768.

The art-school for women at Munich has just been voted a yearly subvention of 6000 florins by the Bavarian government.

Wilhelm v. Kaulbach is at work on a new composition, "Die Verfolgung der Christen unter Nero," which is said to be of a very high order of merit. At Munich the restoration of the frescoes by Professor Rottmann under the Hofgarten arcades is going on but slowly, and seems likely to be a work of some years. Professor Zumbusch has now completed the last and principal figure for the national memorial to King Maximilian II. The work has been largely visited in the professor's atelier, and has excited great admiration.

The *Zeitschrift für bildende Kunst* for July contains a very spirited etching by W. Unger, after a Poussin in the Cassel Gallery. The subject is "Satyrs and a Bacchante"; the composition is full of animation and swing, but we miss the refinement of charm usually characteristic of Poussin.—Carl Justi contributes in the same number an article on "Philip von Stosch und seine Zeit," which will be found worth reading by all who take an interest in the movement of antiquarian research going on in Italy during the first half of the last century.—Phil. Sylvanus concludes his notice of the designs for the parliament houses of Berlin.—"R." calls attention to the wholesale destruction of old Nuremberg which is now going on: he says that now that the official rage for pulling down has once begun its brutal work in the outer part of the town, it is fast pressing towards the centre—the White and the Lauferschlag towers are to be the next sacrifice.

"Denn alles, was entsteht,
Ist werth, dass es zu Grunde geht.

H. Ludwig contributes an essay on the possible use of petroleum in oil-painting.

The Print Room at Dresden has just received an exceedingly important and valuable gift. Geheimrath Dr. Müller, who is well known as a zealous amateur, has presented 178 drawings by modern masters, the best and most valuable of his magnificent collection of modern drawings. With the exception of some drawings by D. Chodowiecki (the engraver of "Les Adieux de Calas," 1768; but perhaps best known by his twelve illustrations of Clarissa Harlowe), all these drawings represent the school which begins with Carstens. From his hand there is a drawing of the "Four Seasons." There are also examples of Thorwaldsen, Reinhardt, Koch, Cornelius, Overbeck, Veit, Führich, Steinle, Delaroche, Léopold Robert, Calame, Callow, Copley, and others.

The American painter and poet Thomas Buchanan Read died at New York on the 11th May last. Mr. Read is best known by his paintings of "The Lost Pleiad," "Undine," "The Star of Bethlehem," and his portraits of Longfellow's children, of General Sheridan, and Mr. Peabody. A complete collection of his poems appeared in 1860.

The Institute of Painters in Watercolours has just been deprived by death of a valuable member, Mr. Henry Tidey, elected in 1858. He early distinguished himself as a portrait-painter, but has of late devoted himself entirely to poetic subjects. His "Feast of Roses" was purchased by the Queen, and "Dar-

thula," by the Duke of Manchester. He took a lively interest in all theoretical questions connected with his art, and was recently nominated vice-president of the Society for the Encouragement of the Fine Arts.

The *Times* of Monday, July 22, under the heading, "Temple of Diana at Ephesus," contains a summary of the report made to the Dilettanti Society by a committee chosen out of its own members, on the results of the recent excavations at Ephesus. Mr. Wood obtained the first clue in exploring the great theatre at Ephesus by the discovery of an inscription laying down the route by which, on the birthday of the goddess, her treasures were to be carried in procession from the temple to the great theatre, and back to the temple through another city gate called the Magnesian. Mr. Wood soon discovered one of the two gates. From it issued an ancient road flanked by sepulchral monuments of the Roman period. The line of this way pointed to a north-east direction, and outside another gate near the Stadium a second road was discovered, converging towards the one already partially traced. Following these converging tracks in April, 1869, Mr. Wood struck upon the wall enclosing the *peribolos* of the temple, at an angle in the masonry of which was inserted in duplicate an inscription in Greek and Latin, stating that the emperor Augustus, out of the revenues of the goddess, had rebuilt the *peribolos* wall round her temple. After tracing the two lines of wall a short distance, all sign of them was lost, and the temple had to be sought by sinking pits within the presumed area of the *peribolos*. Here the alluvial soil ran deep, averaging 22 feet above the ancient surface. At length, in April 1870, Mr. Wood came upon a pavement of white marble, on which were lying fragments of ancient sculpture. These remains were found 18 feet below the surface; immediately above the pavement was a stratum of splinters of white marble, partially calcined by fire. As the area of excavation was enlarged on this spot, remains of Ionic architecture cropped up everywhere. In February, 1871, part of the lowest drum of a column 6 feet 1 inch in diameter was found in its original position. To this succeded, in the autumn of 1871, the discovery of another drum nearly entire, on which was sculptured a group of male and female figures. Fragments of two more sculptured drums, a pilaster with a fine group in high relief, capitals, bases, and drums of columns, were lying in heaps at the bottom of the excavation at the close of the year 1871. The *Caledonia* was promptly despatched by the Admiralty, and took on board upwards of sixty tons of marbles in January last. Since the beginning of the year Mr. Wood has made ready for carrying on further works in the autumn. The question now is, how far is the nation disposed to aid him in this gigantic undertaking? Is this enterprise so important, and hitherto so vigorously conducted, to be left to languish for lack of sufficient funds at the very moment when its prospects are most brilliant?

The paintings executed by Hans Makart for the dining-room of Herr Nicolas Dumba (see *Academy*, vol. iii. p. 26) will not, we hear, fill the situation for which they were intended, but are still in the market.

The Roman burying-place discovered at Ratisbon in the course of excavations for a railroad continues to yield a variety of curious and interesting objects. A large glass urn containing a gold filigree ring with pearl attached has been found, and, what gives rise to more speculation, a separate burying-place for horses, or some other animal, whose bones are found upon a thick layer of egg-shells; an urn on the same spot contained two eggs in an almost perfect state of preservation.

The first volume of Dr. Hermann Grimm's *Life of Raphael* is now ready for the press, and will shortly appear in print.

A correspondent writes to us from Cassel, where the yearly meeting of the General Society of German Musicians took place a short time ago. The chief aim of this society and of the concerts connected with its meetings is to introduce the works of young composers to the public, and the programmes of its performances consist chiefly of the representative work of the rising generation. This fact explains the general tendency towards the "future," the more so as the society counts amongst its members one of the leaders of the progressive movement, Franz Liszt. The oratorio of *St. Elizabeth*, by this composer, was the most important work of this year's concerts, and the presence of the master himself made the whole appear almost in the light of a Liszt festival. Still we notice also the names of the chief representatives of other schools, *e.g.* Brahms and Rubinstein, in the programme. Amongst the new orchestral works of importance our correspondent mentions particularly an overture by Severin Svendsen, a young composer of Norwegian birth, but educated at the Leipzig conservatoire, and imbued with the spirit of the best German masters. He is well known to the musical public in Germany by a symphony and numerous compositions of chamber music. The present work is a symphonic introduction to Björnstern-Björnson's tragedy of *Sigurd Slembe*, and the character of that hero is said to be rendered by the composer with unusual dramatic power and melodious beauty. The work was received by the public with great enthusiasm.

New Publications.

Desnoiresterres, G. La Musique française au xviiie siècle. Gluck et Piccinni, 1774–1800. Paris: Didier.

Gaedertz, Th. Hans Holbein der Jüngere u. seine Madonna d. Bürgermeisters Meyer. Mit den Abbildgn. der Darmstädter u. der Dresdener Madonna. Lübeck: Bolhoevener.

Gervais, E. Lessing's Kritik üb. die dramatische Poesie. Berlin: Calvary. (Königsberg: 1871.)

Hamann's, Johann Georg, Schriften und Briefe. Im Zusammenhang seines Lebens erläutert und herausgegeben von Moritz Petri. Erster Theil. Hannover: C. Meyer.

Ilg, Albert. Ueber den kunsthistorischen Werth der Hypnerotomachia Polyphili. Ein Beitrag zur Geschichte der Kunstliteratur in der Renaissance. Wien: Braumüller.

Kuh, E. Zwei Dichter Oesterreichs: Franz Grillparzer—Adalbert Stifter. Pest: Heckenast.

Pervanoglu, P. Das Familienmahl auf altgriechischen Grabsteinen. Eine archäologische Untersuchg. Leipzig: Engelmann.

Wackernagel, W. Geschichte der deutschen Litteratur bis zum dreissigjährigen Kriege. Supplement. Basel: Schweighauser.

Theology.

THE POSITION OF THE SYNOPTIC QUESTION.

The Gospel of St. Mark and its Synoptic Parallels. [*Das Markusevangelium und seine synoptischen Parallelen*, erklärt von Dr. Bernh. Weiss.] Berlin: Hertz.

It is almost ten years since the present reviewer published a work on the synoptic gospels, in which the theory was maintained at some length that their common root is to be found in "the gospel according to Mark." The current of critical opinion continues to flow in that direction, though it is fair to mention that some eminent theologians represent an opposite tendency in favour of Matthew. Mark, either in its present or in an earlier form, is generally accepted as the foundation, and a collection of sayings and discourses of the Messiah ascribed to Matthew as an important source, of the synoptic literature. This view was at once adopted by writers of such various theological positions as Weizsäcker, Schenkel, and Wieseler on the Protestant and Sepp on the Roman Catholic side. Since 1863 (Ewald, Meyer, Bunsen, Volkmar, Ritschl fall earlier) the priority of Mark has been accepted by Renan, Hausrath, Uhlhorn, Ueberweg, not to mention less known writers. Wittichen's essay, "On the Historical Character of the Synoptic Gospels" (*Jahrbücher für deutsche Theologie*, 1866, p. 427, foll.), may also be added, inasmuch as it distinguishes the now existing from the original Mark only by the absence of that Jewish colouring which made the gospel unsuitable for Gentile readers. The substantial agreement of Wittichen with the present writer is still more evident from his supposition of a second record, in order to account for the common element in Matthew and Luke.

Another class of critics maintain the priority but not the originality of Matthew, *e. g.* in England Sir R. Hanson in *The Jesus of History*, who maintains that this gospel has passed through various stages, from the collection of λόγια to the present text. In Germany we must first of all refer to Hilgenfeld, who has not only returned to the defence of his old anti-Baur position in an essay entitled "Mark between Matthew and Luke" (*Zeitsch. f. wissensch. Theologie*, 1866, p. 82, foll.), but in some later researches (*ibid.* 1867, p. 303, foll.; 366, foll.; 1868, p. 22, foll.) has described Matthew as a "tertiary" formation, the lowest stratum of which is demonstrably that Aramaic "gospel according to the Hebrews" the fragments of which he about the same time collected (*Novum Testamentum extra canonem receptum*, 1866, p. 14, foll.). This last opinion, however, so often maintained from Semler to Baur, is rejected by all other critics, Sepp excepted. The "gospel according to the Hebrews" is probably only an Aramaic edition of the Greek Matthew, accommodated to the wants of the Jewish Christian sect.

We pass to Holland. In 1863 Lamprechts showed convincingly that Luke was dependent on Mark. Meijboom (*Geschiedenis en Critiek der Marcus-Hypothese*, 1866) and Michelsen (*Het Evangelie van Marcus*, 1867) maintained the originality of Matthew and Mark respectively, the latter, however, carefully distinguishing between a Protomarcus (who alone lived before the fall of Jerusalem) and a Deuteromarcus. Scholten, the real head of the Dutch school, adopted this distinction in *De oudste Evangelie*, 1868, where he made a sketch of the life of Christ by John Mark and the collection of λόγια by Matthew the lowest strata of the evangelic literature. From the λόγια and an enlarged edition of Mark proceeded the existing Matthew, which, however, as in the case of Mark, we only possess in a final church-redaction, so that Scholten, like Hilgenfeld, can speak of a Tritomatthaeus. The controversy does not seem to have worked itself out in Holland any more than in Germany; at least, A. D. Lomans and Hoekstra, in the *Theologisch Tijdschrift*, occupy only middle positions.

"Via Media" has in fact become the watchword of recent synoptic criticism. A whole series of works, the most mature of which is the commentary at the head of this article, are devoted to the object of distributing the features of originality between Matthew and Mark. The first in the field was Gustave d'Eichthal (*Les Évangiles*, vol. i. 1863), who is in the main inclined to Matthew, and discovers in Mark distortions of the traditional accounts. The case of the latter is judged somewhat more favourably by Klostermann (*Das Marcusevangelium*, 1867), who makes out Mark to be not only the *pedissequus Matthaei*, with Augustine, but also the speaking-trumpet of Peter. And similarly Grau in his *History of the Development of the New Testament Literature* (vol. i. 1871), the theory of which is the mutual dependence of Matthew and Mark, resulting in the predominance of the collection of λόγια in the one case, and of the oral communications of Peter in the other. Professor Weiss, too, with whom we are more immediately concerned, has been endeavouring from time to time in the course of the last ten years to establish a middle position. He still maintains the (in our opinion) unnatural and untenable theory that our second gospel is based *at once* on the record left behind by Matthew and on the oral teaching of Peter. The former, *i. e.* the λόγια, combined with our present Mark, seems to have formed the foundation for our present gospel of Matthew.

Two points will at once occur as questionable. First, that on Dr. Weiss' theory the work of Matthew was already known by our second evangelist. And next, that it is supposed to contain not only discourses but narratives from the first appearance of the Baptist to the story of the Passion. The former view is held by Weiss in common with Ewald and Meyer; the latter, so far as we know, has only been adopted by Wiesinger. Both views, of course, hang together. For since no discourses of any length are reported by Mark, except the Judaeo-Christian apocalypse in the thirteenth chapter, the work of Matthew (if Mark made use of it) *must* have contained a narrative element. And so the group of sketches in our present Mark will fall into two series: (1) a larger one containing such as are based on the recollections of Peter, which would naturally be sporadic and unconnected, and may be recognised by their picturesqueness of details; and (2) a smaller one, comprising those edited after the aphoristic notes of Matthew. It is obvious that in such an accidental combination of elements no reliance can be placed on the plan and sequence of the parts, and if for no other reason the adherents of the strict "Mark-hypothesis" must protest against the partial nature of the support given to them by Weiss. "The peculiarity of Mark's composition is the way in which, through the succession of single pictures and groups of narratives, he brings into relief the pragmatic progress by which, according to his general theory, the public life of Jesus was distinguished." These words of Dr. Weiss almost remind one of Volkmar, who explains the whole of Mark as a Pauline system of dogmatics in a historical form. The only distinction is this, that Volkmar explains the entire contents of the second gospel as a purely imaginative composition, as Baur has done with regard to the fourth, while Dr. Weiss cannot admit the slightest doubt of a delineation based on a twofold apostolic testimony. As a rule he thinks it superfluous to touch at all on this side of the matter. If, on the other hand, the framework, into which Mark succeeds on the whole in bringing the life of Jesus, corresponds not so much to real history as to the "general theory" of Mark, this is not displeasing to a theologian who, like Dr. Weiss, assumes the historical character of the fourth gospel. Others, like ourselves, will regret to see the important results of the "Mark-theory" called so needlessly into question, and that by one who has so little perception of the transitions of style as to regard viii. 27–x. 45 as a connected section relative to the training of the disciples.

Our author's criticism of the well-known hypothesis of Griesbach, according to which our present Mark is an epitome of the first and third gospels, is excellent. That hypothesis is, however, far from being extinct. In particular, the lives of Jesus by Strauss (second edition) and Keim proceed from the same assumptions (not, indeed, maintained at all strictly by the latter), and Zeller (*Vorträge u. Abhandlungen*, 1865, p. 442, foll.; *Zeitsch. f. wiss. Theologie*, 1865, p. 308, foll.; p. 385, foll.) has attempted both upon general grounds and by special instances to prove that they are still valid.

This school of critics has been answered by Hilgenfeld (1866, p. 91, foll.) and Hanne, and also by Weiss, who observes that Strauss and Keim have only pointed out the extreme consequences of the unfavourable verdict on Mark, but not succeeded in finding any traces of a later age, and still less in making at all distinct the compromising tendency ascribed by the Tübingen school to the supposed epitomator (p. 8). He also makes some short but telling remarks on scholars, who, conscious of their own incapacity to solve the synoptic problem, find it convenient to deny the facts *in toto* as inventions of the modern mania for hypothesis (p. 10). Thus a Roman Catholic, Dr. Friedlieb (*Prolegomena zur bibl. Hermeneutik*, 1868, p. 127, foll.), refers everything to the oral teaching of the apostles (!), and a Protestant theologian, M. Godet, in his *Commentaire sur l'Évangile de saint Luc*, has tried to show in detail that the principle of oral tradition is

on the one hand so sound, and on the other so elastic, as to explain all the difficulties whether of coincidence or divergence in the synoptic gospels.

It may not be out of place to remark that the present writer has found no reason to abandon his own hypothesis, which, in spite of some modifications in details, still appears to him as that which accounts by the simplest means for the largest number of phenomena. As a test of its correctness, applied to the observation of details, the reader may be referred to a paper on the original position of Luke vi. 39, 40, Matt. xv. 14, x. 24, by W. Brückner (*Studien u. Kritiken*, 1869, p. 616, foll.). A successful effort to popularise synoptic researches has been made by E. Zittel in his work, *Die Entstehung der Bibel* (1872, p. 103, foll.), which may also be recommended as a thoroughly readable summary of Biblical investigations in Germany.

The recent revival by Noack of the theory which makes Luke the earliest of the evangelists is curious, and nothing more. The point really at issue is whether Matthew or Mark has the priority, and how nearly unanimous the supporters of the latter have become may be seen from Ewald, who, in his latest work (*Die drei ersten Evangelien und die Apostelgeschichte*, vol. i. 1871), approximates more closely than before to the view of the present writer. He now thinks that the collection of λόγια had already been rendered into Greek, when it was employed by the authors of our synoptic gospels. In relation to Mark, his procedure seems to us by far too artificial, that writer's sketch of the life of Jesus having been combined, according to Ewald, with Matthew's collection of λόγια. The work thus produced was known, he thinks, to the authors of the first and third gospels in a more complete form than we now possess; the sermon on the mount in particular has dropped out of the text at Mark iii. 19. It follows that the remarks of Dr. Weiss (p. 18) on Ewald's position are inaccurate, although the views of the latter in their present modified form were published as long ago as 1850. As for Dr. Weiss's further remarks against the hypothesis of the present writer, they are met by anticipation in contributions of the latter to Schenkel's *Bibel-Lexicon* (vol. ii. pp. 207, foll.; 217, foll.; 416, foll.; and vol. iv. pp. 67, foll.; 121, foll.; 135, foll.), to which the reader may be referred.

H. Holtzmann.

Paul of Tarsus. An Inquiry into the Times and the Gospel of the Apostle of the Gentiles. By a Graduate. Macmillan.

The style of this work reminds us much of *Ecce Homo*. Indeed the similarity both of style and (we might add somewhat conjecturally) also of standpoint is so great that we might have been led almost to identify the writers. We miss, however, in *Paul of Tarsus* that admirable method and clearness of development which was characteristic of *Ecce Homo;* and the style, along with striking resemblances, is inferior in reserve and self-command.

The book is not, as might be supposed, a life of St. Paul, or a progressive sketch of the course of Christian theology. It presents, so to speak, a horizontal rather than a vertical section of the apostolic age. It depicts the conditions under which St. Paul lived, the sort of ground on which he worked; and it also gives a general outline of his teaching. But it does not trace (except here and there incidentally) the successive development either of his missionary career or of his theology. It is a bird's-eye view of the whole seen at once.

The writer is fond of dealing with things in masses—broadly, and by means of a few prominent instances, rather than with any minuteness of detail.

He cuts the critical knot at once in the preface by accepting all the writings attributed to St. Paul—except, of course, the Epistle to the Hebrews—as genuine (pp. vi, 56, 105, 178). It is the major premiss of the negative criticism that the author contests; he admits the facts observed by the critics, but denies that they prove so much as they are supposed to do. The Acts are sparingly used; and the critical difficulties that arise in connection with them are therefore not discussed.

The broad and general mode of treatment that the author has adopted removes for the most part the occasion for criticism; but in some cases we think that it has led him into mistakes. Thus an impartial review of the evidence compels us to place the establishment of episcopacy considerably earlier than the middle of the third century (p. 144). Too much is made out of a single expression in the famous passage of Justin (ὁ προεστώς, *Apol.* i. 65—Nablous, by the by, is Sichem, not Samaria, p. 116). His apology was addressed to a heathen, and would naturally avoid technical terms. But our author seems to have forgotten the Epistles of Ignatius.

Then we think he is a little too hard upon celibacy. After all Fra Angelico, Savonarola, and Michel Angelo were celibates; and the relation between their celibacy and their excellence is not altogether accidental. It is true that celibacy has been abused by being made a compulsory institution; true also that St. Paul advocated it for special reasons. But these reasons are such as may recur. "Every man hath his proper gift of God, one after this manner, and another after that."

We agree with the author in the main; but we think that he takes sides a little too much, and does not always do full justice to that to which he is opposed. He cannot dismiss from his mind the controversies of the present in dealing with the past. Anything that is hierarchical, ascetic, or dogmatical, arouses his wrath. On the other hand, he takes a peculiar interest in all the political and secular side of St. Paul's activity; and his sympathies or antipathies are thus continually engaged.

The work is essentially that of a layman, widely if not deeply read, and a master of vivid presentation. For ourselves we should perhaps at times prefer somewhat quieter tones; but that is a matter of taste. The author seems to us to be moving—both in what he rejects and in what he retains—in the right direction: and there can be no doubt that his book will have a stimulating influence, though it does not enter sufficiently into detail to make any marked addition to our knowledge of the life and theology of St. Paul.

W. Sanday.

Intelligence.

M. Émile Burnouf's *La Science des Religions* (Paris: Maisonneuve) is about to appear in a new and, we may hope, revised edition. The book is not without literary merits, and the introductory chapters contain some intelligent and well-timed remarks. But the author's application of his method is the most perverse which it has been our lot to meet with since the unhappy works, one of which is appealed to as an authority by M. E. Burnouf, of Mr. Ernest de Bunsen. The least unsatisfactory portion is that on the religions of the eastern Aryans, yet there is nothing even here to indicate that accurate knowledge of the sacred writings which we have a right to expect from a Burnouf. "The Zend-Avesta," we are told, "contains explicitly the whole metaphysical doctrine of the Christians." "Almost all the elements of the legend of Christ are found in the Veda." "[The central event of Holy Week] is twofold: it is at once and in an indissoluble manner the resurrection of Christ and the renewal of fire." "At last [in the Office for Holy Saturday] Christ appears under his true name of *Agnus*, which may well be *Agni* under a Latin form. Then they recite the following prayer, where in a few phrases the 'mystique' of the whole paschal rite is expounded: 'O night truly happy, which has despoiled the Egyptians (in the Veda, the Dasyus) and enriched the Hebrews (the Aryas)!' &c." "The re-

ligion of Christ has not come to us from the Semites, but 'the ancient law' contained a portion of Aryan doctrines which Jesus came 'not to destroy, but to fulfil.'" "The mass of the people of Israel were Semitic, and attached themselves to the worshippers of Elohim, personified in Abel. The others, who have always formed the minority . . . were probably Aryas: their principal centre was fixed to the north of Jerusalem in Galilee." "It [Genesis] simply reproduces, under an abridged and diminished form, the Aryan traditions of central Asia." Such gross perversions of facts cannot be allowed to pass without an expression of surprise at the levity of the author and the credulity of the reading public.

A revised edition of Knobel's commentary on Isaiah, by Professor Diestel, requires no commendation. It was manifestly too soon after the last edition to think of entirely recasting the work; hence the additions are for the most part confined to notices of the views of more recent commentators (Delitzsch, Cheyne, Seinecke), and references to Assyriological researches, which will prove of great value to the student.

We may also call attention to Wellhausen's critical notes on the text of the books of Samuel (slightly crude, but more methodical than Thenius), and to the accurate edition of the Palestinian text of Isaiah, by Baer and Delitzsch.

Contents of the Journals.

Studien und Kritiken, 1872, No. 4.—Schürer on the ἀρχιερεῖς in the N. T. [The term includes all the members of the families from which the high-priests were chosen.]—Grimm on the problem of 1 Peter.—Bender on the question of miracles.—Zyro on Matt. vi. 11, and on James iv. 5.—Sayce on the besieger of Samaria, with Schrader's remarks. [Seems to have been written a good while before publication.]—Kamphausen on *The Speaker's Commentary*. [A more lenient judgment than might have been expected from the editor of Bleek's *Introduction to the Old Testament;* and one cannot help feeling that it has been slightly influenced by a supposed representative character which attaches to the *Bible Dictionary* in a much higher degree than to *The Speaker's Commentary*. The latter work, in fact, represents but a section of the actual church of England. "Credit is due," according to the writer, "for the diligence with which the church-version has, even in minor points, been tested by the original." . . . . "Yet it must be said that much more might have been done if the Anglican scholars had displayed a higher degree of care and tact in linguistic matters." With regard to exegesis, the verdict is still less favourable, for "this [commentary] absolutely repudiates the scientific character, inasmuch as it is almost throughout subservient to the false [kind of] apologetics." Just praise is given to the treatment of geographical and archaeological points; also to the abstention of the writers from polemical bitterness and homilitical unction. A sense of humour is shown in directing the student's attention to concessions inconsistent with "orthodoxy."]—Engelhardt on Spiess' *Logos Spermaticos*.

Jahrbücher für deutsche Theologie, vol. xvii. No. 2.—Principal Reviews:—Schröring and Märker on passages of Samuel; English works on Isaiah; by Diestel.—Meyer and Overbeck on Acts; by W. Schmidt.—Weiffenbach on James ii. 14–26; by Weizsäcker; and (together with Hulter on James) by W. Schmidt.—Weiss on Mark; by Wiesinger.—Heinrici on the Valentinian Gnosis and the Holy Scripture; by Weizsäcker. [Severe.]

Theolog. Literaturblatt (Rom. Cath.), June 4.—Berger and Zürcher on the history of the Constance council; rev. by Schwab.—Weiss on Basil and the two Gregories; rev. by Reusch.——June 18.—Reinke's *Beiträge;* rev. by Reusch.—Schröder's *Sanct Brandan;* by Birlinger. [An Irish legend transported to Germany by the Scottish monks.]——July 2.—Grau's *History of N. T. Literature;* by Langen. [Full of original views, but separated from the necessary proofs.]

Monatsschrift für Gesch. u. Wiss. des Judenthums, June.—The integrity of chaps. xxvii. and xxviii. in Job; by Dr. Grätz. [These chapters are inconsistent with the previously expressed sentiments of Job, but very suitable for Zophar. According to the present arrangement, the latter only speaks twice, whereas the other two friends speak thrice. The introductory formula has dropped out of the text.]——July.—The Sources of the Philonian Logos.—The Additions in the LXX. Version of Job; by P. F. Frankl. [Drawn from an old Aramaic Targum.]—Register of Sins in Ewald's *Hebrew Grammar*. [Professedly "out of respect for the public and regard for the dignity of science;" but there is room for doubt. The author rates the respect of Christian scholars for Ewald's authority far too highly. And it seems to us both paltry and useless to irritate the feelings of a great scholar, who once led the van of Semitic philology. It would be a consolation to a less generous mind than Ewald's to think how easily any non-Jewish scholar might pull to pieces some of the philological articles in the *Monatsschrift*.]

Jüdische Zeitschrift (ed. Geiger), vol. x. Nos. 1 and 2.—The Moral and Date of the Book of Tobit; by A. Kohut. [A covert polemic against the Zarathustrian prohibition of interments, which was extended to the Jews at the date of the composition of the book (in Persia, probably under Ardeshir I.]—Wellhausen on the Books of Samuel. [A very valuable review.]—Kohut's Persian translation of the Pentateuch by Tavus. [Criticism of details.]

New Publications.

Biblia Sacra. Codex Vaticanus. Tom. III. (Psalms–Sirach; ed. Vercellone et Cozza.) Romae: Spithoever.

Cyrillus. In S. Joannis Evangelium. Accedunt in D. Pauli epistolas quaedam fragmenta etc. Ed. P. E. Pusey, A.M. Oxford: Clarendon Press.

Holtzmann, H. Kritik der Epheser- und Kolosserbriefe. Leipzig: Engelhardt.

Jesaias. Textum Masoret. accuratissime expressit, e fontibus Masorae varie illustravit etc. S. Baer. Praefatus est Fr. Delitzsch. Leipzig: Tauchnitz.

Mai, A. Nova Bibliotheca Patrum. Tom. VIII. Ed. Cozza. Romae: Spithoever.

Prophetae Chaldaice. P. de Lagarde e fide cod. Reuchliniani ed. Leipzig: Teubner.

Scholten, J. H. Der Apostel Johannes in Kleinasien. Aus dem Holländischen. Berlin: Henschel.

Physical Science, &c.

Le Soleil. Par le P. A. Secchi, S.J. Paris: Gauthier-Villars, 1870.

Spectrum Analysis in its Application to Terrestrial Substances and the Physical Constitution of the Heavenly Bodies. By Dr. H. Schellen. Translated by Jane and Caroline Lassell, and edited with Notes by William Huggins. Longmans, 1872.

We know of nothing which gives us a higher or more hopeful idea of the possibilities of modern science than the progress which has been made during the last five years in the study of the sun by the new method; a method the enormous power of which is not yet recognised whether we consider either the work it is capable of doing or the influence which the generalisations which it renders possible must have upon the science of the future.

What has already been accomplished in this time? Faye's beautiful but unsound theory as to the nature of sun-spots has been entirely swept away, while the idea of Wilson, that sun-spots are cavities, has been absolutely established—a result which it seemed almost hopeless to arrive at by the telescope alone, seeing that even the great Kirchhoff thought himself justified in considering them as clouds. But much more sound and certain knowledge than this as to the nature of sun-spots has been gained: the vapours which affect the spot-level are now in part known; what happens to spots in the various divisions of the sun-spot period is now more than suspected; the velocity of the currents of the various vapours in the spot itself, as contradistinguished from that at higher levels, has been determined, while we are rapidly accumulating knowledge which we may hope will soon enable us to state the exact cause of the formation of a spot.

To the outsider, however, most of the interest attaching to the recent work is associated with the prominences—and perhaps with reason, for here the unfolding has been of a really startling character to him. For the first time we have been permitted to enter into the mysteries of an unseen world, where the visible is beggared at every step. The eye and the telescope together tell us of a sun wondrous in its spots and its faculae, and there the record ends; but now the astronomer, as it were, "*feels* from world to world," and the spectroscope enables him to detect action as far removed from those ordinarily known to occur in the sun's atmosphere

as the rushing hurricane is from the quiet ripple on some fern-girt pool. But if the new knowledge thus acquired has been of the sensational sort, it has at the same time been of surpassing value, embracing solar chemistry as well as solar physics and meteorology. Not only can we now watch tremendous eruptions from the very bowels of the sun; the descent of the cooler materials; and the effect of mighty rushing winds, but we can divide the solar atmosphere, so to speak, into shells, and name the constituent materials, some of them new elements, of these shells, their simpler nature as we get higher in the sun's atmosphere being due to a thinning out of the various gases and vapours.

From these and other results, to which the space at our disposal does not allow us to allude, we have a thousand new problems to attack in solar physics. The spots have been found to have periods at which they are most and least numerous. Then is not this so with the prominences? Are the materials of the prominences always the same? Do they appear in zones as do the spots?—are types of hundreds of questions which will soon be answered.

But this is not all. This solar work has given a life to terrestrial spectrum analysis that it did not possess before, and discovery in this branch of knowledge has gone on hand-in-hand with the new outcomes regarding the sun. The changes which take place in the spectra of the same substances submitted to different conditions have been studied, and the results of these enquiries have tremendous bearing not only upon the spectrum of the sun, but upon the spectrum of every star that shines. Hence a host of other enquiries. Do the lines in the solar spectrum change as well as the spots on the sun's surface? Is their thickness always the same?—and then, knowing that this varying thickness is due to varying pressure, as the varying brightness is due to varying temperature, we have the further queries, Is the pressure of the hydrogen or the magnesium vapour visible outside the sun always the same?—and, finally, Is the sun always of the same size?

These results, and these enquiries directly founded upon them, are on such a stupendous scale that the interest connected with them has broken bounds, and we find the general public as anxious to be informed as to these matters as scientific men themselves: hence a demand for popular expositions not only of the recent discoveries, but of the processes on which the new work is based and of the associated facts.

The two books at the head of this article are among the attempts which have been made to supply this want: one of them is by Father Secchi, the Directory of the Observatory of the Roman College; the other by Dr. Schellen, Director of the Realschule at Cologne. The books are, moreover, to a certain extent complementary to each other, as in the one we find the new work discussed in relation to the sun, while in the other spectrum analysis—the method of the work—is the author's keynote.

Let us deal with Father Secchi's book first. In the first part, that dealing with the structure of the sun, we are introduced to the general aspect of the sun, and here, in the first hundred pages, we have certainly the most valuable part of the volume, for Father Secchi has a fine telescope, and observes in a locality where at times the air is peculiarly pure; and as the various detailed descriptions are accompanied by drawings, many of them never before published, an exceedingly good idea may be gathered by the general reader of this class of observations, more especially as here and there very practical descriptions of the method of work are given. We may especially refer to pp. 66–80, in which the *voiles roses*, now and then seen in spots by means of the polarizing eyepiece in which no coloured glasses are employed, are referred to. The history of the spot of 23rd January, 1866, will be read with the greatest interest.

It is to be regretted that the author has not preferred to postpone his general conclusions until the reader is in a position to bring all the now available knowledge to bear upon the enquiry, and that the conclusions are so scattered, and at the same time so contradictory, that Father Secchi may claim to have promulgated any of the ideas on sun-spots which may hereafter come to be established. At p. 64 we have two hypotheses given as to the formation of sun-spots, one the up-rush theory, the other the cyclone one. On this we read: "Nous pouvons regarder la première opinion comme plus probable; le mode de formation des taches semble bien indiquer une éruption de l'intérieur vers l'extérieur;" elsewhere we find the cyclone preferred. This, however, is a detail compared to Father Secchi's explanation of the dark appearance of sun-spots which he appears to have settled entirely to his own satisfaction. Before we refer to this, however, we must say one word by way of introduction touching the hypothesis of Faye, to which we have before referred. Faye imagined a gaseous nucleus of intensely heated but feebly *radiating* gas. Balfour Stewart objected to this that a gas, if it were a feeble radiator, would be a feeble absorber, and that therefore we should see the photosphere on the other side of the sun through this gas. Father Secchi, who does not seem to see the reasoning on which this objection is based, writes: "On a objecté que le soleil ne saurait être gazeux sans être transparent," and then refers to the *absorption* in our own and the solar atmosphere to prove the contrary. Here, again, Father Secchi must take his choice. If the sun's interior is hotter than the exterior, as he affirms elsewhere, these objections are those of one ignorant of the matter.

The other portions of the work are chiefly remarkable for the skilful manner in which the author gives the idea that in all the recent progress he alone has borne the heat and burden of the day. Father Secchi has an idea of solar planetary tides; he therefore states that the Kew pictures have not yet been reduced: he refers to the work which has established that sun-spots are regions of greater relative absorption. Here he states his conclusions have been *endorsed* by an observer who published the discovery some time before Secchi had repeated the observation. Father Secchi has not yet apparently observed with sufficient optical means to enable him to detect the alterations of wave-length due to the motion of the various gases and vapours (although he has stated that he has noticed an alteration of wave-length which he could only have seen had the sun's rotation been some hundred times more rapid than we know it to be!); hence, in a line, he discards all reference to the precious knowledge that has been acquired by this method of research. In the account of the use of the pile we find no mention of Henry, while the types of stars are not referred to Rutherford, as they should have been, and so on. Surely there should be nothing more disastrous for the reputation of a scientific man than such unfair dealing as this. It might be passed over with small notice in the production of a literary hack, who writes to sell, and who spices his productions with personalities in order that they may sell the better; but Father Secchi is not a literary hack, and he is not compelled to write books, and, when he does, he should add to his reputation for scientific research which has covered a wide field by placing it before the world with a higher regard for justice than that he has shown in too many instances, especially in regard to English work.

In Dr. Schellen we have an author much less practically acquainted with the researches on which he treats than Father Secchi, and to this must be attributed not only a

want of arrangement here and there, where we find the same work taken up over and over again, and the point of some of the recent observations and experiments missed—whence comes a curious rating of their importance—but also now and then an apparent unfairness, which will strike the reader conversant with the subject, but which, we believe, is unintentional.

We have first a description of the artificial sources of light and heat, followed by an account of the properties of light and of its analogies with sound, refraction, of course, holding a high place. We then get several chapters describing the various simple and compound spectroscopes in use, and the methods of showing and observing the various phenomena are stated. In the third part of the volume, the application of spectrum analysis to the study of the various celestial bodies is stated at great length. Here the illustrations are of the highest order, and the reproductions of the various standard maps of the solar spectrum are simply perfect, while full reference is made to the memoirs both of Kirchhoff and Ångström, as well as to all the recent memoirs touching both sun, stars, comets, nebulae, and so on, the recent eclipse observations being also discussed.

This must suffice us as a general description of the plan of the work.

In fact, the attempt made by Schellen is on the whole admirable in design and perfect in tone; and had the English translators, the Misses Lassell—who have done their part of the work in a most creditable manner—been fortunate enough to have found an editor competent to set themselves and the author right where a detailed knowledge of the subject was required, and with the same desire to do justice as the author himself has shown, the book might have been made as perfect as to the text as it is in its general scope, and its illustrations. Instead, however, of "crowning the edifice," and supplying defects, the editor has chosen to mar its symmetry with glaring blotches in the worst possible style.

Thus, in the elementary portion of the subject, we are treated to the terms "refractory index," p. 386; "position of minimum of (*sic*) deviation," p. 78; and we are told, p. 89, that "the *dispersion* of light is therefore to be clearly distinguished from *refraction*," the term deviation not being introduced. On p. 90 we have the general statement that "if the whole length of the solar spectrum be divided into 100 equal parts, the proportions of the colours will be as follows—red 12, orange 7, yellow 13, green 17, blue 17, indigo 11, and violet 23," without a word of reference as to the material of the prism, or to the irrationality of the spectrum. At p. 101, where continuous and discontinuous spectra are introduced, we find no word of the important discovery made by Frankland, that at high pressures the spectra of gases and vapours are as continuous as those of solids or liquids. On p. 115 we find the differential action utilised in direct-vision spectroscopes lucidly described as due to the "remaining rays" after the "dispersive power of the flint-glass" has been "partially destroyed" by the crown-glass. On p. 48 the separation of the poles of the electric lamp is thus described: "The separation is accomplished by the racks *c* and *f*, which before moved forwards, being made to go backwards by means of two connected cog-wheels, which can back them in either direction, a contrivance which helps to make the electric lamp one of the most complicated," &c. On p. 431, "motion-forms" of prominences, that is, the apparent forms seen with a fine slit, and due to alterations of wave length merely, are given as the actual forms of prominences! But after all, these are small matters, which are referred to as showing that the ordinary duties of an editor have to a large extent been neglected. What then has the editor done to the book? He has "enriched" it with notes against many of which, I believe, every true man of science who takes up the work will loudly protest. Having in an evil moment promised to review the book, I am bound to keep my promise, but the task of reading through these notes I confess has been one from which anyone having any belief in the ennobling influence of scientific work might well shrink. Let me quote one:—

"In Mr. Lockyer's communication to the Royal Society in October, 1866, there was no statement of a method of observation or of the principles on which the spectroscope might reveal the red flames. His suggestion consisted only of the following question: 'May not the spectroscope afford us evidence of the existence of the red flames which total eclipses have revealed to us in the sun's atmosphere, although they escape all other methods of observation at other times?'"—P. 417.

This requires no comment, except that it is noteworthy that this craving to deprive others of credit should be so closely associated with such a lack of skill; for it is confessed, p. 378, that, "when the position of the lines was known, Huggins saw them instantly with the same spectroscope (two prisms of 60°) which he had previously used in vain."

The author's account of the methods of viewing the prominences has given the editor an opportunity of treating the book in his peculiar manner. Let us take Sir John Herschel's description of the two methods.* We have first the reference to Mr. Huggins' arrangement, which consisted in "widening the slit sufficiently to admit of the whole prominence being included in its field, and absorbing the light of other refrangibilities so admitted by a ruby glass;" by these means "he was enabled distinctly to perceive *at one view* the form of the prominence." We then read, "Almost immediately after, Mr. Lockyer succeeded, by merely widening the slit of his spectroscope, *without the use of any absorptive media*, in obtaining a clear view of the forms in question."

In the opinion of Sir John Herschel, then, there certainly was a difference between the two methods, and yet the editor charges the author with inaccuracy when he refers to this difference.

But this is not all. In Mr. Huggins' communication to the Royal Society we read:† "A spectroscope was used; a narrow slit was inserted *after the train of prisms, before the object-glass of the little telescope*. This slit *limited the light entering the telescope* to that of the refrangibility of the part of the spectrum immediately about the bright line coincident with C." Observe the reiteration, "after the train of prisms," "before the object-glass of the little telescope," limiting "the light entering the telescope." Although the veriest tyro will recognise the absurdity of this position of the slit to serve the purpose stated, the position is referred to no less than three times. The editor now rewards the generosity of those who have hitherto refrained from pointing out this monstrous blunder by asserting, in a foot-note to the book under notice, as a correction to his communication to the Royal Society, that "the slit was placed in the focus of the small telescope, and not before the object-glass" (p. 423). The value to be placed on such a statement as this, in such a connection, we will leave the reader to determine.

Enough, however, of these parasitic growths, which, we trust, will disappear in a second edition, in the interests of author, translators, and publisher, all of whom deserve the thanks of all true friends of science for the production of this magnificent volume, which in its present dress, it must

* Herschel's *Outlines of Astronomy*, 11th edition, p. 723.
† *Proc. R. S.* vol. xvii. p. 302.

again be pointed out, is due to the efforts of two accomplished English ladies. May we hail this as a sign of the times!

J. N. Lockyer.

Notes and Intelligence.

The *Quarterly* has a carefully reasoned and, on the whole, penetrating article on Mr. J. S. Mill: somewhat too fragmentary and *décousu*, being rather an aggregate of criticisms on special points in his works than a real criticism of his philosophy. The reviewer seems to want the faculty of synthesis, the absence of which he signalises as a defect in Mr. Mill—a charge which is partly just, and partly mistakes for want of comprehensiveness in view and effort a cautious determination to state only definite results. The writer considers Mr. Mill's strength to be shown neither in the region of practice nor in that of the most abstract speculation, but in dealing with "the broad conceptions which are neither traced back to the fountain-head nor forward to the final issue, but which are based on reality and therefore strong." This estimate seems judicious, and so do most of the detailed criticisms, with the exception of an attack on the familiar economic proposition that the effective demand for labour is that of the capitalist and not of the consumer: here the critic's objections seem perverse and superficial, and his style unwarrantably supercilious and violent. But most of the metaphysical and logical points are well taken: as (1) that Mr. Mill follows at once the mentalistic and materialistic lines of phenomenalism without really reconciling them; (2) that he has qualified his nominalism till it has become conceptualism without his being aware of it; (3) that in attempting to distinguish "cause" from "actually constant antecedent" he has to introduce the notion "unconditional," while yet holding that not even the law of causation can be unconditionally affirmed. However, in his remarks on this latter point, the reviewer makes it evident that (though the article is entitled, "Mr. J. S. Mill *and his School*") he has not read Bain's *Logic*, where the causal nexus is referred to persistence of force. This extension of his reading might have modified his surely unfounded charge against this school as "addictos jurare in verba magistri." Every writer of Mr. Mill's influence has a crowd of followers of this sort: but no one has done more to foster independence of thought in the really serious thinkers who received their first impulse from him. The reviewer must have been thinking of philosophers of the dinner-table or the daily press.

Geography.

A New Caravan Route from Wadai to Egypt.—Writing from Alexandria to the president of the Italian Geographical Society, M. Jules Poncet says: "A perfectly new route through the Sahara to Egypt has been opened. About forty-five days ago (from July of last year) a great caravan of 2000 camels, with 400 cwts. of ivory, several cwts. of ostrich feathers, tamarinds, and from 700 to 800 slaves (the number remaining of 3000 who started with the caravan), came from Wadai to Egypt, reaching the Nile two or three hours' distance below the pyramids of Gizeh, without having touched upon the route from Sioot to Darfur. This is a new source of wealth for Egypt, and of misfortune for the victims of slavery." Commenting on this in the *Mittheilungen*, Dr. Petermann remarks that as yet there is not one direct route known from Wadai to Egypt. Fresnel, indeed, notices that from Kebabo, the chief point in the oasis of Kufarah, lying on the trade route from Wadai to Bengazi, an old route passes to the eastward, which probably led to the Egyptian oasis of Dakhel, while some degrees southward traces of an ancient way to Egypt, branching eastward from the former, are said to have been found. Has one or other of these abandoned routes again been brought into use, or has this great caravan chosen a new course? We would strongly urge upon Europeans living in Egypt the importance of examining this question; by this means they, like Fresnel, could render important service to the geography of the unknown eastern Sahara.

The Topography of Europe.—Since the year 1856, Herr Emil von Sydow has annually published in the *Mittheilungen* careful reports on the standpoints of European chartography, which by their great critical value have had an influence on both government and private undertakings. In his last report, which appears in the current number of the journal, von Sydow, in dealing with the Austrian government maps, draws attention to the great importance of the adoption of a scale uniform with that which has been found most suitable in other parts of Europe. It has been proposed in Austria to reduce the original manuscript surveys of the country, which are on a scale of $\frac{1}{25000}$ of nature, to that of $\frac{1}{75000}$ (a little less than 1 inch to 1 English mile) for the permanent topographical map of the country. Herr von Sydow is of opinion that a reduction to $\frac{1}{100000}$ would be in every way more suitable: firstly, because this scale would amply suffice to clearly show by far the greater part of the natural or cultivated features of the Austro-Hungarian Empire; and, secondly, because in those parts which are very minutely and artifically divided, the scale of $\frac{1}{75000}$ would not be sufficiently large, and a change to $\frac{1}{50000}$ for these districts would be desirable. He arrives at this view after many years' use of maps of France, Belgium, Rhenish Provinces, and Westphalia, which are drawn on the closely neighbouring scale of $\frac{1}{80000}$. Prussia is on the point of altering the scale of its map of the western parts of the monarchy from $\frac{1}{80000}$ to $\frac{1}{100000}$, and this change will render the entire map of northern Germany uniform. Saxony has fixed the scale of its new survey map at $\frac{1}{100000}$; the Dufour map of Switzerland is also on this scale; and the countries of South Germany which lie between them must soon adopt it; Sweden and Norway in the north, and Italy southward, have chosen the $\frac{1}{100000}$ scale, and yet between these it is proposed to have a map of the whole Austrian Empire on one slightly larger. This scheme cannot but be strongly deprecated, as it is directly opposed to all ideas of international unity; should it be carried out, and the map be prepared on the $\frac{1}{75000}$ scale, a change to that which has been more generally adopted could only be looked for after a long lapse of years. Perhaps a reduction to $\frac{1}{100000}$ may yet be determined on; we suggest it in the interests of many.

Physiology.

The First Stages in the Development of the Ova of the Common Trout.—Dr. Klein gives a good description of the first stages in the development of the trout (*Salmo fario*) in the fifth number of the *Monthly Microscopical Journal*. He states that up to the sixth hour the fertilised ovum presents a nearly uniform aspect under the microscope. It appears as a dull globe enveloped in a thick vitelline membrane, with irregularly distributed fat-globules. The earliest time he was able to perceive an indication of the blastoderm was after five hours and forty-five minutes, when it appeared as a small, more opaque, irregularly outlined spot, around which the fat-globules are accumulated; at the tenth hour the blastoderm is elevated into a little mound lying in a saucer-like depression of the yolk, and soon after it exhibits slow amoeboid movements. A median furrow then appears, which, some hours later, is crossed by one at right angles, these two furrows being visible at the end of the first day. At the end of the second day the surface of the blastoderm is so divided by furrows as to exhibit eight knobs, but after this the arrangement of the knobs or of the intervening furrows is irregular. Segmentation of the blastoderm into a mulberry-like mass is completed in nine days at the shortest. As regards the expansion of the blastoderm on the saucer-like depression of the yolk, and the large elements which are to be found on the bottom of the segmentation cavity, Dr. Klein compares the growth of the blastoderm round the yolk globe to a cap, the peripheral part of which is thickened, and in regard to the foundation of the embryo at the peripheral thickening, he has but little to add to the account given by Stricker in Max Schultze's *Archiv*, vol. v. Dr. Klein considers the large elements at the base of the segmentation cavity to be products of the blastoderm; that is, they are left behind upon the saucer-like depression of the yolk, as the blastoderm is lifted from the yolk. The first trace of the embryo is a knob-shaped prominence, which slopes towards the centre at one spot of the peripheral thickening at about the fifteenth or sixteenth day after fecundation. On the following day this prominence projects still farther inward, and the internal, or what afterwards becomes the cephalic, extremity stretches like a cord towards the centre of the germinal area. The first indication of a dorsal groove appears at the cephalic extremity of the embryonal elevation; and from the sides of the latter, where the groove is deepest, two cords run forwards to the centre of the germinal area, and meet over the cephalic extremity of the embryo to form what may be called the "secondary elevation." On the twentieth day the blastoderm has grown round the yolk so far that a portion of the yolk no larger than a pin's head is exposed; on the following day the blastoderm has grown completely round the yolk. The presence of an opening, which subsequently becomes the anus, as Stricker and Rusconi describe, cannot therefore be admitted.

The Amount of Caffein contained in Coffee, and its Action on the Body.—Dr. Herrmann Aubert contributes a long paper on this subject to the last part (xii.) of *Pflüger's Archiv für Physiologie* for 1872. He observes that though the amount of caffein in the berry is well known, no researches have been made upon the actual quantity consumed in a cup of ordinary drinking coffee, and although the usual modes of preparation seem well adapted to exhaust the berry of all its useful constituents, there still remains various open questions whether it should be lightly or strongly roasted, whether one or more supplies of boiling water are required, and whether prolonged boiling is of any value. The same questions are unanswered in the case of tea. Opinions also vary in regard to the action of coffee: Johannsen denies the tetanising influence of coffee on muscle generally; Leven maintains that it excites and then paralyses the heart; whilst Falk and Stuhlmann admit only a remarkable retardation of the cardiac-beats as its effect. The author gives the following table to show the amount of caffein contained in raw coffee:—

		Per cent.
Graham, Stenhouse, and Campbell	Native Ceylon coffee	0·87
	Plantation	0·54–0·83
Robiques and Boutron	Martinique	0·36
	Alexandria	0·24
	Java	0·25
	Mocha	0·21
	Cayenne	0·20
	Domingo	0·17
Döbereiner	Mocha	0·6
Versmann	,,	0·5–0·729
Pucetti	,,	0·4
Aubert (with chloroform)	Yellow Java	0·709–0·849

Aubert then describes his experiments in detail, which show: (1) That in our ordinary mode of infusion four-fifths of the caffein is dissolved in the filtrate, scarcely one-fifth remaining in the grounds. (2) But little caffein is lost when the bean is roasted till it is perfectly black, and the amount of extractive matter taken up by boiling water is almost the same whether the bean is slightly or strongly roasted. He thinks Frerich's estimate that a cup of coffee infusion obtained from one ounce of coffee contains from four to five grains of caffein rather too high, and is wholly unable to explain Leven's extraordinary statement that every one consumes 1·7 grammes of caffein daily. As regards the physiological action of caffein, its most remarkable effects are the production of increased excitability of the spinal cord and tetanus. This last is produced in frogs by the subcutaneous injection of 0·005 of a gramme, in rabbits by 0·120 of a gramme, and in cats and dogs by 0·200 of a gramme, in the last three cases the solution being introduced into the jugular vein. Aubert was unable to obtain any evidence of increased excitability in the nerves or in the muscles; but the muscles, apart from the tetanus, become somewhat stiff. The tetanus is only of a transitory nature, and, if artificial respiration be maintained, soon disappears. The action of caffein on the heart he finds somewhat complex. Its immediate effect is acceleration accompanied by diminution of the blood-pressure (showing in a striking manner the independency of these two conditions), due, he believes, to a more or less intense paralysis of the ganglionic nerves of the heart. Lastly, he doubts much that coffee owes its popularity to the caffein it contains, but attributes this rather to its enlivening action.

Botany.

Modifications in the Habits of Plants through the Prolonged Influence of Climate.—M. Alphonse De Candolle contributes to the *Archives des Sciences physiques et naturelles*, No. 174 (June 15), a record of some interesting experiments on the extent to which the habits of plants are modified by the climate of the locality where they are grown, a subject of considerable importance in connection with the question of acclimatisation. He obtained seeds of three species of European distribution, *Sisymbrium officinale*, *Senecio vulgaris*, and *Trifolium repens*, from widely separated localities—Moscow, Edinburgh, Palermo, and Montpellier—and sowed them, at the same time and under similar conditions, at Geneva, attention being specially directed to any differences they might exhibit during the period between sowing and germination and between germination and maturity. The general results arrived at were that the seeds originally from higher latitudes were somewhat quicker in germinating, and also somewhat quicker in arriving at maturity, than those from warmer countries; and this difference was developed to a greater extent in the second generation. M. De Candolle does not, however, consider the experiments to have been on a sufficiently extensive scale for much reliance to be placed on his results.

Absorption of Water by the Leaves of Plants.—Prof. Asa Gray, in a recent number of *Silliman's Journal of Science and Arts* (June), finds, as the result of the most recent investigations on this much controverted subject, that although, under normal conditions, plants absorb water only through the root and stem, yet when, owing to injury or any other cause, the stem is unable to perform this function, the leaves then acquire the power of absorbing it in the liquid, but apparently not in the gaseous form.

The present year has been rich in the commencement of several new journals devoted to botanical science. With January was started a fortnightly French magazine, under the title of *Journal de Botanique, pure et appliquée*, edited by M. G. Huberson, to contain original articles, translations, and extracts, with abstracts of the botanical communications to the *Académie des Sciences*. The first part of a new periodical, entitled *The Transactions of the St. Petersburg Imperial Botanic Garden*, is dated 1871, but has only recently reached this country. The *Yorkshire Naturalists' Recorder*, published under the auspices of the West Riding Consolidated Naturalists' Society, the first number of which appeared on July 1, is devoted to natural history in all its branches. Still more recently the first number has been issued of a small monthly periodical, entitled *Grevillea*, a medium of intercommunication of students in all branches of cryptogamic botany, edited by the well-known cryptogamist, Mr. M. C. Cooke. The *Journal of Botany*, edited, since the death of Dr. Seemann, by Dr. Trimen, of the British Museum, has, since the commencement of the year, adopted the very useful practice of giving the titles of all articles on botanical science published during the preceding month, in all journals, both English and foreign.

New Publications.

Becquerel, M. Mémoire sur l'Origine céleste de l'Électricité atmosphérique.

Duby, J. E. Choix de Cryptogames exotiques nouvelles ou peu connues. Genf: Menz.

Geinitz, H. B. Das Elbthalgebirge in Sachsen. 1. Abtheilung. Cassel: Fischer.

Haun, J., Hochstetter, F. v., and Pokorny, A. Allgemeine Erdkunde. Prag: Tempsky.

Roda, G., and Mercellino. Manuale del Giardiniere fioricoltore. Torino: L'Unione tipogr.-editrice Torinese.

Rüdinger, M. Atlas d. peripherischen Nervensystems des menschlichen Körpers. Stuttgart: Cotta.

Schlüter, C. Cephalopoden der oberen deutschen Kreide. Cassel: Fischer.

Vogel, H. C. Beobachtungen, angestellt auf der Sternwarte des Kammerherrn v. Bülow zu Rothkampf. Leipzig: Engelmann.

History.

The Foundation of French Predominance in Europe. [*Heinrich IV. und Philip III. Die Begründung des französischen Uebergewichts in Europa*, 1598–1610. Von Dr. Martin Philippson. I. Theil.] Berlin: Franz Duncker, 1870.

This book could scarcely have appeared more opportunely. At a time like the present, when the European predominance of France has received so severe a shock, it will be of peculiar interest to observe the beginning of that development of which we are now witnessing the end.

The problem which Dr. Philippson has undertaken to solve had not as yet been considered in its full detail. The main outline was sketched in Ranke's *French History* in his usual masterly style, but the plan of his work did not allow him to go much into particulars. In 1857 Poirson's great work on *The Reign of Henri IV.* appeared, a model of accurate research and application, fully worthy of the "prize Gobert" which the French Academy twice awarded it. As to the inner development of France the book is invaluable and quite exhaustive; hardly any printed materials have escaped the author's notice. But owing to the sparing use made of documentary sources of information, he has not communicated much that is important as to foreign affairs. Philippson's book fills up this gap in a very convenient manner. On the one side, he has had a special eye to the political developments of the time; on the other, he was enabled to follow out the details of the history, and bring to light many new and interesting events and points of view. For the main importance of the book depends on the thorough and comprehensive researches made among the archives and libraries of Berlin, Brussels, and Paris, at which last place the Spanish documents from Simancas on this subject are preserved.

The author begins with the year 1598. Till that time the religious wars had distracted France at home, and crippled her influence abroad. Only when the peace of Vervins (May 2, 1598) had put an end to the civil wars, could the power of the state collect and develop itself. Here, therefore, the opportunity naturally offered itself for giving in the first chapter a comparative view of the condition of the chief European powers, especially of France and Spain. It soon becomes clear how the balance will incline between them at last, though not at the immediate moment. Spain, however great she may outwardly appear to be, has the germs of decay within her. Already the narrow-minded rule of

Philip II., despotic in political as well as in religious matters, had begun the change; under his successor, Philip III. (or rather under the incapable administration of his all-powerful favourite, the Duke of Lerma), it became still more visible. Exhausting wars, the colonization of foreign countries, the expulsion of the Moriscoes, had even, under Philip II., reduced the population of Spain herself from 10,000,000 to 8,000,000. And how completely had every movement of life been checked in them! The liberties of the estates had been destroyed, all free utterance persecuted by the Inquisition, while the system of finance and taxation was the most irrational that can be imagined. The clergy held a fifth of the landed property; the Archbishop of Toledo had an income of 300,000 crowns (840,000 thalers), equivalent to at least three times as much at the present value of money. The high customs duties kept the provinces quite apart from each other; the export of coin was forbidden, commerce crippled by regulations that defeated their own object, especially by the "Alcavala," that is, the exaction of a tenth of all goods sold or exchanged. The home commerce would have been annihilated but for smuggling and fraud. Such statements, which we have no space to go further into, enable us to conceive how, notwithstanding the receipts from the colonies, the prosperity of the nation was always falling lower and lower, while the financial distress of the government continued to increase. Only the army, and especially the Spanish infantry, still kept up somewhat of the fame of the man who had created it, the great Gonsalvo (erroneously called Gasper in p. 39) of Cordova.

In France, on the contrary, with much less influence abroad, we can see all the germs of a fresh and prosperous development. In 1598, the revenue of 9,000,000 crowns (19,000,000 thalers) just balanced the expenditure, and was capable of considerable expansion. Absolutism was still kept in check by the provincial estates, the municipal liberties, the (judicial) parliaments, above all by the separation of the religious confessions. In France, as in Germany, neither of the two parties had succumbed to the other. The Reformed party had put their leader on the throne—not however till he had (at least outwardly) conformed to the creed of the opposite side. Yet by inclination as well as through necessity he always paid every possible consideration to his oldest and truest friends, and the Reformed were protected by widely extended privileges against the enmity of their foes, and any oppression by the royal officials. Besides such elements of resistance, the long wars had made rest a necessity, and created in the great majority of the nation a readiness to join the side of a prince who maintained order and security. All might be attained when a firm and skilful hand knew how to unite and employ the existing resources.

This was shown at once in the contest for the marquisate of Saluzzo, which our author has described in his second chapter with complete—almost too complete—detail. By the treaty of Vervins this little district was to have come to France. But the ambition of Charles Emanuel, Duke of Savoy, aimed at attaching it to his own house by all the devices of policy, and with the assistance of Spain—really against his own interest, which would have required him to obtain support in Italy against his mighty ally by means of France. The duke was able for a long time to protract the matter, by negotiations, and then by a visit to Paris. At last the king's patience was worn out, and on August 11, 1600, he declared war, the issue of which was rapid and decisive. Deprived of nearly half his dominions, and deserted by Spain, the duke had, on January 17, 1601, to submit to terms of peace. France, it is true, gave up the distant and isolated marquisate, but she received instead important possessions of Savoy west of the Alps, the county of Bresse with 200,000 inhabitants instead of 25,000. The relations with Spain also became peaceful about the same time. Henri had already, in April 1600, sent Count Rochepot as ambassador to Madrid, and after the peace of Lyons the Spanish king, on May 27, 1601, brought himself to take the formal oath of peace. When a little later, in September 1601, the same week gave the Spanish king a daughter and the French king a son, Henri began to plan a marriage between them, which he hoped would give his son the Spanish Netherlands as his bride's dower. The interesting negotiations on this point in the autumn of 1601 are published by Dr. Philippson for the first time from the despatches of the Spanish ambassador Tassis among the Simancas papers. Perrens' well-known work, *Les Mariages espagnols sous le Règne de Henri IV*, thus receives a considerable supplement.

It was almost more difficult to maintain peace at home than abroad. What a hostile position the confessions still held towards each other! There were some men, endowed with a freer insight, who recommended toleration, freedom of conscience, and equalisation of rights between the two confessions. Henri's trusted minister, Sully, inclined to these views, and his co-religionists reproached him bitterly with addressing the pope as "Holy Father." The king, too, was indifferent as regards dogmatic distinctions, whether it was that he really had attained a clearer insight into the essential nature of religion, or that he was without the religious sense itself. In either case his manner of thinking was extremely advantageous to France. But what difficulties he encountered in carrying out his views among the Catholics, and no less among those who held his earlier faith! The Reformed, in fact, formed a state within the state. Only after long negotiations did they bring themselves to allow their governing body to be, to a certain extent, dependent on the king. These negotiations had been going on since 1596; at last the leaders of the Huguenots gave way, and Henri signed, April 15, 1598, at Nantes, the famous Edict.

Besides the religious opposition, there was also an aristocratic one—not dangerous through its own power, but only when leaning on foreign help. Already, during the war of Saluzzo, Savoy and Spain placed their main trust in Marshal Biron, who, after having been one of Henri's most zealous and useful servants, and holding the highest places of honour, dazzled by success, had been led on by a boundless ambition to make himself a tool of his sovereign's foes. While at the head of a French army in January 1601, he had concluded an agreement which even the Constable of Bourbon would have hardly brought himself to agree to. Marseilles was to belong to Spain, the French provinces were to be separated from each other as independent districts, except that they (like the German princes) might choose an "over-lord." As his reward Biron was to have a relation of the Spanish king as his wife, with a rich dowry, and the duchy of Burgundy as hereditary in his family. However wild these plans sound, yet this danger lay in them for Henri, that Biron succeeded in uniting himself with all the other elements of opposition. Discontented Catholics who could not forgive the king the Edict of Nantes, the Reformed whom his conversion had displeased, great nobles who could not forget their previous state of independence, and besides these a great personal following, attached themselves to Biron. In addition to this, a new tax had caused great discontents and even disturbances in some of the southern provinces. Of all these circumstances the restless, ambitious viceroy of Milan, the Duke of Fuentes, hoped to avail himself, to strike a great blow against France, which would compensate Spain for her ill-success against England and Algiers.

Henri himself was not free from anxiety. He tried to win back Biron by entrusting him with the government of Guienne, and with important embassies to Switzerland and England. In London (according to De Thou, Sully, and other contemporary writers), Queen Elizabeth showed the former favourite of the French king from a window of the Tower the head of her own former favourite, Essex, whom she had beheaded just before. "If the king, my brother" (she added), "followed my advice, the heads of the factious and rebellious should soon be placed on the gates of Paris as a terrible warning, just as now on those of London." This story about the head of Essex does not seem to me so trustworthy as it does to the author. Camden, in his *Annals of Queen Elizabeth* (Leyden, 1649, iv. 822), says expressly that Essex' head was buried with his body; he confirms, however, the account of the words which Elizabeth made use of to Biron. In any case the marshal neglected this last warning also, and Henri was forced to take extreme measures. Now, however, it became clear how the monarchy had gained in power. The king had only to appear, and the contumacious provinces became obedient. The great men tried to escape by flight or submission. Biron, deserted by his followers, betrayed by his confidents, dared not refuse to obey the king's summons to the court. He reached Fontainebleau June 12, two days afterwards he was apprehended, and on July 31, 1602, executed in the court of the Bastille.

Dr. Philippson has traced all the threads of this remarkable conspiracy, and been able, with the help of MS. materials, to bring much that is new to light. A special excursus at the end of the work gives a full account of the sources of information. He judges the marshal—I think rightly—with more severity than Ranke has done, and brings out clearly the absurd, immoral character of Biron's scheme. Henri has been much blamed for letting the sentence against Biron be executed. We may doubt, indeed, whether greater tenderness towards one who had been such a zealous and deserving follower would not have done honour to his character, but his severity proved highly beneficial to his government. After Biron's fall opposition ceased; for the first time Henri found himself in full and undisturbed possession of his dignity and power.

The fourth and last chapter of this volume begins therefore most appropriately with well executed characters of the king and his leading ministers. As the chief among them appears Maximilian de Bethune, Marquis de Rosny, better known under his later title as Duke of Sully. In his lifetime much hated and reviled, he has been compensated for this since his death, in our author's judgment, more than is his due. He provided carefully for his own fame by his well-known book, the *Oeconomies royales*, which down to the present time (by Poirson, Lacombe, and others) has been used as a trustworthy authority of the highest value. But Dr. Philippson shows by many examples (pp. 235, 325, 363) how often his self-love has led the duke into inaccuracies and even into manifest falsifications, and how untrustworthy in general his assertions are. A Munich scholar, Dr. Ritter, has lately shown (*Abhandl. der bayrischen Academie der Wissenschaften*, III. Classe, XI. Band, III. Abtheilung) in a special treatise that even the so-called "great plan" ascribed to Henri, viz. the formation of a European commonwealth of states, must be regarded as an invention of Sully's own.

The rest of the chapter is devoted to the political development of our part of the world in the three following years, and especially to the relations between France and Spain. The author has, not unfairly, given it the title of "the hollow peace." Both states still shrunk from an open declaration of war. Henri thought the time not yet favourable; he therefore rejected Elizabeth's repeated proposals for an alliance against Spain, and resumed in November 1062 the old plans for the marriage; the Spaniards tried a little later, through the intermediation of the pope, to establish friendly relations with him. But secretly both continued to work against each other, without being by any means particular in the choice of means. Even during the peace Henry did not hesitate to favour plans for a sudden attack on the fortress of Pampeluna, and when the monks had convinced the pious king of Spain that he might (in the interest of religion and his crown) unite himself, contrary to his oath, with rebellious Huguenots against Henri, even the "Most Christian" king did not hesitate, in order to injure the house of Habsburg, to stir up the Turks, whether against Hungary or against Spain. For years he was even connected with Philip's Mahomedan subjects, the Moriscoes, who, driven to despair by intolerable oppression, gladly took the opportunity to unite themselves with the enemy of Spain for vengeance and revolt. On this Dr. Philippson communicates new information of great interest, taken from the memoranda of the governor of Bearn, the Duke of La Force. The insurrection which was to have begun with the burning of Valencia was just ready to break out when the Spaniards, warned in time by their spies, quenched it in the blood of its leaders. Bribery and espionage were then the most favourite means of political skill. The Spaniards had even succeeded in gaining over the trusted secretary of the French minister of foreign affairs, the Marquis of Villeroi. This man, Nicolas l'Hoste, betrayed the most important despatches to the Spaniards, so that the instructions for the French ambassadors usually came to Lerma's knowledge before they did to that of the persons to whom they were addressed. This game lasted several years, till at length (May 1604) it was betrayed by another spy. L'Hoste was drowned in the Marne in trying to fly, and the French had to content themselves with tearing his body into pieces by four horses on the Place de la Grève.

We cannot follow our author in detail through his representation of the struggle between French and Spanish influence in the most different regions—in Switzerland, Italy, England, Germany, as also in the East. Once only the Spaniards had the advantage. In especial it was an inestimable gain when the death of Elizabeth in 1603 rid them of their most dangerous foe, and they could enter into friendly relations with her successor, King James. But in most cases they failed against the strong and skilful policy of the French king. In Italy the Duke of Savoy passed over to Henri's side, especially after the attempt to master Geneva by a night attack had failed (Dec. 22, 1602). Even in the conclave which followed the death of Clement VIII. French influence proved superior to that of Spain. The Cardinal of Medici, nearly related to the Queen of France, ascended the papal throne under the name of Leo XI., April 1, 1605. He died twenty-seven days after, but his successor, Camillo Borghese, raised to be pope, May 16, under the name of Paul V., was also more favourable to the French than to the Spaniards. With these events, and the relations of England to France and Spain, the first volume of this useful and attractive book comes to an end. We shall await the next with lively interest.

Hermann Hüffer.

A Translation of that Portion of Domesday Book which relates to Lincolnshire and Rutlandshire. By Charles Gowen Smith. Simpkin, Marshall, and Co.

Very much will have to be done ere the Conqueror's Survey becomes as intelligible to students as we should wish it to

be, but that labour will, it is probable, take the form of commentary, not of translation. A very slight knowledge of Latin qualifies any one who possesses Robert Kelham's *Domesday Book Illustrated* for turning the record into English in such a manner as to satisfy most people who are not acquainted with the original, but it requires a combination of qualities such as are very rarely found, if indeed they have ever been found at all, to justify a man in undertaking the task of presenting a document so bristling with difficulties in a translated form. Mr. Smith is not the first person who has attempted to turn the Lincolnshire portion of Domesday into the vernacular. William Bawdwen, a Yorkshire clergyman, vicar of Hooton-Pagnell, published at Doncaster, in 1809, a translation of the *Dom Boc* for the counties of York, Derby, Nottingham, Rutland, and Lincoln. He was a good mediaeval scholar and a conscientious workman who availed himself to the utmost of the lights furnished by the elder antiquaries. As a translation we do not think any one at the present day could greatly surpass it, but it is devoid of notes, and the glossary is thin, poor, and inaccurate. Bawdwen had probably no personal knowledge of Lincolnshire. If he had known the county, he could not have been so much at fault as he constantly was in his identification of the Domesday villages with those to be found on the modern map.

Mr. Smith's translation differs but slightly from the elder one, the variations indeed are so very few that it is obvious, though he does not tell us of it, that Bawdwen's version is the basis on which his has been constructed.

Where differences do occur, Mr. Smith is almost always in the wrong, *e.g.* in the second line of the *Terra Regis* we find, "T'ra ad iiii car'," that is, *Terra ad quatuor carucas.* Bawdwen renders this correctly, "Land to four ploughs," but Mr. Smith turns it into "The land is four carucates," and that this is not an accidental slip is proved by his translating, under Netelham, *Terra ad xvj carucas*, "The *arable* land is sixteen carucates." In fact, this confusion between *caruca*, a plough, and *carucata*, a carucate or carve of plough land, runs through almost every page of the volume.

The practice of introducing explanatory words which are not in the text, as "arable" in the sentence last quoted, is highly reprehensible in all translations, except where the words so added are marked by brackets or a different form of letter; it is fatal in a book of this kind which, to have any value, must faithfully represent the minute peculiarities of the original.

The introduction deals with many subjects where we cannot at present follow the author, but a few words must be said concerning Mr. Smith's strange theory as to the derivation of the names of Lincolnshire towns and villages. He believes, in opposition to every competent person who has studied the subject, that they are all, not Teutonic, but Keltic.

> "They are popularly, but very erroneously, supposed to have been to a great extent of Scandinavian origin. They are not Saxon or even Saxonized, but were fixed long before the terms Saxon or Danish appear as national denominations in the page of history."

Such is Mr. Smith's conclusion, and he supports it by an array of derivations which show that the late Mr. Godfrey Higgins, who, along with many other far more foolish guesses, suggested that Brimham, near Ripon, was derived from the Hebrew Beth-Rimmon, has still left a follower who is prepared to go all lengths in support of the exploded dreams of Kelticism. He tells us that Castlethorpe, a hamlet near Brigg, which almost certainly took its name from an earthwork there, is *Ka-cee torp*, "great mere or marsh village"; that Cameringham, which is named after a Teutonic mark, and has a sister village called Cammerton, in Cumberland (Kemble, *Saxons in Eng.* i. 460), is *Ka-mæs lynn öm*, "principal mounds upon a lake-holm."

That Mr. Smith should reject the legend of the mythic Grim, the founder of Grimsby, is not surprising, though his effigy still does duty on the ancient seal of the borough, but it is really wonderful that the termination *by* does not convince him that, even if the Grim who has got into the local histories be as unhistorical as Pharamond, still the place must have been called after some man or woman so named. The law of the formation of names such as this is so well known now that the very strongest evidence must be forthcoming before it is admitted that a place in those parts of Europe where the Norwegians had settlements, whose termination is in *by*, is not in its earlier part composed of a patronymic. But the evidence here is all the other way. Grimsbury, Grimstead, Grimston, and Grimsthorpe are sister names in England, and Grimstad in Norway, Grimisay in the Hebrides, Grimmen in Pomerania, and Grimberghen in South Brabant are most probably foreign relatives. The personal name Grim seems, too, to have been very common; a hunt among indexes would furnish scores between the sixth and the eleventh century. Jarl Grim flourished in England *circa* 950. There were coiners so named at Lincoln, Thetford, and Shrewsbury. Edward Grim was a monk who was present when St. Thomas of Canterbury was murdered. In the reign of John, Simon Grim, who had a ship also called Grim, flourished at Hythe, and in 893 Angelric, a priest of Vasnau, married a woman called Grimma; yet, notwithstanding all this, and the constant tradition of the place from an early period, Mr. Smith tells us, without doubt or hesitation, that Grimsby is *Grimæs-buy*, "an abode at the sacred mounds."

The writer's belief in the Druids and Keltic matters generally has fortunately preserved him from discovering a shred of the Raven banners of the sea-kings in the name of the little hamlet of Raventhorpe. It would really have been a pardonable lapse into poetry if he had found here a memorial of the time when Witikind the sea rover

> "enter'd the Humber in fearful hour
> And disembark'd with his Danish power,"

especially as there is within a few miles a village, just on the Humber shore, called Whitton, which might have been made to do duty so admirably for Witikindton. He is true, however, to his theory, and gives us for Raventhorpe *Ra-avon torp*, "an elevated river-village." This is particularly unfortunate, as there is no river there, and the place is, and always has been, below the hill. There is no excuse whatever for trifling such as this, for the old name of the place, *Ragenaltorp*, as given in Domesday, carries its derivation on its face.

Bottesford is a name that there is good authority for blundering over. Abraham de la Pryme, more than a century and a half ago, made a guess that it meant the town of apples. This we always thought was as far away from the truth as it was possible to go, but Mr. Smith, who makes of it *Bö-dhal cee forde*, "the curved hill altar of a marsh township," has surpassed the Yorkshire antiquary, for apples do grow there still, but "horse-shoe shaped mound of worship" there is none, and, we may safely affirm, has never been. The meaning of the name is obscure, and the Domesday spelling *Budlesforde* does not help us. It may be from a patronymic, but it is more probable that the spelling *Botelford* (Testa de Nevil, p. 344) preserves the earliest form, and that the first syllable is *Bótel*, the Anglo-Saxon for a dwelling, to be found in north country names, such as Newbottle and Harbottle.

Statements are continually made in this book without the

slightest reference to authority. For instance, we are told in one place that

"Learning and the alphabetical character, which first made the Angleish a vehicle of written literature was imported from Ireland" (xlv);

and in another that the Lagmen were "lawyers or lesser thanes" (p. 266). We really ought not to be put off with half knowledge. It is too bad not to inform us whether these lawyers were solicitors or only attorneys. It is not improbable this mistake has arisen from an attempt to translate *Homo legalis*—an expression almost certain to be found in any glossary which explains the word. In the introduction we are told that *Glentenwide* is the old name for Glanford Briggs, otherwise Brigg—a piece of information which is quite new.

In almost every particular this book is much inferior to its predecessor. It is but fair to point out, however, that in some instances Mr. Smith has been able to identify places which escaped the industry of Bawdwen.

Edward Peacock.

Intelligence.

Mr. Edward A. Freeman, the historian, whose excellent works are highly appreciated by competent German scholars, has been travelling lately in Germany with the purpose of studying the history and architecture of the early (chiefly Romanesque) minsters and churches. The route he has been taking, from Aachen and Köln up the Rhine, his visits to Loesch, Gelnhausen, and Fulda, to Marburg and Limburg on the Lahn, will soon be traced in a new series of his well-known contributions to a weekly paper.

Many complaints have been made for several years past of the slow progress and deficient editorship of the *Monumenta Germaniae Historica* as well in the public press as more suitably by certain prominent historians. In consequence of a recent resolution of the Reichstag, further means for continuing this magnificent collection of materials for the national history are only granted under the express condition that, beginning with the year 1873, the direction of the work and the issue of its parts shall henceforth be under the superintendence of the Royal Academy of Sciences at Berlin. The great age of Dr. Pertz makes the substitution of a new editor-in-chief very desirable, and rumour, indeed, hints pretty distinctly that Professor Waitz, in Göttingen, will be the successor at a not very remote period. Nevertheless Dr. Pertz writes to the papers protesting that, unbent by the burden of seventy-seven years, and free from any illness whatever, he continues his daily labours as he has been accustomed to do for the last fifty years. In fact, a new volume, the first of the third sub-division, of which nothing had been heard since the publication of the plan in 1824, a volume containing the *Diplomata and Charters* of the early kings and emperors, edited by Dr. Carl Pertz, is just leaving the press, and is expected to give rise in a more than usual degree to controversy among the small learned fraternity who really know how to edit charters.

On the 9th of July the statue of the great Baron Stein, erected most picturesquely amongst the ruins of the castle of his ancestors near Nassau, on the Lahn, was inaugurated in the presence of the German Emperor, the Empress, the Crown Prince, and a very select circle of distinguished politicians and patriots. Stein, when Prussian minister in 1807 and 1808, was the reviver of the almost forgotten principles of German self-government. After having had the honour of being personally outlawed by the first Napoleon, he returned under the victorious colours of the Allies in 1812 with the plan of a truly national reconstruction of Germany. It was he, too, who started the scheme of publishing the *Monumenta Germaniae Historica* in 1819, and in 1823 placed Dr. Pertz at the head of the editing staff. The presence of the latter at the inauguration of the statue of the great baron, whose very substantial biography he published about twenty years ago, was appropriate, and would have been highly grateful to the original.

The *Memoirs of the late Baron Stockmar*, which have just been issued by the firm of Vieweg, in Brunswick, selected and most carefully edited by his eldest son, cannot fail to meet with very many eager readers both in Germany and in England. Though the most intimate relations by which Baron Stockmar was attached to the late king of the Belgians, and to Queen Victoria and the Prince Consort, as well as to some of the leading statesmen of the time in the several countries, are more or less indistinctly known, the public at large has hardly ever been informed of so much sterling wisdom and goodness as was to be found in this extraordinary and most unpretending man. While he shunned on principle every unconstitutional influence whatever, he became the oracle of the highest, the worthiest, and the most intelligent of his contemporaries. From the Greek candidateship of Leopold and the erection of the Belgian kingdom onward to the marriage of Queen Victoria, to the Spanish marriages which lost Louis-Philippe his crown, the Frankfurt diet in 1848, and the regency of the present king of Prussia and emperor of Germany in 1858, the readers will be fascinated by many a disclosure from the most authentic papers and memoranda. They are printed more or less in full, and form the chief contents of the present volume, which, as we are told, will soon appear in an English translation, edited by a rising diplomatist, Mr. J. D. B. Morier.

The fierce struggle which has broken out at last between the central government of the German Empire and Roman Ultramontanism is calling forth a great number of books and pamphlets on either side. Whoever wishes to inform himself thoroughly of the present state of the law regarding the limits of Church and State, and about the literary and historical materials in detail, will find the most complete collection of information in the new (the seventh) edition of Richter's *Lehrbuch des katholischen und evangelischen Kirchenrechts*, the work of Dr. R. W. Dove, professor of canon law in the university of Göttingen. In the chapters which treat of the pope and papal government of bishops and priests, councils and synods, all results of the decrees of the last Oecumenical Council are drawn out with masterly clearness.

New Publications.

Borda, J. J. Historia de la Compañia de Jesus en la Nueva Granada. 2 vols. Poissy: Lejay.

Elliot, Sir H. M. History of India as told by its own Historians. The Muhammadan Period. (Revised and continued by Prof. J. Dowson.) Vol. IV. Trübner.

Herrmann, E. Zeitgenössische Berichte zur Geschichte Russlands. Russland unter Peter dem Grossen. Nach den handschriftlichen Berichten Joh. Ghilf. Vockehordt's u. Otto Pleyer's. Leipzig: Duncker und Humblot.

Hugues, Edmond. Antoine Court—Histoire de la Restauration du Protéstantisme en France au xviiie siècle, d'après des documents inédits. Tomes I. II. Paris: Michel Lévy.

Markham, C. R. Reports on the Discovery of Peru. Translated and edited with Notes and an Introduction. (Hakluyt Soc.)

Schäfer, D. Dänische Annalen u. Chroniken von der Mitte d. 13. bis zum Ende d. 15. Jahrh. m. Berücksicht. ihres Verhältnisses zu Schweden und deutschen Geschichtswerken kritisch untersucht. Hannover: Hahn.

Philology.

Miscellaneous Writings of John Conington. Longmans.

The editor of these two beautifully printed volumes says in his preface, with truth and justice, that "the reputation of Professor Conington as a scholar will rest upon his editions of the *Choephoroe* and of the works of Virgil and of Persius. As a translator he will continue to be known by his verse-renderings of Horace, of the *Aeneid* and of the *Agamemnon*. In the *Miscellanies* now offered to the public he appears both as a scholar and a translator; but their distinctive mark is what, for want of a better phrase, may be styled literary versatility." The collection is indeed of a very miscellaneous nature; many of the articles are of distinguished excellence, and will have an abiding value; a few were written to serve a temporary purpose, and in all likelihood would never have been reprinted by the author himself. And yet the very slightest among them has a certain interest, and is so characteristic of the writer that there is not one of them which we should have liked to have seen rejected by their judicious editor.

The well-written memoir of the author by his friend, Professor H. J. S. Smith, prefixed to the volumes, tells the uneventful story of his life in a few pages concisely, but effectively. At the end of this memoir there follow about twenty pages of extracts from his letters, addressed almost entirely to a few of his younger friends and pupils, in which his modest and affectionate, yet acutely critical and scrupulously truthful, character is displayed to great advantage.

Conington's own contributions are headed by the essay on Pope, the longest in the whole collection, and one of the

most elaborate. The works of the poet, including the translation of Homer, are successively passed in review, and their merits and defects are dissected in a manner worthy of the editor of Virgil and the accomplished verse-writer and translator. He admires Pope, but not blindly, and with many reservations. If his estimate of the poet be on the whole higher than the average critical judgment of the day would be likely to sanction, at least if we may draw any inference from the poet's latest commentator, he never for a moment permits it to interfere with his perception of the transcendent merits of the older writers, "who have achieved triumphs of expression to which he was unequal, and struck chords of melody of which he never dreamed." The whole of the essay is marked by great moderation: to us the most interesting portions of it are the earlier pages, in which he discusses with much critical acumen the question of Pope's correctness, examines its quality, and points out in what sense Pope may be said to be a more correct writer than Shakespeare, for instance, or Spenser.

This first dissertation is followed by two popular lectures on *Lear* and *Hamlet*. If the preceding essay may be looked upon as showing the Virgilian side of Conington's mind, these two may be taken to represent its Aeschylean phase. It is more than probable that the author, always disposed to mistrust his own powers on ground which he had not by long pondering fully made his own, would not have thought of publishing these himself. We are however glad to have them. Of the two lectures the one on *King Lear* appears to us far the freshest and most original and best. It is curious and instructive to see how the writer sets himself to dissect the play as if it were the *Agamemnon* or *Choephoroe* of his own *Aeschylus*. Overpowered by the transcendent energy of the poet, he will see in him no flaw or weakness; will justify what many of Shakespeare's greatest admirers would only consent to excuse as concessions to the roughness of his times and his audience, for whose iron nerves no excitement was too strong. "It was necessary, in order to fill to the full our conception of Lear's sufferings, that we should know of what fiendish cruelty his enemies are capable; and this is impressed on us far less vividly when we simply hear that they have laid a plot against his life than when we actually see a venerable nobleman, who has rescued him from them, bound in his chair in his own castle and having his eyes torn out by the duke's hand. Thus we may feel that Shakespeare has really exercised forbearance and consulted how to spare the sensibilities of the spectator or the reader: he has not shown us the father actually exposed to the white heat of his children's hatred, but has left us to estimate its intensity for ourselves from the manner in which they deal with his preserver." Whether this unqualified defiance of Horace's laws of scenic propriety can be accepted in the present case, we dare not offer an opinion. The analysis, however, of the whole play is exceedingly suggestive and interesting, much more so, we think, than the equally elaborate, but less original, examination of *Hamlet*. His self-reliance seems not unnaturally to have somewhat failed him here; and he has been content to lean more on adventitious assistance in his dissection of the problems presented by this most famous of all tragedies.

The two lectures on Shakespeare are followed by a very long paper on "the English translators of Virgil;" in which almost every version from the sixteenth to the nineteenth century is brought under review and weighed against its competing rivals. This was a subject of which Conington never tired, as was natural enough in so great a translator as he was himself. We fear we have not the requisite tastes and qualifications to enjoy as we ought this elaborate disquisition.

After this comes a series of six papers on Latin poetry in its various stages, which, as the editor justly observes, "will appear the most important section of the work," or rather, we should say, of the first volume. In these papers the whole field of Latin poetry is surveyed from Ennius to the silver age with much discrimination and much critical power. We have here in fact the results of what formed the main occupation of the maturest period of his life. The eloquent upholder of the supreme excellence of the Augustan poets, he at the same time does more than justice to the fragments of the early Roman tragedy, and on the whole metes out to Ennius his full share of praise. On the other hand, he scarcely appears to us to give the silver age its due in his two articles on Statius and Seneca. Surely the style of Martial is of as consummate a finish as that of Terence or Virgil. One of these essays, "The Style of Lucretius and Catullus," nearly forty pages in length, is a very full examination of a few sentences, not amounting to a page in all, in which the writer of the present notice had made some remarks on the preceding article, "Review of Munro's Lucretius." This is not the occasion for him to enter into a fuller exposition of what he now thinks on the subject: he will content himself with acknowledging how much he has learnt from the masterly criticism of this paper, and how deeply he feels the generous kindness with which he has been treated throughout.

In the lecture on the "Academical Study of Latin" we find in pp. 216–220 some very suggestive arguments on the advantages of the mental discipline to be gained by studying the classical languages. The whole of this essay is well worth pondering over at the present time, when the Latin writers are so bitterly assailed in so many authoritative quarters; when Mommsen, who has a more comprehensive acquaintance with the whole field of Roman antiquity than any other living writer, appears to find his highest enjoyment in pouring contumely on the heads of Cicero, the great representative of classicism, and of the two "court poets," Virgil and Horace. Hear what Conington says in pp. 207, 208:

> "In speaking of Roman literature as imitative, it must not be forgotten that the reproach is not peculiar to it, but attaches to the whole of the literature of modern Europe. Greece, in its independent, instinctive development, set the example which subsequent nations have followed with more or less of distinctive consciousness. Even if we choose to consider this conscious effort after an external standard as fatal alike to national and individual genius, we must admit it to be an inevitable evil, involved in the very position of those who have a preceding civilisation to reflect upon. Rome may seem to have been more of a copyist than any of its successors, partly as being actually more indebted to Greece, partly from the lateness of its intellectual growth, which suggests the notion of rational deliberation rather than of creative energy; but the difference must not be exaggerated in either case. If modern nations have followed Greece less closely than Rome did, it is attributable to the fact, among other causes, that they have had Rome as well as Greece to follow; nor will the long barrenness of the Roman intellect prejudice the judgment of those who bear in mind that the Punic wars were in the life of the Eternal City only what the war with Persia was in the briefer history of Athens, and that even now the true literature of modern Germany, though one of the richest that Europe can boast, is scarcely more than a century old."

It is well to take these sentences, and indeed the whole essay, to heart, when one hears on all sides baseless talk of some "lingua rustica" spoken by the people, as different from the language of literature apparently as Italian is from the style of Cicero. As if the "lingua rustica" of the people of Rome and Latium was not nearer the language of Plautus and Terence, of Cicero and Caesar, than the "lingua rustica" of Boeotia was to that of Pindar, of Attica to that of Sophocles and Plato, or of England to that of Burke and Macaulay. We lately heard an eloquent historian refer to the sarcasm of Naevius on the Metelli as representing the

people's language in contradistinction to the exotic styles of the Ciceronian and Augustan periods. As if "Fato Metelli Romae fiunt consules" was less borrowed from Greek models, less removed from popular apprehension, than "Romanos rerum dominos gentemque togatam"; as if the babble of Prudentius was not the bald imitation of imitations of the ages of Virgil and Seneca. But we have no space here to dilate further on this topic.

The two final papers in the first volume are reviews of Bishop Forbes' liturgical writings, and give an interesting picture of Conington's theological investigations, but above all of that noble candour and consistent courtesy which never seem to have failed him once in all that he wrote or thought.

The prose translation of Virgil, which occupies nearly the whole of the second volume, will be found to be a quite indispensable supplement to his edition of the poet's works. We do not hesitate to say that the translation of nearly every verse is more or less a commentary on that verse. The author had satisfied his literary feeling by his verse translation, and this prose one would appear to have been designed more for a commentary than a specimen of literary style and finish. Manifestly, too, as the editor remarks, it is in an unfinished state. This applies especially to the *Eclogues* and *Georgics*, and perhaps, though in a less degree, to the earlier books of the *Aeneid*. The later books we have read through with undiluted pleasure and admiration, and we look upon them as a magnificent contribution to the elucidation of the poet's many difficulties. But this we would say of the earlier portions as well: even where we are disposed to dissent, we pause, reflect, and are edified. As a proof that in the earlier parts we have not always the translator's most matured views, we would refer to vv. 31–40 of the sixth Eclogue, where it will be seen that the translation is in harmony with the notes to the first edition, but differs essentially from those of the second. In these portions of his work, much oftener than in the latter, we find him making experiments as to how he can compensate in English for the far greater power the Latin possesses in giving emphasis by the position of the words in a sentence. Thus we have, Eclogue v. 22, 23, "Cum complexa sui corpus miserabile nati Atque deos atque astra vocat crudelia *mater*," translated, "When his mother, clasping her son's piteous corpse, is crying out on the cruelty of the gods and stars, *as only a mother can*"; Eclogue vi. 1, 2, "Prima Syracosio dignata est ludere versu Nostra nec erubuit silvas habitare *Thalia*": "First of all, my muse deigned to disport herself in the strains of pastoral Syracuse, and disdained not to make her home in the woods, *goddess as she was*." In Eclogue vii. 62, he thinks he must give point to "formosae Veneri," and translates, "Venus, beauty's queen"; and this makes him reproduce "Lycida formose" in v. 67 by "Lycidas, beauty's king," whereas these words of Thyrsis really answer to Corydon's "formosus Alexis" of v. 55, which is translated simply, "our lovely Alexis." Sometimes he would seem to accentuate overmuch the plain language of the poet: thus, Eclogue v. 54, "Et puer ipse fuit cantari dignus, et ista Iampridem Stimicon laudavit carmina nobis," is translated, "That glorious boy was a theme worthy of any one's song, and Stimicon ere now has dwelt to me with rapture on those strains of yours." He is often eminently successful in bringing out the full point and force of a metaphorical expression. Occasionally, however, in these earlier portions we find a metaphor ridden too hard, as in *Georgic*, iii. 180, "Aut Alphea rotis praelabi flumina Pisae," "or to *glide* at Pisa by Alpheus' waters on wheels *smooth as they*." Surely the rattling and jolting of the wheels of a springless car over the hard-paved Hippodrome of Olympia must have resembled as little as possible the smooth flow of a river. Again, *Georgic*, iv. 518, "Arvaque Rhipaeis numquam viduata pruinis," is thus reproduced, "And fields whose marriage-bond with Rhipaean frost is never severed." Surely "never widowed of Rhipaean frost" would be sufficient here. Yet in every one of these instances, even where we do not approve, we find instruction and food for reflexion; and the inner sense of Virgil is brought more distinctly before the mind.

H. A. J. Munro.

T. Macci Plauti Trinummus. With Notes Critical and Exegetical. By Wilhelm Wagner, Ph.D., Editor of the *Aulularia* and of Terence. Cambridge: Bell and Daldy.

English scholars who desire to gain an insight into the present state of the textual and metrical criticism of Plautus and Terence owe a debt of gratitude to Dr. Wagner, whose editions have done more than any other books written in English to put the questions at issue in a clear light, and to illustrate them with candid and sensible discussion. It is with great pleasure therefore that we read in the first lines of the preface to the little book before us that Dr. Wagner determined three years ago to prepare a complete edition of Plautus with English notes, of which the *Trinummus* is an instalment. Unless we except the late Professor Ramsay's unfortunately unfinished edition of the *Mostellaria*, English scholarship has of late been unfairly neglectful of Plautus, nor is any scholar more competent than Dr. Wagner to make good the defect.

The *Trinummus* now before us does not apparently aspire to the completeness of the editor's *Aulularia*: but, especially for schools, it will be found a very valuable book. Teachers in schools are generally thrown back upon Lindemann's three plays (*Captivi*, *Trinummus*, and *Miles Gloriosus*) of 1844, the commentary of which, though really serviceable in matters of interpretation, and perhaps not always sufficiently regarded by Dr. Wagner, is, in all points in which Plautine scholarship has really advanced during the last thirty years, far behind the time. As the *Trinummus* is a good deal read in English schools, we hope that this edition of Dr. Wagner will receive the attention which it deserves. If so, it will do much for the improvement of exact Latin scholarship.

The preface contains some brief discussions on various disputed points, and, among them, on our old friend the final *d* of the ablative and of adverbs, which, as the readers of the *Academy* are probably aware, Ritschl is inclined to introduce with some liberality into the text of Plautus for the sake of avoiding hiatus ("*anginad* acerrume" for "*angina* acerrume," and so on). A great deal of learning has been expended in Germany upon this obscure and difficult point: it is not only in history that, as Hegel observed, "eben eine dunkle und trübe Zeit ein besonderer Gegenstand und Anspornung der Gelehrsamkeit ist." With the majority of scholars in Germany, Dr. Wagner is against Ritschl in this matter. He relies especially (preface, p. iv) on Corssen's argument given in his *Aussprache, Vokalismus*, &c., 2nd ed. pp. 1004–9. Corssen brings forward a crowd of instances in which Plautus and his contemporaries elide the ending of the ablative, or use the later form before consonants, and argues from them that the final *d* cannot have been pronounced in the conversational Latin of Plautus' time.

This, like many of Corssen's arguments, is weighty and sensible, and requires a thorough and candid consideration. But Corssen does not seem to us to have done justice to all the points of the question. (1) He assumes that in those cases, contemporary or nearly contemporary with Plautus, where final *d* was written, it was not pronounced: and, while

he grants that Plautus may sometimes have *written* a final *d* to avoid a hiatus, he thinks that the actor most probably never pronounced it. Surely a most unnatural supposition, especially in the case of a writer for the stage. It is true, of course (as Corssen urges), that English and French orthography is a very bad guide to English and French pronunciation; but this anomalous state of things was probably almost unknown to the earlier worthies of Roman literature. Corssen does not, it seems to us, take sufficient account of the possibilities of different usages and different pronunciations in the common Latin of the time of Plautus. An instance from English literature will clearly illustrate our meaning. The third person singular of verbs in Shakespeare (except in the case of *hath* and *doth*) commonly ends in *s:* but Shakespeare will sometimes, for the sake of the metre, use the older ending in *th.** Now supposing that the MSS. of Shakespeare were as far removed from the time of the poet, and gave as distorted a view of his real text, as those of Plautus: supposing that in the text, so mutilated, we found lines which only required an additional syllable to a verb in the third person singular to make them scan: supposing that our knowledge of Elizabethan grammar (outside of the text of Shakespeare) were only supported by a few state-documents contemporary with the poet, and a few fragments of contemporary literature: supposing that these documents and fragments gave us instances of verbs making their third persons singular in *th*, and that the MSS. of Shakespeare commonly presented *hath* and *doth:* in such a case an editor of Shakespeare who should endeavour to restore his metre, where possible, by the introduction of the ending *th*, even though the MSS. seemed occasionally to support him in the case of polysyllabic words, and almost invariably did so in the case of *hath* and *doth*, would probably be considered rash by the majority of contemporary critics; but he would, on the whole, have the right on his side. Now it is certain that in other analogous cases of grammatical usage Plautus did allow himself a variety analogous to that which we have pointed out in Shakespeare: he wrote (and surely pronounced) *postid* as well as *post*, *antidea* as well as *antea*, *med* and *ted* as well as *me* and *te:* why then should we judge of his usage with regard to the ablative by one set of instances alone? (2) Corssen attributes, as we think, too much weight to the authority of MSS. which, in the case of Plautus, an old writer and a writer for the stage, cannot surely be rated as high as that of contemporary inscriptions. However scanty the remains of the latter may be, Ritschl is right in pressing the evidence which they afford with emphasis into his service.

The notes are as a rule good, and contain a great deal of information. Something more might however, we think, have been done towards the illustration of the syntax and language of Plautus. There is no notice, for instance, of the tenses in v. 115, "haec, si mi inimicus *esset*, credo, haud *crederet*," where *fuisset* and *credidisset* would have been expected; of *fuerat* for *fuisset* in the phrase "*aequius fuerat*," vv. 119, 1038; of "*deum me atque hominum pudet*," v. 912; of "*bene dicere homini amico, male loqui absenti amico*," vv. 924, 926.

In a few cases, we venture to think a better interpretation might have been given than the one which the editor has adopted. In v. 345, "pol pudere quam pigere praestat totidem litteris," we should prefer to take "totidem litteris," not as = "though these words have the same number of letters," but as = "by as many letters as the word contains." In v. 482, "honore populi" surely means a "public office." There is much more humour in making the *slave* say, "I will make way for him in everything, get out of his way when he is walking, not stand in his way in the competition for public offices," than in making him say, "I will yield to him in all things which concern the outward show of respect due to a free citizen;" how indeed could *honor populi* express the latter? In v. 1049, *probant* hardly = *existumant*, but *aestumant*, as in Pers. 2, 2, 30, where nearly the same words occur. On v. 408, "holitores myropolae aucupes: confit cito," Dr. Wagner remarks, "is it not strange that the μυροπώλης should be mentioned with the greengrocer and poulterer?" It is possible that Plautus may have had in his eye the custom of using unguents as oil for herbs (comp. the proverb τὸ ἐπὶ τῇ φακῇ μύρον), which is known to have existed among persons of vulgar and extravagant tastes. In v. 526, "vinum pendet putidum" might have been well illustrated by "pendens vinum" in Cato, *R. R.* 147.

We conclude by offering one or two emendations. V. 368 as given by the MSS. gives no sense: "sapienti aetas condimentum sapiens aetati cibust." We would suggest that the words represent a proverb put into an iambic *octonarius*, wrongly introduced into the trochaic passage in which it now occurs, though good enough in itself:—

"sapiéntiae aetas cóndimentum, *sáperest* aetatí cibus."

In v. 644, "atque honori posterorum tuorum ut *vindex* fieres," little or nothing can be made of *vindex*, unless the line be taken in connection not with what precedes, but with what follows: "tibi paterque avosque facilem fecit et planam viam." If with Dr. Wagner we join it with what precedes, *vindex* surely requires alteration. Is it possible that the word is a corruption of ὄνειδος? We leave the decision to critics more thoroughly acquainted with Plautus' use of Greek words than ourselves. In v. 749 the MSS. give either "*ut*" or "*ipsum* adeam Lesbonicum edoceam," &c. Dr. Wagner adopts Bothe's emendation, "ipsum adeas Lesbonicum edoctum." "*Ipsum adeo edoceas* Lesbonicum" would be an easy correction.

H. Nettleship.

* *Romeo and Juliet*, act i. sc. 4—"She *comes*, In shape no bigger than an agate-stone;" and so on for some twenty-eight lines: but then, "Sometime she *driveth* o'er a soldier's neck," &c.

MARKHAM'S TRANSLATION OF OLLANTA.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—There are a few points in the review of my version of *Ollanta*, that appeared in the last number of the *Academy*, the explanation of which will perhaps dispel the doubts of the reviewer as to the antiquity of that drama.

1. He thinks that the line, "Therefore my *ears* grow longer," can only apply to an ass, and that consequently it must have been written after the introduction of Spanish animals into Peru. But the *atoc* in the neighbourhood of Cuzco has long ears, and the two lines,

"Therefore my nose scents better,
Therefore my ears grow longer,"

are perfectly applicable to that animal. The introduction of *asnu* in the later versions is due to the blunder of a copyist.

2. The genitive *c*, *cca* is certainly archaic. It is never used in the country round Cuzco, and the old grammars prove that it never has been used for three centuries. If a Spanish priest had composed the drama, it is certain that he would have used *p*, *pa*. But the ancient genitive occurs in the old Ynca prayers preserved by Molina and Ynca Salcamayhua (MSS. at Madrid); which fact establishes the antiquity of the *c*, *cca* form of the genitive, and of any composition in which it occurs.

It is possible, but very improbable, that Dr. Valdez would have written a drama solely with a political object, and with the deliberate intention of excluding all allusions to religion. But it is not possible (and it was not necessary in writing for Indians in 1780) that he could have succeeded in absolutely excluding every Hispanicism, every foreign conception, and in using an ancient form, of the former existence of which it is not probable that he was aware. The difficulties of such a

theory appear to me to be insurmountable, while the simple solution of the question, by supposing that he told the truth when he said that his work was taken down from the mouths of Indians, offers no such difficulties. CLEMENTS R. MARKHAM.

Intelligence.

It is now definitely announced that the last part of M. Littré's great Dictionary may be expected in November.

According to a Trieste paper, G. Corssen has ready for the press a work on the Etruscan language, which he maintains to be a purely Italian idiom, akin to Latin, Umbrian, and Oscan, and perfectly regular in its pronunciation and constructions. He has translated the Etruscan inscriptions in accordance with this view. His work is advertised in the last *Mittheilungen* of Herr Teubner.

Contents of the Journals.

The Indian Antiquary, ed. by J. Burgess; part vi. (Bombay, June). —The Muharram; a Shiah house of mourning in Madras; by C. E. Gover. [A brief description of the Shiah anniversary of the death of the Imâms at Kerbela, as witnessed at Madras. During the ten days the feast lasts, water and sherbet are freely offered to any thirsty passer-by; as the Imâms, being cut off from the Euphrates for three days, were greatly tortured by thirst. The ceremony consists chiefly in chanting songs on Husain; Ali Akbar, his eldest son; and Abbas, his brother, and their deeds and sufferings at the battle of Kerbela.]—Folk-lore of Orissa; by J. Beames. [The writer thinks that, owing to the isolation in which their country has remained for so many ages, the peasantry of Orissa have retained old ideas and superstitions to a greater extent than any other Aryan people of India. The present paper treats of witches (including a *mantra*, or spell, in Uṛiyâ) and similar superstitions.]—Bengali Folk-lore; by G. H. Damant. [Continuation; two other stories.]—On the Râmâyaṇa; by Prof. A. Weber. Translated from the German by the Rev. D. C. Boyd. [Continued. Prof. Weber endeavours to show that, in consequence of the mutual relations which Alexander's expedition into India brought about, between the inhabitants of that country and the Greeks, some kind of knowledge of the story underlying the *Iliad* found its way to India.]—On the Ancient Remains in the Krishṇa District. [From the Report of the late J. A. C. Boswell, Officiating Collector, Kistna District. Continued.]—Forms of Government, &c. among the Dards; by G. W. Leitner. [On the political institutions, habitations, &c. of the Ghilgitis and other Dard tribes.]—Miscellanea; Notes and Queries. [The Kangra fort and royal family of Katoch; a lake legend of the Central Provinces; Marco Polo's route from Yunan; the Hindu temple at Tripetty; the Samlaji Fair; discovery of images of Hindu deities at Velangani in Tanjore (images of the village goddess Pidari, of Piḷḷayar or Gaṇeṣa, of Naṭeṣvara or dancing Śiva, of Sandikeṣvara or Chandikeṣvara, and of Amman; these images, which are believed to have belonged to a Śiva temple once existing at Velangani, have been bought by the government); &c.]

Bijdragen tot de Taal-, Land- en Volkenkunde van Nederlandsch Indië, derde volgreeks, zesde deel, 2e stuk ('s Gravenhage, 1872).—Iets over von Rosenberg's Zending naar Nieuw-Guinea; door J. K. W. Quarles van Ufford. [Some account of the mission of Herr von Rosenberg, a native of Darmstadt, to the S.W. and N.E. coast of New Guinea, in 1858.]—Westersche Fabelen in een Oostersch Gewaad; door J. J. de Hollander. [Fifteen fables from Padang, translated, it seems, from European sources. The Malay text, with notes and a Dutch translation.]—Korte Opmerkingen over Balineesch en Kawi. [Grammatical, critical, and literary notes, communicated, from letters of H. N. van der Tuuk, by H. Kern. Also a Kawi passage giving a list of contents of the Mahâbhârata in Kawi, compared by Dr. Kern with the Sanskrit original.]—De Maleische Handschriften in het Britsch Museum; door G. K. Niemann. [The Malay MSS. of the British Museum here described are twenty-four in number.]—Kolonisatie op Java; door P. A. Leupe.—De Naamsoorsprong van Java; door H. Kern. [The Sanskrit name of Yava-dvîpa was already known to Ptolemy in the sense of "barley island." This derivation has been doubted, on account of barley being no product of Java. W. v. Humboldt, R. van Eysinga, and Dr. van der Tuuk have derived the name from the modern Javanese *jaba* or *jawi* or Kawi *yawa*, "outer," with Sanskrit *dvîpa*. Prof. Pijnappel has lately proposed to derive it from the Sanskrit *japâ* or *jabâ*, which signifies the "Chinese rose." Prof. Kern rejects this derivation on phonetic grounds, and recurs to *yava-dvîpa*, *yava* here probably meaning some other plant than "barley," which is not uncommon with names of plants and trees in different parts of India.]—Leestafel. [Short reviews of Dr. Hunter's *Our Indian Musalmans*; M. E. Buissonet's *De Pékin à Shanghaï* (Paris, 1871); and Dr. K. v. Scherzer's *Fachmännische Berichte über die österreichisch-ungarische Expedition nach Siam, China und Japan* (Stuttgart, 1872).]—Varia. ——Zesde deel, 3e stuk.—De Smeekschriften der Malabaarsche Christenen; door J. P. N. Land. [Brief historical account of the Syrio-Christian communities on the Malabar coast; and translations, from the Syriac and Latin, of letters of Bishops Thomas and Gabriel, and J. H. Schaaf (1709-35), chiefly bearing on the relation of the Malabar Christians and the Netherlandish Indian Company.]—De Oelalone ni iele Aloe; eene Tominische Vertelling etc. door J. G. F. Riedel. [A tale and some popular songs, in the original Tominic, one of the four principal dialects of northern Celebes; with a Dutch translation and notes. Hitherto only a specimen had been published in this dialect, by the same scholar, in his *Bijdrage tot de Kennis der Talen en Dialecten etc.*, 1867.]—Geslachtregister der Vorsten van Sambas; door J. J. de Hollander. [The tables of the Sambas princes of Borneo, first published by E. Netscher, supplemented by various other writers, and re-arranged by Prof. Veth, are revised by the present writer, who has made use of a new copy of the tables.]—Geschiedenissen van Ratahan en Passan etc.; door J. N. Wiersma. [Legends collected in these two districts of S.E. Minahassa, chiefly bearing on early settlements, viz. of Lensang Aloe of Pontak, Londok of Tewoh, Makawaré of Toumboeloe, and Potangkal of Taffoeré.]—Varia; door P. A. Leupe.

Hermes, vol. vi. pt. 4.—Haupt: Coniectanea.—Matzat: On the Credibility of the Herodotean Account of the Geography of Asia. [An important article of ninety-two pages, showing how far Herodotus speaks from personal knowledge of places, and how far he depends on the information of others. The writer maintains the view that the Cadytis of Herodotus was Gaza, and not Jerusalem, and argues against a recent theory which makes it a matter of doubt whether Herodotus ever visited Babylon.]—Kirchhoff: On Demosthenes *de Cor.* § 289. [The last line but one in the epigram is definitely attributed to Simonides by a scholiast on Gregorius Nazianzenus: we rejoice to learn that there is a prospect of the valuable scholia on Gregorius being collected and published.]—Rose: On Aristophanes περὶ ζώων.—Jordan: On the Orations of C. Gracchus.

New Publications.

AESCHINIS Orationes recensuit Andreas Weidner. Berlin: Weidmann.

DICTYS CRETENSIS Ephemeridos belli Trojani libri sex recognovit F. Meister. Leipzig: Teubner.

HÜNNEKES, Dr. Kleine Beiträge zur Erklärung u. Kritik d. Thukydides. 1. Th. Berlin: Weber.

INDISCHE STUDIEN, herausg. v. Albr. Weber mit anderen. 12. Bd. Die Taittiriyâ Saṃhitâ. 2. Thl. Kânda V.-VII. Leipzig: Brockhaus.

JOLLY, J. Ein Kapitel vergleichender Syntax. Der Conjunctiv u. Optativ u. die Nebensätze im Zend u. Altpers. im Vergleich m. dem Sansk. u. Griech. München: Ackermann.

LÜBECK, Aem. Hieronymus quos noverit scriptores et ex quibus hauserit. Leipzig: Teubner.

MARIETTE-BEY. Les Papyrus égyptiens du Musée de Boulaq. Published in facsimile. Tome I. No 1 to 9. Paris: Franck.

MUIR, J. Original Sanskrit Texts. Vol. I. Mythical and Legendary Accounts of the Origin of Caste, &c. 2nd ed., rewritten and greatly enlarged. Trübner.

PLUTARCHI CHAERONENSIS Moralia ex recensione Rud. Hercheri. Vol. I. Leipzig: Teubner.

SOMMERBRODT, Jul. Lucianea. I. Handschriftliches. II. Beiträge zur Kritik. Leipzig: Teubner.

TACITUS, C., a Carolo Nipperdeio recognitus. Pars II. Ab excessu divi Augusti Libros sex postremos continens. Berlin: Weidmann.

WILLIAMS, M. A Sanskrit-English Dictionary: etymologically and philosophically arranged. Oxford: Clarendon Press.

ERRATUM IN No. 52.

Page 269 (*a*), line 46, for "JOURNAL et CORRESPONDANCE de André-Marie Ampère, publié par Mme E. C. Hetzel. Paris: Techener"—read "JOURNAL . . . . . Ampère. Paris: Hetzel"

POSTSCRIPT.—The *Athenæum* states that Mr. R. Simpson, the author of *An Introduction to the Philosophy of Shakespeare's Sonnets*, is editing a series of reprints of the more prominent plays that may be regarded as belonging to Shakespeare's school. The first of these, now nearly ready, is *A Larum for London, or the Siege of Antwerp*; and *The Life and Death of Captain Stukeley*, *Mucedorus*, *Fair Em*, *Histriomastix*, and the *Prodigal Child*, are announced to follow.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 54.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Monday, September 2, and Advertisements should be sent in by August 28.

General Literature.

RECENT WORKS ON VOLTAIRE.

Voltaire et la Société française au XVIIIe Siècle. Voltaire et Frédéric. Par Gustave Desnoiresterres. Paris: Didier, 1870.

Six Lectures on Voltaire. [*Voltaire. Sechs Vorträge.* Von David Friedrich Strauss.] Leipzig: Hirzel, 1870.

Voltaire. By John Morley. Chapman and Hall, 1872.

To write the history of Voltaire is to write the history of his century. His influence told so deeply upon generally received habits of thought, and touched points so vital to the common beliefs of men, that his power was felt not only throughout the varied sections of the community of which he was a member, but availed to modify the existing conditions of European society. Materials lie about us in plenty, and there has been no lack of labourers in the field. They form a long list of names, which begins with Duvernet, and ends with Gustave Desnoiresterres, who in his valuable work, the fourth part of which has now appeared, fulfils all the most exacting requirements of modern science. For once the French man of letters has exchanged *rôles* with the German, and whilst M. Desnoiresterres takes upon himself the burden of arduous research, Dr. Strauss gives us an elegant abridgment of his labours. But then the subject is after all a countryman. Mr. Morley's position is totally distinct from both: he does not propose to rival M. Desnoiresterres by writing an exhaustive history of Voltaire, nor following the example of Dr. Strauss, to lay at the feet of an intelligent princess a finished and elegant memoir. Mr. Morley prefers to comment for us the essential points in his character, the critical moments of his life, just those facts in short which are significant to us of the nature and influence of this extraordinary existence.

It was in 1867 that M. Desnoiresterres gave us in his *Jeunesse de Voltaire* the first instalment of this biography. The appearance of each successive volume has called forth fresh testimony to the intrinsic merits of the work. The author has suffered no source of information, however remote, to escape his search, and he has applied to the treatment of the multifarious quantity of materials which he has assembled a cultivated intelligence and literary skill. The style is simple, the language at times even more than appropriate, and the grouping is managed with so much judgment as to effect that we are placed in possession of every possible detail without being oppressed by the sense of overcrowding. Chronology is one of the points on which M. Desnoiresterres has been obliged to bestow much attention. Voltaire himself was notoriously careless about dates, and his secretaries, Longchamp especially, seem to have followed their master's example in this matter. The very date of his birth (November 21, 1694) was first placed beyond dispute by his latest biographer. And M. Desnoiresterres has not only brought into order the earlier years (which seemed in confusion past hope of disentanglement), but with unremitting care has verified every succeeding date, so that as far as he has gone we are now in possession of a thoroughly reliable chronology.

There is also another question which has inspired the curiosity and taxed the ingenuity of all who have approached the subject, viz. how did Voltaire obtain the princely fortune in the enjoyment of which he spent the last years of his life? To this ever recurring question no one as yet has succeeded in finding a satisfactory answer. If M. Desnoiresterres has not wholly explained away the mystery, he has at any rate indicated to us the direction in which we must look for explanation. The earlier biographers, like Duvernet, are all satisfied to remark that the gifts of the Regent, and the profits of *Oedipe*, placed him above requiring the aid of his family. But in his first volume, M. Desnoiresterres pointed out that the forty-five representations of *Oedipe* did not commence till November 18, 1718, when Voltaire was nearly twenty-five, and the gifts of the regent were bestowed at about the same date. It was on December 6, 1718, after his liberation from the Bastille, that he received from the duke of Orleans the gold medal and pension of twelve hundred francs. The papers of his father, too, contained proof that he was occasionally called on for supplies. The author quotes from the inventory taken at the death of M. Arouet, "Liasse 70, quittances relatives aux sommes accordées à son fils pour ses pensions depuis qu'il est sorti du collège." But M. Arouet did not, we may be sure, furnish his son with enough to support the expenses of a life which that son himself describes as a career of wild dissipation, carried on in the best society of Paris. Now and again Voltaire talks of money-lenders, and leads us to suppose that he passed his life in constant embarrassment. It is therefore with the utmost astonishment that we discover that in January 1722, at the death of M. Arouet, his son was already in possession of a small capital. Besides three "actions de la Compagnie des Indes," Voltaire had amassed about 5000 francs, which he had placed in the hands of his father, and this, too, at a time when he had only been three years in receipt of the regent's pension. So that throughout the years which he represents as passing in a career of reckless extravagance Voltaire was privately saving. Reckless extravagance laid the foundations of future fortune, just as idle dissipation produced *Oedipe*, *Artémise*, and *Henri IV.* Dr. Strauss in his preface quotes Goethe's remark that, just as now and again we see in old families that nature will bring forth an individual who unites in himself all the qualities of his ancestors, and shows in full perfection those peculiarities the existence of which in the race have hitherto been but indicated, so we sometimes see the virtues and vices of a great nation brought to a focus in one typical man. Thus in Louis XIV. there arose the typical king of France, and even so in Voltaire the nation found its typical writer. "Ne m'offusquez pas, car je veux paraître," said Henri IV. This "besoin de paraître," a distinct national peculiarity, was necessarily represented in Voltaire. "On a les défauts de ses qualités." This inborn necessity for striking an attitude explains away many of the at first sight contradictory tendencies which bewilder the student of his character. Voltaire's first impressions of cultivated life, as distinct from that of the middle-class, were received in the "société du Temple." Wit and dissipation seemed indissoluble companions. Voltaire's vanity was interested in assuming the outside of a fine gentleman. To parade the

airs of fashion and quality in the eyes of Paris was to increase his credit as an author, but he was too clear-sighted not to perceive that neither solid fortune nor reputation were thus to be achieved. Therefore, just as he studied and laboured in long intervals between revels which afforded him probably just that stimulus which was necessary to brace his nerves to willing work, so he strove at the same time to create for himself an income which should make him independent. But when he has to depict the situation, he has recourse to appropriate "décors du théâtre," to the heightening touch "qui fera bien dans le paysage." Mr. Morley thinks that "substantially Voltaire's transactions were very like those of any banker or merchant of the day." But M. Desnoiresterres, perhaps an even too impartial biographer, more than suspects the legitimacy of these dealings. Voltaire was sometimes unpleasantly canny in his choice of means to an end, and it is difficult to believe that his money transactions were governed by a loyalty which seems often to have been absent where his own advantage was concerned. He had access early not only to the salons of the great, but to those of the financial world, the attention of which had been drawn to him by his ode on the *Tribunal de Justice*, which had marked him out as one whose pen it might be worth while to conciliate; and his early training in Maître Alain's studio had put him in possession of a kind of knowledge valuable both for the getting and keeping of money. If, however, there is absence of proof as to how the first small beginnings were made, it is now clear that skilful operations in the lottery of the "Ville de Paris" first put him in possession of considerable fortune, and from what we know of that transaction, and from his speculations in corn under the assumed name of Demoulin, in the rue de Long Pont, and again in provisioning the army of Italy, from all of which he derived enormous profits, we are justified in concluding that in the absence of any direct source of income, money was obtained wherever it could be got, without overscrupulousness as to means. There is nothing in such conduct incompatible with the rest of the character, nor at variance with the quality of that particular type of which he is the most brilliant example. He himself says that, goaded by the humiliations which had to be borne by the poor man of letters, he resolved to shield himself from them by the acquisition of a great fortune. This he did to spend, and not to keep. "Assez de gens méprisent le bien," says La Rochefoucauld, "mais peu savent le donner." Voltaire was one of these few, and as a rule practised, as Mr. Morley reminds us, the virtue of magnificent expenditure.

On this point, and indeed on every other, Mr. Morley may be read with advantage as a commentary on the store of facts which M. Desnoiresterres has brought into order for us. Mr. Morley brings not only just judgment but sympathetic insight to his reading of the essential features of the great French genius. He seizes the clue which alone can guide us through the apparent perplexities and strange involutions of Voltaire's character. Instead of vainly trying to credit him with the more correct, ordinary, and pedantic virtues, he is everywhere found insisting on the intense generosity and sensitiveness of the man. People like Marmontel complained that he gave too ready countenance to worthless admirers and flatterers. This, Mr. Morley truly says, "had a source in his intense and sympathetic quality, and was an eager asking assurance from others that his work gave pleasure. The exact steadying value to Voltaire of his sojourn in England is seized: "he left a country where free-thought was an empty watchword, and found a land where men, if they had rejected Christianity, had at least thrown themselves with grave faith on the disciplined intelligence and its lessons." And again, "so real a mind would exchange with delight the poetised astronomy of Fontenelle for the sure and scientific discoveries of Newton." In regard to Mme du Châtelet and her relation to Voltaire, much is said marked by the same quality of just and intelligent perception. But Mr. Morley hardly seems to indicate with sufficient force the existence in her of that depth of warmth and passion, coupled with the power to bestow "imperial sympathy," which was first indeed revealed to us in the unpublished letters furnished by M. Feuillet de Conches to M. Desnoiresterres for his third volume, *Voltaire à la Cour*. Yet without this touch our conception of her must be incomplete. It is precisely this craving for heart affection which made her life with a man like Voltaire "extremely hard for her." In 1749 the tie came to an end, and Voltaire was "disastrously free." The Berlin court, but especially the French colony at the Berlin court, is admirably drawn by M. Desnoiresterres. It is a picture which cannot be regarded with satisfaction; to one of its most unpleasant passages—the Hirschel affair—he has given patient investigation. A lithograph of the original bill of the jewels left with Voltaire by the Jew is given, and an examination of this will suffice to convince any unprejudiced eye that the worst part of the accusation against Voltaire—viz. that of tampering with the document—is undoubtedly false. "There is," says Mr. Morley, "no more pitiful leaf in the biographies of the great than Voltaire's quarrels with ignoble creatures, names which recall vulgar, dishonest pertinacity on the one side, and wasteful, undignified fury on the other."

Perhaps the chapter of Mr. Morley's *Voltaire* which deserves to be read with most attention is that headed "Religion." Here the relation and influence of Voltaire on religion and religious opinion will be found discussed for once from the standpoint of calm intellectual enquiry. The author dispassionately points out Voltaire's failure to rise to the highest points involved in the great debate, and how this invalidated all that he wrote on religion; how he missed the emotion of holiness, the soul and life of the words of Christ and St. Paul; how he had no ear for the finer vibrations of the spiritual voice. But Mr. Morley also recalls to mind that Voltaire lived when, as he himself said, "Here Calas is broken on the wheel, there Sirven condemned to be hung, further on a gag thrust into the mouth of a lieutenant-general, a fortnight after five youths condemned to the flames. Is this the country of philosophy and pleasure?" "We must never forget," says Dr. Strauss, "that it was the furies of St. Bartholomew, of the dragonnades, and of the crusade against the Albigenses, which turned their torches in the hands of Voltaire against Christendom. 'He who says, think as I do or God will punish you, will soon say, think as I do or I'll make you.' Has this saying lost any of its fearful truth because it is a hundred years since Voltaire wrote it down?"

E. F. S. Pattison.

The Elegies of Propertius, translated into English Verse by Charles Robert Moore, M.A., late Scholar of Corpus Christi College, Oxford. Rivingtons, 1870.

Mr. Moore in his short preface apologizes for the attempt which he has here made to introduce Propertius to English readers. This he need not have done; except Catullus, none of the Roman poets is more real as a lover than Propertius; and no erotic poet, either Greek or Roman, has spoken in tones more complex and elaborate. As a study of language as well as metre these elegies cannot fail to be interesting, even if on moral grounds they have sometimes been considered, as by the late Dr. Arnold, dangerous reading for boys.

The translation is for the most part in heroic couplets; but once or twice this rule is broken, *e.g.* v. 8, *Disce quid Esquilias*, where short lines in the style of Conington's *Virgil*, and v. 11, *Desine Paulle*, where elegiac stanzas of four lines are used instead. The former of these exceptions can hardly be considered happy; the latter might, we think, be worked into something better. And this may be said of the translation as a whole. Considerable as Mr. Moore's success may be allowed to be, there are very few pages which would not be improved by an extra year's careful retouching. The faults indeed lie on the surface, and are the faults of immaturity: e.g. *'s* for *is*, *I'll* for *I will*, *I'm* for *I am;* or grammatical inaccuracies: e.g. *Like she* for *Like her*, *had broke* for *had broken;* or bad rhyme, like *war*, *before; borne*, *dawn.* There is besides this much laxity in proper names; Mys appears as Myos, Myron as Myro; the familiar neuter *hippomanes* is transformed to a female Hippomane; the modern Tivoli figures side by side with Praeneste, Bevagna (Mevania) by Clitumnus, Alba by Nemi, p. 105; and *Dorica castra* is translated "Doria's chivalry," an expression which recalls Genoa and the great Genoese admiral rather than Troy and the Greeks encamped before it.

The following is a fair specimen of the translation, iv. 4, 7:—

> "Now, school'd in warfare, spread the canvas wide,
> Lead forth the coursers, knights, in all their pride;
> Go, Fortune smiles, avenge the slain, and be
> One more bright page in Roman history.
> Great Mars and Vesta's fateful fire, I pray,
> Grant I may live to see that happy day
> When Caesar's laden chariot sweeps along,
> The steeds half fretting at th' applauding throng."

The four lines iv. 6, 30 *sqq.* are well translated thus—

> "If tale so sad my Cynthia wept indeed,
> Run back the way thou camest, run with speed;
> Weep, and be this the burden of thy song—
> Wrath she may get from me, but never wrong."

The distich, ii. 18, 29, 30, is simply and effectively rendered—

> "But thou wilt come adorn'd enough for me
> If thou but come as often as may be."

On the whole, though marred by imperfections, this translation is not, as the author fears, a failure, and with more elaboration might be made a success. R. Ellis.

Correspondence and Conversations of Alexis de Tocqueville with Nassau William Senior. Edited by M. C. M. Simpson. King and Co.

The proper subject of this work has been intrenched upon by two earlier publications; the *Life and Correspondence of de Tocqueville* would have been incomplete without at least some of the letters of his oldest English friend, and it was impossible to omit from Mr. Senior's *Journals in France and Italy* all mention of his most able informant and most constant companion. On the other hand, the letters and conversations now collected have the appearance of a united and continuous whole, which cannot be said of a mixed correspondence or a miscellaneous journal, and in this case the whole is sufficiently valuable in itself, as well as sufficiently characteristic of its joint authors, to excuse the unavoidable repetitions of some interesting passages. To contemporaries Mr. Senior's note-books have all the interest of gossip, and we are content, as in real conversation, to run the risk of now and then hearing the same thing twice over; but posterity may be less indulgent, and the journals have a right to look forward to its judgment, because of the solid kernel of instructive information which they offer, not so much to the historian proper as to the historian of society and of opinion. For this reason we should be glad to think that the present arrangement is not final, and that when the volumes which now overlap have had their short day of success with the general reader, they will be succeeded by a complete and methodical edition of everything that the indefatigable author thought worth preserving. Voluminous and even tedious as the collection might seem, it is the best way of doing justice to Mr. Senior's peculiar gift, for no editor, however well informed, can hope to divine correctly which trivial fact, which careless prognostication will become luminous half a century hence, while yet it is a pious duty to see that no such chance is lost.

In some ways the volumes before us show better than their predecessors the precise nature of Mr. Senior's services to historical truth. In one letter he expresses a hope that de Tocqueville will not find him "an unfaithful Boswell," and if he had really stood in that humble and useful relation to any one, it would perhaps have been to the author of *Democracy in America.* But when we compare these notes with the records of his conversations with other celebrities of all sorts and sizes, we see how little his painstaking curiosity was dependent on the stimulus of admiration for the views expressed. His interest, and therefore ours, is much more general. The chief value of the correspondence with even this intimate friend is not biographical or personal; it might, with perfect propriety, be called "The Opinions of a Conservative Liberal in England and France from 1835 to 1859," and neither its usefulness nor its literary attractiveness would be in the least impaired by the change. A Boswell undertakes his task either because he admires every individual utterance of his hero so much that he wishes none may be lost, or because on general grounds his admiration for the man is so high that he assumes whatever he says is valuable merely because he says it. It need scarcely be said that Mr. Senior's attitude to his examinees was very different from either of these. His own view of the matter appears in the following passage from a letter to Archbishop Whately:—"You must recollect that in all these conversations my object is to record what my companions said, not what I said myself. My own words are introduced as sparingly as possible, merely to render intelligible what was said to me. My journals are therefore full of most extravagant opinions and statements, unopposed, indeed uncommented on, by me—but certainly no more acquiesced in than what is reflected by a mirror is acquiesced in by the man who holds it." But the man who holds the mirror chooses the objects that shall be reflected in it, and is alone responsible for the choice; Mr. Senior's originality lay in the manner in which he exercised it. Like a locomotive, permanent commission of enquiry, he took the evidence of any one who liked to offer it, but the persons he was at most pains to interrogate were—not those who could most easily turn their opinion into action, or whose opinion was of most speculative weight—but the representatives of an intellectual type, the men who make an opinion important by holding it, because they are certain not to hold it alone. Thus many of the remarks he has preserved are perfectly commonplace, and such as must have been made over and over again in dozens of newspapers; true or false, the historian of opinion would not think of discussing them on their own merits; but coming from the mouth of this or that distinguished public character, they are a part of the social and political forces actually existing, and it was the number and kind of these forces which Mr. Senior seems to have made it the business of his life to examine and appreciate. His task was the easier because he had no wish to shine himself, and was quite careless about convincing his companions; sometimes he seems almost to play the part of an animated "man of straw," making just the

most obvious answers to objections so as to keep the discussion alive without really influencing its course. Even on points about which he felt strongly he was never carried away by the spirit of debate so as to press his own advantage or expose his opponent's inconsistency. In return for this self-denial, he only asked his friends to let him help them to talk their best, and it is not strange that few were churlish enough to deny the modest request.

Unlike most political memoirs, his note-book is least interesting where it deals with historical luminaries of the first magnitude. As de Tocqueville warned him, such personages, when aware of his habit of reporting conversations, were careful only to say what would look well when written down, and though the lapse of time may make it interesting to know what, for instance, Thiers wished to be thought to think about French politics in 1854, what de Tocqueville and Ampère really did think is of more importance, because their influence was a constant and positive fact, which in the long run would outweigh any single diplomatic manoeuvre. Of course the question of paramount interest throughout these two volumes is that of the political future of France; even to English readers questions of domestic policy, like the new Poor Law or the Reform Bill, seem tame by comparison. And notwithstanding all that has been written to explain the possibility and the success of the Second Empire, there is still something to be learned from Mr. Senior's mirror, as it reflects the successive hopes and fears of men honest, intelligent, and even brave, yet perfectly incapable of providing a remedy against the evils they foresaw. De Tocqueville and his friends could calculate within a few weeks when the next *journée* in the streets might be expected; they had been talking familiarly of the *coup d'état* for months before it came; conditional prophecies of remarkable acuteness are too plentiful to be enumerated, and yet, when the day of danger came, these men, the best representatives of aristocracy in France, could do nothing for either themselves or their country but cry, "A Mazas," and once in durance, their chief feeling was one of relief that "the struggle was over" without fault of theirs. Manzoni gave as a reason for avoiding politics that he was "incapable of distinguishing between the desirable and the possible." De Tocqueville's weakness as a politician seems to have arisen from an over-anxiety to avoid that common snare of inexperienced statesmen; and in practice he carried caution so far as to amount to recklessness. In July 1851 he wrote, "The government which I should prefer, if I thought it possible, would be a republic; but believing its continuance impossible" he was content to trust partly to Louis Napoleon's incapacity, partly to his moderation to mitigate or abridge the despotism which he saw no means of resisting or averting.

The *Droit au travail*, second in importance of the subjects which recur in the correspondence, is treated in very much the same spirit. In his letters to Senior, he dwells on the fact that a poor law on the English model, "affording relief on terms less acceptable than wages," would not satisfy the hopes excited by the extensive socialist agitation. But whatever the faults of the English Poor Law, its use as a barrier against socialism depends on the peculiarity—much open to abuse—that a resolute pauper has the law on his side if he insists on spending his life in the workhouse. But in the speech which characterized socialism as "un appel énergique, continu, immodéré aux passions matérielles de l'homme," he argued at length against admitting the *right* of the poor to either work or relief, and insisted that the state should only organize "Christian charity." The most severely unpopular measure that an *Anglomane* political economist could invent would have been practical as compared with such a suggestion, and such a suggestion made in May 1848 was little better than a mockery, as no one knew better than de Tocqueville when it was his turn to think instead of to act.

The difficulty of foretelling the course of history is very completely illustrated by the guesses as to the probable duration of the empire which were commonly made during its earlier years. M. Beaumont said, "I should give him fifteen years if I thought him capable of using the immense advantages of his position." Most of the other prognostications had a condition attached, and the prophets were generally right as to the different alternatives that were possible; only their calculations were apt to be disarranged by the one incalculable element, the personal character of the usurper. At other times a plausible conjecture turns out incorrect because one of the many influences that could affect the result was forgotten. There is an instance of this in the second volume:—"'The corruption that infects the civil service must in time extend to the army, and make it less fit for service.' 'Of course it must,' answered Tocqueville. 'It will extend still sooner to the navy. The *matériel* of a force is more easily injured by jobbing than the *personnel*. And in the navy the *matériel* is the principal.'" Recent changes in the art of war have raised the importance of the *matériel* in the army, and the *personnel* escapes corruption best which is furthest removed from its seat. On the page before, we read, "No corruption that ever prevailed in the worst periods of Louis XV., nothing that was done by La Pompadour or the Du Barry resembles what is going on now," *i.e.* May 1853, for the date of these general statements is the most instructive part of them. This was the time when men's consciences were finding their price, and scandal of all sorts was so rife in society that de Tocqueville thought the reign of *friponnerie* could not last much longer; but by 1857 things had found their level: Paris was peaceable, and, for the first time for many years, Paris was dull; the Bourse was the one excitement, extravagance the one employment. When the price for which men's consciences had been sold was all spent, scandal revived, and the virtuous indignation of *La Lanterne* had all the effect de Tocqueville anticipated.

The conversations are not all political; those of a miscellaneous nature are worth reading, though not perhaps worth quoting. A good story is told of Nicholas and Lamoricière, who had been sent to praise the republic to him in 1848. The czar replied, "My good friend, there was no need to tell me all this: I have not the least wish to interfere with you. Whether you have a republic, or a dictator, or an emperor, I do not care a rouble. The only government that I cannot tolerate is a constitutional monarchy, and in your case I see no immediate danger of *that*." It is not quite evident upon what principle some of the speakers in the journal appear only under initials, as they are for the most part identifiable with persons elsewhere mentioned by name. Another superfluous precaution is that of giving the original of de Tocqueville's comments on Mr. Senior's memoranda; the translation, which is quite trustworthy and idiomatic, would have been enough for them as well as for the letters. But these are trifling details: in the main, the editor has done enough, and not too much, to what under any circumstances must have been an interesting publication.

H. Lawrenny.

LITERARY NOTES.

The 1207th volume of the Tauchnitz Collection of British Authors consists of selections from Shelley, preceded by a graceful and sympathetic essay by Miss M. Blind, which originally

appeared in the *Westminster Review*. Shelley has never met with anything like adequate recognition from the general public, and consequently he is the only one of the great group of poets of the beginning of this century, of whom it cannot be said that a trustworthy traditional estimate exists. In default of criticism Miss Blind presents the tradition of his admirers in its most intelligent form, perhaps her admiration of *Julian and Maddalo* is exaggerated; if it was inevitable to sacrifice something, we may still be permitted to regret that, while *Julian and Maddalo* is given entire, we have only the exordium to *Alastor*, and that such copious extracts are given from the *Revolt of Islam* as to leave no room for more than two acts of *Prometheus Unbound*. Though we think Miss Blind overrates the *Revolt of Islam*, there is undoubtedly, in the case of a poet like Shelley, in whom the constructive faculty was almost always completely overshadowed by the prodigious development of other and higher faculties, a good deal to be said for the principle of giving extracts from a larger number of poems rather than a smaller number uncurtailed.

In the *Cornhill* some translations from an Arab poet of the twelfth century, Abu'l Fadhl Zoheir (*b.* 1186 A.D.) are remarkable for their very modern tone: the artificial polish which is characteristic of Arabian poetry in general makes way in his *vers de société* for comparative simplicity of language, and the fancifulness of his imagery is not much more strained than that of the Caroline poets.

In reviewing a French translation of Horace Walpole's letters in the *Revue des deux Mondes*, M. Caro brings out the ineffaceable influence of national idiosyncrasy in writings that would at first sight seem most free from it. Walpole's letters are almost the English equivalent of Madame de Sévigné's, the great object of his admiration, and yet, when reproduced in French, they constantly strike a cultivated reader as "Britannic" in animation and humour.

Prof. Gnoli, who is charged by the city of Rome with the task of marking the houses of memorable visitors with a tablet bearing their name, describes in *Im Neuen Reich* (July 19) the inductive process by which he identified the site of the house occupied by Goethe in 1786, but as the house itself has been almost entirely rebuilt since then, his ingenuity seems to have been somewhat wasted; but the German pilgrims to the Eternal City may be of a different opinion.

Music, Drama, and Painting.

The Works of Couperin. [*Denkmäler der Tonkunst. Werke von Couperin;* herausgegeben von Johannes Brahms. Erster Band: Clavierstücke, erstes und zweites Buch.] Bergedorf bei Hamburg: H. Weissenborn, 1871.

Family likeness has been perhaps as often and as strikingly exemplified in a talent for music as in any other speciality of mind or body. With some of the greatest names in musical history more than one person, indeed many persons, of great ability are associated. The sons of Palestrina have been lost to posterity in the shadow of their father's greatness; yet all three, even the two who died young, were regarded with favour by their contemporaries. The brothers Anerio are in their works, and possibly in their persons, continually mistaken for one another, or supposed to be identical. Three generations have augmented, not, however, in an increasing ratio, the renown of the Scarlatti. Henry Purcell was not the only musician of his family; and William and Henry Lawes are rarely mentioned separately. The individuality of the elder Mozart would seem to have merged in that of his son, who by this time might have been as completely forgotten as any other of the juvenile prodigies who have succeeded him, had he not found in his father a teacher whose patience, discretion, and disinterestedness approached, if they did not attain to, the quality of genius. The excellent musicians who have borne the name of Bach, if not innumerable, have never been numbered. Even those who attained reputations only inferior to that of John Sebastian form a considerable list. So with the name Couperin, which represents a family so remarkable that the author of the pieces which form the volume named at the head of this paper was distinguished from his father, uncles, aunts, daughters, nephews, and nieces as "le grand Couperin." The volume itself—an evidence alike of the catholic taste and industry of one of the greatest of living composers—is a very precious contribution to the archives of music; not merely interesting—though this is much—in so far as it marks the condition of a particular kind of art at a particular time, but as a collection of music, whenever and by whomsoever composed, at once beautiful and individual. It includes the first and second "livres," and therefore not all, of the "Pièces de Clavecin" published by their author in the years 1713 and 1716–17. Of these original publications—magnificent folios printed from copper-plates—copies, never very numerous, have now become rare and costly. Single pieces and even small collections of them have recently been edited by English musicians, the first of whom, I believe, was Mr. Lindsay Sloper. Before this, Couperin, save to the curious few, would seem to have been, during the present century, little more than a name, even among his own countrymen. Clementi's *Practical Harmony*, still the best collection of the clavier music of the last century, contains no specimen of his compositions; nor indeed, with the exception of an "Allemande" in Hawkins' *History of Music* (vol. v. p. 48), have I met with one in any work, German, French, or English, of more than ten years' standing.

The clavecin music of "le grand Couperin," of which the volume edited by Herr Brahms exclusively consists—practicable, it need hardly be said, on the clavecin of to-day, the pianoforte—is of two distinct kinds: dances, or more properly pieces, however developed, sufficiently marked in their rhythm to be danced to—gigues, menuets, gavottes, sarabandes, and the like; and what may be described by the modern familiar title, "songs without words." In the first of these forms, Couperin, relatively not merely to his contemtemporaries but even his immediate successors, is one of the most ingenious and pleasing of composers. He was the predecessor by nearly twenty years of Händel and J. S. Bach, and already a renowned composer and clavecinist when those great masters were practising their scales. Nevertheless not a few of his pieces in this first kind will easily bear comparison with all but the best of theirs. In the second kind, he has stood till very recently quite unrivalled. No doubt music suggested by some circumstance or thing, or rather the sentiment awakened by its consideration, had been attempted by French composers anterior to, and certainly known to, Couperin. None of these, however, not even Denis Gautier's *Tombeau de Mad^lle de L'Enclos*, has lived to impugn Couperin's originality. Nor, till very recently, have instrumental composers attempted to follow up the route in which Couperin, if he did not first enter it, made such way. For the volume before us consists in great part of these "songs without words," the variety in the titles of which perhaps exceeds that in the music to which they are prefixed. Couperin, like greater masters, occasionally repeats himself; or perhaps it would be fairer to say that many of his pieces are, or seem to us, very much alike. This arises partly from their brevity and simplicity in form; partly from the little variety of key employed in his age, though in this respect he is in advance of it; and, more than all, from his very frequent employment of the minor mode—the last trace of an unwillingness to accept our "natural scale," but the old masters' "modo lascivo." But Couperin's facility in the invention of titles is marvellous. Here are a few which follow in immediate succession: *Les Sylvains*, *Les Abeilles*,

La Nanette, *Les Sentiments*, *La Pastorelle*, *Les Nonètes* (sic)—première partie, *Les Blondes*, seconde, *Les Brunes*. The connection of these titles with the particular music which follows them is not always very obvious; as, indeed, is the case with a good deal of the music of our own time. A marked character is given to *Les Sylvains* by its limitation to the compass of the male voice, and in like manner to *Les Abeilles* by its "medium" pitch, tranquil motion, and limited range of notes. Couperin had certainly seen the bees

"murmur by the hour in fox-glove bells."

But how *Nanette* differs from other young ladies, or what particular "sentiments" are suggested by the fourth piece in my list, are likely to remain puzzles "till time" and tune "shall be no more." *La Pastorelle* always makes herself known and understood without difficulty; but *Les Blondes* and *Les Brunes*? How does my reader suppose they make themselves distinguishable? Both utter the same strain, but the former in the minor, the latter in the major mode! Now I assert, with little fear of contradiction, that nine modern musicians out of ten would have reversed this arrangement; would have felt the minor mode, with its average reticence and occasional volubility, the persistent sadness of its lower tetrachord, and the three varieties of its upper, to be more characteristic of the brunette than of the blonde, whose evenness of temper and clearness of thought would seem to find their juster expression in the natural scale. The choice, however, lets us a little into the composer's tastes and likings. Certain it is, if anything certain about a man is to be gathered from his works, that Couperin, like his contemporaries, preferred the minor to the major mode. We are driven, then, inevitably to one of two conclusions: either that Madame Couperin was a blonde, or that Monsieur Couperin wished she had been. Having settled the domestic relations of the composer, to our own satisfaction at least, let us return to his music.

Couperin has many moods, but his prevailing mood is tenderness. In the volume before us the student will find many pieces characterized by strength, but many more characterized by sweetness. The composer has himself distinguished these in almost all instances by their titles. Thus the volume opens with a stately "Allemande," which he has well named *L'Auguste*. This is shortly followed by an equally stately "Sarabande," headed, *La Majesteuse*. Farther on, among the pieces of the "dixième ordre," we find an extended "battle piece," in which may be found a good many of the effects introduced a century afterwards by Kotzwara, as novelties; and near the close of the volume an essay in musical comedy, entitled, "Les Fastes de la grande and ancienne Mxnxstrxndxsx," in the course of which we are introduced to "*Vielleurs*, *Gueux*, *Jongleurs*, *Sauteurs* et *Saltimbanques*, avec les ours et les singes," not forgetting the "invalides ou gens estropiés au service de la grande Ménestrendèse," whose performances come to an end in "désordre et déroute causés par les ivrognes, les singes et les ours." These, however, present exceptions to the general character of the collection, in which titles and music answering to them abound like *L'Enchantresse*, *Les Idées heureuses*, *La Volupteuse*, *Les Papillons*, *La Pateline*, and *Les Ondes*, the most touching and elegant only of which I thought I had marked in going through them, for my own and my readers' future reference. My marks are, however, too numerous to serve any purpose but that answered by notes of admiration. At the end of the volume will be found an "Explication des agréments et des signes," which should be carefully studied before any attempt is made to play the pieces which precede them. These "agréments" are not mere *effects* to be omitted at the will of the performer, but essential parts of the music. It is greatly to be hoped that Herr Brahms will include in his collection of the works of Couperin "L'Art de toucher le Clavecin"—a short and well written treatise, now most rare, hardly less applicable to the keyed instrument of our day than of his, and from which the intelligent student may gather some idea at least of the manner in which the music of "le grand Couperin" and his successors should be played. One of not the smallest advantages which may result from re-publications like this which we owe to Herr Brahms may prove to be the restoration to the family of contemporary instruments of the harpsichord. Meanwhile, however, the pieces in them can be satisfactorily played on a pianoforte, and this by performers whose mechanical skill is a good deal inferior to their sentiment and intelligence.

John Hullah.

THE DRAMATIC SEASON, FRENCH AND ENGLISH.

The season of French plays in London this year has been unusually long: but, with one or two brilliant exceptions, sterile of interest. Perhaps M. Félix had reckoned too surely on the expected visit of the Comédie Française, and had therefore neglected to provide other attractions. To begin with, the winter season was very discouraging. Everything, the weather, the illness of the Prince of Wales, the Christmas pieces, combined to keep the St. James's Theatre empty. Moreover it is to be feared that London playgoers have no genuine love for French plays. The fashionable world will go once or twice during the season because it is proper so to do, and furnishes a topic of conversation: but the general public is too little acquainted with French to be able to follow a play with facility, and too indifferent to buy the piece first and study it carefully. This lazy temper is due, to a great extent, to the present condition of our own stage. One of our modern plays taxes the attention so little, possesses so few claims to literary or artistic merit, that persons naturally conclude that the plays of other countries are equally insipid. That few of the Parisian novelties were given to us was no fault of poor M. Félix. Play after play was submitted to the Lord Chamberlain, only to be rejected by that Cerberus of our dramatic purity. When such works as *La Baronne* or *Fernande* were forbidden, one wonders on what principles his licenser makes his selection. Nor does this wonder diminish when we see the actual plays that are allowed. If *Fernande*, one of the ablest and most powerful dramas, and, it may be added, one of the most moral, that have been acted in France for many years, is too highly flavoured for the chaste eyes and ears of English audiences, why allow *Madame attend Monsieur*, a piece whose nastiness is only equalled by its vulgarity? Who are Chaumont and Schneider that they should enjoy privileges denied to others? And yet, during the very seasons in which Lafont was forbidden to play *Les Vieux Garçons* and the Comédie *Julie*, the second of these ladies, Schneider, was kicking up her heels as high as she liked in *La Grande-duchesse*, or hiccupping in *Périchole* louder than ever she dared in Paris. And lately, after the pieces alluded to above had been forbidden, Mme Chaumont was allowed to act and sing nearly every piece and every song that she chose. Was *Le Ménage en Ville* a delicate or an improving comedy? Could in fact anything be much coarser? But the pass we have come to is simply this—we are allowed to *do* anything we like on the stage in England, provided we *say* as little as possible. Society winks demurely at the nudities of burlesque, and blushes with simulated modesty at the *School for Scandal*, which would scarcely obtain a license nowadays.

After a few performances by M. and Mme Lafontaine, and a long series by M. Ravel, upon whom, it must be admitted, age is beginning to tell painfully, *Christiane* was produced, a four-act play by M. Gondinet. It is difficult to understand the reason why this play should have been so successful as it was in Paris: particularly before so critical an audience as that of the Théâtre Français. When it is read, the characters appear unsympathetic, the action prolix, and the dialogue destitute of wit or sparkle. But on the stage, thanks to the art of MM. Delaunay and Febvre, and the charms of Mlle Reichenberg, many of these defects vanish. Still it is a poor piece, and could not have done much to retrieve the fortunes of M. Félix, though it was

presented with much care, and the company played well together. Then we had Mlle Adèle Page in several parts—of which perhaps the hackneyed *Adrienne Lecouvreur* is the best: Mlle Fargueil in *Nos Intimes*, *Dalila*, and *Pattes de Mouches*—and lastly in *Rabagas*. By this time the company had been greatly strengthened, and the performance of the play was in every respect equal to the original one at the Vaudeville, and in some respects superior. As a social and political satire, it is difficult to overrate the merits of *Rabagas*, though as a play it is too long, and too deficient in interest. But nothing can be better than the conception of Rabagas himself: the noisy, pliant demagogue, who bullies his associates, and truckles to the prince—or than that of the prince himself, the very incarnation of high-bred gentility, kindly and humane; and anxious, after his own fashion, to work out his people's good. Some of the smaller parts are excellent too. The chamberlain is a very humorous specimen of a court official; and the republican coterie at the "Crapaud volant" is a singularly well-chosen assemblage of types, not too highly coloured, of extreme republicanism. The dialogue is admirable. Its shafts of wit and raillery spare no one: moderate men may laugh at the sarcasms levelled at their opponents, and communists rejoice that the party of order does not escape without a blow. Berton, who played Rabagas in London, conceived the part differently from Grenier, the original, who was specially chosen by the author to play it, and to play it in a particular way. He was noisy and blatant, and is said to have imitated Gambetta: Berton was voluble and oily, with an under-current of passion, that he could bring out upon occasion, as he does in the fine scene in act iv., when he flaunts the letter in Mrs. Blunt's face. Mlle Fargueil acted the latter personage far more finely than Mlle Antonine did. Her first scene with Rabagas was extremely clever; she plays with the dreaded revolutionist, secure of victory in the long run, as a sportive spider might do with a rebellious fly; and in the next act, when she has succeeded so far as to bring him to the palace, the scene in which she assures him he need have no fears on the score of what the prince may say or do, for "Le prince, c'est moi," was a triumph of acting of the highest quality of comedy.

In Paris itself no new play of importance, except *Rabagas*, has been produced since the war. There have been however some very interesting revivals, especially that of *Ruy Blas* at the Odéon. It was very nobly played throughout, by performers of education and refinement, who understood the literary as well as dramatic importance of the work they had to interpret. This was especially to be noticed in M. Geffroy, formerly sociétaire of the Français. His Don Salluste was one of those perfectly beautiful creations of the dramatic art which can only be produced after a lifetime has been spent in the study and practice of it, added to the possession of great individual talent and personal gifts. He looked like a portrait of Velasquez stepped from its frame: dignified, sarcastic, devilish: every gesture, every look, even the most insignificant movement, had a meaning, and served in some way to elaborate and complete the most perfect picture of a cold and haughty Spaniard that could be presented on the stage. The Ruy Blas of M. Lafontaine was picturesque, but unequal. He began very well, telling the story of his love in an undertone of grief that was extremely touching, and denounced the greedy senators with much fire aud scorn; but his love scene with the queen was a sad failure. He ranted and flung himself into attitudes that were meant to move to admiration, but succeeded only in moving to laughter. However, he made up for all shortcomings by his performance in the last act. He left nothing to be desired in that magnificent scene where Ruy Blas faces Salluste at last, and exclaims with exultation,

"Je te tiens écumant sous mon talon de fer."

Lemaître himself could hardly have been better: if indeed he was so good, for he never could have had the cultivation necessary for the adequate rendering of the poetic drama.

In London—apart from the usual dreary plays, to one or two of which the long-suffering audience has had the pluck to do summary justice—we have had some interesting revivals, among which that of Lord Lytton's *Money* at the Prince of Wales's must take the first place. The management has taken unusual pains with its production in every way; and though faults may easily be found with parts of the interpretation, yet on the whole it is admirably rendered. And it must never be forgotten that the Prince of Wales's is the one theatre in London with a company: a definite set of performers who are persons of talent, accustomed to play together, and of whom the very best are satisfied with small parts upon occasion for the sake of the work that has to be given. *Money* is full of small parts: but they are all good: on them the success of the piece depends: and they are nearly all associated with the name of some celebrated actor in the original cast at the Haymarket, which was exceptionally strong. At the Prince of Wales's they are all appropriately presented: the performers realise the character entrusted to them with intelligence: and if some old playgoer, whose recollections carry him back thirty years, should be crusty enough to maintain that they are not half as good as the originals, why, let him be set down as a grumbling, cross-grained, *laudator temporis acti!* The Captain Dudley Smooth of Mr. Archer is quite admirable. He is new to the London stage; and his acquisition for such a part as that is singularly fortunate. His quiet easy bearing, his cat-like step, his thin lips, long hands, pale face, and premature baldness, combine to realise to the life the portrait that the author has drawn of the consummate gambler, "who never inherited a sixpence, never spent less than 4000*l.* a year, and never told a soul how he managed it." It is difficult to imagine how Wrench could have been better: but it is said that he was. It is much to be regretted that the opening scene of act iv., in which Smooth leads Evelyn's tradesmen to believe that he is ruined, without committing himself to anything more definite than "Have you been paid, Sir?"—should have been suppressed. Mr. Coghlan gives us, for the first time, a thoroughly consistent, flesh-and-blood, Evelyn. Hitherto the part has been played in that stilted, pompous style that was thought proper for all meditative persons from Hamlet downwards, till Fechter banished it, let us hope for ever. Perhaps the highest praise that can be given to Mr. Coghlan is to say that he manages to make all the "tall talk" written down for Evelyn appear plain natural common sense—a feat that surely no actor ever achieved before! At times he may be a little too brusque: but the author evidently intended that Evelyn should be downright rude at times to Clara Douglas, or too sharp in attacking the weak side of Sir John Vesey's character, or deficient in polish when doing the honours of his own house: but after all the adverse criticism that can be brought against him has had its say, one is compelled to admit that he is the one supremely able exponent of the part that has been seen in our time. It is a pity that Mr. Hare should have attempted to portray that bland and unctuous humbug, Sir John Vesey. His sharp, crisp manner is quite out of place there; and he seems unable or unwilling to adopt any other. Miss Brough is a very graceful Clara, and Mrs. Bancroft, of course, an excellent Georgina: but Mrs. Leigh Murray is overweighted with the lively, audacious Lady Franklin: a part which would have been far more suitable for Mrs. Bancroft herself. But, whatever fault we may find, however justly we may criticize minor defects, *Money* is very well played at the Prince of Wales's, and the public evidently take a delight in seeing, what is so rare in England, a good play well performed. That the public does like good old plays better than indifferent new ones is proved by the fact that *London Assurance* lately ran for nearly two hundred nights at the Vaudeville, only to be displaced by that dramatic evergreen, *The School for Scandal*. The absence of anything like a school of acting in England becomes painfully evident when one of the old comedies is attempted. The language, the manners, and the dress are alike strange to the performers, who are infinitely more at home in the tomfooleries of burlesque. This is particularly the case at the Vaudeville, where the representatives of Sir Benjamin Backbite and Crabtree play leading parts in the *Very Last Days of Pompeii* afterwards, and have imported the airs of the burlesque into the comedy. The sight of so many people on the stage at once as are assembled in Lady Sneerwell's drawing-room seems to suggest a breakdown to their minds: and one cannot help fancying that their arms and legs every now and then give involuntary twitchings, and that a general dance of all the characters is becoming inevitable. That the actors should be strangely and incongruously dressed was only to be expected from the usual practice of our stage in these matters. Still, it is surely very odd that the style of a century ago should have been so completely forgotten as to admit the ludicrous caricatures one sees in what are called "costume pieces." What would be thought of a gentleman who walked down Pall Mall in a dress coat, a

morning waistcoat, a pair of footman's breeches and stockings, and a coachman's wig on his head? Yet certain characters at the Vaudeville cut no better figure. Mr. Farren's Sir Peter Teazle is an accurate copy of one of his father's great parts, but, like all copies, wants energy and nature: it is sensible, however, and painstaking. The Lady Teazle of Miss Fawsitt is bright and animated. By far the best piece of acting, however, is the Joseph Surface of Mr. Clayton. Throwing aside all the traditions, he makes Joseph a gay man of fashion (as the play warrants him in doing) who is quite as ready as Charles for any intrigue that may fall in his way, only he is a calculating, hypocritical schemer. He is really in love with Lady Teazle, and only affects a devotion to Maria for the sake of her fortune. Mr. Clayton realises this view in a way that leaves nothing to be desired. His deference to Lady Teazle whenever they meet is admirable, and the love scene in act iv. as passionate as the dialogue warrants, and that is saying a good deal. To this fine conception he adds a perfect bearing, and a costume that is accurate to the minutest detail of the time.

Mr. Bateman's management of the Lyceum seems likely to bring forth good results. *The Bells* was a well-written melodrama, original in idea and execution, and admirably acted, not merely by Mr. Irving, but by the whole company. The production of *Medea* would seem to show that he is anxious to try whether poetic plays can ever again become popular in this country. That he should have selected the well-known story of "Medea" may excite surprise: for she is an utterly unsympathetic person, whose conduct almost justifies Jason's treatment of her; and the other people of the play are dummies—from that terrible bore Orpheus down to the two children. Moreover, the conception of the part is encumbered by the recollection of three great actresses—Pasta, Ristori, and Titiens. Out of these unpromising materials, however, it must be admitted that Mr. Wills has made a very good play. His verse cannot be called musical or scholarly: there is no classical feeling whatever in his work from beginning to end: but he has cleverly arranged the story so as to keep its human side prominent: he has made some changes so as to bring forward Medea's love for her children; and he has introduced a very effective incantation, with the proper accompaniments of a darkened stage and a red light. But the demerits of the play are forgotten in the admiration called forth by the talent of the principal performer. Miss Bateman is not merely a clever exponent of the part: she is an artist endowed with real tragic power, who, whether in pathos or in passion, carries her audience with her, and makes them forget all that is stilted or absurd in the play in sympathy with the heroine with whom she has identified herself. From her performance of Leah it might have been expected that she would have been greatest in passages of indignant declamation; but this is not so. The scene in which she is threatened with the loss of her children develops in her a new power: that of touching her audience by her ability in depicting tenderness. Moreover, it is most agreeable to notice how Miss Bateman progresses in excellence. Her Leah was good: her Mary Warner was better: but in Medea she has made a decided advance, which augurs great things for the future. It is refreshing to think that we have at last a tragic actress: that if plays be only forthcoming, an adequate exponent will not be wanting.—Curiously enough, at this very moment the Théâtre Français exclaims that it has discovered a real actor—young Mounet-Sully, a pupil of the Conservatoire, who bids fair, they say, to rival Talma in his greatest parts—to be as a man what Rachel was as a woman: to achieve, in short, the highest distinction in his art.

J. W. Clark.

ART NOTES.

The Imperial Austrian Commission has issued the programme and regulations in accordance with which the Imperial Government proposes to conduct the Exhibition of 1873. All applications and enquiries must be addressed, up to August 24, by British exhibitors, to the English Royal Commission, through the secretary, Philip C. Owen, Vienna Exhibition Offices, 41, Parliament Street, London. The Austrian commission will communicate with exhibitors from foreign countries solely through the commission appointed by each country for that purpose. The exhibition opens the 1st of May, and closes the 31st October, 1873. Lists are to be sent in of the exhibitors, together with the plan of space required, before 1st January, 1873. Exhibitors have to defray all expenses not provided for by the Austrian commission, which has made arrangements for the reduction of transport charges within its own dominions. Exhibitors of fine arts are exempted from any charge for space. Insurances against fire are to be effected by the exhibitor at his own expense, and he is also responsible for the packing, forwarding, receiving, and unpacking of his goods both for the opening and close of the exhibition. The objects will be submitted to the judgment of an international jury, and special regulations will be issued for the fine arts. Exhibitors receive tickets entitling them to free admission.

The *Gazette des Beaux-Arts* for Aug. 1 contains an important contribution from the pen of M. Henri Delaborde. The article in question is entitled "Les Estampes d'Andrea Mantegna," and forms part of a work on the Elements of the History of Engraving which M. Delaborde is about to publish. Independently of its critical value it will be read with pleasure on account of its intelligent and sound method, which is eminently just, and appropriate to the nature of the subject in hand, being equally distinct from the dryness of German matter of fact treatment and from the English mode of chronicling subjective impressions in euphuistic language. The designs reproduced are —the "Judith," engraved by Mocetto; "Saint Sebastian;" "The Virgin and Child;" and the "Entombment," engraved by Mantegna. The subject of this paper is specially the pieces engraved by Mantegna, and M. Delaborde does not enter into any appreciation of the value of the popular attribution to Mantegna of the designs for the Hypnerotomachia Poliphili, the importance of which in its bearing on the history of the architecture of the Renaissance has been estimated once for all by M. Darcel. Two points are specially well touched by M. Delaborde—first, the way in which Mantegna from the first strove to harmonize his archaeological aspirations with the suggestions of his own genius; and, secondly, the predilection he has shown for scenes of violent emotion: it is in treating these that he displays the most profound power of invention. Mere talent is all that he evidences in such subjects as have their chief significance in the sentiment of tenderness, or compassion; whereas in such compositions as either of the Entombments we have the accent of genius.—The remaining articles are—a useful paper on the Musée de Lille (first article), by M. Louis Gonse; a notice of contemporary engraving in the Salon of 1872, by M. Réné Ménard; a third chapter of the "Correspondence of Léopold Robert," edited by M. Charles Clément; a notice by M. Champfleury on a collection of comic drawings which belonged to Catherine de' Medici; the correspondence of the directors of the French Academy at Rome; the letters of Vien and Natoire (tenth article), edited by M. A. Lecoy de la Marche; Flemish artists of the Renaissance, by M. J. Houdoy.—Amongst the most noteworthy of the illustrations are MM. Lorsay's and Jobert's reproduction of Mantegna's engraving of the "Entombment;" the engraving by M. Gaillard of a bronze bust of Dante in Sir Richard Wallace's collection; and a very graceful and artistic engraving by Mlle Hélène Boetzel, from a drawing by M. Édouard Frère of "Children leaving School."

The Royal Archaeological Institute met on August 1 at Southampton; the concluding meeting was held on Thursday 8, and the following resolution was unanimously carried:—"That this meeting has heard with deep regret of the projected destruction of 'Caesar's Camp,' near Wimbledon Common, and wishes to represent to the Council of the Institute its earnest desire that they should take such steps as they may think best for the preservation of that ancient historical monument." If we had a Chief Commissioner of Works sufficiently educated to have a proper knowledge of his duties, the task of saving from destruction such an historical monument as this would not be left to the chance zeal of private societies.

The Russian empire has been amongst the most active of those states which have, since the second International Exhibition at London in 1862, turned their attention to the development of industrial art by the means of schools and museums. In 1864 there was opened at Moscow a museum attached to the

Strogonoff School, which had been at work ever since 1860 at the training of designers for manufactures and teachers for schools. Both these institutions are supported by the government: the school receives an allowance of 16,000 silver roubles, and is attended by about 209 pupils. Similar efforts are being made at St. Petersburg. It is proposed to enlarge the schools at St. Petersburg and Moscow, to increase the importance of the Moscow museum, and to place the provincial schools of drawing, together with those of St. Petersburg and Moscow, under one central direction.

The death of M. F. Gillot, which has just taken place at Paris, must not be left without mention. M. Gillot was the inventor of paniconographic engraving, the influence of which on the diffusion of illustrated journals and musical publications can hardly be appreciated too highly. Formerly everything had to be engraved by hand, but M. Gillot, by means of a long sought and carefully perfected method, solved the problem of cheap engraving. Drawings submitted to the action of the acid became in twenty-four hours thoroughly bitten in, so that an immense number of impressions could be taken from them. The works of Doré, Marcellin, Cham, Bertall, have thus been popularised; even the *Gazette des Beaux-Arts* has more than once had recourse to this method.

The first part of the catalogue of the paintings contained in the museum at Madrid has at last appeared. It contains the Italian and Spanish schools. The second instalment is to contain the Flemish, Dutch, German, and French. With the second instalment, the editor, Don Pedro de Madrazzo, promises to give to the world facsimiles of all the most interesting signatures to be found on the various works which form this magnificent collection. M. Paul Lefort, in the *Chronique des Arts* for July 20, assures us that this laborious undertaking has been conducted with equal science and sagacity, and fulfils in every respect the most exacting requiremets of curiosity and criticism. Don Pedro de Madrazzo has patiently analysed the archives of the palace, and the thousand curious details which he has found in them have been condensed into the notes with which he accompanies the description of every picture. In cases where the editor has had (in the absence of any certainty) to choose the most probable attribution, he invariably furnishes the reader with the text of all the documents on which he has founded his conclusions.

The fourth edition of M. Alfred Michiel's *Voyage d'un Amateur en Angleterre* has just been brought out by Renouard. This work has steadily gained in reputation ever since its first appearance.

The well-known artistic glass-painting establishment of M. Maréchal is about to be transferred from Metz to Blois.

Melkshott Court, near Romsey, the seat of Lady Ashburton, has been almost destroyed by fire, which broke out on Friday, August 2. The building is fortunately of recent date, and all the works of art (which were very numerous and valuable), together with the library, were preserved by the energetic exertions of the neighbourhood.

The fourth edition of the catalogue of the collection of portraits, which forms the chief feature of the Dublin Exhibition, is now published. Portraits too form, it is said, the staple of the fine-arts department of the Lyons Exhibition, which was opened July 7. M. de Rayssac remarks, in the *Chronique des Arts*, that there is little or no high art, and an enormous quantity of portraits rarely satisfactory, but, on the other hand, many remarkable landscapes and fine examples of still-life painting. These, he adds, are the usual features of contemporary exhibitions. A gallery for fine arts has also been attached to the Universal Exhibition for Domestic and Industrial Economy, which was opened in the Champs-Élysées, July 28. This exhibition will remain open till November 1.

On Saturday, August 3, the British Museum estimates were presented to Parliament by Mr. Walpole. Mr. Wood's estimate of the sum required for the completion of the excavations of the Temple of Diana at Ephesus amounted, said Mr. Walpole, to 6000*l.* The trustees of the Museum had applied to the Treasury on this subject, and the Chancellor of the Exchequer, "who took the greatest possible interest in these excavations," had at once stated his readiness to grant the sum required by supplementary estimates, 3000*l.* this year, and 3000*l.* next. It may here be mentioned that on the 2nd inst. the lowest drum of the *columna celata* found at Ephesus nearly entire (see *Academy*, vol. iii. p. 285) arrived at the Museum.

Amongst the most notable works of art which have lately changed hands we may specify — Gainsborough's full-length portrait of Sheridan, dated 1783, purchased by Baron Rothschild for 3200*l.*—At the sale of Mr. Curling's collection, by Christie, Manson, and Woods: Webster's "Village Choir," which fetched 766*l.*; Cooper's "Cows and Sheep in landscape," 462*l.*; Herring's "The Start for the Derby," 660 guineas.—At the sale of the Durand-Dubois collection in Paris, M. Charles Nuittier bought on behalf of the Opéra all the old drawings of the decorators and scene-painters Brongniart, Mauro, Ciceri, &c. &c., also two full-length portraits of Fanny Elsler by Deveria. There was a lively competition for a pencil-drawing by Eustache Lorsay of an ex-artiste of the Palais Royal, Mlle Laure Lambert, who is at present Mme Émile Augier.—On Thursday, August 6, Sir George Chetwynd's collection of English, Italian, and Anglo-American coins and medals came to the hammer.

A curious musical MS., containing the words and notes of Luther's favourite hymns, collected and arranged for him by his good friend, "Herr Johann Walther, Componist Musice zu Torgau, 1530, dem Gott gnade," has been lately carefully edited and reprinted in facsimile by O. Kade. Apart from the interest which attaches to the exact words, &c. used by the reformer in the domestic concerts of which he was so fond, the publication is of course very interesting to musical antiquarians.

New Publications.

Aubert, E. Trésor de l'Abbaye de saint Maurice d'Agaune. Paris: Morel.

Didot, A. F. Étude sur Jean Cousin, suivie de notices sur Jean Leclerc et Pierre Woeiriot. Paris: Didot.

Galerie théâtrale, ou Collection de Portraits en pied des principaux acteurs et actrices français depuis 1552, gravés par les plus célèbres artistes, avec notices biographiques. Paris: Barraud.

Gobineau, le Ch. de. Souvenirs de Voyage. Céphalonie, Naxie et Terre neuve. Paris: Plon.

Hardwick, C. Traditions, Superstitions, and Folklore (chiefly Lancashire and the North of England); their affinity to others in widely distributed localities; their Eastern origin and mythical significance. Simpkin and Marshall.

Hittorff, S., et Zanth, L. Architecture antique de la Sicile. Recueil des Monuments de Ségeste et de Sélinonte. Suivi de recherches sur l'origine et le développement de l'architecture religieuse chez les Grecs. (Complément des ouvrages publiés 1826–30.) Paris: Franck.

Mareschal, A. La Faïence populaire au xviiie siècle, sa forme, son emploi, sa décoration, ses couleurs et ses marques. Paris: Delaroque.

Morand, Fr. Les jeunes Années de C. A. Sainte-Beuve, suivies de réflexions et jugements de son père sur la Terreur. Paris: Didier.

Overbeck, T. Atlas der griechischen Kunstmythologie. 1. Lfg. Leipzig: Engelmann.

Quérard, J. M. Oeuvres posthumes; publiées par S. Brunet. Bordeaux: Dumoulin.

Tourgueneff, Alex. Lettres à son frère Nicolas. (In Russian.) Leipzig: Brockhaus.

Physical Science and Philosophy.

The Introduction of Cultivated Plants and Domestic Animals into Europe. [*Kultuspflanzen und Hausthiere in ihrem Uebergang aus Asien nach Griechenland und Italien, sowie in das übrige Europa.* Historisch-linguistische Skizzen von Victor Hehn.] Berlin: Gebrüder Borntmeyer, ed. Eggers, 1870.

Man's efforts to supply his necessities or multiply his enjoyments, his strivings after "panem et Circenses," may seem to fall as regards the past entirely within the realm of the

historian, and as regards the future within the realm of the politician. But investigators, like other organisms, are mutually interdependent, and investigations regarding "all men's labour under the sun" must be largely biological if they are to be at all complete. For much of all that labour relates to organic nature, its processes admitting of being viewed as the selection, its results as the survival and predominance, of rival forms of life. The work now before us, Herr Victor Hehn's *History of the Introduction of Cultivated Plants and Domestic Animals into Europe*, professes to give us sketches of the history of the subordination of such plants and animals to man's needs so far as literary, that is, historical and linguistic, research can help him towards doing it. This profession, which is made upon the title-page, is fairly carried out in the body of the work; but in justice to the author we may say that he goes beyond his promises, and that the names of de Candolle and Unger amongst modern and those of Theophrastus and Pliny amongst ancient naturalists are to be found amongst his authorities, as well as those of the poets like Homer, and the historians like Herodotus, who give us so much more or less indirect information by making and omitting to make allusions to the natural history of their days. In one word, our author has to deal with an ethnographical and physico-geographical subject, and he has not wholly neglected its physical aspects.

If, after the fashion of a recent writer in the *Contemporary Review*, we take in the first place and as our surest gauge a purely quantitative estimate of Herr Victor Hehn's work, we must say that being but a nineteenth-century octavo of some 450 pages, it contrasts to disadvantage with such a vast and weighty folio as Bochart's *Hierozoicon*, which again, in its turn, must have looked but a pigmy by the side of the "ingens volumen" which Bochart himself speaks of with a shudder (*l. c.* ii. 814) as having been written by a certain Bustamantinus, *de SS. Animalibus*. In all seriousness, however, the subject is a very large one, Herr Hehn speaking himself with great propriety of the literature bearing upon one single department of it as "unermesslich;" and it is all we can or ought to expect if within the limits just specified we have some of the relations which the entire subject has to the history of the progress of our species sketched out, and some of its special concrete examples worked out for us. This the author has done.

In his introductory pages, pp. 3–10, Herr Victor Hehn treats of the large question of the possibility of the restoration of certain of the countries of antiquity, such as Greece, to the condition of fertility which they enjoyed, or are supposed to have enjoyed, in the times of the ancient writers; and he does wisely in siding with Unger in holding that "the thing that hath been, is," or at least, with ordinary care, may be, "the thing that shall be"; and in repudiating the doctrine of necessary decadence and exhaustion embodied in the words *loci senium*, endorsed though it be with the names of Fraas and Curtius. The very simple precaution of preventing the goats from destroying in Greece, as they have all but finished destroying in St. Helena, the forest-trees, by cropping their early buds, would enable the inhabitants to dispense with artificial plantation; and at the same time Herr Hehn points out that the utterances of the ancients are not all unanimously in favour of green fields and purling streams having been the characterizing features of the landscapes they lived in, for that the "woods which cool Ilissus laves" were not planted in what had been previously a bare treeless Attica till the time of Pisistratus (see Dio Chrysostom, *Or.* 25, p. 281 C), and that Plato years after spoke of the Ilissus itself as being but a rivulet, ὑδάτιον. Sophocles, we may add, would scarcely have devoted so many lines as he has done in the *Oedipus Coloneus*, 668–705, to the description of masses of green foliage, of the trees which composed those masses, and of the nightingales which sang in them, if such a description would have applied with truth to other parts of Greece, or indeed to other *demes* in Attica. It is only after a long sojourn in London, or after a lengthy travel in some such country as Palestine, that green comes, in Sir Francis Palgrave's language, "to comfort the eye and the mind;" and the force of such poetical description as the one we have just referred to was the force which is given by contrast.

H. Hehn notices the alarmist views of the agricultural chemist as to the exhaustion of the soil by the cropbearing to which it has been subjected for now so many successive wasteful generations. These too he sets aside, ascribing the decadence of agriculture in Greece to the non-adoption of scientific methods in the husbandry of the country, which *vera causa* again is the outcome in the last resort of the disadvantage which Greece labours under as compared to Italy owing to the large immigration of Sclavonian, Albanian, and Turkish semi-savages, and the insecurity for and the paucity of capital which this calamity has entailed.

Ten pages (10–20) are devoted to a sketch of the condition of things which prevailed in the two peninsulas of Greece and Italy when the first Aryan immigrants (whom he does *not* suppose with Mr. Fergusson, *Rude-Stone Monuments*, p. 39, to have been "figured under the myth of the return of the Heracleidae"!) entered it. He draws our attention to the great advantage which accrued to the invaders who penetrated farthest south into the two peninsulae from the more intimate relations which they were thus able to enter into with the Phoenicians, who in those early days had attained so large a mastery of the arts and inventions which are prerequisites of civilisation.

Three more or less general *résumés* of the conclusions to which his special investigations have led him are to be found in different parts of the book, pp. 314–316, pp. 355–368, and pp. 387–395; but the bulk of the book is made up of accounts, which begin immediately after the sketch of primordial times just alluded to, of the introduction and adaptation to human uses of various plants and animals. Herr Hehn's general surveys and summaries, even when we rank his introductory pages with them, fill up but some forty pages, but they contain a very large number of highly suggestive and thought-awakening general principles which vivify, whilst they help us to colligate, the vast mass of details which some threescore and ten special investigations entail upon his readers. The portentous load of concrete facts which his memory has had to carry has not deprived our author, as it deprives so many men similarly conditioned, of the faculty of graceful and artistic exposition; and the effects of intercourse are shown to have manifested themselves pictorially, or rather to have been measurable picturesquely, by the changes they produced in external organic nature, or, in one word, in the *landscape*, as plainly as, or even more strikingly than, by those other changes which are more usually held to be exact measures of the progress of civilisation. The characters given by the annalists to Tullus and Ancus do not differ more from those given by the historians to Pompey and Lucullus than did the landscape presented by early Italy differ from that of Italy in the first century before our aera. Oaks, limes, beeches, and pines clothed the hill—and indeed the mountain sides of Italy in its pristine days, but these trees had given way to the chestnut, apple, mulberry, cherry, and plum trees of man's introduction, whilst the olive, vine, and fig had occupied the lowlands when Varro (fl. B.C. 116–27) was justified in saying that Italy was so planted with fruit-trees as to look everywhere like an orchard. We doubt, however, whether the Ciminian wood,

which Livy (9, 36) and Florus (1, 12) in their rhetorical language compare with the German and Caledonian forests of their own day, could have coexisted with Etrurian civilisation even in the early periods indicated to us by the legend of the Tarquins; large forests and high civilisation being incompatible. At any rate Herr Hehn, in quoting Livy's words, and Livy in quoting the annalists' words, as to the existence of such a barrier against the march of an army some forty miles northwards of Rome in the year 308 B.C., should have pointed out that they were inconsistent not only with the whole condition of political and military movements described as then prevailing, but also with the account given (Livy v. 32) of Roman armies and their expeditions nearly a century previously. But we would also remark that the postdating of the persistence of the forest with all its characters of "invia atque horrenda" into the days of Papirius and Fabius shows that the early annalists must have dwelt upon those characters with considerable force and iteration in telling or distorting the legends, which we suppose to have really belonged to those far earlier times in which Tuscan power was yet but half developed, whilst Rome existed but in the embryo form of a small community tolerated in semi-independence partly on account of its insignificance, partly on account of the isolation which the legend, speaking so strikingly of the existence of woods, shows us that woods may have secured for it. We should also demur to Herr Hehn's ranking the Etrurians with the Indo-Europeans (p. 15), and to accepting the legend of their entrance into Italy having taken place from the north, and should use his own elegant analogy drawn (p. 389) from the fact that our best fruit-trees are the result of the engrafting of Oriental branches upon Western stocks to express the relation which was really held by the complex result of Roman culture to Etrurian and indigenous factors respectively.

Herr Hehn has well pointed out (p. 359) how ruinously one of the most prominent doctrines of the political economy of the old world, expressed by Cato in the words, "quae nasci in fundo ac fieri a domesticis poterunt, eorum ne quid ematur," or, he might have added, in the still older and equally foolish aspiration of Dicaeopolis (Aristoph. *Acharn.* 35), for the country where ὁ πρίων ἀπῆν, operated on the mechanical arts by checking the development of trades within the cities. But according to our author there was at work a deeper cause than even the non-recognition of the principle of division of labour to account for the stationary character of the mechanical arts among the ancients. They had, according to him (pp. 359, 360), no aptitude for the study of natural phenomena, living as they did in an ideal world, given up, as aristocratic castes are often given up, to the enjoyment of the artistic instead of to the pursuit of the real. But that he is wrong, at least from an aetiological point of view, when he says (p. 367) that what differentiates the modern from the ancient world is natural science, the arts, and political economy, as also when he says (p. 360) that the ancients lived immersed in dreams of religious fancy, and when he suggests (p. 361) that the evil influence of slavery (and the latifund system connected with it) may have been overrated, will be allowed by most persons. Again, it may be true enough (see p. 362) that the spirit of Christianity opposed itself to the Roman spirit of war, and that it was also so alien from the spirit of Roman law, in the codification of which the last manifestations of intellectual life under the empire were exhausted, that the name of scarcely one of the great Roman jurists can be pointed out as being that of a Christian, and that thus law and war, the two chief pillars of the Roman economy, were undermined by the new religion. But our author is at variance not only with himself, but also with the facts, when he hints that the new religion was at all more opposed to the spirit of natural science than the mind of the old world had shown itself to be, and the remains of Pompeii, where want of comfort, where imperfection of apparatus and poverty of instruments are so strangely noticeable side by side with works of unquestionable artistic beauty, if not always of unquestionable taste, testify to this at the present day, as he himself remarks (see p. 360). H. Hehn, again, is only right to a certain extent in insisting (pp. 358, 359) that much of all the good which might have accrued from the road-making of the Romans was neutralised so far as purposes of commerce and trade were concerned by the imposition of heavy tolls upon traffic, by their system of monopolies, and by their prohibitory tariffs. For if we take, as our author insists we should take, the history of the introduction of domestic plants and animals as a measure of the freedom of intercourse existing at various periods in the civilised and semi-civilised world, the history of such a plant as the cherry which spread in the 120 years which elapsed between the period of Lucullus' Mithridatic war and the time of Pliny into Spain, Belgium, and England, must be taken as indicating the existence of a tolerably free system of interchange and of intercourse. The chestnut, again, another stranger from Pontus, must have spread with even greater rapidity, as Amaryllis, who lived, in imagination, a considerable time before Pliny, was acquainted with and indeed (see Vergil, *Ecl.* ii. 52) not insensible to its merits. The parable of Jotham (Judges ix.), which H. Hehn assures us is now very little read, and which he consequently is kind enough to translate in full for his readers, shows us that the fig, vine, and olive were, at an early period, "dwellers in Mesopotamia and Judaea"; and though they were at a disadvantage as compared with the more hardy northward ranging plants just mentioned, which came, together with "nuts and almonds," from the Armenian region, they still had established themselves on the western shores of Italy before the period of authentic history. For in the legends the fig shelters Romulus and Remus and their she-wolf nurse; and though the law ascribed to Numa, and forbidding the use of wine for sacrificial purposes (p. 27), may seem to show that this "demoniacal drink," as Hehn calls it (*l. c.*), was looked upon in early Italian times as metal knives were looked upon by Zipporah, viz. as something too novel to be used in religious rites, still the legend does prove that wine was known at an early period in Italy, and at how early a period we can only guess, as the priests, especially if they looked upon wine as our author appears to look upon it, may have thought that no lapse of time would qualify such an invention for employment in their rites and ceremonies. The words, thirdly, of the old annalist, Fenestella, preserved for us by Pliny (*N. H.* 15, 1, 1), as they connect the date of the introduction of the olive with the name of Tarquinius Priscus, and so with the period of Etrurian influence, complete the chain of evidence; and we may further remark that, well suited to and indeed now even distinctively characteristic of the Mediterranean region though the olive be (Grisebach, *Die Vegetation der Erde*, i. 244), there can be no doubt that it was introduced into and not indigenous in Italy, and that its title, "bacca Sabina," shows therefore that this introduction took place at a period to which the memory of men reached not back, at least in the days of Juvenal. The peach (*Amygdalus persica*) and the apricot (*Prunus armeniaca*), coming from the parts of Asia which their scientific names denote, did not establish themselves in Italy till the first century of our aera, and we find no mention of them made in any writer of the Augustan age. It was left to the Moors and Crusaders to introduce the lemon, and, according to Hehn (p. 331), to the

Portuguese to introduce the orange, the "China orange" of some English writers, and the "Apfelsine" of the Germans, into Europe about the year 1548. The linguistic evidence for the introduction of the orange by the Portuguese may seem singularly complete, the modern Greeks calling the fruit πορτογαλεά, the Albanians *protokale*, the Italians *portogallo*, and, most striking of all, the Kurds *pottoghal* (Pott. *Zeitschrift für Kunde des Morgenlands*, 7, 113). But de Candolle (*Géographie bot.* 868) is of opinion that here, as in a good many other cases, reputation is in inverse ratio of desert, and that the orange, introduced from China at a comparatively recent period into India, was carried thence into Europe by the agency of the Arabs, Genoese, and Venetians some twenty-five years earlier than the date assigned by Herr Hehn.

If we lay aside the consideration of these somewhat small questions of priority, and look at the large-scale relations which have subsisted between India and China on the one hand, and Europe on the other, we shall note that, two thousand five hundred years before the days of Vasco de Gama, Solomon and Hiram contrived to introduce apes and peacocks into Palestine from India, and that with the exception of the sugar-cane, introduced, like the fiddle and the organ, by the Arabs, and the buffalo, Europe gained scarcely anything from India in the long period just mentioned. Surely the nations who extinguished Tyre, Sidon, and Carthage, must have been as much inferior to the Phoenician races in navigation and maritime enterprise as they proved themselves to be superior in military skill. What would Pytheas have thought if he had been able to foresee that Ireland would remain as little known to the Roman occupiers of Great Britain as New Guinea is now to the Anglo-Saxon and Celtic occupiers of Australia? How Pliny ought to have blushed for his countrymen when he had to confess that his knowledge of the Canary Islands had come to him but secondhand from King Juba! Herr Hehn says (p. 366) that the Roman empire might have been saved if it had been possessed of gunpowder, wherewith to keep back the barbarians, and of paper, upon which the entirety of Greek and Roman literature, including, we suppose, the writings of Crispinus, Fannius, and Tzetzes, might have been preserved, for use, we may suggest, in our public schools. But with the instances just given of the inaptitude for improvement, and of the slowness to exert itself for the benefit of mankind which the Roman empire manifested after it attained its definite establishment, we think mankind is perhaps to be congratulated upon the retardation of the invention of two commodities which might have secured a still longer tenure of power to the Italian mistress of the world.

It would be impossible, within the limits, we will not say of one or of two articles, but of very many articles of ordinary length, to follow Herr Victor Hehn through each of the detailed investigations into the history of our now familiar domestic animals and cultivated plants with which he has favoured us. There are about seventy of these histories, each one of which would furnish a large mass of matter for discussion; and the author goes beyond his undertaking as signified in his title-page, and adds to these old-world histories much that is interesting with reference to our obligations to America and her contributions to the landscapes and dietaries of modern Europe and Asia. He enumerates, and rightly, the Indian fig, the agave, and the Occidental plane, together with the potato, the tomato, and the tobacco-plant, but, whilst omitting the fuchsias, he adds to his list (p. 385) the Lombardy poplar (*Populus dilatata*), to which no American has, we imagine, since the time of the elder Michaux, made either direct or indirect claims. If men of science, who are, as Mr. Ayrton rejoices to think, but a small minority of mankind, demur to this statement, the immense majority of mankind (who are not scientific) will demur to another made upon the next page, where our author discharges a copious vocabulary of abuse upon the habit of smoking tobacco. He calls it upon that single page (p. 386) a barbarous custom, "ein barbarischer Gebrauch," and a hateful habit, "eine hässliche Gewohnheit," and this so-called "fragrant weed" itself he styles a kind of poisonous nightshade, "eine Species giftigen Nachtschattens." In days when an attorney-general has been howled at by an untruth-loving multitude because he had called things by their proper names, we may mention with praise the wholesome habit which our author has of expressing his likes and dislikes in plain language; and if any of our readers are curious or anxious to know what Herr Hehn's feelings are towards Turks, Magyars, and Sclaves, we may refer them to pp. 10, 364, and 425, where, whatever else they may object to, they will not have to object to any want of outspokenness.

A little more respect, however, for ancient literature, if for nothing else, might have saved our author from one of the few mistakes into which he has fallen, and would have prevented him from going out of his way (p. 181 and p. 435) and beyond both his authorities and the facts themselves to attack the correctness of the passages in Genesis xii. 16 and Exodus ix. 3, in which the camel is spoken of as being used in Egypt in the times of Abraham and of Moses. It is well known that Desmoulins long ago proved (*Mémoires du Muséum*, tom. x. p. 221, 1823), so far as literary evidence can prove such a point, that the camel was not largely used in Africa *west of Egypt* till a much later period in the world's history than the one we have referred to, but Desmoulins himself accepts the accuracy of the statements in the Pentateuch, and gives it as the result of his enquiry that Arabia, a country conterminous with Egypt, and Persia are the native region of the dromedary. But further, Mr. Horner (*Philosophical Transactions*, 1858, p. 59; cf. Lyell's *Antiquity of Man*, p. 35) and Lieutenant Newbold (*Proceedings of the Geological Society*, 1842, vol. iii.) have dug up dromedaries' bones in various deposits, alluvial and marine, in the Delta and on the west coast of the Red Sea respectively. We take this opportunity of saying that very strong evidence may be brought forward for the early and usually accepted dates of the books of the Old Testament in the same way as is done for those of the genuine Homeric poems, from the allusions they make to the plants and animals with which man is represented as coming into contact; and that this evidence may be brought out strikingly by a comparison of the real renderings of the Hebrew names of these animals and plants with the renderings given by St. Jerome, who learnt Hebrew only in middle life, and then assuredly imperfectly. The common fowl, for example, a bird the mention of which by the writer of the *Batrachomyomachia* proves him, as Payne Knight long ago observed (*Prolegomena*, vi.), to have been of a later than the Homeric age, finds a place some twelve times in the Vulgate as *Gallus gallinaceus*, though nowhere in our more correct version; and the tiger is found occupying in the former of those versions a place which in the latter is occupied, as in fact it only could have been, by the lion. Whatever such blunders as these may make us think of the learning (for learning alone, as distinguished from science, would have been sufficient to prevent the commission of them) of the early father in question, the fact that they are blunders, committed by him, and not by the writers whom he undertook to translate, is one which we commend to the serious consideration of H. Hehn as speaking somewhat plainly in favour both of the authenticity and of the authority of the writings which he sets aside so cavalierly.

In the two last pages of his text, H. Hehn has some remarks upon the numerical predominance which dark hair is gradually obtaining over light hair in the world as we now see it, and as this subject is of great ethnological and (if we may argue from the attempt of the late eminent theologian, Chr. H. Weisse [*Psychologie und Unsterblichkeitslehre*, p. 311], to correlate the colour of the hair and eyes with variations of our mental and moral nature) of even higher interest, we must point out a few particulars in which our author has fallen short either of completeness or of correctness. Firstly, Herr Hehn would have been liable to the charge of hastiness for arguing that the Scythians and Thracians of antiquity were dark-haired, because the Greeks and Romans, themselves a dark-haired race, would otherwise have stated that these two races differed from them in this particular. Secondly, as a matter of fact, the ancient Greek and Roman writers are not silent upon the matter; but when they do speak of it, they say exactly the reverse of what our author anticipates they would have said. Sidonius Apollinaris, in his *Panegyric on Majorian*, as also elsewhere, may not be taken as an undeniable authority, still the words, l. 218—

"Scythicisque choreis
Nubebat flavo similis nova nupta marito"—

count for something, and, when coupled with those of Clemens Alexandrinus (*Paedag.* iii. 3)—τῶν Ἐθνῶν οἱ Κελτοὶ καὶ οἱ Σκύθαι κομῶσιν, ἀλλ' οὐ κοσμοῦνται· (κομμοῦνται, see Cobet:) ἔχει τι φοβερὸν τὸ εὔτριχον τοῦ βαρβάρου καὶ τὸ ξανθὸν αὐτοῦ πόλεμον ἀπειλεῖ—they carry some weight. Galen, however, in his treatise Περὶ Κράσεων, ii. p. 627 (vol. i. ed. Kuhn), classes "the whole Thracian and Scythian race" with the Celts and Germans on account of their resemblance to them in this very particular of the hair. Though, as Dr. Beddoe, to whom we owe this last reference, has remarked, there is no subject upon which statements are so likely to be misleading and erroneous as statements made by any but good observers provided with standards of comparison, upon differences in complexion and colour of hair, we nevertheless believe that Herr Hehn is right in thinking that dark hair is becoming more and light less common in our own latitude and day as it always has been in Italy, and we think there is good evidence for this which his particular line of research should have drawn his attention to. Herr Hehn has in several places noted the singular fact that the useful invention of soap was due to the Northern and only adopted (and we may add, sparingly) by the Mediterranean races of Europe. He has not mentioned the fact that in many passages referring to this commodity it is said to have been employed "rutilandis capillis," for the procuring that flaxen-coloured coiffure which was fashionable in the later times of the Roman republic and under the empire, as it is at present in England. "Prodest et sapo," says Pliny, "Galliarum hoc inventum rutilandis capillis ex sevo et cinere." The Roman matrons, however, had employed wood ashes, the really efficient agent in the compound just mentioned, for this purpose long before Julius Caesar had subjugated the Gauls; for Valerius (ii. 1), writing in the time of Sulla, tells us that they "summa diligentia capillos cinere rutilabant." And light hair continued to be the fashionable, and, we submit, therefore, the less common, colour of hair down to the time of Tertullian at least; for he in his work *De Cultu* indulges in some ghastly mirth as to the evil omen which a flame-coloured head of hair might be taken to be as to the future life of the wearers who had taken so much pains to win it. The argument, that, if light hair is a thing which is fashionable, and for the procuring of which pains and trouble are laid out, it may be safely taken to be a scarcer thing than its opposite, will apply to the present day and to its parallelism with the other centuries of which we have been writing.

English ladies who have hair of their own, though of the wrong colour, buy washes to make that colour "auricomous," "regardless of expense," as indeed they well might be if these washes, containing ordinarily simply nothing beyond chloride of lime, were priced at any price less than a thousandfold their intrinsic value; and to them Martial's line, xiv. 23—

"Caustica Teutonicos accendit spuma capillos"—

applies curiously. English ladies who have not sufficient hair of their own buy the natural hair of German women now as in the days when Ovid wrote—

"Jam tibi captivos mittit Germania crines,
Culta triumphatae munere gentis eris."

What was written in the time of Arminius and Varus will apply to the time of Moltke and MacMahon; Mr. Hulke, one of the surgeons to the Moorfields Ophthalmic Hospital, informing me that it is an ordinary thing to find the German female patients at that celebrated institution wearing wigs, their own hair being sold and doing duty at the opposite end of London. It may be said that these are but coincidences, curious and close enough, it is true, but merely coincidences for all that. To this it may be replied that a plague-spot is merely a coincidence also, but that it has its significance as relating to conditions which are more than skin-deep. Let our readers lay alongside of such a description of the dazzling and squandering season of 1872 as appeared in the *Daily News* of Monday, July 22, and of Mr. Gladstone's boast as to the "leaps and bounds" which our prosperity is making, Livy's description of the life and manners of Rome in the "seasons," with which he was only too familiar. It will be found in his *Praefatio;* a few words for it may end this article—"Nuper divitiae avaritiam et abundantes voluptates desiderium per luxum atque libidinem pereundi perdendique omnia invexere." G. Rolleston.

The Philosophy of Shaftesbury. [*Die Philosophie des Grafen von Shaftesbury.* Nebst Einleitung und Kritik. Von Dr. Gideon Spicker, Privatdocent an der Universität Freiburg.]

Dr. Spicker's book consists of a historical study rather singularly sandwiched between two expositions of the author's views on theology and philosophy: for though these latter are termed respectively "Einleitung" and "Kritik," they have scarcely the shadow of a relation to the central portion of the treatise. The connection suggested in the preface is that Dr. Spicker has taken Shaftesbury as his "Vorbild" both in matter and in form. But, in fact, it is hard to say whether there is a greater contrast between Shaftesbury's effort to establish rational theism as the crown and culmination of philosophic morality and Dr. Spicker's conviction that reason and religion have nothing to do with each other: or between the urbane irony and serene contemplation of the peer and the inconsiderate violence, grotesque humour, and emphatic indecorum of the Privatdocent. It is hinted that Shaftesbury, like Shakespeare, requires a German interpreter in order that his merits may be duly recognised by his fellow-countrymen; and no doubt a certain disposition to depreciate him may be found in other writers besides Mr. Lecky, whom Dr. Spicker quotes. On the other hand, our author is apparently unacquainted with Mr. Hatch's elaborate edition, in which Shaftesbury's opinions on all subjects are treated with the most serious and respectful commentation; more so, indeed, than the polished essayist sometimes deserves or would have desired. However, even supposing that the fame of Shaftesbury needed rehabilitation, Dr. Spicker does not seem particularly well qualified for the task.

He is not sufficiently acquainted with English philosophy to exhibit the originality and importance of Shaftesbury's ethical views; while the theological portion of his author's work he seriously misrepresents by rendering it in his own very different temper. A writer who claims (in the *Miscellanies*) that he has always "forborne to mention any holy mystery of our religion or any article of our faith" would scarcely approve of an expositor who metamorphosed his elegant innuendo into a direct and violent attack on Christianity, by the simple process of leaving out the irony which is the most entertaining and characteristic quality of his style. Sometimes Dr. Spicker vulgarises this into coarse sarcasm; sometimes he does not seem to have caught it at all. For example, he seems to take quite seriously Shaftesbury's reference (while advocating good humour in religion) to the "playsom humour" of David, as exhibited in the "famous high dance" performed by him in a state—as he carefully notes—of nearly complete nudity. Apart from the carefully studied and artistically effective expression, Shaftesbury's criticism of historical religion is scarcely worthy of much consideration at the present time. His knowledge was not extensive or profound, and his application of it shows all the unhistorical intolerance of the eighteenth century; as even Dr. Spicker sees, in spite of the vehement unfairness of his own anti-Christian polemic.

And generally speaking, though Shaftesbury's importance in the evolution of English ethical thought is very great, on other subjects he hardly fills the place that his expositor assigns to him. His philosophical talent was considerable, but its development was checked by his continual dread of losing the gentleman in the philosopher. A theory of practice, he thought, the most rigid rules of good taste and cultivated sense could not forbid; but in the purely speculative region, though he showed himself acute enough in casual criticisms, he was restrained from any serious pursuit of truth by his gentlemanly-practical contempt for the absurdities of metaphysical pedants. Thus it seems extravagant to speak of Shaftesbury and Leibnitz as *co-discoverers* of Optimism: as if Optimism remained to be discovered in the eighteenth century, and as if there could be any comparison between the loose effusions of the "Moralists" and the elaborate and ingenious reasoning of the *Theodicee*. And there is a similar inappropriateness in the following account of the Letter to Somers on "Enthusiasm:"—

"Seit Plato, an den er sich unmittelbar anschliesst, hat keiner diese Leidenschaft so klar und gründlich erfasst und ihr eigenstes Wesen durch eine Fülle von Thatsachen aus der Geschichte und Erfahrung entwickelt und bewiesen. Nicht umsonst hat er dieses Schriftstück .... als Programm und Einleitung an die Spitze seiner Werke gestellt. Denn Moral, Kunst, Religion u. s. w. leitet er aus dieser Leidenschaft ab," &c.

Now Shaftesbury himself says of this composition, "The author cared not to grapple closely with his subject, nor to give us at once the precise definition of enthusiasm." And, indeed, here he does not appear exactly as a defender of enthusiasm: but rather as mediating between religious enthusiasts and polite society, which regarded their fanaticism as a malady needing severe treatment. He is chiefly concerned to impress on Somers and the public that a free play of raillery is the proper cure for this disease. Elsewhere no doubt he advocates more decidedly such temperate enthusiasm for beauty and virtue as he finds to be sanctioned by good taste and not incompatible with the character of a gentleman: nor would he exclude this exaltation from religion, provided its object be such a Supreme Being as a polite person in good humour feels himself disposed to recognise. But the resemblance between this attitude of mind and that of Plato is scarcely so close as either he or his expositor appears to think.

H. Sidgwick.

Notes and Intelligence.

Geology.

The Glaciation of Patagonia.—Prof. Agassiz has forwarded to the superintendent of the U. S. Coast Survey a second report of the expedition in the U. S. steamer *Hassler*, of which he has the command. A great number of observations of very great value and interest are detailed in it, among others, a large mass of evidence supporting the theory of the glaciation of Patagonia. In one locality he found a pool containing live marine shells more than 100 feet above the level of the sea, showing a very recent rise in the land. He is inclined, however, to believe that the level terraces which Darwin took for raised sea-beaches are not so in reality, but are the denuded surfaces of the horizontal Tertiary deposits. The only evidences of upheaval met with by Agassiz refer to a period since the deposition of the Tertiaries, and while the shells now living already existed, without pointing to a rise by successive steps. The report is printed in full in the number of *Nature* for 11th July *et seq.*

Fossil Wood from the Lower Eocene of Herne Bay.—*The Geological Magazine*, No. 96, opens with an interesting article by Prof. Dyer on the fossil woods of the Lower Eocene of Herne Bay and the Isle of Thanet. The author describes and figures the microscopic features of the wood of a dicotyledonous tree, which exhibits the peculiar structure known under the name of Fylose.

Fossil Footprints in the Carboniferous Series of Canada.—In the same periodical, Mr. Selwyn, the director of the Geological Survey of Canada, notices the occurrence of some fine fossil footprints in a stratum of dark shale belonging to the Carboniferous series of Nova Scotia. These footprints are described and figured by Principal Dawson, who finds the principal footprints to be of two kinds: a large one resembling the form described by him as *Sauropus Sydnensis*, but having a strong claw on the fifth toe of the hind foot, that has left its mark strongly impressed upon the slab; and a smaller impression, sometimes trifid, but occasionally showing the marks of four or five toes. The former, which has been named *Sauropus unguifer*, he thinks may have been produced by *Baphetes planiceps*, the latter perhaps by a species of *Dendrerpeton*.

The Sand-pits, Mud-volcanoes, and Brine-pits of Yarkand.—At the meeting of the Geological Society on the 5th June, Dr. G. Henderson described some remarkable circular pits, occurring chiefly in the valley of the Karakash river. These pits vary in diameter from six to eight feet, and are from two to three feet deep, the distances between being about the same as it is across them. He explains their formation by supposing that water permeates the gravel at the head of the valley, and passes under a stratum of clay, which prevents it regaining the surface; after flowing in very varying quantities for irregular periods, it at length gradually washes away small portions of this clayey band, while the sand above runs through into the cavities thus formed, and produces the pits described. The mud-volcanoes of Tare-Dab he considers to arise from the air contained in the water-bearing stratum after a fall of rain or snow becoming churned up with water and mud; it is ejected as a frothy mud, sometimes to a height of three feet. The brine-pits in the Karakash valley he attributes to the excessive rise and fall of the level of that river at various times; the water which fills the pits, unless replenished from time to time, becomes gradually concentrated by evaporation till a strong brine remains.

The Cambrian and Silurian Rocks of Jemtland.—The chief Silurian area in Sweden lies in the neighbourhood of Lake Storsjön, in Jemtland, and covers no less than 1920 geographical square miles. Dr. G. Linnarsson, of the Geological Survey of Sweden, describes this region in the *Geol. Fören. i Stockholm Förhandl.* vol. i. p. 34, and notes the striking fact, that the eastern and the western extensions of the Silurian formation of Jemtland exhibit a great lithological and consequently also a palaeontological difference. At places where limestones are prevalent, organic remains abound, and a comparison with strata of other parts of Sweden is consequently easy; but in the western extension of the Silurian rocks clay slates predominate which are utterly bare of fossils, so that it was only by means of a thin seam of limestone which bears Middle Silurian fossils he was able to trace the relationship with the other Cambrian and Silurian rocks. As regards their palaeontological characters, the Jemtland rocks bear a nearer relationship to the Norwegian than to the South Swedish Silurian formations. At several places large masses of metamorphic schist rest on the Silurian beds, but as they have not yet yielded any traces of fossils, their true relative age has not been ascertained.

The Fossils of the Cambrian Rocks of Oeland.—The Cambrian beds of West Gothland consist of sandstone and the so-called alum slate. According to Angelin and Linnarsson, the latter is characterized by two distinct faunas: the lower by Paradoxides and Conocoryphe species, and the upper chiefly contains Olenides. Up to the present time it was believed that in Oeland only the upper zone with Olenides was represented, but A. Sjögren has found below this stratum beds

which represent the lower division of the West Gothland alum shale, though differing in lithological character. It is a remarkable fact that this deposit, which has yielded several new species, is more nearly allied to the Bohemian primordial zone than to the rest of the Cambrian rocks of Sweden. (*Geologiska Föreningens i Stockholm Förhandlingar*, vol. i. p. 67.)

Geological Profile of the Central Chain of Scandinavia between Ostersund, Sweden, and Levanger, Norway.—The rocks along this line are classified by A. E. Törnebohm according to their relative age in the following manner:—1. Primitive rocks and old granite. 2. Slate of Levanger and Cambrian quartzite. 3. Silurian beds; and 4. For the most part crystalline shales without fossils. These are of uncertain age, but they are probably not older than the Upper Silurian. (*Sueriges Geologiska Undersökning*, Stockholm, 1872, p. 24.)

Coniferous Remains from Solenhofen.—The *Geological Magazine*, No. 95, contains a paper by Prof. Dyer, in continuation of a former one on the same subject, on some remains of Conifers from the lithographic stone of Solenhofen. He describes a new species of *Pinus* (*P. Solenhofenensis*), and gives a revision of the genus *Athrotaxites*, with description of two new species (*A. longiramens* and *A. ? laxus*), and a notice of a new genus, *Condylites*, probably belonging to the Cupressineae, and including a single new species, *C. squamatus*.

Flint Implements associated with Elephas primigenius in the High-terrace Gravels of the Thames Valley.—At the meeting of the Geological Society of London on the 19th June, Col. Lane Fox read a paper on the discovery of several flint implements which he found in association with *Elephas primigenius* and other extinct species of Mammalia. The author called attention to the presence of drift implements in the high terrace, their absence in the mid terrace, and their reappearance in the existing bed of the Thames; and noticed the great rarity or absence of animal remains in the high terrace, their abundance in the mid terrace, and the occurrence of both implements and animal remains at the bottom of the gravel in both terraces.

The Clay Deposits near Campbeltown.—Mr. David Robertson, at a recent meeting of the Geological Society of Glasgow, read a paper on the boulder-clay section near Campbeltown, which, contrary to its usual position in the west of Scotland, here overlies shell-bearing clay. The latter is dark grey in colour, and contrasts strongly with the overlying boulder clay, which is of a full reddish brown. The shell-bearing clay, as exposed in the bed of a little burn or streamlet in Tangy Glen, about six miles from Campbeltown, is seen standing up in the boulder clay like a little knoll, and has doubtless been brought to that form by abrasion. It can be traced for a distance of 60 or 70 yards; and though its exact depth could not be ascertained, as the rock is seen at a short distance on either hand, it probably extends only a few feet below that which is exposed. The boulder clay overlies it to a height of 50 or 60 feet. The latter consists of 50 per cent. of fine mud and 50 per cent. of sand and gravel, while the shell-bearing clay gives 80 per cent. of fine mud and only 20 per cent. of sand and gravel. The fossils are sparsely scattered through this deposit—Molluscs in particular are comparatively rare, the few found being chiefly *Leda pygmaea* with an occasional *Leda pernula* and a few fragments of other species. Ostracoda and Foraminifera are better represented, eighteen species of the former and twenty-six of the latter having been obtained. A remarkable feature of the Ostracoda in this deposit is that they have much in common with those found in the clays on the east coast of Scotland, which have been held to represent more purely Arctic types than those generally found in the west. Amongst these are *Cytheropteron Montrosiense*, *C. vespertilio*, *C. Sorbyana*. An upper bed, dipping to the river only, contains the more recent forms common to our raised beaches and present seas. It may be stated that *C. vespertilio* and *C. Sorbyana* are common species in the clays of Norway.

The Structure of the Cordillera de los Andes.—Dr. Maack, who was in charge of an expedition to explore the Isthmus of Darien in order to ascertain whether the Napipi road would offer advantages for an inter-oceanic canal, has found that the Cordillera de los Andes province of Chocó, New Granada, has features which distinguish it from the rest of the range. Throughout the whole of South America the general strike is from south to north, but in this province it changes to from east to west. The Cordillera of the isthmus consists of several rock systems; no high and wide tableland accompanies it as has been observed in the South and Central American Cordilleras, and it belongs altogether to a far more recent period, being contemporaneous in short with the eruption of basalt and trachyte. (*Boston Daily Advertiser*, 4th Nov. 1871.)

The Geology of the Argentine Republic.—According to Dr. G. A. Maack, the great La Plata plain chiefly consists along its western border of alluvial deposits from one to two feet in thickness, and generally formed of a fine brown or grey silt "Pampa sand," made up for the most part of Diatomaceae, and in the neighbourhood of rivers some still living freshwater shells. This covers the diluvium, the real Pampas formation ("formation pampéenne" of d'Orb. "Pampean mud" of Darwin). More or less red in colour, and attaining a thickness of 10 to 60 feet, it consists of sand and clay and in some parts limestone in so-called "Tosca concretions," and is remarkable for its "Lagunas" or "Salinas," and the gigantic remains of *Megatherium*, *Mylodon*, *Glyptodon*, *Toxodon*, &c. The basis of this Pampas deposit is formed by Tertiary beds, which d'Orbigny divided into a *système guaranien* and *système patagonien*. To the former may belong the lignite beds of Rio grande do Sul, in Brazil. The latter group is best developed in the neighbourhood of Paraná, and near Vivoras, in Uruguay; its chief fossils are *Venus Münsteri* and *Ostrea patagonica*; and the formation may be ranked beside the Swiss molasse. Tertiary beds are found at a depth of 280 feet at Buenos Ayres, whence they seem to extend right away to the base of the Cordilleras. Other sedimentary rocks are unknown in the Pampas, though the older Plutonic rocks are met with at isolated spots. (*Proc. Boston Nat. Hist. Soc.* vol. xiii. 417.)

Zoology.

We have received three parts (Nos. 4–6) of the *Illustrated Catalogue of the Museum of Comparative Zoology at Harvard College*:—No. 4 is intituled "Deep-Sea Corals," by L. F. de Pourtalès (pp. 93, with eight plates). The corals described in this paper were collected in the years 1867–9, during the expeditions made by the United States Coast Survey for the exploration of the Gulf Stream, and more particularly that part of its course known as the Straits of Florida. The greatest depth at which the dredge appears to have been used is 853 fathoms, between Key West and Havana. The families having apparently the greatest range in depth are the *Oculinidae*, *Stylasteridae*, and *Milleporidae*, and about fifteen species are considered to be characteristic of the rocky bottom at greater depths than 100 fathoms. The explorers found, moreover, that the Gulf Stream, as far, that is to say, as they examined it, extends to the bottom, and is not underlaid by a cold arctic current running in an opposite direction, as has sometimes been assumed to account for the low temperature at the bottom. Mr. H. Mitchell, assistant on the United States Coast Survey, proved experimentally that the Gulf Stream has a nearly uniform velocity in those straits, and a constant course for a depth of 600 fathoms, although its temperature varies 40° Fahrenheit in this depth.—No. 5 is intituled "The Immature State of the *Odonata* (Part I.: Sub-Family *Gomphina*)," by L. Cabot (pp. 17, with three plates). The larvae of seventeen species are described, but only four are identified and placed beyond any doubt; all the others are determined by exclusion or supposition, and some of them more or less doubtful.—No. 6 is a "Supplement to the *Ophiuridae* and *Astrophytidae*," by Th. Lyman (pp. 18, with two plates), in which some of the Ophiurians procured by deep-sea dredging in the Straits of Florida, as well as a few other species from shallow water, are described.

Syrraptes paradoxus in Scotland.—This remarkable Asiatic bird, a sudden irruption of which occurred in Germany, Holland, and more particularly in Great Britain during 1863, and which is commonly known by the name of Pallas's Sand-grouse, has made its appearance again this year, four of them having been seen on the 25th and 29th of last month near Girvan, in the west of Scotland. It is at present uncertain whether these birds are fresh arrivals or descendants of the individuals which immigrated in a previous year.

Two New Sponges from the Philippine Islands.—The British Museum has just received two new genera of Sponges that were discovered by Dr. A. Bernhard Meyer at Cebu, the island in the neighbourhood of which the beautiful *Euplectella* occurs. One of these sponges, named by Dr. Gray *Meyerina claviformis*, is, indeed, allied to, but still more beautiful than, *Euplectella*; it is 18 inches long, in shape like a cucumber, is slightly bent upon itself, and, whether regarded in its several parts or its entirety, must unquestionably be ranked as the most exquisite of sponges. The second, named by Dr. Gray *Crateromorpha Meyeri*, is of very different form, being goblet-shaped, and consisting of a globular, hollow body supported by a contracted stem. The globular part is 3½ inches wide, and the stem 3½ inches long. Both these sponges are marine, and grow erect in sandy mud. (*Ann. and Mag. Nat. Hist.* July and August.)

The First Dredge.—To Otto Friedrich Müller belongs the honour of having invented the dredge. The Zoological Museum at Cambridge, U.S., possesses in its library the copy of Müller's *Zoologia Danica* used by Tilesius during Krusenstern's voyage round the world in the beginning of this century. Tilesius, among many interesting remarks written on the fly-leaf, mentions the dredge invented and used by Müller, and represented in the vignette of the title-page. He purchased it on his passage to Copenhagen in 1803 of Vahl, Müller's collaborateur, and used it occasionally during the voyage, though, as he admits, not often, as he required the assistance of several sailors to work it, the rope alone weighing eighty pounds. On his return, the dredge was deposited in the collection of the Academy of Sciences of St. Petersbourg.

The Colours of Insects.—Under the heading of "Mimicry in the Colours of Insects," Dr. H. Hagen contributes a very interesting paper

to the July number of the *American Naturalist*. He states that the colours of insects are of three distinct kinds, viz. colours produced by interference of light, colours of the epidermis, and colours of the hypodermis. Colours due to interference may be produced in two different ways: either by thin superposed lamellae, as in the wings of Diptera and Neuroptera, or by many very fine lines or striae in very near juxtaposition, as in *Apatura* and other colour-changing insects; these colours are only optical phenomena, and differ in this respect from both of the other kinds. The epidermal colours belong to the pigment deposited in the cells of the chitinized external skin or epidermis. They are mostly metallic blue, green, bronze, golden, silver, black, brown, and perhaps more rarely red. They are very easily recognised, being persistent and never obliterated or changed after death. The hypodermal colours are situated in the non-chitinized and soft layer called the hypodermis by Weismann. They are mostly brighter and lighter, light blue or green, yellow, milk-white, orange, and all the shades between. The hypodermal colours in the body of the insects fade or change, or are obliterated after death. The hypodermal colours are very often different in males and females of the same species; the epidermal colours rarely differ. The hypodermal colours may change or be altered in some way in a male or female during its lifetime by sexual or other influences; the epidermal colours never change; the so-called "mimetic" colours are probably hypodermal. The hypodermal colours appear to be due to a kind of photographic action; the epidermal to a chemical process of combustion or oxidation.

Distribution of Land Molluscs in the Sandwich Islands.—Mr. John T. Gulick contributes to *Nature* for July 18 some new and curious particulars respecting the distribution of a group of *Helicidae* known as the *Achatinellinae* in the different islands of the Sandwich archipelago. The group is characterized by a spiral twist of the columella, generally so strongly developed that the columella seems to be armed with a lamellated tooth revolving within the shell, and is peculiar to the Sandwich Islands. It consists of several genera, most of which are confined to a single island. A remarkable development is found on Oahu, an island sixty miles long, with an average breadth of about fifteen miles, on which are found no fewer than about 185 *Achatinellinae*, all, with only one or two exceptions, peculiar to the island. Nearly all the species are confined to the forest regions skirting two ranges of mountains, about forty miles long by five or six wide; and even here no one of the species is distributed over even one-half of this small mountain range, being mostly restricted to areas of from one to five miles in length. Each mountain valley has its own varieties, and in many cases its own species; and the same remarkably restricted distribution of species is found in the other islands of the group. Nearly all the species of one genus found on one mountain range are connected by varieties presenting very minute gradations of form and colour. Species of the same genus on different islands are not so completely connected by intermediate forms. The degree of difference between the several species of the same group is in proportion to their separation in space. Nearly allied species, occupying neighbouring localities, pass from one to the other by all the intermediate gradations of form and colour, while those whose homes are separated by a distance of eight or ten miles cannot be connected by minute gradations without bringing in some of the forms occupying the intermediate territory. Mr. Gulick is however unable to account for these differences by natural selection, survival of the fittest, or any other theory. The conditions under which the allied species live are so completely similar that it does not appear what ground there can be for difference in the characters best fitting the possessors for survival in the different valleys in which they are found. The ground species are mostly dextral, while the arboreal species are chiefly sinistral, though this rule is not without exception.

Physics.

Earthlight on the Moon.—Prof. Shaler, of Harvard, who has devoted considerable attention to the appearance of the new moon when illuminated by the light of the sun-lit earth, has communicated his observations to the *Philos. Magazine* for August. With the 15-inch Mertz of the university observatory it is possible to see all the principal features of the topography of the dark region illuminated only with this earthshine. The eye is unable to recognise the craters by light and shade, the light being too feeble, besides being too vertical; the relief is due to the difference in the light-reflecting power of the various features of the topography. Whatever becomes very brilliant under the vertical illumination of the full moon shines out with a singular distinctness when lit by our earth's light. When the moon is not over twenty-four hours old, she is at her best for observation. The author was able to recognise nearly all the craters of the darkened part that are over fifteen miles in diameter, and probably one-half the bands which show with a power of 100 when the moon is full.

The Atmospheres of the Fixed Stars.—The first annual report of the observatory of Bothkamp, edited by H. C. Vogel, the director, contains very important results, which extend our knowledge of the branch of astronomical science that Miller and Huggins may be said to have founded. The following red stars were examined: α Orionis, α Herculis, β Persei, and R Leonis Minoris, and gave spectra that agree perfectly in exhibiting a series of broad dull absorption bands having sharply defined boundaries on the side next the violet. In the spectrum of α Orionis (*Betelgeux*) many lines were measured and compared with those in Ångström's atlas of the solar spectrum, and the presence of sodium, calcium, magnesium, iron, and bismuth, determined with a high degree of probability. The presence of hydrogen is uncertain, for in that portion of the stellar spectrum which should be occupied by Hβ, the second hydrogen line, a dim band only is observed, and Hα and Hγ are altogether absent. The lines of α Herculis conclusively indicate the presence of sodium, magnesium, and iron, and probably that of calcium and tin. The spectrum of another red star, α Bootis (*Arcturus*), differs greatly from those of the four above mentioned. It contains, in the place of bands, several sharp lines that could be measured with great exactness, and resembles most nearly the solar spectrum, but is distinguished from it by certain lines between D and *b*, not present in the sun, and by a dearth of lines in the red and blue. Hα and Hβ were detected with difficulty, and Hγ not at all, only a dull dark band being seen near G. A comparison with the lines of typical spectra was more easily made than in the case of α Orionis, and the presence of hydrogen, sodium, calcium, magnesium, iron, and chromium determined with certainty, and that of barium, manganese, and silver rendered highly probable. Though in the brilliant spectrum of Sirius the hydrogen lines are astonishingly prominent, the groups of lines are otherwise so weak that it is only possible to recognise with certainty the two sodium lines D and the magnesium line *b*. The spectrum of the variable star β Lyrae is peculiar in having a continuous ground on which bright instead of dark lines are seen. Of three more striking than the rest, one near the D line is the most intense, a second is on the boundary of the blue, and the third a little short of G. The positions of the three were determined with great accuracy, and their values in wave-lengths are: 587·5, 485·9, and 434, the limit of error being within 0·2 millionths of 1 mm. The first line is rather more refrangible than D, and agrees with the one, usually termed D_3, first noticed in the protuberances; the two others are hydrogen lines. Besides these, other bright lines were seen, one lying between D and C, the other probably being *b* of the solar spectrum, and corresponding with magnesium. (*Der Naturforscher*, No. 27.)

The Meteoric Shower of 30th April—1st May.—This meteor stream, the apparent position of whose radiant point is found by Schiaparelli to be in the Northern Crown, R.A. 237°, N.P.D. 55°, and which has also been recognised by R. P. Greg, was, according to D. Kirkwood (*Amer. Jour. Science*, July, 52), a more conspicuous object in earlier times. Meteoric displays are recorded by Quetelet to have occurred on this day, A.D. 927 and A.D. 934, and it is considered by the author that this stream of meteors may be connected in its origin with the comet which passed its perihelion about the 29th April, B.C. 136.

The Altitudes of Aurorae.—A paper on this subject in *Pogg. Ann.* No. 5, contains the results of observations of the aurora of the 4th February, made by Galle and Reimann, at the observatory at Breslau. Fourteen determinations made independently by these observers indicate a mean height of fifty-five geographical miles for the auroral rays. It appears probable that light is developed at even a less altitude than this, at forty miles, or what is practically the limit of the atmosphere, where, according to the observations of Liais, in Brazil, the last traces of reflected sunlight are to be detected, and the ignition of meteors is assumed to occur. The magnitude of the rays was not determined, but they are believed by these observers to have an average length of forty miles.

The Electrical Condition of Gas Flames.—Prof. Trowbridge, of Harvard, publishes a paper on this subject in the *Amer. Jour. Science* for July, page 5. He finds—1. That the flame of a Bunsen burner is negative while positive electricity accumulates on the burner itself, if it be a good conductor; when made of non-conducting material, no charge is noticed at the top of the flame. 2. The stratum of air in contact with the outer cone of flame is slightly charged with positive electricity, the partly consumed gas of the inner cone being neutral. 3. The presence of flames tends to change the nature of the atmospheric electricity at any given place, reducing a positive tension to a feebly negative one. As the electricity of air during cloudy and rainy weather is generally negative, or at the most feebly positive, the author considers that his observations in some degree warrant the popular idea that great fires are followed by a change in the atmosphere inducing rain.

The *Bulletin de l'Acad. royale des Sciences de Belgique*, No. 3, has a paper by J. C. Houzeau on a ready method of calculating lunar phases. It is especially intended for the use of students of history, and, with the help of the four tables appended to it, enables them to perform calculations of this kind with ease.

New Publications.

Abbott, C. A. The Stone Age in New Jersey. Salem (Mass.): Peabody Academy of Science.

Annual Record of Science and Industry for 1871. Ed. by S. F. Baird. New York: Harper and Brothers.

Arbeiten aus dem zoologisch-zootomischen Institut in Würzburg. Herausg von C. Semper. 1. Heft. Würzburg: Stahel.

Bastian, H. C. The Beginnings of Life. Two vols. Macmillan.

Bonnissent, M. Essai géologique sur le Département de la Manche. Paris: Savy.

Brefeld, O. Botanische Untersuchungen über Schimmelpilze. 1. Heft. Leipzig: Felix.

Egleston, T. Lectures on Mineralogy, delivered at the School of Mines, Columbia College, New York.

Fayer, J. The Thanatophidia of India: being a Description of the Venomous Snakes of the Indian Peninsula; with an Account of the Influence of their Poison on Life, and a Series of Experiments. Folio, with Coloured Plates. J. and A. Churchill.

Haeckel, E. Natürliche Schöpfungsgeschichte. 3. Auflage. Berlin: Reimer.

Kingsley, C. Town Geology. Strahan.

Koch, L. Die Arachniden Australiens nach der Natur beschrieben und abgebildet. 5. Lieferung. Nürnberg: Bauer und Raspe.

Pietschmann, W. Der Photometer. Leipzig: Scholze.

Rosenthal, J. Zur Kenntniss der Wärmeregulirung bei den warmblütigen Thieren. Erlangen: Besold.

Ross, J. The Graft Theory of Disease. Churchill.

Westerlund, C. A. Sveriges, Norges och Danmarks Land- och Sötvatten-Mollusker. I. Land-Molluskerna. Lund.

Philology.

The Nominal Suffix *ya* **in Indo-Germanic.** [*Ist in der indogermanischen Grundsprache ein nominales Suffix* ia *oder statt dessen* ya *anzusetzen?* Von Theodor Benfey.]

The Origin and Forms of the Indo-Germanic Optative. [*Ueber die Entstehung und die Formen des indogermanischen Optativ* (*Potential*), *so wie über das Futurum auf sanskritisch* syâmi *u. s. w.* Von Theodor Benfey.] (Publications of Göttingen Scientific Society.) Göttingen: Dietrich.

Professor Benfey has reprinted these two papers from the *Transactions* of the Göttingen *Gesellschaft der Wissenschaften.* Their titles are not ambitious: but the importance, at least of the second paper, for comparative grammarians is very considerable. In both of them is clearly seen the writer's acute and many-sided intellect: whether we agree with them or not, we learn from them.

The first (which in one way is introductory to the second) aims at proving that a nominal suffix which has played an important part in Indo-European languages had for its original form *ia*, not *ya*, as all philologers had hitherto believed: in other words, that it was a dissyllable, not a monosyllable—a circumstance which of itself raises a presumption against the new view, when we remember the undoubted antiquity of the suffix. The new evidence is the occurrence in the Vedas (clearly shown by Professor Benfey) of both the monosyllabic and dissyllabic form of the suffix, whereas in classical Sanskrit, as is well known, the former alone occurs. Which form is more frequent in Vedic writings is not certain; nor, indeed, is it material: the dissyllabic form is found there abundantly; and occurs also in Pâli and the Prâkrits. Which form was the older? The professor argues from the general improbability of so extensive a diaeresis of *ya* into *ia*, in default of parallel cases, and from the special improbability of so exceptional a change in Sanskrit, where the general tendency is to avoid hiatus: from the regular process of the formation of words, to wit, the meeting of open vowels in the amalgamation of the component parts; which vowels are at first pronounced distinctly, afterwards phonetic change occurs in order to avoid hiatus: from some indications given by the Sanskrit accentuation; and, lastly, from the fact that the suffix undoubtedly appears as *ιο* in Greek and *io* in Latin. From these arguments, but more especially from this agreement of the three languages, whose records are much the oldest which we possess, he concludes that the original form of the suffix was *ia*, which afterwards, in the Asiatic and North European languages, passed into *ya*.

Professor Benfey's argument undoubtedly disturbs the quiet possession of the received theory. Yet there is something to be said for that too. The agreement of the three languages—Sanskrit, Greek, and Latin—would be much more striking if the two last had possessed the *y*-sound: the few cases where it seems to occur in Latin, e. g. *Pompeius*, are scarcely to be regarded. Greek and Latin could not change from *i* to *y*: the other languages, which had both sounds, could change as easily from the one as from the other. The solution, therefore, of the question in favour of *ya* rests not merely (as Professor Benfey says) on a numerical preponderance in its favour, which would certainly not be conclusive: the nature of the evidence on the two sides is different: the evidence which can be drawn from Greek and Latin is much less conclusive. Further, it seems to me hard to separate the history of the nominal suffix *ya* from the verbal suffixes—formative and inflectional—of the same form: nor, I think, does Professor Benfey altogether wish to do so. But the manifold forms which the formative *ya* takes in Greek become in this way very unintelligible. Once derive them from a sound which the Greeks could not pronounce, and therefore endeavoured in many different ways to avoid, and all is plain. But why should there be such variety from original *ia*, a combination to which the Greeks had no objection? Lastly, the occurrence of *ia* beside *ya* in Vedic undoubtedly is easiest to understand on the professor's hypothesis—that *ia* was original, but began to pass into *ya* in the age of the Vedic hymns (both forms then existing), and was altogether lost in the classic period. But the very theory by which he explains the curious occurrence of *both* forms in the same literature may help us to understand how *ya* could pass for a time and to some extent into *ia*, and yet be fully re-established again. The Vedic language, Professor Benfey says, is an artificial language—derived, indeed, but yet quite distinct, from the popular speech. I quite agree: and is it not just in such a language as this that an artificial diaeresis might be expected?—a diaeresis which never established itself in the popular speech, which retained the original sound *ya*. I do not think that we should expect Vedic peculiarities of the sort to pass into the popular Sanskrit. Professor Max Müller's remarks on the license of pronunciation allowed in the Vedic hymns (*Rig-Veda-Sanhita*, vol. i. preface, p. lxxvi) seem to me pertinent here.

The second paper before us is an enquiry into the origin of the optative. In this enquiry is involved a larger question—as the professor points out—whether the principle originally laid down by Bopp, that such formations were compounded out of pre-existing words, not roots, or at all events out of a root and a word, is to be still maintained, as against the newer theory, that the changes of meaning in the moods were expressed by the insertion of probably pronominal roots. Bopp held that the optative-suffix was *ya*, formed from a root *î*, "to wish," with the suffix *a*: from this primary sense of wishing he thought that the other powers of the optative could be deduced. Professor Benfey adopts this view, with modifications designed to meet one or two difficulties in it. The first difficulty is the assumption by Bopp of the special Sanskrit phonetic law (by which *î* + *a* became *ya*) in order to get the ground-form applicable to all Indo-European languages. To this difficulty, which is

considerable though not fatal, because *i* might have passed into *y* in Indo-European (which possessed both sounds) and then been reinstated in Greek and Latin, Professor Benfey adds an objection to the insertion of *ya* before the personal endings. I do not understand Bopp as necessarily maintaining such an insertion: it is contrary to his principle above stated: but undoubtedly Benfey's objection to the insertion of such verbal roots is supported by all analogy. His own view is that the optative forms (which are three in Sanskrit and more in Greek) do not spring from one common origin—but from different tenses of a verb *î*, "to wish," which he agrees with Bopp in looking on as the radical idea of the mood. These tenses are the present and imperfect—indicative and conjunctive—both of the simple verb *î* and of the same verb as a base with a suffix *a*. From the imperfect of the simple verb *î-am* (*î-m*), *î-s*, *î-t*, &c. we get the Sanskrit forms of the first conjugation (*bhareyam*, *bhares*, &c.), the Greek ordinary forms (except the first person φέροιμι in common use, but the archaic first person) φέρο-ιν, φέρο-ις, &c., and the Latin futures *feres* (for *fera-îs*), &c. The other usual forms he gets from the imperfect conjunctive of the base *îa*, i. e. *îâm*, *îâs*, &c.—which give the Sanskrit forms of the second conjugation *-yâm*, *-yâs*, &c., the Greek -ιην, -ιης, &c., the old Latin *-iêm*, *-iês*, &c. (*e. g.* in *siem*), and the Gothic *jau*, *eis*, &c. The middle voice of the Sanskrit is the imperfect indicative middle of the simple verb, *î-ma*, *î-sa*, &c.—but, it must be confessed, with some strange changes of termination. Other Greek forms are ingeniously fitted into their respective holes: φέρο-ιμι is the indicative present of the simple verb—meaning simply, "I wish to bear": forms like τύψεια, τύψειας, &c. are given to the imperfect of the base, *îam*, *îas*, &c.: the Homeric conjunctives θείης, μεθε-ίῃ, &c. are present conjunctives of the base; δαμείω is the base present either conjunctive or indicative; θε-ίο-μεν is the indicative either present or imperfect: lastly, the indicative present, *î-â-mi*, *î-a-si*, &c., when attached to the root *as* (*es*) "to be," gives the future; in Sanskrit *-syâmi*, in Greek -σω through σιω, and in Latin *ero* for *es-io*.

All this is extremely ingenious, and holds together well. There is nothing improbable in this application of many forms to denote one category: on the contrary, it is in accordance with all we know of the principles of language. I wish to point out some difficulties in the theory; but I fully recognise that Professor Benfey has made out a very fair case with the evidence he has to deal with: he candidly lays claim to no more.

In the first place, it seems quite impossible to prove that the vowel *i* was ever long in the optative of either Greek or Latin. In *siem* it was short, and the Greek admits of no proof either way. Professor Benfey seems to recognise the difficulty at p. 9, where he speaks of *oî* becoming οι in Greek, and gives κοίτη from *kî* as an instance. But there is no proof that the root *ki* was long in Greek: I believe it to have been short in Graeco-Italian, as shown by Latin *quies*, &c. But it is essential to any establishment of the professor's theory that it should be proved to be long, or at least to show some traces of its having been so: for otherwise the sense "to wish" falls to the ground. Indeed there is but unsatisfactory proof for this root. Professor Benfey regards it as = *i* + *i*, the intensive of *i*, "to go," in the sense of applying to a person, requesting, wishing: then from wishing, he devises a transition through possibility to potentiality, in order to account for all the meanings of the verb. Now it does not seem easy to establish the sense of wishing for *î* even in Vedic: in common Sanskrit the sense does not occur: and Professor Benfey himself has some excellent remarks (p. 21) on the fact that in a living language a word never really has too distinct senses at the same time: it has one sense, though under special circumstances it may be applied to express another: and consequently it is improbable that *î* should really have had the special sense of wishing, here assumed to be so old, when it actually means "to request" in Vedic. In Greek and Latin we find no *ī*; we have *ĭ*, "to go": the Greek ἰότης and ἵμερος may point to a secondary root *is* with the desired sense: the nearest form is the Homeric ἰέμενος, which exactly corresponds to the Vedic *îyamâna*; but too much dependence must not be placed on the length of the vowel here: it is short in ἴενται (*Od.* xxii. 304); and cases like ἀθάνατος, ἀπονέεσθαι, &c., where a short vowel is artificially lengthened when followed by two or three others, are too common in Homer for us to feel certain about this one.

In the next place, does the syntax of the different languages, in which the mood occurs, countenance the view that "wish" (or "power") was the primary sense of the mood? In Latin the mood was absorbed into the subjunctive; but this very absorption points to a similarity of function and origin. In Sanskrit, it seems in the main conditional: but here we must wait for fuller information on the most important subject of Vedic syntax from Professor Benfey himself. When, however, in classical Sanskrit we find (e. g. *Nala*, i. 30) *viçishṭâyâ viçishṭena saṅgamo guṇavân bhavet*, we seem to have a perfectly parallel usage to the Homeric (e. g. *Od.* iii. 231) ῥεῖα θεός γ' ἐθέλων καὶ τηλόθεν ἄνδρα σάωσαι: that is to say, a direct statement differing from the indicative only by the introduction of more or less uncertainty; the statement of a conception, not of a fact. Now this usage is frequent in Homer; in Attic Greek it is hardly traceable: while the sense of wishing, and of potentiality (with ἄν or κέν), are comparatively rare in Homeric Greek, but fully established in Attic. This surely does not point to wishing as the primary sense of the mood. Again, it is well known that the subjunctive and optative are used in Homer to express the same kind of idea, only with different degrees of certainty. In the line, ἄλλον κ' ἐχθαίρῃσι βροτῶν, ἄλλον κε φιλοίη (*Od.* iv. 692), the optative is no whit more potential than the subjunctive. So far as sense goes, I can see no reason for treating the optative as a different kind of formation from the subjunctive. I do not know whether Professor Benfey would now form that mood on the same principle as his optative: but in his excellent *Kurze Sanskrit-Grammatik*, while confessing doubt on the matter, he seems to acquiesce in the usual explanation of the *a* of the subjunctive, namely, that it is an inserted element adding uncertainty to the verb. Now if this explanation is the best that can be given for the subjunctive suffix *a*, why should it not be tenable for the optative suffix *ya*? It seems to me that the received view is internally probable, by which both *a* and *ya* are regarded as demonstrative roots: I hold to the opinion that the relative sense of *ya* is later. In this explanation we have the analogy of the augment to help us: only the same element is attached to a different portion of the word, naturally to avoid confusion. I take the steps to be these: φέρε(τ)ι = "he bears," φέρη(τι) (with the inserted *a*) = "he bears there" = "he bears not here but elsewhere" = "his bearing is present to the mind only" = "he may be conceived of as bearing." The same explanation holds for the optative, probably a later formation and possibly to denote greater remoteness. Hence the subjunctive, as giving the nearer event, can be used to express greater probability: also as dealing with an object near at hand it gets its well-known usages to express doubt and questioning with reference to immediate action. The optative, on the other hand, as formed by the stronger suffix, can express a greater degree of uncertainty, a more remote consequence, and a wish, realised as a mere conception.

It is, no doubt, a strong point against this theory that it gives no explanation of the almost universal change of *ya* to *yâ* in this suffix. The long *a* before *m* in the Sanskrit first person singular and plural may be explained by the nature of the following sound—compare the extraordinarily disproportionate number of lengthenings before μ in Homer —and the dual *-āva* may have followed on analogy. But no physiological reason, so far as I know, can be assigned for lengthening a vowel before *s* or *t*. This difficulty then must be admitted. JOHN PEILE.

China's Place in Philology. An Attempt to show that the Languages of Europe and Asia have a Common Origin. By Joseph Edkins. Trübner, 1871.

THE first part of the problem alluded to in this title, China's place in philology, is certainly one of the most interesting and important of linguistic questions; and no one can be better qualified to answer it than Mr. Edkins, whose knowledge of Chinese and its dialects is at once extensive and accurate. But instead of restricting himself to this first part of the subject and investigating the phonetic and grammatical forms of Chinese in connection with other monosyllabic languages (Annamese, Siamese, Burmese, and Thibetan), the author descends from the scientific to the theological level by attempting to prove that the languages of Asia and Europe proceed from a common origin. Even if this could be done—and in the attempt the principal question is made to appear of secondary importance—we are at a loss to imagine what the author supposes himself to have gained thereby; for his object, as his theological attitude plainly shows, is to prove the unity of *all* races, and for this it would have been necessary to adduce the languages of Africa and the New World, which he entirely omits to do. Apart from this error, into which a philologist of the nineteenth century ought scarcely to have fallen, the method followed in his work is not exactly on a level with the present standard of scientific enquiry. Mr. Edkins fares no better than Xylander in his well-known book, *Das Sprachgeschlecht der Titanen*, when he allows himself to compare Chinese and Mongolian words with Greek and Sanskrit ones, and Thibetan with Hebrew, without considering the possibility of the origin suggested in each individual case. Thus before investigating the formal or phonetic elements with sufficient accuracy, he lays hold on certain morphological or syntactical coincidences, which, as is well known, can only be relied upon when the first two points have been already cleared up.

The author's observations in chap. iv. on the origin of language were evidently written in ignorance of the labours of Steinthal and L. Geiger, a pardonable circumstance considering his residence at Pekin; but some of the views which he imparts are such as even a theologian—in Darwin's native land—ought not to introduce into a work of scientific pretensions.

We fail to see how the enquiry into China's place in philology is furthered by the author's declaring the Chinese to be "Hamites who migrated eastwards before the building of the tower of Babel," for certainly no philologist would take such a statement upon faith, and to those who would, the whole question is a matter of indifference. The author is also in error in maintaining, in the beginning of the seventh chapter, that the Himalayan languages are more modern than Chinese; on the contrary, according to the latest researches, they as well as the other monosyllabic languages belong to a much older phase of phonetic development than Chinese.

In spite of these defects, to which must be added the numerous inaccuracies in transcription of Indo-Germanic and Semitic words, the book contains many valuable remarks upon the languages of Upper India; and especially the greater part of what the author communicates from the rich stores of his sinological learning is at once new and of the highest interest for philologers. FRIEDRICH MÜLLER.

A Grammar of the Urdu or Hindustani Language. By John Dowson. Trübner.

THIS grammar belongs to the best sort of those intended for practical use and convenience. It gives all the grammatical materials and the rules of syntax with completeness and brevity, which should make it fully answer the purpose for which it is intended.

There is however one essential defect which it shares with all the Urdu grammars that have hitherto appeared, that of ignoring the importance of comparative philology. When it is found that languages of older formation such as Latin, Greek, or Gothic, cannot be thoroughly understood without applying the comparative method and assimilating the results of modern philology, the same must be even more certainly the case with a quite modern language such as Urdu, which is more nearly parallel to the Romance dialects. Just as it is impossible to obtain a really scientific insight into any of the Romance languages without reference to Latin, so it is impossible to comprehend any form in Urdu, which belongs to the linguistic treasury of India, without recurring to Pali, Prakrit, and Sanskrit. And that this is not a matter of indifference even to the practical student appears from the rule discussed on p. 113, "The Agent Case," which, as the author himself observes in the preface (xiii), can only be understood by the help of Sanskrit.

The scientific study of the languages of modern India is especially incumbent on English scholars; no one in Europe has so close a concern with these languages, which possess a rich popular literature, and it may even be hoped that Sanskrit literature will be enriched and supplemented by their study.

As much unexpected light was thrown by the Romance languages upon the history of Latin (cf. Schuchardt's excellent work), certainly a profounder study of the new Indian dialects would explain many obscurities in Sanskrit. The Sanskrit lexicon, in particular, which at present, like the Arabian, contains an amalgamation of the most discordant elements, might be thoroughly sifted, and dialectic differences certainly would come to light as the popular languages were investigated. But to attain this result, the matter must be viewed from different sides, and in the first place a zeal for the scientific study of the popular dialects must be awakened.

FRIEDRICH MÜLLER.

M. SHAPIRA.

TO THE EDITOR OF *THE ACADEMY.*

SIR,—In the *Athenaeum* of to-day there is a letter, dated Jerusalem, July 24, 1872, and signed "H. J.," which gives an account of "the excavations in search of antiquities in Moab, which are being carried on under the auspices of M. Shapira," and which "have proved surprisingly successful." Allow me to repeat the warning which I gave in a recent number of the *Academy*. There was shown to me some weeks ago, at the British Museum, a drawing of the top of a pillar, sent home by M. Shapira. On it were figures of animals and an inscription, partly in Phoenician and partly in Nabathean characters. The authorities at the Museum seemed to have little doubt that the whole thing was a forgery.

That the Count de Vogüé should have secured a fine Phoenician inscription of fifteen lines, dug up at Beirut, is a matter of congratulation. W. WRIGHT.

Cambridge, August 10, 1872.

Intelligence.

The experiment which is being tried at Zürich, of admitting women to the ordinary academical course, is attracting considerable attention in France and Germany as well as in England, especially in view of the sudden increase (from seventeen to fifty-one) in the number of such students which has taken place this year. A very well informed writer in the *Allgemeine Zeitung* (July 23, 25, 26) represents the professors as entirely satisfied with the results at first obtained; but it appears that some of the latest comers (chiefly Russians) are imperfectly prepared for the university course, and to guard against any danger of lowering the academical standard, it is proposed to introduce a matriculation examination for all the students alike, and this plan is favoured by the ladies themselves, who are of course anxious that the degree of the only university open to them should not lose its relative or its positive value. Forty-four out of the fifty-one students are inscribed in the faculty of medicine; and a pamphlet by the physiologist Bischoff, who entertains a strong *à priori* objection to the study of medicine by women, has called forth an answer by his colleague, Prof. Biermer, who has had in all twenty women in his lectures, and speaks highly of the accuracy and penetration of the best amongst them. He adds: "Gerade in der Mikroskopie, einer wichtigen Seite der modernen Medicin, hat meiner Ueberzeugung nach das Weib eine Zukunft." As to the anticipated inconveniences of lecturing on anatomy, &c. before mixed classes, the professors are unanimous that none have arisen. The conduct of the young men has been irreproachable, and the serious zeal of the ladies has acted as a stimulus to the other students; the only difference made by their presence in the lectures is that the slightest facetiousness of tone has become impossible, and this sacrifice, if it can be so called, the professors make without reluctance. The experience of Zürich is important because Lord Gifford's interlocutor in the action brought by the lady students at Edinburgh against the senate and chancellor of that university may be considered to decide the case practically in favour of the former. The French universities, it is noticeable, show much less reluctance than those of Germany to the admission of female students.

M. Ganneau, whose name is so well known in connection with "the Moabite stone," has published in the *Revue archéologique* a list of Hebrew, Greek, and Latin inscriptions discovered by him in Palestine. Twelve of them are described as Hebrew inscriptions, including—No. 1, the Moabite stone; Nos. 2 and 3, inscriptions in Phoenician characters found at Silvân, and presented to the British Museum; Nos. 11 and 12, Greek inscriptions, with a single word in archaic Hebrew. There is also one in each of the following characters: hieroglyphic (found at Gaza), cuneiform (found at Salt), ancient Aramaic, Phoenician, Nabathean, Estrangelo, Pehlevi; also eight Latin and fifty-six Greek inscriptions. A large number of engraved stones, graffiti, texts of the Crusades, cufic and other inscriptions (not all found in Palestine) are not included in this catalogue. M. Ganneau is now in Paris.

With the publication of the twenty-first volume of *Kuhn's Zeitschrift*, a new series commences, under the same direction as the old. An index to the last ten volumes is in the press, and will appear in the course of the year.

Messrs. Teubner announce *Untersuchungen über das System Plato's*, by Dr. David Peipers; an *Anthologia Latina Epigraphica*, by Bücheler; an edition of Demosthenes' *de Corona*, by J. H. Lipsius; *Polemonis Declamationes*, by Hinck; and *Porphyrionis Commentarii in Horatium*, by W. Meyer.

In *Fraser's Magazine* for August, "Pronunciation of Latin," by D. F., supports the hard pronunciation of *c* and *g* by Celtic analogies, which are also used to explain the transition to the present Italian pronunciation, which is recommended for practical adoption.

Contents of the Journals.

Journal Asiatique, No. 70.—Essay on the two principal Aramean dialects, by M. l'Abbé Martin. [The introduction explains the local distinction between the two dialects, which corresponds pretty nearly to the religious division between Nestorians on the one hand, and Jacobites, Maronites, and Melchites on the other. M. Martin then proceeds, on the basis of Bar-Bahlul, Jacob of Edessa, Bar-Hebraeus, &c., to examine, 1. phonetic questions, and 2. different parts of grammar; concluding with some remarks on Syriac lexicography. He expresses an unfavourable opinion as to the results to be obtained for the lexicon from publishing the works of Bar-'Aly and Bar-Bahlul. Passages from manuscript authorities are given at the end of the number.]—Intelligence, and notice of the Appendix to Perny's *Chinese Dictionary*.

The Pandit, Vol. vii. No. 73 (June).—The *Śabdachintâmaṇi* (or fourth book of the *Tattva-chintâmaṇi*, a celebrated work on *Nyâya* philosophy), with Ruchidatta Miśra's comment. [Continued.]—The *Brahma-mîmâṃsâ*, or *Vedânta* aphorisms, with Kanthaśivâchârya's comment. [Continued from the 19th aphorism of the 1st pâda of adhyâya I. to the end of the 2nd pâda.]—A *résumé* (*upasaṃhâra*), by Vâmanâchârya, of the drama *Viddhaśâlabhanjikâ* of Râjaśekhara.—The first portion of the *Karpûramanjarî*, a *Saṭṭaka*, or dramatic composition in Prâkrit dialect, by Râjaśekhara. Edited, with a Sanskrit translation, by Vâmanâchârya.—The *Vidvan-mano-ranjinî*, or "Rejoicer of the Mind of the Learned," a commentary on Sadânanda's *Vedântasâra*, by Râmatîrtha. Edited, with an English translation, by A. E. G. and G. D. [Continued.]—Catalogue of Benares Sanskrit MSS. [Continued. MSS. 5–10 of Nyâya and Vaiśeshika works.]

Rheinisches Museum, vol. xxvii. pt. 3.—A. Holm: The Discoveries in the Great Temple at Selinus in the Spring of 1871. [With facsimile of an Inscription.]—K. Dilthey: On the Greek Hymns published by E. Miller. [Discusses them in connection with the magic-papyri edited by Parthey, with remarks on the earlier literature of magic, and some emendations on the text.]—L. Ziegler: On the Text of the Scholiasta Bobiensis on Cicero's Orations. [A number of critical notes, the result of an accurate re-examination of the palimpsest.]—J. Gildemeister and F. Bücheler: Themistios περὶ ἀρετῆς. [A German translation of the Syriac version by which alone this valuable relic of antiquity has survived.]—H. Gelzer: Inscriptions in Asia Minor.—W. Schmitz: On the Tironian Notes.—Fr. Rühl: Corporare.—L. Müller: *In re* Simonides. [Prof. L. M., writing from St. Petersburg, informs us that the Russian officials know nothing of Simonides or his whereabouts.]—L. Müller: On Tacitus and Suetonius. [On a supposed surviving fragment of the Fulda MS.]—F. Bücheler: Coniectanea.—W. Clemm: Oraculum Pythium. [Proposes to emend the line ἃ φιλοχρηματία Σπάρταν ὀλεῖ, ἄλλο δὲ οὐδέν, by reading ἄλλ' ὀλεῖ οὐδέν.]—N. Wecklein: On Euripides. [*Phoen.* 722 and 916.]—M. Schmidt: A Decade of Conjectures. [On Plato, Thucydides, &c.]—J. M. Stahl: On Thucyd. iv. 28.—W. Teuffel: On Plautus, *Trinum.* 725.—L. Müller: On the poem *De Sodoma.* [An attack on Haupt.]—A. Riese: On Cato. [*Gell.* xi. 2.]—E. Baehrens: On Varro's *Saturae Menippeae.*—G. Krüger: On Cicero. [*Pro Sestio*, 6, 14 and 11, 26.]—A. Eussner: Coniecturae in Sallustii Catilinam.—M. Schmidt: On Hyginus.—Erotemata philologica, &c.

Zeitschrift für Deutsches Alterthum, iv. 1 (Berlin).—Steinmeyer: Glossen zu Prudentius (Old High German).—Wilmanns: Metrische Untersuchungen über die Sprache Otfried's. [Attempts to settle the quantities of the end-syllables by means of the rhymes and assonances.]—K. M.: Um Ragnaröckr. [The word is a late corruption of *ragna rök*, in which *rök* is equivalent to the Old E. *racu*, and signifies "fate," by an easy process of metaphor. The usual translation "Götterdämmerung" has, therefore, no foundation in the older mythology.]—K. M.: Uuâra und Uuara. [Shows by a comparison with the Old High German forms that the separation of *wǣr* (foedus) and *wǎru*, gen. *wǣre* (Schutz), in Beowulf is wrong: both words should be written with the long vowel, corresponding to the O. H. G. *wâra*, which from the original sense of "truth" develops that of "fidelity" and finally "protection."]——iv. 2 (Halle).—K. Maurer: Zur Geschichte der Godenwürde. [Traces the origin and development of the Norwegian and Icelandic priesthood in heathen times.]—F. Koch: Englische Etymologien [*a-jar* from O. E. *cerr* (turn), *awkward* from a conjectural O. E. *afoc* = Gothic *iluks*, *big* from *bûan* in the sense of "adorn," *bad* from *bedling* (effeminatus), *cushat* from a hypothetical *cwic-sceote*, and some others of less importance].—Zu Lamprecht's *Alexander II.*, von J. Harczyk. [Comparison of the German poem with the earlier traditions.]—L. Meyer: Zur *Germania* des Tacitus, Schluss. [Criticisms on the explanations given of various passages.]—S. Bugge: Zum Beowulf. [Valuable emendations and explanations of the text: a continuation of earlier articles in the *Tidskrift for Philologi og Pædagogik.*]

New Publications.

Benfey, Th. Ueber die Entstehung des indogerm. Vokativs. Göttingen: Dieterich.

Deveria, Th. Le papyrus de Neb-Qed, exemplaire hiéroglyphique du livre des morts, reproduit, décrit et précédé d'une introduction mythologique. Avec la traduction du Texte par Paul Pierret. Avec planches chromol. Paris: Franck.

Eisenlohr, A. Der grosse Papyrus Harris. (Vortrag.) Leipzig: Hinrichs.

Quicherat, L. Introduction à la Lecture de Nonius Marcellus. Paris: Hachette.

Ten Jātakas. The Original Pali Text; with Translation and Notes. By V. Fausböll. Trübner.

ERRATA IN No. 53.

Page 284 (*b*), 18th line from bottom, for "twelve" read "twenty-six."
,, 299 (*b*), last line but one, for "conception" read "corruption."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 55.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of THE ACADEMY *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Monday, September 16, *and Advertisements should be sent in by September* 11.

General Literature.

THE FOLKLORE OF GREENLAND.

Esquimaux Tales and Legends, translated from the Communications of Native Informants. By H. Rink, Governor of South Greenland. With Supplement, containing an Appendix on the Esquimaux. [*Eskimoiske Eventyr og Sagn, oversatte efter de indfödte Fortaellerces Opskrifter og Meddelelser.* Af H. Rink, Inspektor i Sydgrönland.] Kjöbenhavn: C. A. Reitzels Boghandel, 1866. [*Supplement, indehaldende et Tillag om Eskimoerne.* Af H. Rink.] Kjöbenhavn: 1871.

THE development and significance which the study of ethnography and the history of civilisation has acquired of late years, and the small degree of trustworthiness of the information upon which we are often forced to rely, combine to magnify the importance of these communications respecting a people dwelling at the furthest extremity of the earth; the rather that they come from a person peculiarly well qualified to guarantee their authenticity. He occupies a post in that remote Danish possession which assures him an ample supply of the required information, and he is further assisted in making use of it by the fact that he has constantly endeavoured to come directly in contact with the native inhabitants, in dealing with whom his familiarity with their language is also very serviceable. To these qualifications must be added a most praiseworthy sympathy for the poor inhabitants of these polar regions, who not only have to contend against their icy, niggardly climate, but are obliged to submit to the oppression and contribute to the support of the missionaries and other European residents as well. The results of his experience and his investigations upon Greenland and its inhabitants are set down in the two volumes named above. Though they deal chiefly with the folklore of the Esquimaux, they also contain a good deal of circumstantial information on other points relating to the people, in furnishing which of course the folklore itself is amongst the most important of our sources concerning the religion, the history, the usages, and the intellectual and material condition of past and present times. Since the appearance of the first volume, the value of this work of Rink's has accordingly been so generally recognised that the supplementary volume is published at the expense of the Scientific Association at Copenhagen and the minister for ecclesiastical affairs and public instruction.

I shall return presently to the legends, but will begin by noticing some of the religious opinions of the Esquimaux, together with the usages to which they have given rise, especially those which have analogies in other countries. Thus according to the view of the Greenlanders, when still heathens, divine justice displayed itself mostly in this life, yet they had also, it is said, the conception of rewards and punishments after death, and believed that witches and bad men came into the upper world, where they suffered from cold and want, and played with a walrus head, which was the cause of the northern lights; they were therefore called *Arssartut*, or "those who play with missiles." The lower world, on the contrary, where warmth and plenty reigned, was for the *Arsissut*, or "dwellers in abundance;" that is, all who had done great deeds in their earthly life, or had undergone much suffering, especially those who had perished at sea, and, lastly, women who had died in childbed, a conception which is met with also in the Marquesas islands and in the Lechrain, a district in Bavaria. The Greenlanders believed that a child murdered at its birth became an evil spirit, *angiak*, a belief also met with amongst the Norwegians and the Norwegian Lapps. The *Oromatuas*, the most powerful of all the spirits recognised by the inhabitants of Tahiti, had the same origin, and amongst the Polynesians in general the ghosts of children passed as being peculiarly malevolent. It is also noticeable that the Greenlanders trace the origin of death to a quarrel between two of the first men, one of whom said: "Let day and night alternate, and let mankind be mortal;" and the other: "Let it be always evening, and may men live for ever." This tale or myth bears a striking resemblance to a South African one of which Bleek gives five different versions (*Reynard the Fox in South Africa*, Nos. 31–35, "The Origin of Death"). Singing in the ears, which is variously interpreted in different countries, is said by the Greenlanders to be the voice of the dead asking for food, while to the Scotch it announces the death of a friend (for which reason they also call it "the dead bell"—Hogg, *Mountain Bard*, 3rd ed. p. 31). The conception of the *Igdlokok* or *Igduinak*, a being in the form of a half-man, with half a head, one eye, one hand, and one leg, is met with elsewhere, as amongst the modern Greeks and the Musselmans; there is no reason for supposing that the latter derived it from the Zulus (Tylor, *Primitive Culture*, i. 353); on the contrary, it is more probable that it has everywhere arisen independently. It is forbidden to point with the fingers at the *Inua* or genius of certain spots, such as mountains, headlands, and ice-fjords, because this is supposed to make him angry. The same prohibition in Germany extends to the sun, moon, and stars; and though the modern Christian explanation is that you may run a little angel through in the act, the original heathen motive for the superstition is very likely to have been the same as in Greenland, though of course it may have been formed independently in the two cases. The *Angakoks* (conjurors) and *Iliscetsoks* (witches) breathe forth fire, as in the German saga of Dietrich of Berne, and in the Anglo-Saxon *Havelok the Dane.* Amongst the accomplishments of the *Angakoks* was that of opening the bodies of the sick, taking out the entrails, washing them, and putting them back in their proper place. This too is an old idea, especially common in the East, from whence it was probably derived. Cf. my notice in the *Gött. gel. Anz.* 1868, p. 1656; to which may be added the following passage from an unpublished dialogue dedicated to the younger Lorenzo de' Medici:—

"Is (sc. medicus) ut fertur, daemones cacodaemones magica arte invocat atque coercet, lubetque ut languentis illius quem vult simulacrum vel formam daemones illi sibi deferant et eam scindant atque eviscerent. Ibi vero cum magno lumine consecratae candelae passim viscera omnia suis manibus revolvit atque oculis suis diligenter perlustrat, ut aegrotantis illius singulos intueatur languores. Tandem vero de invaletudine ac invaletudinis causa bene conscius factus, illud simulacrum reintegrari atque consui et in suum locum reduci praecipit, post vero languenti, cuius erat simulacrum medelas adhibet opportunas, si autem de salute illius desperet, id suis affinibus patefacit, ne in vanum pro salute sua

laborent. Sed aegrotantis prius ac genetricis ejus nomen solertissime perquirit, de genitoris autem nomine nihil sibi curae est, nam de vero patre incertum nomen esse dicit, matris autem certum: ne sui daemones aliam aegrotantis loco formam sibi deferrent."—*Il Paradiso degli Alberti* ... a cura di Alessandro Wesselofsky, vol. i. pt. i. p. 264, Bologna, 1867.

Evidently here the same process is applied to the image which the physician was supposed by the common people to perform on the sick person himself. Hydromancy was also known to the Greenlanders; the Angakoks used to divine from water the fate of persons and things that had disappeared. The conjurations of the Angakoks used to take place in a perfectly dark house, after they had had their hands tied behind their back and their head made fast between their legs. When the incantations were over, it was allowable to strike a light, and then the Angakok was seen free from his bonds, exactly in the approved style of a modern medium. The belief that the ghosts of departed mortals can be killed over again is not peculiar to the Esquimaux; it is shared by the ancient Hindoos, the Tartars, and many European nations, such as the Greeks, ancient and modern, the Kelts, the French, Scandinavians, Germans, &c. Further may be noticed the reluctance of the Esquimaux to pronounce the names of the dead, or of persons present, and especially their own name, a prejudice met with amongst other uncivilised races, as well as in the elder *Edda*, and in Scandinavian and apparently in early English popular verse (Tylor, *Early History of Mankind*, 2nd ed. p. 142: cf. 127; Svend Grundtvig, *Danmarks Gamle Folkeviser*, ii. 339, 340). Any one who bears the same name as a deceased person changes it in order to deceive and escape from death, in the same way as amongst the native tribes of America and the Sunda islands. As another superstitious opinion may be mentioned the belief that evil-smelling things, especially old urine, have a peculiar power o banishing supernatural beings (comp. the Icelandic *alfreki*), and this is probably the explanation of the custom followed in Greenland of holding a vessel containing the same over women in labour, because women in that condition are supposed to be especially exposed to the attacks of evil spirits; a belief of which traces may still be found amongst civilised nations. The *couvade* in the narrower sense, when the husband, after his wife has been delivered, takes her place in bed, and remains there, while the mother gets up and goes about her business, "is only an addition, to deceive the sickness-spirit of puerperal fever, and to protect the new-born infant from the pursuits of demons desirous of substituting a changeling" (Bastian, in Lazarus and Steinthal's *Zeitschrift*, v. 153, sqq.). In Greenland a child soon after its birth is licked by the mother all over lengthwise from the head to the toes, in order that it may enjoy health and long life; in Labrador the operation is adjourned till the end of the first year. The Esquimaux believe that spirits are unable to pass through running water, a superstition that prevails amongst the Lusatian Wends, who still make a point of placing water between themselves and the dead as they return from a funeral, even breaking ice for the purpose if necessary. And Sir Walter Scott (in a note to the *Lay of the Last Minstrel*) observes: "It is a firm article of popular faith that no enchantment can subsist in a living stream. Nay, if you can interpose a brook between you and witches, spectres, or even fiends, you are in perfect safety. Burns' inimitable *Tam o' Shanter* turns entirely upon such a circumstance."

Leaving the superstitions of the Esquimaux, we turn now to their legends, with respect to which Rink remarks that the more recent amongst them show little disposition to spread along the coasts, but that on the contrary every district contents itself with recording the ocurrences of the immediate neighbourhood and the last generation. The distance from Labrador makes it therefore exceedingly improbable that there should have been a constant exchange of legends kept up after the Esquimaux had reached their present places of settlement, and one is driven to suppose that the older legends which are common to both countries must date from a time when the present inhabitants of both stood in a much nearer relation to each other, that is to say, before they separated to spread east and westward along the shores of Baffin's Bay. The substance of the legends is partly religious, partly historical, partly poetical; but, as a rule, all three elements are mixed together, though there are also some that belong exclusively or principally to one or other class. In his section on religion, Rink has fully discussed the religious element, which is, without doubt, the most important and the most universal. The more recent legends are those which may be regarded as chiefly historical. They give us a picture of the breaking up of the nation into a number of small communities which, as above observed, only preserve the memory of quite recent events in a single spot. Such narratives generally reach back only 100 years, more rarely 150, but the narrators can upon the whole give an exact account of genealogies within this limit, that is to say, for five or six generations. However, though the persons, and the principal incidents in their life, are really historical, and correspond with the information derived from other quarters, they are nevertheless embellished with ingredients taken from older legends, and the spirit-world is made to play a considerable part in the story. As for the old Scandinavian settlers in Greenland, the ruins of their habitations are known to exist in two principal localities in South Greenland, that is, in the neighbourhood of Julianshaab and Godthaab. There can be no doubt that in the years immediately following their destruction, many tales were told concerning them by the native inhabitants, yet only two still survive; one, the most important, giving an account of a war between the Esquimaux and the Northmen, is localised in both those districts. That there should be a poetical element in the legends is a matter of course, as otherwise they would not have arrested the attention and seized the fancy of the listeners, or, in other words, they would have failed to inspire that love which has preserved the older legends unchanged for upwards of a thousand years. The legends are also important because they offer a speaking picture of the Esquimaux's way of looking at life, so that we can see at once in what respects it differs from ours. As Rink remarks, we ought not to be surprised at the absence of any pictures of what we consider beautiful in nature, for it is only in few spots that the Esquimaux catch in their summer excursions a glimpse of green valleys, with a little scanty shrubbery. Their taste does not lead them to seek out such places where they exist: far otherwise; the sea and winter with all their dangers, which the fancy pleases itself by even heightening, on the one hand, and on the other an ample provision of lard and meat, by the help of which the Greenlander bids defiance to those dangers, far outweigh to his thinking all those advantages which the sun draws from the lap of earth under a brighter sky. The legends reflect the life of man as truly as they do the moods of nature, and one does not have to read far in them to see that property counts for literally nothing, while courage and strength are everything; that some expend their strength chiefly in dashing hither and thither in their *kajak* (the Esquimaux fishing-boat), and stretching so far out to sea that at last the tops of the highest mountains look like the head of a seal bobbing up and down upon the surface of the water; that others again are admired and emulated for the fortitude with which they endure the severity of winter, and go out fishing, after all their comrades have given up the idea in despair, and so save them from perishing with

hunger; and that there are yet again others who set at nought the infirmities of old age, and as grandfathers continue to procure the necessary means of support for their families. We see from all this how greatly the Esquimaux is absorbed in the "struggle for existence," which leaves him little leisure to admire the beauties of nature, and yet they do not escape him altogether, as we see from the following song for summer:—

"Oh summer warmth, who hast come again now—Not a breath of air stirs, ama hai,—And there is not a cloud in the heavens, ama hai—Weeping with emotion I stretch myself out upon the earth,—The good reindeer do the same—Between the mountains one sees them grazing in the dewy distance—Haija haija hai—Oh what delight, what happiness!—Aija aija haija hai!"

Still more attractive is the deep feeling for the beauty of nature in the following saga:—

"A seal-hunter in the island Aluk, on the east coast of Greenland, was distinguished beyond all his countrymen for the love of his native home, for he never left it even in the summer time. At the beginning thereof his great delight was to watch the sun rising above the waves, showing, as it sometimes will, a momentary glimmer, and then again disappearing. But when a son that he had grew up, and could not resist the desire to follow his companions on their summer's journey, he persuaded his father to travel with him towards the west. But scarcely had they proceeded so far inland as that the sun appeared to them to rise over the land instead of out of the sea, the father refused to go any farther, but turned back upon the spot. And when they had got back to Aluk, the old man left his tent early in the morning and stayed without. At first they heard his voice, but after a while everything was still, and as his children came out to look for him, they found him lying dead upon the ground, with his eyes turned towards the sun. It was joy that slew him in the very moment when he saw it again rise from over the sea."

A deep feeling for nature can scarcely be more touchingly or more impressively expressed than is the case here. We see, in this respect, too, how essential an exact knowledge of the tales and legends of a people is to the true understanding of its inner nature, and how serviceable Rink's collection is. He also communicates a series of songs, from which the following love-song is taken:

"I turn my gaze ever towards the south—For by the headlands of Isna, by the sea-shore of Isna—He will appear from the south—This is the way that he will choose,—Korsarak will surely come by the headlands,—Korsarak will surely be able to do this;—But perhaps he will not come—Till the plaice fishing begins—Till one begins to haul in the plaice."

Besides the legends, tales, and songs, of which the two former offer many and startling points of resemblance to those of widely distant lands (as I have pointed out elsewhere, *Heidelb. Jahrb.* 1869, Nos. 7 and 8), Rink has also given us a circumstantial treatise on the means of support and the mode of life of the Esquimaux, on their language, social organization, manners, customs, and usages, their religion, their intellectual condition, the presumable birthplace of their race, and its relationship to other peoples, with, finally, the influence of Europeans upon the natives. I have already quoted some passages from this section, to which the following may be added. Before the arrival of Europeans, the Esquimaux showed scarcely any signs of spiritual development, except in their legendary poetry, and in a certain very limited proficiency in the healing art, in astronomy, and in the computation of time. As for their descent, Rink contents himself with remarking that after much enquiry it has been concluded that the original inhabitants of America do not constitute a race apart, but show, though in a lesser degree, the same kind of variation as the inhabitants of the Old World, so that from the Esquimaux, through their nearest Indian neighbours on the west coast, a gradual transition to the other Indian tribes of North America can be traced. As to the influence of Europeans on the Esquimaux, Rink observes that we have seen so many cases in which the native inhabitants of various countries have been exterminated by the introduction, through Europeans, of sickness and intoxicating liquors, as well as by open warfare, that it is especially instructive to trace the effect of such contact when the requirements of the native population are most carefully considered, as has been done by the Danes in Greenland. The results unfortunately leave much to be desired, for in spite of all apparent good intentions, in spite of many steps taken for the security of the population, it is still chiefly regarded as an object of religious and commercial speculations. The attempt was made, it is true, to draw a distinction between the traders and the missionaries, but this proves nothing, for in the first place both systems have a common origin, and in the second both together form, as against the natives, a solid and united whole; so that the ostensible separation only serves as a subterfuge for those who wish to justify their party at all hazards, instead of considering how the actual grievances of the natives can be righted. Without going into the religious situation of the people, still, in spite of all the missionaries, of a very meagre description, it is interesting to learn what constitutes the material prosperity of a Greenlander, and for this purpose we give the inventory of the possessions of a man who was not to be considered exactly poor, as it was taken down at Rink's instigation. He owned a very miserable little house with a clay stove in it, which he shared with eighteen other persons, but he had no boat for long voyages, and no tent. He possessed one *kajak*, with the needful clothes and implements, amongst which were two fish-lines, one rifle, one chest of small tools, two furs with stuff coverings, one coat of coarse cloth, one vest, four pairs of breeches, two pairs of boots, two shirts, and a cap. Of his eighteen housemates, three possessed a *kajak* apiece and a rifle in common, but all were much worse off for clothes than the head of the household. They were also joint possessors of three lamps and a small fishing-line, and scarcely any other household utensils. From this one can easily form an idea of the possessions of a *poor* Greenlander, which Rink also enumerates; and yet there are European labourers of whom one could not give a very much better account, even in countries famed for their wealth.

As to the Moravian missions in Greenland, Rink observes that their principal purpose is to procure the society consideration in Europe by advertising its possession of four several stations in that remote country; and it is remarkable that public opinion has been so far imposed upon as to believe not only that the European residents at them are martyrs of self-denial and self-sacrifice—whereas they really lead a very comfortable life, amongst a submissive population, secured from material cares by their official position—but also that they are the only Christian community established in Greenland, which is quite untrue.

As to school instruction, it is observable that the Greenlanders show great receptivity in other matters than religion, and possess by no means despicable abilities. Attendance at school seems more popular than in other countries, so that reading and writing are as universal as in the most enlightened parts of Europe; while the higher instruction presents quite respectable results. It is especially remarkable to see how many of the natives combine scientific studies, which they are compelled to pursue under the most disadvantageous external conditions, with the exercise of their national industry. These and some other circumstances which speak favourable for the natural capacity and moral disposition of the Greenlanders give us a ray of hope for their future in spite of many darker shadows. This ray will be the more welcome to the philanthropist as the population has already fallen off frightfully. According to

Egede's estimate in the middle of last century, the population of Danish Greenland amounted to about 30,000; in 1863 it had diminished to 9461, while in Labrador the proportion is still more distressing. These numbers speak for themselves, and confirm the experience made elsewhere of the effect of contact between Europeans and uncivilised nations; so that it would seem the Danish government has not yet hit upon the right method of protecting the native inhabitants of Greenland. I cannot omit this opportunity of referring to an excellent work in which the subject under discussion has been exhaustively investigated. I mean Georg Gerland's book, *Ueber das Aussterben der Naturvölker*, Leipzig, 1868.

Here I must take leave of Rink's very attractive and instructive work, which, besides its other merits, has that of correcting several erroneous statements of Egede's and Crantz's, while its own intelligence may be received with unlimited reliance. Besides this, there are a number of woodcuts, executed by a native artist, to serve as specimens of inland art; also a photographic group of forty-one Greenlanders, partly of pure, partly of mixed descent; and two pretty chromo-lithographs of Greenland scenery, executed by a printer of the latter class. It is interesting to compare these woodcuts with those in Mitford's *Tales of Old Japan*, which were also the work of native artists: these last have certainly a higher degree of technical merit, as was to be expected from the superior antiquity of the art in Japan; but in correctness of proportion and drawing, the palm certainly belongs to the Greenland Dürer. Felix Liebrecht.

Souvenirs de la Maréchale Princesse de Beauvau, suivis des Mémoires du Maréchal Prince de Beauvau, recueillis par Mme Standish (née Noailles), son arrière-petite-fille. Paris.

The princesse de Beauvau was one of the very few personages of the *ancien régime* who lived through the Revolution, until the Empire, without ever varying in her opinions or her conduct. She and her husband, who was fortunate enough to die a natural death in 1793, were amongst the most eminent members of the liberal aristocracy which did so much to make the Revolution possible by protecting "philosophers" from persecution and making enlightenment fashionable. The present volume is a monument of the princess's constancy at once to her husband's memory and to the principles of '89, and it reads rather like the life of a righteous man, for whose sake the city might have been spared, had there been fifty such within it. The memoirs, chiefly compiled by Saint-Lambert, the life-long friend of the maréchal, are practically an apology for the eighteenth century, a plea for the governing classes, that, if they had had time, they would have reformed the government for themselves. It is curious to read a list of the good deeds of Louis XV., though the writer's view of him is substantially that which has since prevailed; but every page gives a fresh illustration of the chasm between the court and the people, which prevented even the virtues of the court reaching those whom they were meant to benefit. The prince de Beauvau was thoroughly upright and conscientious, but half the occasions of his opposition to the crown were mere personalities—*e. g.* he would not allow his wife to visit with Mme Du Barry, and the dangers he so courageously encountered were, literally, the royal frown and nothing more. The king showed his displeasure by not speaking when etiquette condemned them to drive out together, and this was political martyrdom; but the country at large naturally never heard of either the offence or its punishment, so it ignored the merits of the victim.

A more important exercise of public virtue was his opposition to the decree abolishing the parliaments in 1771; as governor of Languedoc, he persisted, in spite of direct instructions to the contrary, in releasing fourteen old women from a life-long captivity in the Tower of Aigues-Mortes, where they had been imprisoned for Protestantism ever since the Dragonnades. In his *discours de réception* at the Academy, he set the fashion which has found so much favour since, of wrapping up a political rebuke in apparently loyal and decorous phrases. It was soon after the disgrace of his friend and relative, the duc de Choiseul, and he took advantage of the usage which obliged him to praise the reigning monarch to praise him for all the measures planned and executed by the discarded minister. Voltaire was delighted with the artifice, and expressed his admiration in one of those wonderful effusions of humility of which he was so fond: "The reed, lifting up its little head, says very humbly to the oak," and so on. After the accession of Louis XVI. the prince was appointed to the government of Provence, and we can readily believe that his administration was just, merciful, and as enlightened as the central authority would permit. He saw that the prosperity of Provence depended on its seaports, and we might never have heard of the *Marseillaise* if a plan which he recommended with some warmth had been adopted. He proposed to bestow on Marseilles the privilege of religious liberty and freedom of trade, so as to attract thither all the commerce of the Mediterranean; the court objected, and he used to say to his wife, "Nous ne sommes pas encore assez mûrs, j'y reviendrai, on s'éclairera;" but unfortunately it was already 1788, and half Aix was starving from the suspension of the Parlement de Provence. His last appearance in history is in 1789, when he was invited to take a place in the council of ministers; he at first made his consent conditional on that of Malesherbes, but an urgent letter from Louis XVI. caused him to reconsider his resolve; he remained in the council for five months, and then passed into retirement. He had never been much in the confidence of the royal family, and though of course he continued loyal to the last, he watched the course of the revolution with melancholy tolerance. His conscience had been troubled long before on the score of feudal and seignorial rights; he had wished to abandon them formally, but was baffled by an entail, and when the law abolishing them was passed, he hastened to make all the sacrifices it imposed on him. Yet there must have been a good deal of the old aristocratic leaven left, for his wife, who shared all his thoughts, rejoiced in 1795 that he had not lived to see "le désordre et le déplacement de toutes choses," exemplified by a peasant-woman's having money enough to buy a feather bed (p. 108). It is easier to sympathize with her gentle regrets when armorial bearings were made illegal, not that they were necessary to her dignity, but because they had been dear to her since her lost husband's arms were first quartered with her own.

The first half of the volume, the *Souvenirs*, is the expansion of a sentiment which we must let the maréchale express in her own words:—

> "Pour expliquer comment deux personnes se sont aimées pendant quarante années, non comme amis, non comme époux, non plus même comme amants, mais comme s'ils n'avoient été créés que pour jouir l'un de l'autre, pour confondre leurs goûts, leurs intérêts, pour trouver de continuels motifs de se préférer à tout, pour ne se quitter jamais sans peine, ne se retrouver jamais qu'avec un plaisir mêlé d'émotion; pour expliquer, dis-je, la nature de cette intime union, il faudroit un nom qui ne convint qu'à elle. Celui de *passion* me semble le seul de ceux que nous connoissons qui pourra en donner l'idée."

This "passion" was nearly as famous in Parisian society as the less legitimate flames of Mmes d'Houdetot or d'Épinay. When the prince de Beauvau was about thirty-five, a widower with one daughter, he began to frequent the salons of Mme

de Clermont, one of the most attractive hostesses in Paris, and a lady upon whose reputation even that scandalous age never ventured to reflect; their marriage did not take place till ten years later, when the mature age of the parties added to the piquancy of that rare spectacle, a pair of married lovers. Thirty years of conjugal felicity were followed, for the maréchale, by thirteen years of pious devotion to the memory of the departed: her regrets, it has been seen, are expressed with some elegance, and in excellent language; but after all the theme is monotonous, and it must be admitted that we do not read her reminiscences altogether for the sake of the excellencies of him to whom they are dedicated. Other witnesses represent the prince as somewhat cold and formal in manner, scrupulously honourable, with only moderate original talents, but of wide and cultivated intelligence. It was he who said, with the magnificent condescension of a *grand seigneur*, in addressing the Academy, that the king "voit avec plaisir les personnes de sa cour briguer dans cette compagnie l'honneur de *devenir les égaux des gens de lettres*." Two other anecdotes must complete the portrait. He was dangerously wounded in his first battle, and as he was being carried from the field, an officer stopped to pity "le jeune brave," as he was called in the army. He smiled, and replied by quoting the line—

"Et mes derniers regards ont vu fuir les Romains."

Some years later a French army was besieging Mahon, on the island of Minorca: wine was cheap, and it was found impossible to keep the soldiers sober. The prince de Beauvau suggested the publication of an order forbidding every soldier found drunk from joining in an assault for a week afterwards, and we are assured that drunkenness ceased like magic.

What distinguishes this book from so many other volumes of memoirs is that a single life is the thread which connects these last days of chivalry with the foundation and rise of the new order of things. The traditions of the *grand siècle* were in full force when the maréchale was young; she sat at the feet of Voltaire, and was so devout a "philosophe" that after her husband's death she refused even to regret "cette opinion consolante de la réunion dans un autre ordre de choses" which had not been his. In 1764 she signalised as remarkable a phrase in a parliamentary remonstrance, "l'opinion commande à la multitude, et la multitude commande à la force;" and after watching the first warnings of the coming storm, she lived to see it both break and spend itself. Another family memoir gives a very graphic description of the salon in which, true to her old habits, the maréchale used to receive her surviving friends under the Empire. Her dress was rich, but of ancient cut; the *cafetière* was gold, the china priceless; the lackeys aged and infirm, but with an air that said they had seen good society, and made their criticism a thing to be dreaded. The maréchale's voice was weak, and every one spoke low for courtesy; the company was mixed—some surviving philosophers converted to imperialism, some returned *émigrés*, one or two old and intimate friends. The new men came to give themselves an air of *ancien régime*, the Faubourg Saint-Germain came to show its liberalism, Mme de Staël came to admire the grand old lady who had been her father's friend: but the most welcome guests were still those who could talk about M. le maréchal, and encourage her in the pious hallucination that he was not wholly dead while she lived to preserve his memory. Marmontel describes her in his memoirs as "la femme qui a toujours raison," so perhaps we ought to believe on her authority that it was the fault of circumstances and the misfortune of France that the prince did not take a more conspicuous and influential part in public affairs. At any rate the double chronicle of her constant affection and the life of her lord—it must be admitted that the two are mixed together rather perplexingly—makes a monument with which a greater man might be contented. H. Lawrenny.

The Life and Labours of Mr. Brassey. By Arthur Helps. Bell and Daldy.

Most eminent men never have their lives written at all; they are commemorated in the first instance by an amorphous collection of materials for a biography, and then by a series of *résumés* and reflections on the biography which has not been written. Mr. Brassey has escaped the common fate: no one can say that Mr. Helps has given us undigested materials instead of a book; yet he has not given us exactly a life of Mr. Brassey or a history of his labours. Instead he has written the *prolegomena* to a work which is hardly likely to be written, and, if it were, would find fewer readers than the pleasant sketch which he has given of Mr. Brassey's singularly winning character and of the conditions of his vast success. Mr. Helps in one respect was better qualified for his task than almost any writer; he has long been occupied with the problem of organization, and in approaching the life of a great organizer he knew at once what questions to ask. He points out very clearly how all the conditions necessary for the enormous development of railway enterprise had been gradually accumulated in England, and gives an interesting summary of the experience of Mr. Brassey and his agents, of the capacity and idiosyncracies of the workmen of different countries, with the result that the practical cost of labour scarcely varied, among extreme variations of the rate of wages. But the main interest of the book lies in what must have been the attraction of the subject to the writer, in the numerous illustrations which Mr. Brassey's career supplies of the homely wisdom which just evades being commonplace, and almost seems recondite because it is neglected, which has served for so many years to exercise the trained perception of *Friends in Council*. Perhaps the most striking fact is that Mr. Brassey's average profit on his contracts was barely three per cent.; the most edifying is that he seems to have owed his success much more to his character than even to his abilities, great as these were. There were many men who understood the business of railway construction equally well; but he was able to obtain the lion's share of it because he was peculiarly safe, and still more peculiarly pleasant to deal with, and because his good nature and judicious trustfulness enabled him to take work in a sense easily. It is seldom that optimists can point to such a splendid confirmation of the maxim that "Honesty is the best policy." G. A. Simcox.

LITERARY NOTES.

The Russian government is said to be preparing to publish a complete collection of all autograph letters, orders, memoranda, &c. of the czar Peter the Great, including those of a private as well as of a public character.

The literary remains of the poet Bürger, which have hitherto been withheld from publication, and include letters and poems of considerable interest and value, have now, it is stated, passed into hands which give hopes of their soon being made accessible to the public.

From St. Petersburg we hear of the discovery, near Kertch, of a remarkable catacomb with walls covered with battle and hunting scenes: the sarcophagi are empty, but are supposed to be of Scythian origin, and to date from about the fourth century B.C. The frescoes give an exact representation of the dress

and accoutrements of a Scythian warrior, which in some respects resembled the old Russian costume.

The free-trade in light literature which the house of Tauchnitz does so much to forward will doubtless end by raising the standard of fiction throughout the inhabited globe, but just at first it gives rise occasionally to criticisms which have a very comical sound when they come back to the native country of writers who are prophets abroad. The *Allgemeine Zeitung* assures its readers that in *Wilfrid Cumbermede* Dr. George Macdonald "discusses the most serious and important life-problems *without ever falling into a didactic tone, or becoming wearisome.*" The same reviewer admires the "Sprachgewandtheit" of a novelist for whose interpretation "even the best dictionaries leave us in the lurch." Did the reviewer try the *Slang Dictionary?*

The *Revue des deux Mondes* (August 15) prints some very pleasant letters from Admiral (then Commandant) Page to the wife of the Marquis de la Grange; they were written between 1844 and 1848, from various quarters of the globe, and express very much the feelings which a literary landsman would describe if he were trying to imagine himself in the position of a sailor. The singularity is, not so much that an active and able officer should have leisure for such emotions, but that he should be able to express them with as much ease and propriety as if they were unreal.

In a paper read before the American Philological Association, Mr. Trumbull gave a respectable Indian etymology for the much-discussed and much-abused word *caucus*. It comes from an Algonkin root, signifying "speak, encourage, instigate"; the least corrupted form of the word is *kaw-kaw-wus*, plural *kaw-kaw-wus-sough*, "caucusser," "counsellors, council"; the Virginians, out of the same word, made *cockarouse*, a name for the chief man in a tribe. As the settlers were fond of adopting native names for their political gatherings, the suggestion seems highly plausible.

We understand that Mr. Morris's early poems (not *The Defence of Guinevere*) will be reprinted about Christmas, with an equal quantity of new matter.

THEOLOGICAL NOTE.

Mr. Henry Dunn, in his last work (*The Churches an History and an Argument;* Simpkin, Marshall, and Co.), has carried the idea of Protestantism as purely individual Christianity nearer to complete logical development than any previous writer. He maintains that the Christian societies we find in the New Testament, though divinely organized, were provisional, and lost their *raison d'être* when inspired men had disappeared, and the inspired writings had been collected. Since then all associations between Christians exist only *jure humano*, and are most useful when we recognise that they are optional. The writer is a continuator of John Foster and of Isaac Taylor, the author of *Antient Christianity*. He spends much perverse ingenuity on the theses that the Lord's Supper was originally an household rite, and that Baptism is essentially a profession of faith, though there is some plausibility in the guess that there may have been a time when it was only administered to converts. The writer believes that the object of the Christian dispensation is to train the elect to take part in the subjugation and renewal of the world after the Second Advent; and that the object of the hierarchical organization of the church was to convert the world prematurely and superficially. So far as we can admit a deliberate change, the object was rather to fix and maintain the faith. Mr. Dunn insists, not without reason, that the traditional compromises inevitable in an organized society have to some extent lowered the Christian ideal, but he takes no account of the extent to which the standard of conventional propriety has been, and is being, raised, nor of the danger that, if everybody were left to make his own compromise with the ideas, the practice of half believers would be lower than it is. As the writer makes the personal union of the individual believer with the person of Christ the essence of Christianity, he ought in consistency to have rejected the traditional Protestant notion of the unique supremacy of Holy Scripture, as he has rejected the traditional Protestant notion of the sacramental value of preaching. He is too unfamiliar with scientific investigations to put his views in a form to be enforced, or even seriously discussed; but he has a refinement and distinction of mind which are often the fruit of sustained and solitary earnestness, and these make what he says not unworthy of attentive consideration.

Art, &c.

THE DRAMA IN PARIS.

The great heat has closed most of the Parisian theatres. The Comédie Française, however, remains open, and is giving several very interesting works, among which *Le Chandelier* of Alfred de Musset holds the chief place. This audacious but beautiful play was first performed in 1848 at the Théâtre Historique (now the "Porte St. Martin"), and transferred to the Française two years afterwards, where, after a few representations, it was forbidden by the censure. Now, however, its own intrinsic merit, and the talent of the actors who interpret it, seem to promise it a long and prosperous existence. The story is simple enough. A bold dragoon, Capitaine Clavaroche, is quartered in a country town. The café is dull, the theatre indifferent; he therefore turns his attention to his neighbours' wives, and wins the favour of Jacqueline, wife of the local solicitor, Maître André. The lovers are on the brink of discovery when the captain's somewhat dull intellect suggests to his mistress the idea of selecting a "chandelier:" that is, a young man who shall be admitted to her confidence up to a certain point, and no farther, so as to divert all suspicion from her real admirer. Her choice falls on the youngest of her husband's clerks, Fortunio, a boy of eighteen, who has long loved her in secret. The end is not hard to guess. Fortunio is generous and clever, Clavaroche selfish and dull—a difference which the lady is not slow to observe, and makes her choice accordingly. Of this work, rather a poem than a drama, Fortunio is the central figure. De Musset seems to have set himself to draw a boy of a generous, high-spirited character, in all the glow and ardour of his first love. His heart is full of a respectful passion for his beautiful mistress, whom he worships at a distance, as a being of another world: his joy knows no bounds when he thinks his love returned: he is broken down with wild anguish when he discovers why he has been tempted to think himself preferred: but in all his passionate outpouring of sorrow and reproach, there is no thought of mean revenge; she has broke his heart, but he loves her as truly as ever, and is ready to make any sacrifice to prove it. This difficult character is realised by M. Delaunay with singular ability. He is at least forty-eight years old, but manages to look and move as if he were barely eighteen, and even to infuse a certain boyish eagerness into his voice. The tone and manner in which he gives the long speech in which he muses upon woman's faithlessness and his own wretched lot is quite indescribable. It is a bitter cry of despair, coming straight from the depths of a generous heart, that has learnt for the first time that smiles may deceive, and vows be false. More admirable still, if possible, is the last scene, where he upbraids Jacqueline, less in anger than in sorrow, and faints away at her feet, worn out by his emotion. Mme Madeleine Brohan is a charming Jacqueline, and M. F. Febvre realises the rough sensual Clavaroche most completely.

The Orestes of Mounet-Sully, the young actor whose *début* at the Théâtre Français has been so successful, is unquestionably a remarkable performance. In the first place, it has brought four or five thousand people together twice a week to see one of the most stilted and dreary tragedies of the classical epoch, the *Andromaque* of Racine, which is of itself no small feat: and it raises them at times into genuine enthusiasm. One would like to know, however, whether any one has gone a second time! The actor is a strong, well-made, handsome young fellow—rather too fond, perhaps, of showing off his personal attractions, especially a pair of muscular and not ungraceful arms. He has been thoroughly well taught, and knows how to turn his lessons to the best account. The result is a performance of much vigour and intention, rising at the end into a stately pathos when Orestes, stung by the reproaches of Hermione after the murder of Pyrrhus, becomes mad. But from the beginning to the end the character is so unsympathetic that one cannot do more than admire the art, while one regrets the fustian on which it has been bestowed. From such a commencement it is impossible to predict the future. He may be a great artist, or he

may not. To tell him, on the faith of what he has already done, that he is a second Talma, as the French critics are doing, is as absurd as it is unfair to him. The result may be, if he is not wiser than they are, that he will rest contented with his first success, and make no further progress. He is to appear next in Corneille's *Cid*, and afterwards in one of Victor Hugo's dramas, either *Hernani* or *Marion Delorme*, probably the latter. Either will give him an excellent opportunity of showing what his real talents are. An adaptation of *Othello* is said to be also in preparation. J. W. Clark.

Paris, August 22.

ART NOTES.

A special commission was appointed under the Empire to report upon the Fine Art collections deposited in the museum of the Louvre, with a view to relieving the overcrowded state of these collections by making from them a selection of works which might be properly entrusted to other museums or to buildings of a sacred character. This commission has now finished its labours as far as they concern the paintings which are to be removed: the total number of which is, as stated by M. Charles Blanc in his report recently published in the *Journal officiel*, 885. Of these, 180 are of the Italian school; 50, of the Flemish and Dutch schools; and of the French, 655. The Italian are for the most part copies, or works of the second and third class; the same may be said of the Dutch and Flemish, and of a large proportion of the French. Where the works are attributed to a good name, it is invariably a doubtful attribution. As soon as these paintings have left the field clear by their departure for the provinces, the commission will proceed to attack the terracottas, ancient and modern sculpture, enamels, vases, and Egyptian antiquities. All the works purchased by the department of the Beaux-Arts at the recent Salon are to be submitted to the approval of the public before distribution.

M. Champfleury is about to publish his *Souvenirs et Portraits de Jeunesse*. The volume will contain a biography of Courbet, of Bonvin, and others, the materials for which have been furnished by letters and personal intimacy.

Henry Trappes, who is well known by his etchings, and chiefly by his illustrations to *Gil-Blas*, recently committed suicide, it is said in despair at some family complications. He was hardly thirty-seven years old.

The great exhibition at Milan opened on August 26. The artistic congress held in connection with it took as its principal question for debate the teaching of drawing in so far as it may be made a portion of primary instruction. The inauguration of the monument erected by the Milanese to Lionardo da Vinci took place on the 28th.

The École des Beaux-Arts is making rapid steps towards importance amongst the museums of Paris. As soon as the library was commenced, M. His de la Salle presented to it a hundred drawings selected from amongst the most valuable in his collection. M. Gatteaux also bequeathed all his books, his drawings and engravings. Mme Bertin has now enriched the collection by the gift of eighteen drawings which were accounted amongst the finest of those which figured in the posthumous exhibition of her brother's works, the last of the French landscape painters who held by the traditions of Poussin, and, it may be added, of Francisque Millet.

The first half of the second volume of Andresen's *Handbuch für Kupferstichsammler* has just appeared. It has been edited and completed since the death of the author by J. E. Wesselez. The two other unfinished works left by Andresen, viz. *Der Deutshe Peintre-Graveur* and *Der Deutsche Malerradirer des* 19. *Jahrhunderts*, have also been undertaken by the same writer.

It is said that the architects Bohnstedt, Kaiser and Grossheim, Ende and Böckmann, Mylius and Bluntschli, have been invited to take part in the final competition for the German Houses of Parliament. Their new plans are to be sent in April 1, 1873.

Hans Makart, Alma Tadema, August Pettenkofen, Franz Defregger, Oswald Achenbach, and Caspar Zumbusch, are on the list of those recently confirmed as honorary members of the Munich Academy of Fine Arts, by the king of Bavaria.

The *Zeitschrift für bildende Kunst* for August 9 contains an article on "Barbarian Types depicted by the Ancients," by Professor Conze, illustrated by a lithograph from a marble supposed by the writer to be the portrait of a German woman, now preserved at St. Petersburg in the Hermitage.—Carl Justi concludes his essay on Philipp von Stosch and his time; and Bode's notes on the artists of Haarlem also come to a close.—H. Ludwig ends his paper on the uses of petroleum in oilpainting.

In December 1862, Herr Oberstlieutenant Pfau of Winterthur came into the possession of one of the many repetitions of that composition of Raphael's which is well known by the name of the Madonna di Loretto. The apparent merit of this particular example has caused a claim to originality to be put forth on its behalf. The grounds on which this claim may be supported, together with much interesting matter relating to the history of the painting in question, will be found in a little book entitled "*Die Madonna von Loretto*—eine kunstgeschichtliche Untersuchung von S. Vögelin," published at Zürich in 1870.

The death of M. Charles Duron has just taken place at Paris. M. Duron, born in 1814, at Pont-à-Mousson, was a distinguished artist in enamel. Some of his happiest works became the property of the Marquis of Hertford, and of Baron Rothschild.

Professor E. Magnus, born at Berlin, 7th January 1799, has just died there at the age of seventy-three. Professor Magnus was a pupil of Schlesinger, whose valuable studies after the Sixtine Madonna he recently presented to the print room of the Royal Museum. He especially excelled in portraits; nearly all the princes and notabilities of Germany have been painted by him. His portraits of Jenny Lind, of the Countess de Rossi-Sonntag, and of Mendelssohn, were exhibited at the Paris Universal Exhibition in 1855.

The jury for the Berlin Goethe memorial have awarded the three prizes offered, to the sculptors Adolph Donndorf, of Dresden, Fritz Schaper, and Rudolf Siemering, of Berlin. These three artists are invited together with Alexander Calandrelli to take part in a final competition.

Oberlieutenant Joseph Reiter, commandant of the fortress of Klissa, in Dalmatia, has been named corresponding member of the Institute for Archaeological Correspondence at Rome, as a grateful testimony to the services rendered by him in the preservation of two Roman sarcophagi in the neighbourhood of Salona.

The largest and most important of the fragments of the carved column dug up by Mr. Wood, on the supposed site of the temple of Diana at Ephesus, has been set up in the Graeco-Roman room at the British Museum. It measures about 6 feet in height, and 18½ feet in circumference; and is supposed to have formed a portion of the first drum of one of the thirty-six Ionic carved columns which, with ninety-one others, supported and adorned the edifice. Portions of the base and capital of the column were found close by (*Academy*, vol. iii. p. 285). On the side of the drum there are five figures which, though not without intrinsic merit, derive their chief beauty from the admirable architectural intention which is manifested in the treatment and grouping. All are more or less mutilated, but there are sufficient indications to identify one as Mercury, and another as Victory.

A new bust of Mr. Gladstone is on view in the great hall of the Reform Club. It is by Mr. J. D. Crittenden, whose "Christ anointing the Eyes of the Blind" was one of the works in the sculpture room of this year's Royal Academy exhibition.

In repairing the roof of Dumfriess House, Ayrshire (formerly the property of the Earls of Kilmarnock, but now in the possession of the Marquis of Bute), some workmen discovered two half-length portraits rolled up, and hidden in the rafters. On

examination one proved to be the portrait of the Earl of Kilmarnock who was executed for rebellion in 1746; and the other after some difficulty was identified as that of John Drummond, Earl of Melfort, outlawed in 1694. These portraits had been removed from their frames and hidden away in consequence of the political peril formerly attaching to their possession. Another portrait of Drummond, engraved and published by Vanderbanc, was named, not Melfort, but Lundin, Lady Melfort's family name—the name of Melfort being tabooed.

A collection of original drawings by William Blake has been sold recently by Messrs. Sotheby and Wilkinson. The collection consisted of—the set of twelve illustrations to Milton's *Paradise Lost*, which fetched 100*l.*; the set of eight illustrations to Milton's *Comus*, 20*l.* 10*s.*; the set of six illustrations to *The Hymn*, 53*l.* On the same occasion, an early drawing by W. Hunt, "The Cottage Door," 41*l.*, and "Childe Roland," by Burne Jones, 42*l.*, were also disposed of. To the same firm was entrusted the sale of the valuable library of Mr. André Knox, which took place August 14 and five following days. One of the most interesting of the many fine illuminated MSS. which were then disposed of was *Horae Beatae Mariae Virginis*, 4to—a beautiful MS. of the fifteenth century, on vellum, with thirteen large paintings, every page ornamented with borders of great elegance in design, capital letters, &c. This volume was formerly in the possession of Samuel Rogers, who attributed the work to Oderici, the contemporary and friend of Giotto and Dante, and it contains an MS. note in Mr. Rogers' hand. It is bound in morocco, with the cypher of Charles II., of whose collection it once formed part, stamped on the back and sides. 98*l.* Messrs. Sotheby also disposed of the collection of coins and medals of the late Wm. Jackson, of Lancaster. Some of the most valuable pieces were the following:—a gold octodrachm of Ptolemy III., 26*l.*; an octodrachm of Ptolemy V., 29*l.*; of Ptolemy VIII., 24*l.*; a pattern five-piece of George III., by Pistrucci, 21*l.*

New Books.

Bibra, Ernst v. Alte Eisen- u. Silberfunde. Archäologisch-chemische Skizze. Nürnberg: Richter u. Kappler.

Bötticher K. Von dem Berliner Museum. Eine Berichtigung an A. Conze in Wien. Berlin: Ernst u. Korn.

Pouy, F. Les Faïences d'origine picarde et les Collections diverses. Amiens: Lenoel-Hérouart.

Seidl, Fr. Xav. Dichtungen vom Morgenlande. Nach e. Orig.-Inscr. bearb. Regensburg: Forchthammer.

Physical Science.

The Morphology and Physiology of Plants. [*Botanische Abhandlungen aus dem Gebiet der Morphologie und Physiologie.* Herausgegeben von Dr. Johannes Hanstein, Prof. der Botanik an der Universität Bonn.] 1870–1871.

[Second Notice.]*

In turning to the memoirs, two of which form the subject of the present notice, the first relating to the development of the Embryo in Phaenogams, the second to the structure and fructification of Diatoms, it will scarcely fail to be remarked that where the subjects are at all cognate, much advantage will be derived from reading them in connection. Indeed, as the paper on the development of the radicle by Reinke was prepared under the express supervision of Dr. Hanstein, the author of the important memoir with which the series was opened, and which now comes under revision, the two may almost be considered as emanating from the same source, and I have no hesitation, from my own experience, in stating that Reinke's observations are an excellent preparation for the full understanding of his superintendent's larger and more important dissertation. Undoubtedly the whole is well worth a careful study, but no one point seems to me of greater interest than the development of the embryo of Brachypodium, because it completely settles the theory which was originally broached by Richard as to the nature of the organ called by him vitellus, and which I confess that I had long considered as true. If this is regarded as the primary radicle, the subsequent ones being all adventitious, Gramineae are placed in the same category as other Monocotyledons, in the greater part of which the primary radicle is evidently exorhizal. On following out, however, the gradual development of the embryo from its earliest stage, it becomes quite evident that the first rootlet is endorhizal, and that the so-called vitellus is really an absorbent portion of the cotyledon. This is, in fact, in accordance with what takes place in some palms, the onion, and other cases, where a portion of the cotyledon remains in contact with the albumen long after the development of the radicle and plumule, deriving nourishment from it for a considerable time, while the development of the embryo of Brachypodium is almost exactly like what occurs in Tropaeolum, where even the suspensor can readily be traced in the ripe seed just at the point of germination, and where the real primary radicle bursts through the hood (Haube) exactly as in Brachypodium. The nomenclature adopted by Reinke, though somewhat complicated, is really of value in indicating the true relations of the several parts of which the descending axis is composed.

As regards the second memoir, on Diatoms, by Dr. Pfitzer, we have in it a full confirmation of the important observations which were made by Mr. Thwaites† before leaving England for Ceylon, and which at once settled the question as to the vegetable nature of these singular organisms. The point of especial interest in the paper is the elucidation of the mode in which the two portions of the outer siliceous envelope overlap each other, thus facilitating the multiplication of the individual as distinct from the fructification. Few matters are more interesting as regards microscopical observation than the mode of propagation, and where the different species of Biddulphia can be readily procured as on our southern coasts, they will afford ample food for many a morning's investigation. The two original halves remain exactly *in statu quo*, and it would be interesting to know how long they would subsist while new intermediate frustules are developed; and the same observation applies to many Desmidiaceae. It is much to be wished that these very useful and important memoirs should receive such encouragement as may ensure their continuance. The Ray Society would do well to include them in the number of their acceptable translations. M. J. Berkeley.

* See *Academy*, vol. iii. pp. 188, 189.

† The whole subject of Cryptogamy is deeply indebted to Mr. Thwaites for the patient investigation he was able to devote to it before leaving England. Amongst other matters, his memoir on the gonidia of Lichens in *Annals of Nat. Hist.* ser. ii. vol. iii. p. 219, will be read with interest, as anticipating those of Schwenderer in *Nägeli's Journal*, though taking a far more rational view of the subject than that which supposes that Lichens are Fungi parasitic on Algae. Cohn has lately called in question the justice of Schwenderer's views in the *Botanische Zeitung* (March 1872); but he is wrong in supposing the threads in Palmellae are always extraneous. A comparison of Mr. Thwaites' observation on *P. botryoides* in the same journal (vol. i. p. 312), as confirmed in Berk. *Intr. to Crypt. Bot.* p. 399, will be sufficient to show the connection of the threads and spores. A similar structure prevails in the gonidioid cells of the anomalous genus Emericella, *l. c.* p. 341.

Notes of Scientific Work.

Geography.

Central Africa.—The whole of the geographical information contained in the numerous letters written by Dr. Livingstone and safely brought home by Mr. Stanley, has by this time been sifted, and as the great traveller has turned back into the mysterious central land of Africa, our knowledge of his accomplished work will in all probability remain at its present stage for a long period. Until the explorer shall himself appear to confirm or correct what he has given us, the geography of equatorial Africa will rest on Livingstone's own data. The discussion by geographers at the British Association and elsewhere, of the outlines of information thus vouchsafed, has wrought great changes in the accepted hydrography of the land. Before these letters arrived, it was believed that the Nile had a main tributary at least in the Tan-

ganyika Lake and its feeders far south of the equator; for a connection had been traced on apparently good grounds between this basin and the Albert Lake and the Nile by an outflowing river. The Chambeze-Luapula of Livingstone with its lakes might also, so far as our information then went, prove to be the head of the Nile, though probabilities were in favour of its being rather the headstream of a river flowing westward. We learn now from Livingstone and Stanley that the Tanganyika is not in the Nile basin; its outlet (for being a lake of perfectly fresh water, it must have an outflow) is not to the Nile; but it is highly probable that its discharging river is the Lufiji, on the east coast. Moreover, taking Livingstone's own measurement of the level of the great Chambeze-Lualaba system that he discovered, at its furthest point, the river could not be the Nile, for it is here exactly the same height above the sea as Gondōkoro, known to be on the Nile, 800 miles away. The Lualaba could not join the Albert Lake, as it lies upwards of 500 feet above the given elevation of the river, not to mention the very mountainous country of Ulegga, spoken of by Speke, Baker, and Livingstone, which intervenes to prevent it. Dr. Schweinfurth's explorations, carried on contemporaneously with those of Livingstone in Manyuema, by tracing the rivers forming the Bahr-el-Ghazal to their sources, have shut off the only inlet which seemed possible to Dr. Livingstone himself. The conclusion is evident that Livingstone, though searching for six years with this object in view, has never once seen the Upper Nile at any point. It has been suggested that a great inland lake may receive the waters of the Lualaba, but such a continental system in the equatorial forest region of Africa, saturated by double rainy seasons, is a physical impossibility. Any lake in this belt must overflow. The only outlet on the west coast, capable of discharging such a volume of water as that accumulated by the Chambeze-Lualaba and its lakes, is the Congo; and the second conclusion forced upon us is that it is the Upper Congo river which the great traveller has now made known.

Upper Nile.—The results of Dr. Schweinfurth's latest remarkable journey in Dar-Fertit in the beginning of 1871 are fully described in the current part of *Petermann's Mittheilungen*. In former journeys Dr. Schweinfurth had explored and mapped out the source country of the Rohl, Tonj, and Jur tributaries of the Nile rising westward of Gondōkoro. These rivers flowing northward unite in the Bahr-el-Ghazal, which joins the Nile above the ninth parallel of north latitude, and have hitherto been considered as the chief streams of this lateral system. In his last journey, however, the traveller, by going westward, has crossed the upper streams of a river named the Abu Dingā, which he identifies clearly with the Bahr-el-Arab, a tributary of the Ghazal formerly considered to be of small importance, but now proved to be the longest and largest branch of the Bahr-el-Ghazal system.—Ernest Marno, a traveller in Upper Sennaar, has sent to Gotha a full report of his journeys in this region during 1870–71, and a most valuable map, which it is said will add greatly to our knowledge of the territory of the Abyssinian Nile. His letter from Khartum of the 6th December 1871 brings the following intelligence:—Great political changes have recently taken place; Jaffar Pasha has been deposed from the ruling power in Sudan; Muntas Pasha has obtained the government of the districts of Khartum Fashoda (Bahr-el-Abiad), and Sennaar; Kordofan, Taka, and Dunga, with Berber, have each received a separate ruler. The government recently seized upon a number of slave boats, and slaves to the number of from 3000 to 4000 were brought to Khartum. No provision having been made for such an influx, the greater number died within a few days. Muntas Pasha had not arrived, the remaining officials did not trouble themselves in the matter, and soon the dead lay before every house and all along the river banks, a fearful epidemic among the settled inhabitants being the result.—The most varied reports are in circulation respecting Sir Samuel Baker's expedition, but this at least is certain, that he is still (in Dec. 1871) at Jebel Redjef, not far from Gondōkoro. In consequence of the great number employed, the expedition encountered great obstacles, that increased as it advanced into the less known country; the troops have been so greatly reduced and demoralised by sickness and hunger that it is the opinion in Khartum Baker must soon return.

Western Mongolia.—The active exploration by the Russians during the last few years of the geography of the region of Mongolia lying next to their Siberian possessions, and the establishment of new relations, political and commercial, with these countries, would lead us to suppose that the annexation of these lands to the great empire is seriously contemplated. A very important map of this region accompanies the last part of *Petermann's Mittheilungen*. It is based on Klaproth's map of Central Asia, which was drawn from the surveys made by the Jesuit missionaries of Pekin by order of the emperor Khian-loung, and upon that of M. Veniukov which accompanied the seventh number of the *Isvestija* of the Russian Geographical Society for 1871; but the map is filled in and greatly amended from the journeys of the Russian travellers Schishmarev (1864–65), Palinov, and Matusovski (1870), containing besides a reconstruction of the routes of Prinz (1863) and the artist Atkinson, so far as they bear upon this part of Asia. These tracks cross Mongolia in sufficiently various directions to form a trustworthy basis on which the detailed topography of this inner Asiatic plateau may now be accurately laid down.

Morocco.—Though formerly little visited by Europeans, this country has of late attracted many explorers, as the names of Rohlfs, Gubernatis, Balanza, Beaumier, Lambert, Gatell, Blackmore, Hooker and Ball abundantly testify. The French military expedition under General Wimpffen from Algeria to the Wady Gir in Morocco, during March, April, and May of 1870, also form the subject of an essay in the *Mittheilungen*. The primary object of this undertaking was the dispersion of the armed bands that harrassed the people of the Algerian Sahara, the most powerful of which, the tribe of the Dui-Menia, had their home in the Wady Gir, not far north-west of the oasis of Tafilet. The map accompanying the paper, in which the line of march of this expedition is seen almost to join the route made known by Rohlfs in 1861–1864, shows that great gain to geography has also resulted.

An *Abstract of the Reports of the Surveys and of the other Geographical Operations in India for* 1870–71, just issued, contains an interesting chapter on recent geographical exploration. In continuation of his plan for systematically exploring the countries beyond the British frontier, Major Montgomerie despatched a trained Pathan Havildar of Sappers direct from Peshawur to Faizabad, the capital of Badakshan. This interesting tract of mountain land between the Indus and the Kabul rivers, bounded on the north by the Hindu-Kush and Mustagh ranges, had been sealed to all attempts at exploration. The Havildar crossed over from Yusufzsi into Swat, went thence to Chitral, then up the lofty and difficult Nakshan pass to Zebak on the Upper Kokcha, and descended the valley to Faizabad. He fixed the positions of the Nakshan and Dora passes, and took latitude-observations at five points. His route survey is 286 miles in length, and has opened out 13,000 square miles of hitherto unknown country.—During the autumn of last year, Mr. Blanford, of the Geological Survey, examined the eastern and northern frontiers of British Sikkim, reached the Donkia pass, 18,500 feet above the sea, ascertained the position of another pass never before marked on any map, discovered three unmapped lakes, and made a good collection of birds.—Our knowledge of the geography of Persia has also received valuable additions. Captain St. John, after co-operating with Col. Walker in determining the longitude of Tehran, has fixed the latitudes of places between Shiraz and Tehran, correcting an error of ten miles in the position of Kashan, and has completed a survey of the Elbourz Mountains. Meanwhile Major Lovett has made a journey from Shiraz to Kerman and Bam, and corrected the position of Niviz, an important place at the eastern extremity of the valley of Persepolis. From Niviz the road traverses a pass, 5,640 feet above sea-level, over the range of Loivez hills, a mountain-chain requiring thorough geographical and geological exploration to its termination near the shores of the Persian Gulf. Beyond these hills is the desolated valley of Kotro stretching away in a direction south of east, with no visible limit. Major Lovett travelled thence to Khairabad, at the foot of the Tung Chal, a granitic range, and, crossing at an elevation of 8000 feet, reached Kerman. He then journeyed north-east to Khabis, and corrected the mistaken position of this place on Pottinger's map. Khabis, the terminus for kafilahs proceeding across the deserts to and from Seistan or Meshed, abounds in fruit, including eleven kinds of *Aurantiaceae*. The surveys of St. John and Lovett have furnished valuable materials for a new map of Persia.

The *Zeitschrift der Gesellsch. für Erdkunde zu Berlin*, No. 38, contains an elaborate paper by Dr. Neumayer on the exploration of the South Pole. He has prepared a full *résumé*, extending over fifty pages, of the literature of the subject, illustrated with a very good map, and given the details of a scheme which he laid before the Geographical Congress at Antwerp for prosecuting a further exploration of that region. He proposes that it should be combined with an expedition to observe the transit of Venus, and, starting from the Cape of Good Hope, and making the M'Donald Group head-quarters, should endeavour to push on from Kemp's Land toward the pole. The essay has since been published in a separate form.

Physiology.

The Influence of the Central Nervous System upon Animal Heat.—A very interesting essay on this subject containing the results and details of many experiments has just been published by Dr. Franz Riegel in *Pflüger's Archiv für die gesammte Physiologie* (No. 12). Dr. Riegel first repeats and corroborates the generally known fact that division of the spinal cord in the neck, opposite the sixth cervical vertebra, is followed by a steadily progressive diminution of temperature. The cause of this fall of temperature might be attributed to paralysis of the vasomotor nerve, leading to dilatation of the vessels and consequent increased evaporation and exposure of the blood to the cooling influence of the air; or it might be due to this cause, combined with diminished production of heat within the body of the animal; or, lastly, it might be due to a proportionally increased loss of heat, though the production of heat be augmented. Riegel set himself to determine which of these

views is correct. For this purpose, control experiments were requisite on every point: on the effects of chloroform and of morphia injection; of keeping the animal in a warm room; of binding it; of the frequency of the respirations, which are greatly diminished by section, &c. He agrees with Tscheschichin that there is no increased internal development of heat after section of the cord, and that the fall in temperature is to a certain extent due to the dilatation and increased evaporation from the cutaneous vessels. But he even goes beyond this, and considers that there is an absolutely diminished production of heat in an animal after section of the cord, and that all his experiments favour the view that the application of heat to the peripheric cutaneous nerves constitutes an excitation which travels centripetally to the respiratory centre, and acts reflectorially upon it. The healthy animal possesses in this reflectorial excitation of the respiration a highly important heat-regulator, and it is consequently easily intelligible why the external application of heat, if this regulator be not annulled, causes no rise of temperature in the healthy animal. This reflectorial increase in the rapidity of the respiration explains why other observers in their researches on "the effects of external heat" have observed no increase of temperature in uninjured animals. Division of the spinal cord removes the channel the more perfectly the higher the section is made.

The Gases of the Blood.—MM. Mathieu and Urbain contribute to Brown-Sequard's *Archives de Physiologie* (No. 2) the results of their enquiries into this subject, especially in regard to the proportion of gas contained in the blood of different arteries. The researches of Claude Bernard have shown that the quantity of gas contained in venous blood varies with the condition of activity or of repose of the organ whence it proceeds. Though the greater or less amount of oxygen absorbed by the tissues explains these variations very well, a second interpretation has been proposed, namely, that the diminution of oxygen in the blood is due to intra-vascular oxidation taking place at the expense of the blood itself. On this view the oxidation which is well marked in the veins commences in the pulmonary capillaries, and continues in the arteries, causing a gradual disappearance of the oxygen, the loss attaining its maximum in the veins. As a consequence of this, the arterial blood does not everywhere present the same composition. MM. Estor and St.-Pierre actually concluded from their experiments that whilst the blood of the carotid contained 21·06 per cent. of oxygen, that of the crural artery contained only 7·62 per cent., so that 13·44 per cent. of oxygen disappears in the course of a second or two; the authors attribute this sudden change to the occurrence of incessant intra-vascular oxidation. MM. Mathieu and Urbain's experiments may be divided into two groups: first, those in which the proportion of gas contained in the blood of arteries of nearly equal diameter was compared; and, secondly, those in which that from arteries of different calibre were examined. As regards the former, they found that no remarkable difference could be detected between the carotid and crural artery: in one case, for example, the proportions were for the carotid, oxygen 20·45 per cent., nitrogen 1·64 per cent., carbonic acid 48·18 per cent.; and for the crural, oxygen 18·03 per cent., nitrogen 1·60 per cent., carbonic acid 44·23 per cent., the slight difference being due to the effect of the first bleeding. On the other hand, in comparing the blood of large with that from small arteries, the amount of oxygen in the former was invariably greater than in the latter, the difference sometimes amounting to 3 per cent.

The Anatomy of the Spleen.—M. Wedl, in a paper contained in the *Sitzungsberichte der Wiener Academie*, vol. lxiv. pt. 1, observes that it is not difficult to inject the veins of the spleen, and exhibit the venous ramifications by the corrosive method. When the spleen of a sheep is thus treated, the following appearances are seen:—Each main vein with its dilatation receives branches opening into it peripherically, and these again receive numerous branches from certain intermediate spaces. These branches are sometimes so minute that they can only be discerned with a lens. The angle of entrance of each set of vessels into the larger ones is nearly the same, as well as the distance from one another, so that a branch resembles a small cone beset with prickles. He was unable to discover the venous plexuses or anastomoses described by W. Müller. Another mode of examination he adopted was to fill the vessels with coloured solution of gelatine, and then to harden this with alcohol, which process allows of fine sections being made. At the points where the veins present constrictions, processes may be seen by this means to pass into the cavity of the diverticula of the veins. These processes are of two kinds: one a papillated inflection of the venous wall; the others are trabeculae forming incomplete septa. Wedl found, as Gray and Frey have done, no venous rootlets within the Malpighian corpuscles. As regards the epithelium demonstrated by Billroth in the delicate veins of the pulp, Wedl always found it complete, never discontinuous, as stated by Frey. His investigations show that the blood path is also continuous, the blood passing from the arteries into capillaries, and thence into veins, and not at any point through lacunae of the tissue.

On the Coagulation of Fibrin.—A. Schmidt (*Medicinisches Centralblatt*, No. 16) finds that, in blood drawn from the living vessels, a ferment originates from the action of the blood corpuscles which causes the coagulation of fibrin. The material for the fermentation is afforded in the fibrinogenous and the fibrinoplastic substances, which must be simultaneously exposed to the action of the ferment in order that the fibrinous coagulum may be formed. The action of the blood corpuscles upon the fermentation process is dependent on the haemoglobin, though other substances that condense oxygen upon their surfaces and catalytically decompose peroxide of hydrogen act in the same way, such as spongy platinum, carbon, &c. The transudates found in the cavities of the dead body for the most part contain the two fibrin generators, but no ferment, and they will coagulate on the addition of the ferment. In some the fibrinoplastic substance is absent, and requires to be added before coagulation will occur. Neutral alkaline salts and low temperatures arrest the process. To obtain the ferment, the albuminous substances of the blood must be coagulated by maceration for fourteen days in concentrated alcohol; the fluid is then filtered, and the residue on the filter dried at a low temperature, pulverised, and extracted with glycerine.

The Structure of Striated Muscle.—Four papers have recently appeared upon this subject: one by J. H. L. Flögel, in *Schultze's Archiv*, viii. 69; a second by W. Dönitz, in *Reichert und du Bois-Reymond's Archiv*, 1871, 434; a third by G. Wagener, in the *Marburg Sitzungsberichte*; and a fourth by F. Merkel, in *Schultze's Archiv*, viii. 244—discussing the structure of the primitive muscular element of Articulata. Flögel gives a description of the muscles of a species of Trombidium (a small arachnidan, of which the common minute red spider of gardens is an example), and states they are composed of a series of compartments divided from one another by septa which from wall to wall contain: (1) a simple and feebly refracting substance, which strikes a slight tint with perosmic acid; (2) a granule which, with its neighbours on either side, forms the granule layer, and is strongly stained by perosmic acid; (3) another layer identical with the first; (4) the double and strongly refracting substance which becomes deeply stained with the acid; (5) the same as the third layer; (6) the same as the second; and (7) as the first.—Merkel agrees with Flögel in considering that the fibres of muscle are divided into compartments (Muskelkästchen) by transverse septa.—Dönitz, on the other hand, returns to the old view that the primitive morphological element of the muscle is the fibril and not the compartment. His researches appear to have been chiefly made on the Crustacea.—Wagener admits the existence of Hensen's intermediate stria, but adds that there are from two to eight secondary ones which are constantly present, but are very fine. He describes the act of contraction in the following terms. The anisotropal and doubly refractive substance, with the intermediate stria of Hensen and the adjoining striae, contract and approximate to one another, and then the two isotropal and singly refracting striae, originally separated by the broad anisotropal band, become so compressed together that they are only separated by a single feebly marked line.

Anthropology.

Etruscan Antiquities found in Belgium.—A Belgian antiquary, M. H. Schuermans, calls attention (*Bulletin de l'Académie royale de Belgique*, p. 528) to certain objects found in a tomb at Eygenbilsen, north of Tongres, in 1871, viz. (1) a fillet of gold; (2) a cylindrical cista of bronze; and (3) an oenochoe of bronze, with the figures of two fabulous animals confronted on its neck. There appears to be no doubt that the articles in question are of an Etruscan character. But it is very rash on the part of M. Schuermans (as his critics, MM. Roulez, Wagener, and de Witte point out, *ibid.* p. 513) to conclude that they must have found their way from Etruria into Belgium previous to the displacement of the original Celtic population by the Germanic race which Caesar found in possession of the district where the recent discovery took place, seeing that his argument relies on a series of combinations which are anything but satisfactory. In the first place, it is not just to take the statement of Caesar (*Bel. Gall.* i. 1) with regard to the Belgians generally *minimeque ad eos saepe mercatores commeant*, in the sense of *nullum aditum esse ad eos mercatoribus* afterwards (ii. 16) applied by him to the Nervii, a tribe which despised the rest of the Belgians for their submission to the Roman dominion. And if it were just, there is no difficulty in supposing a relaxation of the laws against foreign traders after Caesar's time. The fault of this supposition, however, is that it does not fall in with M. Schuermans' notion of the high antiquity of the articles about which he writes. In the second place, the passage of Livy (v. 33) refers to the supremacy of the Etruscans by sea and land up to their decisive defeat by Hiero I. of Syracuse, B.C. 474, and has nothing to do with the spread of their wares north of the Alps, while the passage of Pliny (xxxiv. 16) concerning the *signa tuscanica* to be met with in various lands applies to statues, not to utensils, and moreover need not be taken as referring to so very early a period, or as including Belgium in the "various lands." In the third place, the fact that in Greece solder was in use instead of rivetting in bronze work as early as the fifth century B.C. cannot be relied on to prove that the bronze cista (No. 2), in which rivets have been employed instead of

solder, was made previous to the fifth century B.C. For the artists of Etruria, and more especially the workmen, we should suppose, took very few hints from the Greeks, even in later times of greater commerce. But after all, there are many who give good reasons for believing that the objects looking like Etruscan found of late years in great numbers north of the Alps—notably at Hallstadt, in 1868—and also conspicuous for the absence of solder in the bronze work, are really ancient productions of the native workmen of the countries where they are found, owing their resemblance to objects found in Etruria, both in manner of manufacture and style of decoration, to a common inheritance of skill and taste which the southern nations developed more quickly. In that case we should be still less surprised if a Greek invention of the sixth century B.C. did not reach the native workmen in distant parts of Europe till after Caesar's time.

Excavations at Mzchet.—If Fr. Bayne has hit upon the right way of accounting for the uniform presence of not less than three skeletons in one sarcophagus in the ancient tombs of Mzchet, near Tiflis, he will have contributed a valuable commentary to the statement of the geographer Strabo concerning the practice of sacrificing human beings which existed among the natives of that district in his time. In any case, the report on the excavations among these tombs, the first instalment of which is given in the *Zeitschrift für Ethnologie*, part iii. 168, will prove an important addition to our knowledge of the condition of ancient civilisation in that quarter. Distinguishing the sarcophagi of the native Iberians from those of the Greek residents, he describes the former as of two classes in point of size, the smaller containing always three skeletons, the larger more than four, usually six, skeletons. The rule with regard to the smaller sarcophagi is to find them containing one grown person decked with ornaments of gold and pearls, and accompanied by two children with ornaments of bronze of a rude pattern. In cases where the two companion skeletons are of larger make, the ornaments are still of this common material and pattern. In the larger sarcophagi, on the other hand, there is a marked absence of ornaments throughout, from which Bayne concludes that the tenants must have been ordinary victims sacrificed to the gods, while with respect to the triple occupation of the lesser sarcophagi, he considers that the two secondary persons—generally children—had been sacrificed in token of grief at the decease of the central and conspicuous person. The most appalling result of his researches is that the victims appear to have been buried alive. The sarcophagi which he ascribes to the Greek residents contain only one skeleton, beside which, in one instance, he found a bronze mirror, such as the tombs of Kertsch usually yield, and an engraved onyx with a Greek name inscribed on it.

The Engis Caves.—These caves, where Schmerling carried on such successful explorations, have been further examined by E. Dupont, who has laid his report before the Académie royale des Sciences de Belgique (*Bulletin*, No. 6). He found a human ulna, and bones of *Ursus spelaeus*, *Rhinoceros*, *Sus scrofa*, *Equus caballus*, *Cervus tarandus*, *Cervus elaphus*, and *Bos primigenius*. A great number of flint implements were also met with of a form resembling those from the caverns of Sureau and Magrite; drawings are given of some from the second cave in which Schmerling found the human skull.

Chemistry.

The Origin of the Urea of the Animal Body.—Schultzen showed some time since that certain nitrogenised substances, containing but one atom of the element, are converted in the animal body into urea, and suggested that the final oxidation-products of the amidated acids, of leucine, glycocine, &c., may be either bodies of the cyanogen group or carbamic acid. If animals yielding a uniform amount of urea be given glycocine or leucine, they secrete an increased amount of urea exactly corresponding to the nitrogen of the leucine or glycocine supplied to them. The objection could of course be raised that the increase of urea arose from the substance introduced acting like a fever-poison. Though no symptoms of fever were observed, to meet this difficulty, a substitution-glycocine was chosen for the experiment, methyl-glycocine or sarcosine being preferred. According to a recent paper (*Ber. Deut. Chem. Gesell. Berlin*, No. 12, 578), if a well-nourished dog be given, in addition to his ordinary food, the amount of sarcosine the nitrogen of which corresponds to that of the urea daily secreted, urea and uric acid disappear altogether from the urine, and are replaced by a series of new and definitely characterized bodies, the examination of which cannot fail to explain as yet unknown normal processes of interchange of matter in the animal organism. One of the substances is obtained by the author's method as the acid of a baryta salt; the other, which forms brilliant tabular crystals, has the formula $C_4H_8N_2O_3$; when heated with baryta solution in closed tubes, it splits up into carbonic acid, ammonia, and sarcosine:

$$C_4H_8N_2O_3 + H_2O = NH_3 + CO_2 + C_3H_7NO_2.$$

Its rational formula therefore is clearly

$$\begin{array}{l} CH_2N(CH_3)\,(CONH_2) \\ \quad\;\; | \\ \quad COOH, \end{array}$$

and it may be regarded as a urea the two atoms of hydrogen of one atom of nitrogen of which have been respectively replaced by methyl and acetic acid, or as a sarcosine in which the group $N(CH_3)H$ has the H replaced by the group NH_2CO of carbamic acid, NH_2COOH. The author traces the formation of the new body to the combination of sarcosine and carbamic acid with separation of water. The acid body combined with baryta was found by analysis and a study of its behaviour when heated with baryta to have the composition

$$H_2NS(O_2)N\begin{cases} CH_3 \\ CH_2CO_2H, \end{cases}$$

that is, of a compound of sulphamic acid with sarcosine *minus* water. Here then is the sulphamic acid of the bodies, albuminous and gelatinous, which the sarcosine has met, and which under normal conditions is transformed into sulphuric acid and ammonia, the latter combining with carbamic acid to form urea. It is a point of no little interest to know the form in which the sulphur is contained in the complex bodies of these two classes. Under normal conditions fowls convert the greater part of the nitrogen of their food into urate of ammonia; when plentifully supplied with sarcosine, however, they fail to secrete any uric acid, and produce new and definite substances, the characters of which are now under investigation. The details of this interesting research are to appear in the *Annalen der Chemie*.

Analysis of a Bronze Celt.—The implement in question, one of many found at Salzberg, near Halstatt, has been examined by E. Priwoznik, of the Vienna Mint (*Annalen der Chemie*, clxiii. part 3, 371). It was remarkable for having a crust of a reniform or botryoidal structure, and an indigo-blue colour; being from 5 to 7 mm. in thickness, diminishing near the edge to 2 mm., and weighing nearly 100 grammes. On the inner side the crust was in some places coated with a thin layer of bright green basic carbonate of copper. The first or outer, and in fact the chief, layer is very brittle, and has a fracture which, when fresh, exhibits an imperfect metallic lustre and a distinctly radiate structure; the streak is very deep blue, almost black. It is composed of 33·22 per cent. of sulphur, and 66·77 per cent. of copper, being in fact covelline (CuS), to which mineral it likewise bears the fullest resemblance as regards specific gravity and other physical characters. The second layer, found only in certain portions of the crust, is separated from the first layer with difficulty; it has a blackish-grey colour, is about 0·5 mm. thick, and consists of copper-glance (Cu_2S), through which is disseminated about 15 per cent. of tin. This metal, it will be remarked, is not present in the outer layer. The third layer, sparsely distributed, consists of a black powder composed of 59·8 per cent. of copper-glance, 23·2 per cent. of tin, 3·4 of water, with traces of antimony and nickel. The unchanged bronze of the Halstatt weapons was shown by v. Schrötter to have the composition: copper, 90–92 per cent.; tin, 6·5–9·0 per cent., and traces of six other metals, which traces have been detected in the several parts of the crust. It follows then that this crust is due to a direct chemical change of the bronze, and not to deposition from without. The tin and the other metals appear to have moved from without inwards as the alloy became broken up on the conversion of the copper into sulphide by soluble sulphides or gases containing sulphuretted hydrogen. The author has succeeded in covering fragments of antique bronzes with a layer of blue copper sulphide by long treatment with yellow ammonium sulphide. The presence of zinc as a constituent appears to prevent copper alloys from undergoing this change. Knop ascribed the formation of covelline to the decomposition of copper pyrites, by oxygen and water containing carbonates, into carbonate of iron and copper-glance, and the production of covelline and copper oxide from the copper-glance by the continued action of those reagents. The author's view of the formation of this mineral has the advantages of being less intricate, and of deriving support from direct experiment.

Conversion of Aniline into Toluidine.—This has been accomplished by A. W. Hofmann (*Ber. Deut. Chem. Gesell. Berlin*, 13th August, 720) in the following manner:—By heating one molecule of aniline hydrochlorate with one molecule of methylic alcohol for many hours at 230° to 250°, there is formed a yellow transparent resinous mass of the consistency of honey, consisting for the most part of methylaniline hydrochlorate:

$$C_6H_5.HHN.HCl + CH_3.OH = C_6H_5.CH_3.HN.HCl + H_2O.$$

If the tube be now heated for a day to 350°, it undergoes a complete change. The transparent viscous fluid is converted into a beautifully crystalline mass, the secondary salt is transformed into the primary:

$$C_6H_5.\,CH_3.\,HN.\,HCl = (C_6H_4.\,CH_3)HHN.\,HCl.$$

The solid mass is almost completely soluble in water, and by treatment with alkali liberates the base as a brown oil, which, when distilled in an atmosphere of steam, solidifies in the receiver into a brilliant white mass of toluidine, the melting-point of which is 45°. In this reaction but few by-products are formed. Aniline hydriodate furnishes a liquid toluidine. The author intends to attempt the formation in a similar way of homologues of the amines of other classes, and of some of the

bases occurring in the organisms of plants. One of the by-products of the action of heat on trimethylated phenylammonium iodide is a beautifully crystallised hydrocarbon melting at 136°, and boiling between 230° and 240°. It gave the formula $C_{12}H_{18} = C_6(CH_3)_6$, and is supposed by the author to be benzol, the whole of the six atoms of hydrogen of which have been replaced by methyl. If it be so, he considers that the oxidation of such a compound will yield products worth investigation.

Fall of Aërolites in France.—The *Compt. rendus* of the 29th July contains a note from M. de Tastes, addressed to the Academy of Sciences, and presented by M. Sainte-Claire Deville, describing the fall of an aërolite in the neighbourhood of Lancé, in the canton of Saint-Amand, Loir-et-Cher. At 5^h 20^m, Tours mean time, on the 23rd July a brilliant meteor passed over a spectator stationed between Champigny and Brisay towards the north-east in the direction of Tours. It presented the appearance of a spear of flame with two spheres of fire of an orange colour; the track of one seemed to incline downwards, that of the other to proceed straight forward, the whole appearance becoming somewhat more luminous at the instant a slight divergence of the course of these two spheres was first seen. It was lost to sight behind a cloud near Sainte-Maure, and an explosion was heard at 5^h 26^m. Many observers affirm that they heard two distinct explosions very near together, others noticed but one; all testify to the appearance of two meteors pursuing nearly the same path. A meteorite fell in a field near Lancé, and passed a metre and a half through the light soil into a bed of marl. It weighs 47 kilogrammes; some fragments separated by the fall were found near it.—In the last number of the *Compt. rendus*, for the 5th August, is a note by M. Daubrée recording the more recent discovery of a second meteorite at Pont-Loisel, 12 kilometres south-east of Lancé. The line joining the two localities coincides with the direction of the trajectory of the meteors, and the Pont-Loisel stone, though much smaller (it weighs 250 grammes), bears the closest resemblance as regards mineral characters to the Lancé stone. The smaller stone fell first—a circumstance observed in former showers—and penetrated the soil to a depth of only half a metre.

Conversion of Tartaric into Racemic Acid.—M. Jungfleisch announced at a meeting of the *Société chimique* held last month that tartaric acid may be almost completely transformed into racemic acid by heating it in a closed vessel at 172° to 175° for a dozen hours (*Revue scientifique*, 28th July, 68). He exhibited several hundred grammes of racemic acid prepared by this method, and established its identity by a careful examination of the racemates.

Writing from Florence to a recent number of the *Ber. Deut. Chem. Gesell. zu Berlin*, H. Schiff reports the progress made since 1867, in the publication at Turin, of the *Enciclopedia chimica*, edited by T. Selmi, of Bologna. This great work is arranged very much after the form of the first edition of the *Handwörterbuch* of Liebig, Wöhler, and Kopp, and five quarto volumes of it have already appeared, embracing about 1000 pages and bringing it down to the letter F. The articles on theoretical and organic chemistry are by Schiff, Sestini, Paternò and others, those on technical chemistry by Arnaudon, of Turin; many are said to exhibit a completeness hardly met with in German works of the kind. Some indication of the degree in which the *Enciclopedia* is appreciated in Italy is shown by its boasting over 2000 subscribers.

The directorship of the new laboratory at Rome has been offered to Dr. Hugo Schiff, who will however remain at the Florentine Institute, which has been even more richly endowed by the Italian parliament than the institution at Rome, the charge of which has been undertaken by Prof. Cannizzaro.

New Publications.

Andersson, C. J. Notes on the Birds of Damara Land and the adjacent Countries of South West Africa. Van Voorst.

Baltzer, E. Der Mensch inmitten der Natur. Leipzig: Dürr'sche Buchhandlung.

Bouvier, C. Pharmakologische Studien über den Alkohol. Berlin: Hirschwald.

Brücke, E. Studien über die Kohlenhydrate und über die Art wie sie verdaut und aufgesaugt werden. Wien: Gerold's Sohn.

Czerny, V. Ueber die Beziehung der Chirurgie zu den Naturwissenschaften. Freiburg: Wagner'sche Buchhandlung.

Geikie, J. On Changes of Climate during the Glacial Epoch. London: Trübner.

Gräber, V. Vorläufiger Bericht über den propulsatorischen Apparat der Insekten. Wien: Gerold's Sohn.

Humboldt, Alexander v. Eine wissenschaftliche Biographie. Im Verein mit R. Avé-Lallement, J. V. Carus, A. Dore etc. bearb. und herausg. von K. Bruhns. Leipzig: Brockhaus.

Leitgeb, H. Zur Morphologie der Metzgeria furcata. Graz: Leuschner und Lubensky.

Mädler, J. H. v. Geschichte der Himmelskunde. 1. Band, 6. und 7. Lieferungen. Braunschweig: Westermann.

Nagel, E. Der natürliche und künstliche Schlaf. Wien: Ficht.

Seidlitz, G. Die Parthenogenesis und ihr Verhältniss zu den übrigen Zeugungsarten im Thierreich. Leipzig: Bidder.

Strassburger, E. Die Coniferen und die Gnetaceen; eine morphologische Studie. Jena: Dabis.

Zenger, K. W. Der Differentialphotometer. Prag: Grégr und Dattel.

History.

Contributions to the History of the Literature of the Times of Thököly and Rákóczi, 1670–1735. By M. Koloman Thaly. [*Adalékok a Thököly-és Rákóczi-kor Irodalomtörténetéhez.*] Pest: Ráth.

These two volumes refer to that interesting portion of Hungarian history known as the *kurucz világ*—an expression which we may perhaps be allowed to translate by "insurgent world." The word *kurucz* is derived from the Latin *crux*, and the name was first applied to the peasants who in 1514 were collected by the pope's legate for a crusade against the Turks, but turned their arms against the nobles. This name was assumed by the insurgents, mostly peasants or members of the lowest sections of the nobility, and almost exclusively Calvinists, who in 1672 rose against the intolerable fiscal oppression and religious persecution practised by the lieutenants of the emperor Leopold I. The assumption of the name *kurucz* pointed to an essential distinction between this insurrection and the political wars of religion that had filled the earlier part of the seventeenth century. In these earlier wars the political classes had taken the initiative, and reasons of statecraft and the interests of the princes of Transylvania had limited the extent and duration of the warlike operations. On the other hand, the insurrection of 1672 was—at any rate in its beginning—a popular movement, excited by oppressions affecting the lower classes of society. Hence the revival of the word *kurucz* of demagogic memory. With varying fortunes, and under diverse leaders, the insurrection continued until it culminated in the expulsion of the Germans out of the whole of Upper Hungary by Thököly. He was recognised by the sultan as vassal king of Upper Hungary, and the vezier in 1683 proceeded to lay siege to Vienna. The defeat of the Turks by Sobieski and Charles of Lorraine (*tringyiai Károly*) involved the ruin of Thököly. In vain did his heroic wife, Zrinyi Ilona, defend the rock of Munkács for more than twelve months. The Turks were slowly but steadily driven out of Hungary. Transylvania submitted to the rule of the house of Habsburg. Thököly was interned, a helpless exile, in Asia. A series of victories had laid Hungary at the feet of Leopold the "Great." Not only the fear they inspired silenced opposition, but a large part of the nation felt that the expulsion of the Turks was a benefit so great as to counterbalance many evil deeds on the part of the German government. Under such circumstances it was natural that the old oppressions should be repeated by the foreign—German and Italian—agents of Leopold, to end in the same result. In 1703 a second *kurucz* insurrection broke out in the same part of the country as the first—along the banks of the upper Tisza. Prince Francis Rákóczi II., son of Zrinyi Ilona by her first husband, was placed at its head. The expulsion of the Turks from Hungary, which at first seemed to render the prospects of the insurrection doubtful, really enabled it to assume more formidable dimensions, as it spread over the whole country from the north-eastern

Carpathians to the frontiers of Styria and the banks of the Drave. So strictly *kurucz* was it in its origin that the first officers of the insurgent's army were swineherds, barbers, tailors, &c., elected by the peasants themselves. Nor was it until he had achieved several successes that Rákóczi received the adhesion of the nobles, who but gradually and a few at a time joined his standard. After many successes and reverses, the exhaustion of the country, the wiser and more conciliatory spirit of Leopold's sons, and the success of the allies against Louis XIV., Rákóczi's ally, put an end to the insurrection in 1711. One of Rákóczi's lieutenants, Alexander Károlyi, a man of great ability and prudence, negotiated for the insurgents the Peace of Szatmár, which closed the long period of internal wars which had wasted Hungary with but slight intermissions for more than a century and a half. The character of the warfare then waged is incidentally revealed by such words in the Hungarian language as *hajdu*, *katona*, *szegény legény*, which have fluctuated between the meanings of "soldier" and "robber," and it is repeatedly alluded to in the present collection, especially in the *labancz* or anti-*kurucz* pieces. The leading spirits of the insurrection, Rákóczi and Bercsényi, however, refused to recognise the treaty, and betook themselves to the hospitality of foreign sovereigns, the Czar of Muscovy, the King of France, the Sultan of Turkey. In 1735 Rákóczi died in exile at Rodosto, on the shores of the Sea of Marmara, leaving behind him a name which, in spite of his want of ultimate success, or perhaps on account of it, has enjoyed a larger measure of posthumous fame than any other in Hungarian history.

Such is the period which the lamented historian, M. Szalay, himself spoke of as the most interesting and instructive in the history of his country, but death put an end to his labours before he had completed his account of the times of Rákóczi. In its investigation and illustration M. Thaly, mindful, as he tells us, of the maxim, "ars longa, vita brevis," has already spent the spare moments of twelve years. During this time he has examined nearly a hundred and fifty public, family, and private archives. The results of his researches have appeared in his *Life of Blind Bottyán*, one of Rákóczi's generals, and several other historical works relating to the "*kurucz* world." While carrying on these investigations, he kept in view not only what is still considered by many in its narrowest sense history, the record of wars, battles, negotiations, administrative measures, &c., but also the literature of the times, revealing more or less clearly the degree of culture attained by the nation or individuals, the passions and the beliefs which sustained them during the long internecine struggle. The result is the two volumes before us, the first containing the poetry illustrative of the insurrection of 1672 and the career of Thököly, the second that illustrative of the insurrection of Rákóczi.

As long ago as 1864 M. Thaly had conceived the plan of this present work. In the preface to his collection, entitled *Old Hungarian War-songs and Elegies*, published in that year, he stated that the pieces of a later date than 1670 had been reserved with the view of publishing all relating to the "*kurucz* world" in a separate collection. In like manner he has excluded from the present work all pieces of a later date than 1735, the year of Rákóczi's death. At present, to judge from his preface, he does not see his way to publishing a collection of them. In 1864 he had collected about sixty or seventy *kurucz* poems, but he deferred their publication from two motives. Not only did he entertain hopes—now happily fulfilled—of rendering the collection more complete, but the police regulations relating to the press—M. Schmerling being then in the height of his power—would have rendered the publication of such "rebellious" literature difficult, not to say impossible. Since 1864 the collection has been augmented not only from MS. in public and private archives, but also by an extensive correspondence with and personal enquiries from all sorts of persons who might be supposed to have any knowledge of the subject—descendants of *kurucz* leaders, surviving members of old bands of gipsy musicians, and the like. In Hungary, as elsewhere in Europe, the conviction prevails that the old world is definitively passing away, that now, if ever, must be collected the wrecks of tradition which have withstood the assaults of time, but are fast disappearing before the railroad and the common school. Not the least interesting or instructive reading in the two volumes before us is afforded by the history given of each piece, its preservation, and its discovery. M. Thaly writes on this subject with a genuine enthusiasm which perforce communicates itself to the reader. As the most striking instance in point, we would refer to the account given (ii. pp. 227–241) of the scarcely suspected survival of the original music of the *Rákóczi-nóta* down to the present day.

The collection itself is sufficiently miscellaneous. With the exception of two dialogues out of the *Actio Curiosa* (noticed in the *Academy*, vol. ii. p. 473), sixteen unpublished letters of the poet Gyöngyösi, a Latin cento on the Diet of Szécsény, and two Latin hymns, all the pieces are in verse and in the Hungarian language. Most of these Hungarian poems express the sentiments of the *Kuruczok*, a few those of the *Labanczok*, or partisans of the Habsburgs. The larger number, including those of the greatest value as historical documents, are popular poems composed by uneducated or half educated men, but the collection also includes poetry written by persons of culture, illustrating not merely the struggle but also the ideas then entertained about literature. We have a good number of the unflinching loyalist Count Koháry's long-drawn effusions, lamenting his undeserved misfortunes—he was for three years a prisoner in the hands of Thököly—in a monotonous strain of somewhat provoking self-complacency. By way of contrast we have one specimen given us of the unpublished poems of Petröczy Kata-Szidonia, the wife of the *kurucz* leader, the last Count Pekry. It is marked by pathos and "distinction," but the versification has that monotonous character so general in the Hungarian verse of the seventeenth century. The most important from a literary point of view is an abridged version of a hitherto unpublished poem, 499 stanzas in length, on the marriage of Thököly and Zrinyi Ilona. It has neither title nor name of author, but is evidently written by a contemporary imitator of Gyöngyösi. The latter poet, be it observed, was a steady adherent of the *labancz* cause. The foot-notes elucidating the allusions in the text are very useful, but occasionally there ought to be more of them. The spirited piece in the second volume (pp. 121–128) which describes the state of Kolozsvár when besieged by the *kurucz* army is composed in a style so terse as to be often obscure. And surely there must be many Magyar readers who will not understand the strange jargon of the Slovack insurgent in vol. ii. p. 376. The two volumes form a valuable addition to our knowledge of the period, and mark a long step towards the composition of a regular history of the *kurucz világ* which M. Thaly half promises us.

Arthur J. Patterson.

Heimskringla, eller Norges Konge-sagaer, af Snorri Sturlasson. Udg. ved C. R. Unger. Christiania: 1868.

The *Heimskringla*, or *Lives of the Kings*, written by the old Icelandic historians, exist in miscellaneous collections of

sagas, and in various redactions. Chronologically they fall under two heads, the *mythical* and the *historical;* and among the historical we may again discern between the "epic historical," written from oral tradition, treating events from bygone times, and the historical in the modern sense, or those written and recorded by contemporary writers.

The mythical period ends, and the dawn of history begins, shortly before the time of the settlement of Iceland, about the time of King Harold Fairhair and his father Halfdan the Black. Whatever is recorded to have happened before that time falls within the mythical age, extending from Odin downwards to the middle of the ninth century. The two centuries next following make up what may be called the Saga age, the time of the early historic sagas, marked by two great events—the settlement of Iceland, the Orkneys, the Faroes, and a century later by the introduction of Christianity. Then comes the purely historical time, when events and writing run parallel.

The Lives of the Kings may be divided thus. The mythical age is comprehended in the brief *Ynglinga Saga*, containing a pedigree of kings from Odin, accompanied by brief notes on each king, his death, his cairn, intermingled with various interesting mythical anecdotes. The historical series of kings then begins with King Harold Fairhair and his father Halfdan the Black. In the ancient works and MSS. we may divide this series into three parts: (1) *The Life of King Harold*, the ancestor of all future Norse kings, with the lives of his sons and nearest successors, kings and earls, within the heathen age, including the end of the ninth and the whole of the tenth century; these sagas only exist in an abbreviated form. (2) Then follow the *Lives of the two Olaves* (*Ólafanna Sögur*), King Olave Tryggvason and St. Olave, *Ólafs-Saga-Tryggvasonar* (995–1000) and *Ólafs-Saga-Helga* (1014–1030). These two kings were the champions of the Christian faith, much celebrated in song and story, and of each there exists accordingly an elaborate historical account. (3) Lives of the following kings: Magnus the Good and Harold Hardrada, and his successors down to King Sverri, including about 150 years (1030–1180); King Harold is the last in the list whose life still bears the mark of the epic and early saga style, although his time borders close on the age of writing, for the first Icelandic historian, Ari (see *Academy*, vol. i. p. 278), was born only a year after his death, and this historian, Ari, was the very man who, among other works, laid the foundation of the Lives of the kings of Norway, in a work variously called *Konunga Æfi*, *Konungabók*, or *Konunga Sögur*. Among the kings of the twelfth century there was no eminent man, and their sagas are accordingly devoid of much interest until the appearance of King Sverri, 1177–1202, of whom there exists a separate saga, a highly interesting and well written history (*Sverris Saga*); the saga of his grandson, King Hakon († 1263); his son was King Magnus the Law-minder († 1281), whose life (now lost, with the exception of a fragment) is the last saga written by an Icelandic sagaman on a Norse king. Thus counting from Harold Fairhair, we have an unbroken series of above 400 years, a period almost exactly coinciding with the existence of the Icelandic commonwealth.

Now, as to the work commonly called *Heimskringla* (the name is modern, taken from the beginning words "Kringla heimsins," the *Circle of the world*); this work contains a recension of the Lives of the kings of Norway down to King Sverri; first comes a preface, including a brief record of Ari, the historian, whose book formed the groundwork; then the series of the sagas themselves, beginning with the *Ynglinga Saga*, the *Heimskringla* being the only recension that has preserved that saga to us; for all the other recensions begin with King Harold Fairhair (the *Fagrskinna*, with his father Halfdan the Black). The Lives of King Harold and the next following kings, King Hakon (the foster-son of King Athelstan), and the sons of Gunhild, are here given in a fuller and better form than elsewhere. It is succeeded by the saga of Olave Tryggvason, much abbreviated in shape as compared with the large *Ólafs Saga* contained in the Arna-Magn. vellum, folio 61, and published in *Fornmanna Sögur I.–III.*, as also in *Flateyarbók;* yet the abridgment is done with a careful hand, evidently by a historian, not, as is the case in some of the following, by a mere abridging, unskilled transcriber. The *Olafs Saga Helga* (St. Olave) conforms in the main to the special saga of that king, published in *Fornmanna Sögur IV.* and *V.*, but especially it agrees closely with the text in the edition of 1853 from an old Icelandic vellum in Stockholm. The sagas of the following kings are given in an abridged text, and mostly by an unskilful hand, especially in the sagas of the kings of the twelfth century; and we may add that the texts of the various MSS. of *Heimskringla* vary here among themselves, transposing, adding, and omitting, so as to produce an almost hopeless confusion. The best and fullest text of all these sagas from Harold Hardrada downwards to Sverri, is contained in another ancient Icelandic vellum called *Hulda* (Arna-Magn. folio 66), and published in the sixth and seventh volume of the *Fornmanna Sögur*. The *Heimskringla* ends abruptly in the year 1176; but only in a single MS., the parent of our vulgate text; for the other vellums run on, and also give an abridgment of the *Sverris Saga*, as well as of the *Hákonar Saga*, down to 1263, some comprehending but one, some both those sagas.

The author of this work is in the editions and in all later writings said to be Snorri Sturlasson, born 1178, died 1241, the famous writer of the *Edda;* but curiously enough, neither the MSS. nor the tradition attest this; the only vellum that says anything about the matter is the *Cod. Fris.*, which begins thus: "here beginneth the Book of Kings according to the records of Ari, priest, the Historian." The first mention of Snorri, as compiler of the *Heimskringla*, occurs in a Danish (or Norse) translation of it by a certain Lauriz Hansson of 1550 (Arna-Magn. 93, and autograph); he says: "as it is recorded in the preface of Snorri Sturlis (*sic*), the Norse historiographer;" and "here endeth the preface of Snorri Sturlesenn in the Book of Kings." This statement was repeated in a later translation by the Norwegian priest Clausen (1599), whose translation was published by Ole Worm (a Dane) in 1630. The most learned Icelandic scholar of that time, Arngrim the Learned, was himself unaware of the fact, for in a letter to Ole Worm of 1632 (Aug. 18), he says: "quod ad Snorronem nostrum, an vestrum potius, quibus lucem et se ipsum profundâ oblivionis nocte debeat;" "as to our Snorri, or rather *your* Snorri, for to you (the Danes, not to us Icelanders) he owes both the light and the deliverance of himself out of a deep night of forgetfulness." The fact appears nevertheless to be substantially true. If not the *Heimskringla* in its present shape, yet the *Life of St. Olave*, as it stands in the edition of 1853, is the work of Snorri; his authority is once quoted in regard to the battle of Swolder (where Olave Tryggvason fell), and the reference quoted agrees with the text in our *Heimskringla*. Graver doubts may exist as to his authorship of the last part, namely, the sagas of Harold Hardrada and the rest; if he ever was the composer of those sagas, his work would be more likely to be the text of the *Hulda* (our best text), and not the badly compiled abridgment which is given in our texts of the *Heimskringla*.

But Snorri was not the original compiler of these records; neither could he have been, for at his time the tradition of events that had happened in the tenth century had greatly,

if not altogether, faded away in Iceland. But there were other sources :—

I. The *Book of Kings*, or *Lives of Kings*, by Ari, a book which appears to have existed as a separate work, but was at a later time inserted (abridged ?) into his *Islendinga Bôk* (see *Academy*, *l. c.*) ; this Book of Kings is lost, but we can often penetrate to it and perceive it through the veil of the works of later historians ; in the chronology, and chiefly in the choice records as to heathen rites, sacrifices, customs, and manners ; in the genealogies, which we owe to Ari's authority ; &c.

II. The next sources were the old poems (war-songs), but however rich in words and circumlocution, they were but poor in facts.

III. The large collection of episodes and sagas of Icelanders who had lived in Norway in the times of the respective kings, received honours there, and now that they returned, the incidents of their lives were handed down shaped into a little tale; those episodes the Icelanders call "thætter" (twists of rope), distinguishing them from the longer sagas ; they were told and re-told at festivals, meetings, banquets, weddings, at the evening winter-hearth, and at length written down. A large collection of such episodes, rich and varied in scenes and characters, is embodied into the Sagas of the Kings (thirty, forty, or upwards), and forming sometimes the choicest part of the narrative. The saga of Harold Hardrada, *e.g.* and that of Olave Tryggvason, are for a great part made up of these small stories, which inform us, not of the king's public life and career, nor even of his dealings with his subjects in Norway, but of his audiences and intercourse with the Icelandic visitors in Norway (*e.g.* the *Tale of Stuf the Blind* in the saga of King Harold).

IV. As to the *Lives of the Kings* next preceding Sverri, there was a work written by an Icelander, Erik Oddson ; that book was called *Hryggjar-Stykke*, a record, mostly authentic, of the events in Norway immediately after 1130 ; this work is lost, but it is the groundwork of the complete saga as found in the *Hulda* and in the *Morkinskinna*.

Most of the ancient vellum MSS. of the *Heimskringla* were preserved in the old University Library at Copenhagen, and were consequently all destroyed, together with the library, in the great fire of 1728. These vellums were :— 1. The *Kringla* (also called *Cod. Acad. Primus*). This famous vellum is the foundation for all the editions (with one exception), and it has given the name to the book itself. It was nearly a complete copy, only the first leaf with the preface was wanting, and the corresponding leaf, the eighth and last in the quire; it therefore began with the first chapter of the *Ynglinga Saga*, where the words "Kringla" or "Kringla heimsins," from which the name is derived, occur in the first sentence. This vellum seems to have been written in the year 1266. 2. The next vellum was by Torfaeus called *Jöfraskinna* (*Membrana Regum*), also called *Cod. Acad. Secundus*; it did not end as the former MS., but ran on into *Sverris Saga*, the end being wanting. 3. The third was by Torfaeus called *Gullinskinna* (*Golden-skin*), *Membrana Aurea*, from the brilliancy of its writing and parchment ; it only contained the latter part, beginning with the life of King Olave the Quiet (1067–1093), and ran on through *Sverris Saga* and *Hákonar Saga*, where it ended, being defective. Although these vellums were destroyed, they have been preserved in a transcript by the well-known vellum-transcriber, Asgeir Jónsson. The learned Icelandic historian Thormod Torfaeus was at the end of the seventeenth century engaged by the king of Denmark to compile the *Historia Norwagiae*, the *Series Regum Daniae*, the *Winlandia*, the *Orcades*, &c., until in consequence of an unlucky accident (a manslaughter), for which see *Hist. Eccl. Isl.* iii. 570, 571, Torfaeus fell into disgrace with the king, who exiled him to Norway, to the island Karmten, in Bergen-Stift; here he lived during the remainder of his long life for about fifty years, far off from the vellums in Copenhagen. He therefore had all these vellums copied by Asgeir, the Icelandic vellums of the Royal Library as well as those of the University Library ; the Arna-Magn. Library did not yet exist. Among other things all the vellums of the *Heimskringla* were copied, precious fragments of the *Orkneyinga Saga*, and much besides ; and a happy accident it proved to be, for when in 1728 the library with the originals was consumed by fire, these accurate transcripts were preserved, all in the possession of Árni Magnússon, who had bought them at the death of Torfaeus in 1719. The transcript of the *Kringla* is contained in three volumes (Arna-Magn. 35, 36, and 63), and that of the *Jöfraskinna* in Arna-Magn. folio 37. The first edition of the work, published in Sweden in 1697, *before* the fire, is founded throughout on the *Kringla*, but not so the folio edition of 1777–1783 and its later reprints, of which the third part is founded not only on a different MS. but even on a different recension ; and for this reason :—In making the catalogue of the Arna-Magnaean MSS. (in 1731), the third and last volume of Asgeir's transcript had by inadvertency been separated from the rest, and placed under No. 63. This circumstance was unknown to the editor, and it was noticed by the present writer when ten years ago the collection was removed from its old place in the Round Tower into the New Library building at Copenhagen. The present edition is throughout founded on the same MSS. (Arna-Magn. 34, 35, 63), and is consequently the first real true edition of the work presenting oneness in the text.

The present edition originated thus. It was originally intended to be edited by the late Prof. P. A. Munch ; but at his lamented decease in 1863, the work, which seems not even to have been begun, was transferred to the present editor. It is a commendable work in every respect, especially in the philological parts, in which the editor has endeavoured to give the chief peculiarities of the spelling of the *Kringla* : *e.g.* the double use of the *ö* (*ǫ* and *ǫ́*), answering to the double sound of that vowel. The transcripts of Asgeir are accurate in the text and meaning, but seldom in spelling ; but some few pieces exist in Árni Magnússon's own handwriting, and *he* was the most accurate man both in text and in spelling. We may here add a fact which has escaped Prof. Unger, viz. that besides those pieces which Prof. Unger has given in the preface as existing in Árni's hand, there also exists a fuller evidence as to the spelling of this old vellum. The *Kringla* wound up with a "List of Poets" (*Skálda-tal*), following the series of the kings, and adding in parallel columns the names of those poets (skalds) who composed songs on each of the kings ; this last part of the *Kringla* is preserved in a separate transcript executed by Árni himself (Arna-Magn. No. 761, qto.), and is printed (but not yet published) in the third volume of the Arna-Magn. edition of the *Edda*, pp. 251–269, following letter for letter the spelling of the old vellum. By the aid of this List we are also enabled to fix the age of the MSS. ; for it has the name of King Hakon, with Sturla the Lawman as his poet ; this poem was composed in 1264 or in 1265, shortly after the king's death. The List, on the other hand, omits the name of King Magnús, his son, on whom the same poet composed many songs, for which he received honours, as stated in *Sturlunga Saga*, iii. 306.

Prof. Unger's preface gives a good account of older editions, especially that of Peringsköld, and of the way in which

modern pieces and additions from other sagas have crept into the text. All this is now weeded out, and the book is a handsome edition; at the end there are indices of names—of proper names and of local names—all done in a satisfactory and unpretentious way. GUDBRAND VIGFÚSSON.

DRACO NORMANNICUS.

I AM not aware whether the periodicals have at all noticed the recent rediscovery of a document by no means unimportant for the medieval history of England, but appearing to have been lost for a number of years.

Montfaucon (*Bibliotheca Bibliothecarum Manuscriptorum nova*, i. 41, 1739) was the first who mentioned as the contents of MS. Reg. Christ. 1267: "Anonymi *Draco Normannicus*, versus continent historiam Mathildis Imperatoris Francorum Anglorum et Normannorum, quaedam ibi habentur de synodis sub Victore et Alexandro III." Afterwards J. J. Brial, well acquainted with this notice, printed from a volume of abstracts of MSS. belonging to the queen of Sweden, which he found in the library of St.-Germain-dès-Près, part of the introduction in verse, as well as the prose headings to the several books and chapters of the work, in *Notices et Extraits des Manuscripts de la Bibliothèque du Roi*, viii. 2, 297, 1810. He asserted at the time that, when he enquired for the MS. in the Vatican through the academician, M. La Porte du Theil, and Cardinal Dugnani, late papal nuncio in France, the book was not to be found. Brial is of opinion that Stephen of Rouen, a monk of the abbey of Bec in the twelfth century, was probably the author of *Draco Normannicus*, a poet of whom verses in a similar style are preserved in a MS. of St.-Germain, and about whom there is an article in the *Histoire littéraire de France*, xii. 675. Brial's extracts and conjectures concerning the authorship are repeated by Sir Thomas Duffus Hardy, *Descriptive Catalogue of Materials relating to the History of Great Britain and Ireland*, ii. 297, 1865.* It appears that the MS. was not forthcoming when the late Record Commission sent emissaries to the continental libraries, though I happen to know that Dr. Pertz much about the same time obtained a copy with the purpose of printing it in the *Monumenta Historiae Germanica*. At length it turns up again in print, and at a place where not every sharp-sighted enquirer would readily look for it, viz. in *Appendix ad Opera edita ab Angelo Maio S. R. E. Presbytero Cardinali continens quaedam Scriptorum veterum Poetica, Historica, Philologica ex codicibus collecta.* Romae apud Josephum Spithoever M.DCCC.LXXI. 4°. As the editor, Joseph Cozza, Monachus Basilianus, is altogether silent about the long disappearance of the volume, one can only guess that Cardinal Mai, who died in 1854, kept it a good long time by himself. And nobody thought of it until sixteen years after his death it is published, together with some other of his transcripts, in the same slovenly manner by which the learned men of the Vatican have latterly distinguished themselves. In a few scanty words, not altogether free from suspicion (p. 20), the reader is informed that the poem after all did not belong to the collection of Queen Christina, but that, after some vicissitudes, it is preserved in an Ottobonian MS., viz. Vat. 3081. Moreover, it turns out to be a paper copy, and consequently neither very old nor the original of an author of the twelfth century. There is, however, a notice at the end (p. 65 of the edition), saying, "Libellum istum sumpsi ex quodam *perno*" (= *parvo*, says the editor) "*antiquo* libro, quem mihi concessit R. M. R. B. Et erat ille liber ut credo de Ab. de B. H." (Bec-Hellouin?). Not a word is added about the age of the handwriting or the paper. The work contains in print 4346 verses, exclusive of three gaps after v. 1439, v. 1629, and v. 3007, in each of which places a leaf equal to a hundred verses has been torn away. The editor, who has added a few flimsy notes mixed up with the glosses which are written on the margin of the MS., is also to be blamed for having suppressed the opening of the Prooemium under the pretence: "quia nihil historicum, nihil non vulgare habebat" (p. 21). He consequently begins with the same words as Brial's extracts: "Dum moror in studiis," &c. Lastly, he has arbitrarily distributed the prose headings or titles, which in the MS. stand by themselves over the whole poem, inserting them wherever he thought fit.

In spite, however, of the late date of the MS. and the bad editorship, a careful perusal must convince every scholar that he has not to deal with a supposititious forgery, but unquestionably with a composition of the twelfth century. Though distichs were not frequently selected for an historical poem, the imitation of Ovid is not altogether unusual in medieval historiography. I may refer to Ermoldus Nigellus and his contemporary work: *In honorem Hludowici Christianissimi Caesaris Augusti* (Louis le Débonnaire), printed in Pertz, *Scriptores*, ii. 467; and in every respect much nearer the Norman poet, to the *Carmen de bello Hastingensi*, by Guido of Amiens, supposed to be nearly contemporary with the event, and printed for the first time in *Monumenta Historica Britannica*, i. 856. There is not much to be said for our author's talent as a writer of verse. Like all writers of Latin verse in Gaul since the days of Venantius Fortunatus, he is fond of an accumulation of epithetic terms and synonymous verbs, which adds neither to poetical nor metrical correctness and beauty, *e.g.* v. 231:

> "Sublimes, humiles, fortes, castos, sapientes
> Obruit, extinguit, comprimit, arcet, habet."

For the sake of his verse, he sins occasionally against grammar and syntax. There is little of the poet in him, but decidedly more inclination to reason about historical facts and their connection. He makes his heroes, Pope Stephen III., William the Conqueror, King Henry II., and others, deliver long speeches on given occasions.

The chronological arrangement of the work, evidently written in honour of the empress Matilda and her son, King Henry II. of England, is rather involved and full of episodes. Happily the author adheres in this respect to the programme which he has prefixed in the introductory verses. After having mentioned the two marriages of the lady, first to the emperor Henry V., a connection about which nothing new is said, and afterwards to Count Geoffrey of Anjou, as well as the accession of Henry II. in Normandy and in England, he proceeds to the early history of the Normans, calling them most unusually from Hastings' invasion and Rollo's occupation down to his own days almost exclusively *Dani*. After a short survey of the growth of the duchy of Normandy during the time of the last Carlovingian and the first Capetian kings, we have the conquest of England by William, of course in a spirit inimical to Harold and the English. Here unfortunately we miss, owing to the first break, what the author wrote about the latter days of the Conqueror, his son William Rufus, and the beginning of Henry I. down to the battle of Tinchebrai, 1106. Farther on, at the opening of the second book, when the author returns to the coronation of Henry II. in 1154, he enters on another digression. After describing the last Merovingian king in his degraded and empty state, v. 1782:

> "Intonsus barba residens, cum crine refuso
> Hac in parte sui *scoticus* esse cupit,"

he treats of the coronation of Pippin and Charles by Pope Stephen III., and of the empire of the great Charles, very much as was to be expected in the twelfth century, and from a native of the west of Europe. See v. 2026:

> "Cum sibi subjectis servit Maguncia, Roma,
> Parisius, triplicem sic regit ille thronum."

After this the feuds between Henry II. and Louis VII. in 1167 and 1168, especially the capture of Chaumont-en-Beauvaissis are narrated with several digressions. We have first the invasion of Normandy by Otto I. (946), unfortunately mutilated by another break in the text, and then suggested by the marriage of Henry's second son Geoffrey to the daughter of Conan of Brittany, the fabulous correspondence between King Arthur, "qui tunc apud Antipodes degebat," prohibiting King Henry to annex the land of the Britons. The third book opens with the death of the empress Maud, on the 10th September 1167, and her interment in the abbey of Bec; after which the narrative is taken back again to the embassy sent by the emperor Frederick I. (1165), the betrothal of Henry the Lion, duke of Saxony, to the daughter of King Henry, and the papal schism between Alexander III. and Victor IV. (1159). Even the letters of the two pontiffs and the reports of their opposite councils, involving a succinct synopsis of imperial policy from Caesar down to Barbarossa, are turned

* See also Wattenbach, *Deutschlands Geschichtsquellen im Mittelalter*, p. 360, No. 2, 2nd ed. 1866; and Potthast, *Bibliotheca Historica medii aevi*, Supplement, p. 66, 1868.

into distichs. The author deduces his arguments against the superiority of the king of France over Henry II. from the fact that the ancestors of Louis were not the legitimate heirs of Charles the Great. He rejoices in all successes of the Angevin king over his feudal lord; see v. 1746:

"Conclusos triplici Gallos tenet ipse ducatu."

But much more important than such reasoning is the character given to Archbishop Thomas of Canterbury, formerly the intimate friend of the English king, but now a fugitive in France. To the great disgust of the ultramontane editor, Becket is treated, indeed, very unfairly, as it could not be otherwise expected from such a decided partisan of the king. He is introduced for the first time on the occasion of the discord between the two kings, v. 2060:

"Exul abest Thomas antistes Cantuariensis,
Foedera perturbat, proelia sola cupit."

Afterwards he is accused of having gained the favour of Pope Alexander by bribery, v. 3839, and with regard to the debates at the Council of Tours (1163), of which there is a long description, we have the very curious hint, v. 3933:

"Hic siluit Thomas antistes Cantuariensis
Ut minus doctus verba latina loqui."

Towards the end of the poem there is mentioned a truce between the two kings, at Poissy, in February 1168 according to the heading, iii. 16, but in the Epiphany 1169 according to Robert of Thorigny. Here the author alludes once more to the uncertain position of the conspiring archbishop, v. 4333:

"Reddere iura sibi si dedignatur avita,
Exul ab Angligenis iure perhennis erit";

and v. 4344:

"Nescio quid voluit, retro redire timet,"

perhaps the best evidence of the conclusion of the poem before Becket's death. The latest fact of which there is a record in the poem seems to be the visit of Henry the younger to Paris, v. 4245, which is dated by Robert de Thorigny 1169, in Purificatione Beatae Mariae (Pertz, *Scriptores*, vi. 518).

At the end of the poem, however (p. 65), are added from the same MS., and therefore indirectly from the same original, two lists of the jewels and ornaments bequeathed by the empress Maud to the church of Bec in her lifetime and after her death, and thirty-three distichs more, evidently in continuation of the poem, describing the return of the king to England in a gale, by which no other passage can be meant than that described and dated the 3rd March 1170 in *Gesta Henrici Secundi Benedicti Abbatis*, i. 3, ed. Stubbs.

That the work is the composition of a contemporary appears likewise from the description of Denmark, a country still pre-eminently known to an inhabitant of the lower Seine, v. 524, from the term *Metropolis Londis* (Lund), and from v. 536:

"Waldamarus ibi regia sceptra *regit*."

The author is fully alive to the recent importance of canon law, v. 1492:

"Hinc fluvius torrens Gratianus ad alta redundat,
Quo sine nil leges, nil ibi iura valent."

That he was a Norman, proud of his distinct nationality, is evident throughout the poem. The courtier may be discovered in v. 1732, where he insinuates too much consanguinity as the only reason of the divorce between Louis VII. and Eleonora of Poitou. That Bec is the local centre from which he writes is apparent from the vigour by which the church and castle of Poissy (Pissenum) are claimed by the abbey as its property (v. 1678), and more especially from the circumstantial description of the individual monk of Bec, who was despatched to inform the king of the death of his mother the empress (v. 2910):—

"Is regi notus tum carus tumque fidelis
Hinc magis est iteris (*sic!*) dulcior ipse labor," &c.

It strikes me as if this must have been the poet himself, Stephen of Rouen, provided that the authors of the *Histoire littéraire de France* and Brial have come to the right conclusion. As for the title *Draco Normannicus*, the editor does not even hint whether it is actually prefixed to the work in MS. Its meaning can be no other than *vexillum*, the Norman standard.

It is not very easy to trace minutely all the sources from which our author collected his knowledge of previous history. In the opening of the poem (v. 2), he professes magnificently:

"Ex propriis gazis edere pauca libet."

Referring to the British king Arthur (vv. 2803, 2804), he quotes "*liber Gildae sapientis*" and "quae *Monemutensis* vera loquendo canit." The description of Childeric III., the last Merovingian (v. 1762), agrees more in spirit than literally with the well-known first chapter of Einhart's *Vita Karoli Magni*. The author knew of course his more provincial historians, especially Dudo of St.-Quentin, who is quoted by name in the title (ii. 13) referring to the siege of Rouen by Otto I.: "Dudo ponit quod hoc fuit supra pontem portae Beluacensis;" cf. Duchesne, *Hist. Norm. Scriptores*, 131. He had some annalist at his disposal, and most likely the Chronicles of Sigibert of Gembloux and his continuators. The best of these, Robert de Thorigny, had been himself a monk at Bec from 1128 till 1154. On the other hand, Wace's *Roman de Rou* was probably not yet published, whereas the monk of Bec, who had very little poetical fervour in common with the *trouvère* from Jersey, must have been acquainted, as I have very little doubt, with at least the *Gesta Pontificum* of William of Malmesbury, from the way in which he mentions (v. 3957) the synod of Winchester in 1072, at which, in the presence of William the Conqueror, the quarrel between Lanfranc and Thomas of York was decided in favour of the first. Though the latest dates in the work are 1169 and 1170, and not February 1168, as Brial supposes (*l. c.* p. 298), I find no traces that the author wrote with a knowledge of Becket's letters, which were hardly collected yet. He relates what he either saw himself or heard from those who did. There are many more or less local details, however, which require more minute investigation both from Norman and English scholars, before a final verdict can be given about the historical value of *Draco Normannicus*.

R. Pauli.

Intelligence.

We are in a position to say that M. Renan's *L'Antichrist* may be expected in the early part of next year. The previous statement in our columns on this subject was inexact.

"*Etruscan Inscriptions*, analysed, translated, and commented upon," by Lord Lindsay, is one of the books in Mr. Murray's list of works in preparation.

The first part of the long promised *Historical Atlas of Ancient Geography, Biblical and Classical*, compiled under the superintendence of Dr. W. Smith and Mr. G. Grove, is announced to appear in October. The work (which will be completed in five quarterly parts, price one guinea each) is to contain 41 maps of the size of those in Keith Johnston's *Royal Atlas*, together with descriptive letter-press and an account of the authorities used in constructing each map. The classical maps have been prepared by Karl Müller, the well-known editor of Strabo and the minor Greek geographers.

M. Taine is at present engaged on a History of the French Revolution.

The publication of Mr. Buckle's Miscellaneous and Posthumous Works, which were announced for the present season, is postponed till October.

A writer in *Fraser* (August) is disposed by fresh manuscript and other authorities to give full credence to the story of Olimpia Maldachini, sister-in-law and sovereign ruler of Pope Innocent X., as commonly told in the seventeenth century, though it was treated by Ranke as a mere romance. The life of this lady, which has been usually ascribed to Gregorio Leti, may, according to the writer, be of more trustworthy authorship.

According to *La Voix*, the autograph MS. of the memoirs of A. Khrapovitsky, Secretary of State to Catherine II., has been found amongst the papers of Prince Peter Vrazemsky. The two published editions are incomplete, and it is hoped that the original text of the work, which throws so much light on the private life of the empress, will now be restored.

SS. Tanfani, Paganini, and Lupi, of the archives of Pisa, are preparing to publish, by instalments, in 4to, *Le Iscrizioni della città di Pisa, raccolte ed illustrate*, with notes and facsimiles when desirable.

Contents of the Journals.

Gött. gel. Anzeigen, June 5.—Reviews Gaston Paris' edition of *La Vie de saint Alexis*, a poem perhaps written by Tetbald of Vernon at Rouen in the eleventh century in assonant five-line strophes, which later hands

have changed first into the rhymed verses which the thirteenth century preferred, and then into four-line Alexandrines. The historical value of the poem is therefore great, and it gives us more insight into the old French dialects in some respects than even the Oxford "Roland," also of the eleventh century.—There is also a notice of Monod's book, *On the Sources of Merovingian History;* and Ewald refers to Wright's *Syriac Apocryphal Acts of the Apostles*, as illustrating the use of the word συμφωνία for a musical instrument in the Book of Daniel.——June 12.—Contains good criticisms of Stamm's and Heyne's edition of Ulfilas; and of Waddington's *Inscriptions grecques et latines de la Syrie.* ——June 19.—Analyses Clouet's *Histoire de Verdun*, vol. ii., at length; and Kohl characterizes Cunningham's *Notes on the Natural History of the Strait of Magellan* as being unsatisfactory.——June 26.—Reviews Köpke's interesting *Kleine Schriften.*—Kohl takes an unfavourable view of Neill's *English Colonization of America during the Seventeenth Century.*

Liter. Centralblatt, April 27.—Notices Friedrich's *The Diet of Worms in* 1521, from the letters of the Nuncio Oleander. Friedrich (Döllinger's ally) found a copy of some of these at Trent; the originals at Rome are of course not accessible. He last year published Turrecremata's *De Potestate Papae et Concilii Generalis* from the Munich library.——May 4.—Analyses Ritter's examination of Sully's *Memoirs*, especially as to Henri IV.'s great plan of overthrowing the House of Hapsburg, and establishing a European peace; which Ritter shows to be unhistoric, and falsely attributed to the king either by Sully or Sully's secretaries.—A good summary follows of von Sybel's fourth volume of the *History of the French Revolution* (to 1797).——June 29.—Notices Max Müller's *Ueber die Resultate der Sprachwissenschaft*, as containing a corrective of Mommsen's views as to a "Graeco-Italian race," and of similar views in Schleicher and others.—Lugebil on the *Constitution of Athens* and Mommsen on the *Römisches Staatsrecht* are reviewed at length, the former with special reference to the archonship, the latter as to the tribunate.

Bullettino dell' Instituto, June, continues its account of the excavations at Pompeii and at Certosa. The latter show the rudeness of Etruscan art in the north as compared with what it was near the coast: some objects found at Eygenbilsen in Belgium prove how far Etruscan trade extended before the rise of Rome.——July and August.—Continues the account of the excavations at Pompeii and Certosa. The objects found at the latter illustrate the religion of North Etruria; nothing has been discovered that in the least reminds us of those ghastly beings of the nether world so often depicted in the vases and tombs of the southern region of Tuscany. An attempt is made to range the discoveries in their chronological order and progress.

Periodico di Numismatica e Sfragistica per la Storia d'Italia, Firenze, anno iv. fasc. ii., contains notices and a plate of the early coins of Camerinum in the thirteenth century, with the name of Bishop Ansovinus (a German name) on them, the bishops then having great temporal power. A list follows of the officials of the hospital at Altopascio, with a plate of six unedited seals. An article on the "vermilion cross on a white ground," the arms of Florence, given to the knights specially created by the people, contains a curious list of the knights appointed in the famous outbreak of the Ciompi in 1378, "Mess Salvestro" (de' Medici) heading the list.

New Publications.

De Luynes, Duc. Voyage d'exploration à la Mer morte, à Palmyre, à Pétra et sur la rive gauche du Jourdain. Oeuvre posthume, publiée par ses petits-fils, sous la direction de M. le comte de Vogüé. 4 vols. quarto et 3 atlas in fol. (Vol. 1 et 2: La relation du voyage laissée entièrement, manuscrite par le duc de Luynes, des recherches géographiques, historiques et archéologiques. Vol. 3: Un mémoire de M. Vignes sur la topographie etc., le journal de voyage à Karak et à Chaubak, suivis d'inscriptions arabes, traduites par M. Sauvaire. Vol. 4: La géologie, la minéralogie etc., réd. par M. Lartet.) Paris: A. Bertrand. (Trübner.)

Registra quorundam Abbatum Monasterii S. Albani qui saeculo 15mo floruere; vol. I. Registrum Abbatiae Johannis Whethamstede, Abbatis Monasterii Sti Albani, iterum susceptae; Roberto Blakeney, Capellano quondam adscriptum. Edited by H. T. Riley, M.A. (Rolls Series.) Longmans.

Scriptores Rerum Germanicarum in usum scholarum ex monumentis Germaniae historicis recudi fecit G. H. Pertz. Godifredi Viterbiensis festa Friderici I. et Henrici VI. imperatorum metrice scripta, ex ed. Waitzii. Hannover: Hahn.

Ubicini, A. Les Constitutions de l'Europe orientale. Constitution de la Principauté de Serbie annotée et expliquée. Paris: Durand et Pedone-Lauriel.

Philology.

Prophetae Chaldaice. Paulus de Lagarde e fide cod. Reuchliniani edidit. Lipsiae in aed. B. G. Teubneri.

Hitherto anyone who has wished to use an authentic text of the Targums has been obliged to consult the rare editions published in the first century after the invention of printing. These were printed by Jews or Jewish Christians, partly in Portugal and Spain: as in Lisbon (1491—Onkelos), in Leiria (1492—the Proverbs; 1494—the Prophets), and in Alcala (1517—Bible); partly in Italy: as in Bologna (1482—Onkelos), in Venice (where Daniel Bomberg, of Antwerp, established his celebrated press, and published, from 1518, the three large editions of the Bible, together with the Targums), in Sabbioneta (1557—Onkelos, with Massorah), and in other places. These editions were based upon the MSS. The later ones in common use among Christian scholars reproduced the editions of Alcala and Venice, but unfortunately not without alterations.

After Elias Levita had advised the forming a Chaldee grammar for the Targums from the Aramaic text in Daniel and Ezra to the neglect of the MSS. (see preface to his *Dictionary*, 1541), a tendency arose not only to correct the vowel system of the old editions, but also, on the pretext of their superfluity, to diminish the use of the *matres lectionis.* This was done by Le Mercier in his edition of the Targum of the Minor Prophets and some Megilloth (1557, preface), and also by the elder Buxtorf in his Rabbinic Bible, on which the Targum texts in the later polyglots were based.

Very little was done in editing Targums by Christian scholars of the succeeding centuries, but the following editions—all from MSS.—should be noticed: Taylor (two Targ. of Esther, 1655), Terentius (Job, 1663), Beck (1680 and 1683, Chronicles), Wilkins (1715, Chronicles). The last edition of a Targum was that of J. D. Michaelis, who in 1775 reprinted the Targum of Hosea, edited by van der Hardt in 1702. There were of course several Jewish reprints, on which *v.* Steinschneider, *Zeitsch. d. Deutsch. Morg. Ges.* xii. 171, and cf. Frankel, *Zu d. Targ. d. Proph.* p. 40, *note.*

It was only on October 1, 1857, at a general meeting of the German Oriental Society held at Breslau, that it was resolved, on the motion of Prof. Brockhaus, of Leipzig, to promote and support a critical edition of all the Targums (*Z. D. M. G.* xii. 195, 199; xiii. 320), but this resolution was never carried out.

Semitic philologists will under these circumstances share our great joy at seeing that Prof. de Lagarde has broken the ice, though we regret to add that this has not been done without personal sacrifice, for he has once more had to defray the whole cost of printing. In the hope of giving a solid basis to the grammatical study of the Targums, he chose the oldest extant MS., viz. the Codex Durlacencis (A.D. 1105), which contains the Nebhiim of the Jewish Canon in Hebrew, with the Targum wrongly ascribed to Jonathan bar Uzziel. It was bought at Rome by Reuchlin in 1498, and was used by P. J. Bruns, who collated parts of the Hebrew text for Kennicott's Bible (cf. also Eichhorn's *Repertorium*, xv. 174). From this codex we have here a most exact copy of the consonant text of the Targum. In the very rare cases where the MS. has lacunae they are filled up from Bomberg's first edition of 1518. The editor was not in a position to add the vowel-points of the MS., as this would have considerably increased the expense. But this omission is not to be greatly regretted, for the reconstruction of the probable pronunciation of Aramaic words depends chiefly, we think, upon etymologic reasons under the guidance of the *matres lectionis*, which are of course

left untouched. We fear that an investigation of the vowel system of the Reuchlin MS., for which the editor seems disposed to make further sacrifices (p. iv), however useful it may be, would have only a negative result. It would probably show that the punctators of the Targums did not follow a tradition of any great age or authenticity, but merely fixed a very late pronunciation which had already become arbitrary and corrupt. Must we not indeed infer the absence of points from the use of a double י or ו to express the consonant sounds, while for the vowels we have the single *matres lectionis?* Besides, Elias Levita maintains that the Masorites paid no attention to the vocalisation of the Targums, and expressly states that the very old MSS. which he saw had no vowel-points at all. We must perhaps admit one exception, in the case of the vocalisation hinted at in the Massorah of Targum Onkelos, but this was fixed by the Madinchāē, and seems to depend upon the actual pronunciation of the Eastern Jews as influenced by Syriasms (*v.* Geiger, *Z. D. M. G.* xviii. 649, 657).

After the text of the Targum itself (pp. 1–489) there follow (pp. 490, 3—493, 32) from the same MS. the Reshūjōth or Harmōnīn ("licences"), *i.e.* introductions in which the Turgemān asks leave of God and the congregation in the synagogue for reciting the Haftarah. Nos. 1, 2, and 5 are the most interesting: 1 and 5 rhymed; 2 an acrostic; 1 and 5 alphabetic, and followed by an acrostic of the name of the Paitān (cf. Prof. de Lagarde's conjecture on Ps. xxv. and xxxiv., *Academy*, vol. iii. p. 12). No. 6, which is in prose, praises Jonathan bar Uzziel as a disciple of Haggai, Zechariah, and Malachi. No. 7 and 8 contain the liturgical blessings of God after finishing the Haftarah. (On all this *v.* Zunz, *Gottesdienstliche Vorträge*, pp. 380 *a*, *b*, and 356 *d*, and *Literaturgeschichte der synagogalen Poesie*, 1865, pp. 19 and 79 *c*.)

Besides a detailed description of the Reuchlin MS., the comprehensive preface contains (pp. vi–xlii) the whole of the marginal notes to the Targum, which are of great importance. They consist of fragments of different Targums to many passages, and are often of considerable extent. The longer ones are marked (1) "Jerusalem Targum," (2) "Other Targum," (3) "Other Book," or (4) the two latter notes are combined (*v.* pp. xii, 17; xxxiv, 20; xxxviii, 19). The shorter ones and those which refer to single words are marked "Different" and "Other Expression."

Now classes 1, 2, 4, to judge from their contents, all contain Jerusalem Targums, but the difference of their marks suggests that the Turgemānīn, who had to read the official Targum in the synagogue, used to increase the Jerusalem glosses already extant in their own copies from the margin of other copies which they happened to meet with. For "Other Book" means another MS. of the official Targum (cf. p. xv, 11, on 1 Sam. v. 11), and it is not probable that in later times they borrowed from a complete Palestine Targum of the Prophets. How little the marginal notes of the Reuchlin MS. exhaust what contemporary and later Rabbins knew of this Jerusalem Targum may be seen from the fact that quotations from it made by Rashi (who died in the very year that the codex was written), Kimchi, and others, do not exist in the MS., except one Targum of the Haftarah, Is. lxvi. 1, but this has about twenty-five words more than in the Vatican MS. (*v.* these quotations collected by Zunz, *Gottesdienstl. Vortr.* pp. 77, 78).

Since the language of all the Targums, as is shown by its grammatical peculiarities, is a Palestine-Aramaic dialect, we have to seek the origin of all in Palestine (*v.* Nöldeke, in *Gött. gel. Anz.* 1872, p. 831). The differences, lexical and other, find their explanation in the different histories of these interpretations after they were transplanted from their native soil into Babylonia and other countries. We know also from Zunz's and Geiger's researches that among the Jerusalem interpretations of the Pentateuch—and to these the fragments first edited by Prof. de Lagarde bear a twin likeness—we possess pieces of the oldest and least refined of all Targums. To these the Aramaic versions of the Hagiographa come nearest in affinity, as has been acknowledged for centuries; while on the other hand the Targum Onkelos of the Pentateuch and Targum Jonathan of the Prophets have passed through the Babylonian schools, and have been so cleared of old exegetical additions and alterations, and so formed word for word from the Hebrew text, that even their Aramaic idiom has become but an artificial and defaced language.

The present form of the Targum of the Prophets is ascribed by the tradition of the Turgemānīn—wrong as to the person, but right in its conception of a Palestine origin—to Jonathan bar Uzziel. But in fact it seems to depend for the most part on the redaction of Rabbi Joseph ben Chama of Babylon (ob. 325), who laid great stress on the Targums as a source of exegetical information (*v.* Frankel, *Zu d. Targ. d. Proph.* p. 11, line 1). From the method of interpretation followed in this official Targum, that of the Jerusalem Targum in de Lagarde's edition is not in its essence different. The peculiarities which Frankel quotes are here again met with, but with fuller extension and licence. What there is old in them, what added at a later time, can only be decided by examining the single passages; but in many instances we have in these incoherent fragments common matter which points to an earlier cycle of legends. Cf. *e.g.* on Josh. xiv. 15 and xv. 13 with xxi. 11 (Gen. xxiii. 8); Josh. xv. 16 with xviii. 17; Judges v. 4 ("the dew which will resuscitate the dead of Israel") with Targ. of Ps. lxviii. 9, 10, Talmud Chagiga, 12 *b* (Levy's *Dict.*); Jud. xii. 8, 9, with Targ. Ruth i. 1, iv. 17: Boaz = Ibsān, cf. Mercerus' edition. Sometimes it is evident that in one gloss another is inserted, as in Jud. v. 5, where the lines p. x, 21, עני—xi, 12, מכיכין, are a second Targum.

Of course all these marginal notes contain valuable contributions to the Aramaic dictionary, but it will not be always easy to decide whether we have before us a genuine Aramaic expression or one moulded on another—as the Arabic—pattern. I should think *e.g.* that "meth'arkhīn," *they quarrel*, is formed from the Arabic "muta'arrakīn" (*v.* Berggren, *Guide français-arabe vulgaire*, s. v. "battre") rather than from the Hebrew "'arakh milchāmāh." Are Mohammedans meant in x. 24?

Very frequently the glosses contain several synonyms of vessels and implements having different names in different countries, *e.g.* Judg. iii. 22, *goad*, Jerus. (and Peshita) "massāsā," cf. Arab. "minassat"; iii. 19, three terms for *leather* or *skin-bottle;* iv. 21, *hammer*, "'arzappᵉthā," Eastern Targ. (and Syriac), "marzappᵉthā," Palestine (cf. v. 26); the Arab. has borrowed both forms, "'irzabbat" and "mirzabbat"; ibid., *peg*, "dᵉshār," Arab. disār; vi. 19, three terms for *kettle* and two 1 Sam. ii. 14; vi. 38, *bowl*, the terms λεκάνη and *lagena*, cf. Targ. Job xxxii. 19. In like manner we have *neck-ornaments* in Judg. viii. 21, 26, and *concubine*, viii. 51. To another class belong "qibhl- = qᵉdhām-", p. ix, 25; three terms for *bind*, Jud. xv. 10; instead of "paggar," of the official Targum (Jud. vi. 25), we have "pakkar," which, as far as we know occurs only in the Jerusalem Targum, marked "Other Expression."

A few marginal notes refer to different vowel-points, as Judg. iv. 13, "karkē" and "kᵉrake"; 1 Sam. i. 6, Pael and Afel; &c. But we may not dwell longer upon these highly important notes.

It is only for practical reasons that the editor (*v.* his

statement, preface, p. xlii) calls the idiom of the Targums "Chaldaic." This name as used for "Aramaic" seems indeed older than Jerome, for Berosus uses χαλδαϊστί for an Aramaic or at least a Semitic dialect (ed. Richter, p. 50; Euseb. *Chron.* ed. Majus, i. 11). The Palestine Jews would have said "Syriac," the Babylonian "Aramaic" (*v.* Nöldeke, *Zeitsch. d. Deutsch. Morg. Gesell.* xxv. 116).

Among other interesting etymologies, Prof. de Lagarde proposes (p. xliii) to identify the Syriac "paddān" with the Persian "paitidāna"; but my honoured friend and teacher now authorises me to state that he withdraws the application of this to Paddan Aram. The latter is very probably identical with what was afterwards known as the village of Paddānā, in the neighbourhood of Charan.* This identification was expressly made by Barbahlul, who knew the village, in a MS. belonging to Dr. Socin, s. v. *Pāran dārām* (sic), and long before was assumed by Ephrem in the *Carmina Nisibena*, p. 31, i., 33, ii. (*v.* Bickell, p. 138).

We beg to invite particular attention to what deserves a notice beyond our present space, viz. the emendations, &c. of the text of the Hebrew Bible, to which the editor devotes five pages at the close of the preface. Of these emendations fifty-eight refer to the Psalms, thirty-two to Isaiah, seventeen to Job, five to Kings, one corrects Col. ii. 16.

We must, in conclusion, not omit to note the excellent getting-up of the work, and especially the solidity and clearness of the Hebrew type, obtained by Prof. de Lagarde for the university printing-office at Göttingen. It is the more to be regretted that there was not a sufficient supply of type to provide some diacritical points. In this, as in other respects, there is still much need of additions which would render the press more worthy of the university and of such works as that now before us. G. Hoffmann.

Assyrian Dictionary. By Edward Norris. Part III. Williams and Norgate.

An Assyrian Grammar. By A. H. Sayce, M.A., Fellow and Tutor of Queen's College, Oxford. Trübner.

It is with special pleasure that we notice the appearance of these two works, which are equally creditable to their authors, and hopeful omens for the young study of Assyriology. The third part of Norris' great Assyrian dictionary treats of the vocabulary from the letter M to nearly the end of N, thus comprising only two letters. The reader will see from this with what thoroughness the material has been examined. We could wish, however, that the author had limited himself more in the selection and particularly in the quotation of authorities, or had at least been more sparing in the use of cuneiform characters. We should think an exact transcription would be almost as useful for the student, since the original texts have been already lithographed in the English and French collections of inscriptions. An exception would be only necessary in quoting from an unpublished text.

Plan and mode of treatment are the same as in the two first volumes, and though (as we remarked last year in the *Academy*, vol. ii. pp. 49, 50) we should have preferred a different arrangement, it is clear that no alteration was any longer possible. We therefore heartily welcome this fresh proof of the extensive reading and unabated energy of the author, who works with an unpretentiousness which marks the great scholar, only anxious for the due exhibition of facts. We reserve the expression of our dissent with reference to certain points of detail for an intended publication of our own two Assyrian glossaries, and we will only point out the importance of this volume for the historical study of religion, inasmuch as it includes the names of all the Assyrio-Babylonian divinities.

We now pass to the Assyrian grammar of Mr. Sayce. Like the preceding work, it makes altogether the impression of conscientious research, and is, all things considered, a valuable addition to Assyrian literature. The author himself states that it is designed especially "for comparative purposes," and we have no doubt that Semitic philologists will duly appreciate it under this aspect. A number of points of view indicated by the author are, in the highest degree, deserving of attention. The part on the formation of nouns in particular is not only in a high degree accurate as a representation of facts, but furnishes most interesting illustrations of the relation of Assyrian to the cognate languages. We are also glad to find that the author has avoided several misleading and incorrect views of recent Assyriologists, which spring from a too hasty combination of the peculiar phenomena of Assyrian with those of other Semitic languages. The remarks on the pronouns and numerals are mostly such as we entirely concur with. It is otherwise with the verbs. Here we cannot help expressing grave doubts as to many of the theories proposed by Mr. Sayce. Not that his account of the fundamental features of the Assyrian verbal formation is not substantially accurate, but it seems to us that he has attached too much weight to the authority of Dr. Hincks, eminent as this lamented scholar must be admitted to be. He has thus been misled into adopting a number of tense and mood distinctions, the existence of which in Assyrian cannot be at all proved. We hope to return to this subject in another place, and therefore abstain from entering into further detail, as also from following the author in his sketch of the Assyrian syntax, in our opinion one of the most meritorious parts of the book. We may be allowed, however, to express a regret, which has repeatedly forced itself upon us in perusing the work, relative to the omission of references for the examples adduced. Not that these have been selected arbitrarily; indeed, our own reading enables us to guarantee their reliableness. But the reader who is less acquainted with these new studies, and perhaps somewhat sceptically inclined, may be excused for wishing to control the author's statements by a reference to the *data* on which they are founded. In many cases, too, the Assyriologist himself will desire to test the character of the example by an inspection of the original text, simply on the ground of the variety of interpretation to which cuneiform writing is liable. After giving this free expression to our wishes, we once more congratulate both authors on their excellent works, and trust we may often meet them again in the field of Assyriology. Eb. Schrader.

New Publications.

Bauer, Wolfg. Zu Euripides' Iphigenie auf Taurien. Kritisches u. Exegetisches. München: Lindauer'sche B.

Capeller, C. Die Ganachandas. Ein Beitrag zur indischen Metrik. Leipzig. (Jena: Frommann.)

Ermerins, F. L. Epistola critica ad Soranum a se editum. Accedit de vita Ermerinsii editoris Epilogus. Utrecht: Kemink u. Sohn.

Garcke, H. Die wichtigsten anomalen Verba bei Homer. Im Anschluss an Köpke's Homerische Formenlehre. Altenburg: Schnuphase.

Koziol, H. Der Stil d. Apuleius. Ein Beitrag zur Kenntniss d. sogenannten afrikanischen Lateins. Wien: Gerold's Sohn.

Lenormant, Fr. Essai sur la Propagation de l'Alphabet phénicien. Vol. I. Part I. Paris: Maisonneuve.

Lenormant, Fr. Lettres assyriologiques. Vol. II. Paris: Maisonneuve.

Martin, E. Das historische Studium der neueren Sprachen und seine Bedeutung für den Schulgebrauch zunächst in Baden. Freiburg i. B.: Wagner.

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* I am indebted to Professor Wright for a reference to his *Catalogue of Syriac MSS. in the British Museum*, iii. 1127, which will soon be published; and to Mr. Cheyne for one to Chwolsohn, *Ssabier*, i. 304.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 56.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Tuesday, October 1, and Advertisements should be sent in by September 27.

General Literature.

Érasme. M. Durand du Laur. Two volumes. Paris: Didier et Cie.

Erasmus stands at the end of a period as Abelard stands at the beginning: the real significance of both is to be found in the success with which they hustled one system of education out and ushered another in. The essential qualifications for such a function are incompatible with real depth, which cannot exist apart from reverence. If Abelard and Erasmus had understood what they displaced, they would have been encumbered by their respect for it. As it was, they were earnest enough to go through with their work, not too self-forgetful to be flippant, and shallow enough to be plausible. In other respects they differed widely: Abelard was haughty, pugnacious, impulsive, and brilliant; Erasmus was cautious, insinuating, and capricious. Abelard, in spite of the great scandal of his life, was of a temperament to which austerities are not unwelcome; Erasmus was decorous as a matter both of interest and of conviction, but in him the craving after physical, sensuous comfort was something ineradicable. Both came into conflict with traditional orthodoxy without exactly intending it, for neither was capable of realising the way in which a great system hangs together; and they imagined that they were only protesting against the obstructiveness of a clique of pedants, while they were really attacking the essence of Catholicism. Even here there was a difference. Abelard's proposal to recast Christianity by the aid of dialectics was put forward openly upon positive grounds, and he persevered with it till the final collapse into penitentialism, when no price seemed too high to pay for inward and outward peace. And the superfluous offence he gave was by a spirit of personal rivalry, the impulse to conquer and outshine every distinguished teacher of the day on his own subject. Erasmus shrank from all personal disputes and rivalries, but his irrepressible sense of the ridiculous frequently led him beyond the limits within which he desired to remain. Both Erasmus and Abelard succeeded completely in giving a new direction to education; both aimed at giving a new direction to opinion, and upon the whole it must be said that they failed. Abelard failed completely; Erasmus succeeded to the extent of founding a tradition which survived and propagated itself through underground channels till it emerged again to swell the torrent of the eighteenth century. The difference between their methods may account to some extent for the difference of their fate. In the twelfth century instruction was still democratic, and the idea of open questions was still in the distance: rationalists knew of no limits to the efficacy of reason in solving all intelligible questions to the enlightenment of all willing minds. Abelard was at once a gladiator and a demagogue having perfect confidence in himself and inspiring perfect confidence in his hearers; but he roused the full strength of orthodoxy when it was strong, and he was shattered in the contest. The close of the fifteenth century found what knowledge was still left in the possession of a narrow body composed almost exclusively of those who, if they did not exactly make a trade of knowledge, valued it only or chiefly as an instrument of professional advancement. The aim of Erasmus was to transform this professional body of learned men into something more rational, to replace their fixed unintelligent traditions by flexible opinions intelligently held, and to diffuse just enough enlightenment among the upper strata of lay society to act as a solvent to professional obstructiveness, a stimulant to professional inertia. To put it shortly, Abelard wanted to convert the world to knowledge, Erasmus to influence society by the instructed public opinion of the enlightened classes. In this he has been plausibly compared to Voltaire, though perhaps neither he nor Voltaire would have considered the comparison exactly complimentary, as Voltaire in spite of the *Henriade* was an amusing writer, and Erasmus, in spite of more than one shabby episode, was upon the whole an honest man. In fact, if it is hardly to the credit of the middle ages intellectually that they left the mind of Europe in a condition to be amused and dazzled by the wit and humour of Erasmus, it is hardly to the credit morally of the influences which succeeded mediaevalism that the Voltaire of the fifteenth century, nurtured in the midst of the ecclesiastical corruption which is supposed to have justified all the stupidities and brutalities of the Reformers, should have been, after making all allowances, so much more serious, more moral, and more reasonable than the Voltaire of the eighteenth. But in spite of this double contrast there is an obvious foundation for M. Durand du Laur's parallel. Both led for many years the life of missionaries of culture, and both attained the position of heads of the commonwealth of letters, that is to say, they were beyond dispute the foremost members of a cosmopolitan clique which had unbounded influence over public opinion and very little upon the opinion of the people. Both were in favour of leaving the framework of things as they were with as little disturbance as possible, and both by their raillery prepared the way for much more sweeping changes than they desired. Both, too, succeeded in getting the changes which they did desire patronised by the heads of the society which they were sapping. Voltaire got the pope to give him relics for his church at Ferney. Erasmus got the blessing of Leo X. upon his paraphrase of St. Paul. Both, lastly, had a natural talent for superficial servility; both, especially Erasmus, had an inextinguishable hankering after personal independence. In one respect Voltaire was the most fortunate; he outlived the conservative attempts to put him down, and he died before any liberal had seriously attempted to put him aside. Erasmus passed the last eighteen years of his life under a crossfire of increasing severity between the monks, who had got a chance at last of persuading the world that the precursor of Luther must be dangerous, and Luther himself, of whose proceedings and surroundings he conscientiously disapproved.

The Reformation was from every point of view an immense misfortune to Erasmus. His European reputation really rested on the fact that on his return from Italy the Germans had selected him by acclamation as their foremost scholar. When Luther appeared, the *literati* who had given Erasmus his position were with scarcely an exception swept away by the new movement. No doubt Erasmus might have been the titular chief if he pleased, but neither his con-

science nor his vanity would have been satisfied with a nominal command, and Luther was too massive to be thrust aside as he himself had thrust aside Carlstadt. Then Erasmus saw that, whichever side won, the victory would be a defeat for "good letters and evangelical philosophy": if the Dominicans put down Luther they would prove to the satisfaction of all conservatives that there was no safety away from scholasticism; if Luther held his own, still much that Erasmus was anxious to keep would have been abolished, and more than one repulsive paradox would have been established; and both results would have been reached by an appeal from the cultivated to the uncultivated, from common sense to passion. His course during the crisis has been stigmatised as cowardly, but it was not cowardice which kept him from throwing in his lot with Luther. It was really his fear of Luther and of the public opinion which Luther led which made him give exaggerated expression to his fear of the pope and talk about his unfitness for martyrdom. For a moment Luther, with his astonishing arrogance, actually took the Patriarch of the Humanists at his word, and offered to patronise and protect him as a timid disciple, well-meaning, but too weak to act up to his convictions. Put in this way the offer was too transparently insulting; the Reformer should have talked of respecting the honourable scruples of an elder generation; but he was too impetuous to imagine honest and intelligent opposition as possible. Erasmus was not too cowardly to be piqued by the monks into giving them a great deal of needless provocation in his *Colloquies*, at a time when it was really possible that an ill-advised journey on the part of a man who was always travelling might give them the chance of burning him: he allowed Luther to provoke him at last into an imitation of his own scurrility; but if we ask why he was so long in writing the book on the *Freedom of the Will*, and so much longer in completing his rejoinder to Luther's reply, the only answer is he was afraid of giving offence by coming into collision with the Reformers. If further proof is wanted that it was the revolution that he feared even more than the reaction, it is to be found in the energy with which he pressed the necessity of concessions on all the authorities whom he expected to influence. He was emphatically a "man of order," and men of order are for the most part timid; the only question is whether their timidity shall take the form of repression or of conciliation. The form that Erasmus' timidity took was not determined exclusively by his fear of the Reformers, it was determined also by his real indifference to the points in dispute. He could see Luther's antinomianism, he could not see his spirituality, and though he was attached to the historical continuity of the church, he neither understood nor valued Catholicism. What would have pleased him best would have been that the church should go as far as possible without stultifying herself in the direction of abolishing distinctive Christianity, while energetically propagating as much of the morality of the Gospel as could plausibly be grafted upon the morality of Plutarch. It is curious to reflect, when we come to measure what the Reformation permanently effected, that it really succeeded exactly so far as Erasmus approved of it, and that this modest success has been rather compromised than facilitated by the spasmodic efforts which have been made on a perpetually dwindling scale to persuade mankind of the vital necessity of going through an imitation of Luther's imitation of the spiritual conflicts of St. Paul. The common sense of Erasmus approved of the Reformation exactly so far as it was a safe and sensible attempt to make religion a good deal more natural and a little more fervent. It might perhaps have been expected that, after having appealed to common sense against Catholicism, Protestantism should have been subjugated by its own ally; but it is curious that Erasmus should have divined so exactly the terms of the ultimate arrangement which might be maintained indefinitely if knowledge were as stationary as common sense.

The success with which Erasmus anticipated the judgment of posterity is a measure of his real force and depth, and may serve to explain what needs explaining, the immense position which he acquired among his contemporaries.

He had nearly everything against him. His position was low; his character was not imposing; though his manners were winning, he could not profit much by the favourable impression they created. He was too fastidious, too capricious, too independent to be a pleasant person to patronise, and his transparent attempts to play off one patron against the other generally ended in his falling between two stools. From the time that he left his monastery he was always posing without effect as the victim of circumstances; he was constantly making enemies by indiscretions, like coupling Budaeus with Badius, indiscretions which proceeded not so much from an unwillingness to recognise distinction in others as from an inbred poverty of nature to which frank recognition of greatness was not congenial. As a scholar he was too omnivorous to be refined. Plutarch was his favourite philosopher. In the *Ciceronianus* he never touches the fundamental question. If Latin was a living language, no doubt the Ciceronians were wrong; but if so, the language of the *Epistolae Obscurorum Virorum* was a legitimate though hardly a desirable development, and Erasmus' proposal to reform it on the model of the classics in general was about as reasonable as an attempt would be now to chasten the style of modern journalism into a tolerable resemblance to the sober dignity of the Elizabethan age. But we do Erasmus an injustice when we treat the *Ciceronianus* as a work of disinterested criticism; it is really an attack upon Roman neopaganism, which the author did not venture to assail more directly because most of the neopagans occupied high ecclesiastical position; though their attitude affronted his respect for the person of Christ, which in his latter years at any rate seems to have been the strongest and most permanent of his feelings. He did more than perhaps any other one man to familiarise the world with Christian antiquity; but his want of transcendental insight prevented him from understanding it; he assumed that the Bible was to be interpreted throughout on common-sense assumptions, and when the Fathers interpreted it otherwise, he could only suppose that their judgment was warped by the necessity of combating heresy.

His political views were no deeper than his theological. He disliked oppression, and he had a keen sense that the interest of sovereigns was easily separable from that of peoples; he had the *bourgeois* horror of war to such an extraordinary extent that he actually maintained the prudence of buying off an invasion; it is needless to add that, like all advocates of peace at any price, he assumed that a nation can develop itself indifferently in any direction which at a given moment is physically possible, and that therefore, if development in one direction is obstructed by another nation, it is always a waste of power to endeavour to remove the obstruction by war.

Of course this only amounts to saying that, like Voltaire and the other writers of the *Aufklärung*, Erasmus was essentially superficial and one-sided; but he had little or nothing of their literary perfection. His wit, with few exceptions, is of the order

"lusco qui possit dicere lusce."

His irony consists of saying the reverse of what he means, and reminding the reader at short intervals that "this is said kinder sarkasticul;" but with all these defects of matter

and manner, he shared with the men of the eighteenth century the one inestimable talent of discovering the line of least resistance for the numerous minds which liked to think that they thought. His forcible fluency constantly gave his contemporaries the satisfaction of the *bourgeois gentilhomme* when he learned that he had been in the habit of talking prose.

His best work is the *Praise of Folly*, where the satire, though still rudimentary, is at least two-edged; it reminds us of the *Utopia*, as that reminds us of such a really great work as *Don Quixote*. Cervantes' thesis is quite as much that the world is no place for a man of honour as that knight-errantry is obsolete and ridiculous; More's thesis is not only that existing European society is irrational, but that no rational society is possible, since an attempt to follow reason issues in the grotesque absurdities and immoralities of *Utopia*: Erasmus' thesis is not only that dignitaries are generally fools, but that to obtain success of any kind, either practical authority or the voluptuous ecstacies of transcendental pietism (for which Erasmus' early work, *De Contemptu Mundi*, shows a curious hankering), it is necessary to repudiate the good sense which was the idol both of his judgment and his desires.

M. Durand du Laur's two volumes are full, accurate, and intelligent, everything but masterly: consequently he fails to give as vivid an impression as such an inaccurate writer as Jortin (whom apparently he did not think it worth while to use), and the plan of treating the "Vie" and "Oeuvre" separately leads to a good deal of repetition; but the painstaking, straightforward diligence of the writer gives the book a value of its own, besides its convenience in making the researches of Low Country scholars accessible to the general public.

G. A. Simcox.

The Tale of Frithiof. By Esias Tegnér. Translated from the Swedish by Captain H. Spalding. Murray.

Captain Spalding must of course be aware, though there is not a word in his preface to show it, that he has had many predecessors in the labour he has taken on himself. The presence of many competitors would seem naturally to enforce a special carefulness on each new candidate for the laurels of translation; and it is rather surprising that this handsome volume should contain so little that is satisfactory from a poetical point of view. Before he undertook to translate a work so illustrious for melody as *Frithjofs Saga* is, Captain Spalding should have assured himself that he had the requisite power and a due flame of enthusiasm, while in fact it is plain that he is too little a poet to be a poet's interpreter, and equally plain that he has faltered and grown weary, at times, of his work. However, it is good, in spite of Captain Spalding's shortcomings, to be brought once more face to face with the Bishop of Wexio's beautiful masterpiece, and so saying, let us pass from the translator to the poet.

No attempt is made in this volume to add to the critical or controversial history of the poem. The writer has contented himself with adding a few notes on the Norse mythology, and then has left the text to introduce itself, without a word to show when, how, or why it was originally written. Now that all the various streams of flattering or adverse comment have subsided in the course of half a century, it is obvious that *Frithjofs Saga* has a fixed and important position among the classics of modern times, and in spite of all just or unjust criticism will be read and valued to the end of time. The year of its original publication, 1825, is the culminating point in the Swedish literature of our century, and since then it has been impossible for any poet in Sweden to write without being in somewise influenced by its mannerisms.

The history of Swedish poetry is encumbered by the grotesque names of many warring schools. During the earliest years of the present century, the field of poetry was pretty equally held by two of these, the Academic, who clung to old-established forms, and the Phosphorescent, who, represented most fully by Atterbom, brought in an ideal element and studied the newest theories of Tieck and Novalis. In opposition to both of these there arose, a little later, headed by the eminent Geijer, another active school, known as the Gothic, which, rising on the ruins of the two former, rallied round a national and antiquarian banner, and repudiated both the conventional and the German tendencies in favour of aims more directly Scandinavian. Out of this last, and yet with a certain arrogance holding himself aloof from it, rose Tegnér, whose desire was to collect all the best from all the schools, and form thereby a standard of excellence for all future time. *Frithjofs Saga* was the result of this endeavour, and as soon as it appeared, the victory of its author was complete, and a new period began. Since *Frithjofs Saga* Sweden has possessed no Phosphorists and no Goths.

The Icelandic saga from which Tegnér gained his plot and the suggestions for his characters differs in no important feature from the rest of its class. It paints in simple colours, or rather in mere black and white, the wild sea-faring life by barren fjord and holm, before Christianity came with its southern glow of sentiment and tender emotion. Frithjof is drawn as a Viking of the most masculine sort, of superhuman strength and daring, a man who gives hard blows, and has no fear of gods or men; King Helgi calls him "a wrongdoer who heedeth no place of peace," in other words, a sacrilegious person, for whom sanctuaries have no terror, if their barriers restrain his passions. Through the whole saga blows a stiff northerly gale, interpenetrated with sharp salt savours. He who will may read it in Mr. William Morris' exquisite English. But turn to Tegnér, and one finds a Frithjof of the Provençal order, a delicate troubadour sighing among nightingales and roses, while odorous winds carry the murmuring sounds of flute and guitar through such woods as Scandinavia never saw. The contrast is complete.

That the spirit of Tegnér's poem is different from that of the old sagas and of ancient Norse poetry generally, has always been admitted at the outset; but whether the author erred or no in his latter-day treatment of the theme, and how far the modern element in his epic spoiled it as a whole, have been questions productive of much violent discussion. One thing is evident enough, that Tegnér took his immediate inspiration, not from the saga literature itself, but through the medium of contemporary writers. In Sweden several poets, Geijer for instance, and Ling, had already handled old Scandinavian subjects, but the real origin of Tegnér's bias for these is to be found in the splendid successes just then being achieved in the same field by Öhlenschläger. Tegnér has admitted that the form and spirit of the latter poet's *Helge* exercised a strong influence over him when he was planning *Frithjofs Saga*. Now to us in these days of antiquarian research and artistic realism, it is easy to see that the rhetorical and ornamental style of Öhlenschläger, however beautiful in itself, was very far from adequately representing the spirit of the pagan times, but half a century ago it was not so easy, and probably Geijer was the only man then writing who formed a just conception of what a Viking should be. The idealising soul of Tegnér found rest in the treatment that Öhlenschläger suggested; he added to the vigour of the Danish poet his own peculiar sweetness and polish, and the result was a poem which will always be one of the most lovely in the language, but in

which the execution of the constituent lyrical parts must be felt to clash with the great epical basis. And this is why its influence on succeeding writers has been pernicious; *Frithjofs Saga* has been a magnificent upas-tree, distilling the poisonous dews of feebleness and unreality down on all poets that have sat under its branches.

It must be remembered that the criticism of our day demands a sterner, or at least an exacter, realism in art than that of Tegnér's generation did. In the earlier years of the century a tinge of semi-religious sentiment was demanded from a poet dealing with mythological themes. Considering this, and remembering how completely Tegnér was a man of the time, it is interesting to read his own estimate of *Frithjofs Saga* as embodied in a letter to Franzén. "My design was," he says, "to present a poetical picture of the old Scandinavian heroic life; it was not Frithjof as an individual, but the time which he may be taken to represent, that I wished to paint . . . . In the saga there is much that is grand and heroic, which holds good for all time, and so both could and should be retained, but there is also a certain rough and barbaric wildness, which ought either to be altogether thrown out or at least to be toned down. On the one hand the poem ought not to outrage our finer customs and ideas too much, and on the other hand what is national and healthy and natural must not be sacrificed; a cold winter air, a fresh wind must blow through the poem, for it belongs to the northern climate and character, but not so that the quicksilver freezes, and all the tenderest emotions of the heart are sealed."

No one can complain that the quicksilver freezes in *Frithjofs Saga*. It is one of the warmest and purest love-poems of modern times, and must build an everlasting niche for its author high on the northern front of the Temple of Fame.

Edmund W. Gosse.

Journal et Correspondance de André-Marie Ampère. Publiés par Mme E. C. Paris.

The name of André-Marie Ampère is not so well known in England as it should be, but those who are best acquainted with his titles to fame will be least prepared for the light in which he appears in the present little volume. It is difficult to recognise the irritable, absent-minded mathematician, whose blunders were one of the standing jokes of Parisian society, in the ingenuous hero of a short and simple love story, which is so very short and so very simple, that being sad as well, it is also very pretty. And yet to those—like his son and a few intimate friends—who believed Ampère's genius to be of the order of Newton, Kepler, or Copernicus, the discrepancy between his powers and his achievements, considerable as the latter were, always seemed to need explanation, just such an explanation in fact as is afforded by the untimely conclusion of his juvenile romance, and its effect upon his sensitive, indolent, versatile character. A similar blow, the death of his father, one of the victims of the Jacobins at Lyons, in 1793, had reduced him to a state approaching idiocy, and when, after the interval of a year, his mind regained its activity, the direction of his studies was completely changed. As a child his mathematical precocity was on a par with Pascal's; at eighteen he knew as much, according to his own account, as ever afterwards, and his father might with good reason write, just before his death: "Quant à mon fils, il n'y a rien que je n'attende de lui." But mathematics were forgotten in his grief, and for long afterwards. Rousseau and botany roused him from his stupefaction; he had learnt Latin once to read Euler, he learnt it again to read Horace; the classical poets were his companions as he wandered in search of botanical specimens, and he came back at night to write dramas and idylls. Three years of this desultory existence bring him to the opening of his own idyll.

"1796. Dimanche, 10 avril. Je l'ai vue pour la première fois." This is the first entry in a journal where proper names are scarcely needed, for there is but one "she" in the world to Ampère. She lends him a book, she is not at home, she tells him not to call so often, she asks him for some verses; he eats a cherry she has dropped, he helps her over a stile; she finds fault with his dress, she talks about his prospects, she tells him not to do this or that "before people." And so for three mortal years, and many pages of round schoolboy handwriting, intermixed with much of x and y, the good innocent youth prolongs a courtship which might have melted a harder heart than that of Mlle Julie Carron. She married him at last, though he had nothing in particular to live on, because he was thoroughly good, very much in love, and in some inscrutable way had succeeded in convincing her imagination that despite his *gaucherie*, his social ineptitude, he was really a remarkable man. This discovery is the more creditable to Mlle Julie's perspicacity because there was no one in their neighbourhood qualified to do justice to Ampère's talents, and he himself had hardly yet realised their existence. It took him eighteen years to find out that he was shortsighted, and it took him longer still to discover that he was one of the first mathematicians in France: Julie did not wait for the discovery, and it was made the sooner for her sake.

Julie, whom we know from her own and her sister's letters, as well as from André's journal, seems to have been a pretty, clever, and eminently sensible young woman, the reverse of emotional, very fond of her husband, and prudent enough for two; but her crowning merit was the happy tact with which she distinguished from the first between the man and the *savant* lodging together in her sheepish lover's frame: she sets the one remorselessly to rights about his wardrobe, his private pupils, his behaviour in society, but she receives the assurances of the other with the implicit faith that is the best encouragement; she believed in the goodness of André's brains as she believed in the goodness of his heart, by direct intuition; the praise of others confirmed, but did not alter her judgment, and she valued it chiefly as promising an increase of income. Such a wife was peculiarly valuable to a man like Ampère, who had all the childishness of genius in a singular degree. Her sympathy would have encouraged him to sustained effort, and the wish to justify her preference would have stimulated him to original discoveries, of which he could lay the reward at her feet. Unfortunately, after the birth of a son, Julie's health gave way, and within three years of his marriage André became a widower, just as a brilliant career seemed to be opening before him.

The remainder of his life was not unprosperous. He had valued friends, his son was all that could be wished; he even married again. But those who knew him best thought him sad; they looked upon him as a man to whom something was wanting, and that is exactly the feeling that seems to have haunted him in his most brilliant successes. He was constantly comparing what he might have done and what he might have been with what he was; he looked in vain for a substitute for the immediate personal motive to exertion which he had lost, and he was too much discouraged by this first failure to try and dispense with such an incentive altogether. What he did was the least, not the most, of which he was capable. In the lives of the greatest discoverers one engrossing scientific interest seems to swallow up all the rest, but the universality of Ampère's genius was against him here. The subjects which had the strongest attraction for him personally promised him little increase of fame;

being naturally unambitious, he was not deterred by this consideration; but from what we know of Julie, it is allowable to conjecture that she would have suggested to her erratic philosopher to keep to the point and attend to one thing at a time; she would have discouraged his metaphysical reveries, not because metaphysics may not be as good in themselves as chemistry or commerce, but because Ampère's talent for the luminous co-ordination of facts could be so much better employed than upon the few and uncertain facts of psychology. The unpractical André persuaded himself that he was doing as good service to science by satisfying his own curiosity about the foundations of knowledge as if he had been constantly adding to its superstructure; he had an uneasy feeling of disappointment when the world thought otherwise, and declined to give as much weight to his philosophical convictions as to his scientific demonstrations.

Still it is unfair to speak of his career as a failure. The powers of his mind were dissipated amongst many objects instead of concentrated upon one, and the positive result of his work was diminished in proportion, but that is all. His great discovery, that of the law according to which the magnetic needle is attracted and repelled by electric currents, is one which, according to Arago, scarcely any other man in Europe could have made. It required a genius for hypothesis as well as a genius for experiment, and the verification of his hypotheses was the first *proof* of what Oerstedt's observations only suggested, namely, the common origin of electric and magnetic phenomena. When it is added that this demonstration was substantially perfected in seven days, Jean-Jacques Ampère's estimate of his father's powers seems scarcely exaggerated. In controversies relating to sciences with which he was less familiar, and there are few of which he was altogether ignorant, he almost always took the side of the minority that was in the right; many happy conjectures must have been lost when he burnt an early work on The Future of Chemistry, in a fit of religious remorse at its audacity. His interest in electro-magnetism cooled after two or three years, and as he grew older his mind presented a very curious combination of indolence and impetuosity. He would hold forth for thirteen consecutive hours upon a theory of the universe; when he was dying, he rebuked a friend for declining a discussion on the ground of his health: "Between us there should be question of nothing but Eternal Truths!" Yet the books on his shelves were mostly uncut, only here and there sawn open by a clumsy finger, and he gave in all good faith as a reason for declining an important appointment that he would have before accepting it to read two short memoirs, by a writer whom he esteemed, on a subject in which he was much interested! And all the while he was engaged upon a Classification of the Sciences —of which he enumerated 168—and he was so far from being indifferent to the results of modern speculation that he was personally pained if any one, knowing his peculiarities, would maliciously cast a doubt upon one of his favourite opinions, the reality of space, for instance, or the possibility of a new race arising as superior to men as men to mastodons; some one asked him what he, Ampère, would be the better for the latter event, and his surprise and distress at "the inconceivable stupidity" of the demand were quite pathetic.

The last letter given in this volume is dated 1805, about a year and a half after his wife's death: it is to Elise, her sister and confidante, whose lively and circumstantial letters do even more than the naïf entries in André's journal to transport us into the midst of the happy family, so soon, alas! to be broken up. He speaks there of the "moral apathy" which constitutes his existence. A little later, at the beginning of his correspondence with Maine de Biran, he says that his condition is substantially unchanged, but he has "begun to derive some satisfaction from researches in psychology." These researches gave him the same kind of consolation and distraction as he had found in literature after his father's death, but the results to which they led were little more substantial. He approached the subject at what, for him, was an unfortunate time. The whole bent of his mind was opposed to scepticism: it was too active, too inventive to rest satisfied with criticism; his appetite for knowledge was insatiable, and because he could digest the most abundant materials, he was loth to believe that the materials available for his use could be scanty. Hence a kind of facility of belief, which he himself called "credibility," and a consequent preference for realism, as offering most objects of immediate knowledge. "A quoi sert le monde?" he asked: "à donner des idées aux âmes;" and he failed to reflect that this result, the possession of ideas by the soul, remained the same whether the ideas came from within or from without. His desire for certitude required something more comprehensive than the truths of particular sciences, and even these truths seemed to him to be called in question by modern idealism. Partly from the indolence already referred to, he never quite succeeded in mastering the philosophy he rejected; he confounded phenomenalism and scepticism, putting Kant and Berkeley on a line with Hume, and for scepticism he had a moral aversion; it was the vacuum which his intellect abhorred. His misconception of the tendency of modern speculation was the more unfortunate as it led him to begin his classification of the sciences—an undertaking for which his encyclopaedic attainments rendered him eminently fit—at what must be called the wrong end. His divisions are ingenious enough, but they are entirely arbitrary; he only enumerates and classes the various possible objects of knowledge or thought, and assigns a separate science to each group. But if such a classification is to be more than a learned *jeu d'esprit*, it must rest on a psychological basis, and Ampère's genius would have been fitly employed in correcting and formulating the laws which regulate the relations of phenomena *in the mind*, still subject—if he pleased to think so—to subsequent verification by comparison with patent objective realities. In fact the "théorie des rapports," which his son celebrates as a discovery scarcely less important than "Ampère's law," is a statement, though not a solution, of this problem: it is also the most original feature in his metaphysical system, which would otherwise have little to distinguish it from Maine de Biran's spiritual eclecticism. He defines a sound hypothesis as one which not only explains why things are as they are, but why they could not be otherwise. Now the existence of external objects is a hypothesis, but *if* they exist and cause, those two facts explain not only why their effects, our sensations to wit, are what they are, but also that they could not be otherwise, for an effect is something which follows necessarily from the nature of the cause. But if our sensations have no external cause, they might just as well be altogether different. Therefore the first hypothesis is to be preferred. (There is a curiously similar argument in Mr. Herbert Spencer's essay on "The Universal Postulate.") The existence of external objects is first suggested to us by our consciousness of sensations caused by some Not I: causality is a relation, and the reality of this relation is directly evidenced by consciousness, consequently the existence of relations is a reality, and therefore the things related are also real. Compared with other ways of arriving at a foregone conclusion, the argument is not without ingenuity. We perceive a thing by sense, but only know it by its relations, and he proceeds to

distinguish two classes of relations, those that express material resemblance and difference, and those (like space and time) which, being independent of the nature of the terms in which they are expressed, appear to be applicable to noumena. The primary qualities of things are the relations of noumena to each other, but we can only know those relations which exist between phenomena as well as between noumena; infinite possibilities of knowledge remain beyond our grasp, or, as Ampère expresses it with characteristic melancholy fervour, "Que de rapports de noumènes invinciblement ignorés!" He attempts to qualify the dangerous doctrine that knowledge is only of relations by the saving clause that true knowledge must reflect the relations of "things in themselves," but the admission is still tantamount to a concession to idealism; the relations are the same, whatever the names by which the objects related are known, but he omits altogether to explain what ground we have for supposing that *any* of the relations of noumena are similar to or identical with those which we discern amongst phenomena. The fact was that he never really thought out the system to fragments of which he was passionately attached; and it is possible that his son, in endeavouring to harmonize the disjointed records of his opinions, may have made them at once more coherent and less plausible, more consistent and less suggestive, than they would have seemed in their natural and original disorder.

Good or bad, Ampère's metaphysics have nothing to do with the readableness of the book which tells the story of his first love. As an amusing study of character, and a picture—a most favourable one—of the moral tone and mental cultivation of the provincial *bourgeoisie* of France during the Revolution, it would be interesting even if the hero had never been anything but an obscure usher. It may seem a questionable compliment at the present day, but the letters of the two sisters almost remind us of the correspondence betweeen Richardson's Clarissa and Anna, Harriet and Charlotte; they are not nearly so long, much more lively, and perfectly easy and natural, but they are quite as literary, and, to complete the analogy, while Julie is always self-possessed, tranquil, and impeccable, Elise is lively, passionate, satirical; both are cleverer and better educated than, in spite of Richardson, we believe was commonly the case with their English contemporaries, and the cause must be the good effects of centralisation in literature. Till the present century there was only one literature in France, and that was the best; those who read at all read this, and though culture was not universal, whatever there was of it was good of its kind: the standard was the same at Paris and at Polémieux. H. Lawrenny.

LITERARY NOTES.

M. Émile Montégut, in his "Impressions de Voyage et d'Art" (*Revue des deux Mondes*, Sept. 1), gives a very interesting description of the château de Bussy, in the Côte-d'Or, where Mme de Sévigné's scandalous cousin, the count de Bussy-Rabutin, spent his time in continuing to deserve the exile to which he had been condemned for his *Histoire scandaleuse des Gaules*. Like the châteaux of Tanlay, which belonged to the Colignys, and Ancy-le-Franc, built in the sixteenth century by the house of Clermont-Tonnerre, acquired by Louvois at the end of the seventeenth century, and recently recovered by the heir of the first owners, Bussy has escaped not only undestroyed, but unaltered since the days when, as has been said, Bussy-Rabutin amused himself by turning it into a standing commentary and illustration of his book. The walls and ceilings are covered with portraits, allegorical devices, mottoes, and embodied slanders, which, though not always of artistic value, are of the greatest interest to students of the literature and history of the period. One room is set apart for the portraits of the greatest generals of all times and countries — Condé, Cromwell, Gustavus Adolphus, Spinola, Wallenstein, &c.—with whom it was one of Bussy's most harmless foibles to believe he might, but for the royal injustice, have competed on equal terms.

The copy of the *Diurnali* of Matteo da Giovenazzo mentioned in a note of the *Academy*, July 1 (vol. iii. p. 246), proves to belong to an edition printed in the seventeenth century, and consequently can throw no light upon the question whether or not they were forged in the sixteenth century; however, a new edition is to be published, based on the printed text, those hitherto in existence having been taken from various MSS.

In the *Allgemeine Zeitung* (August 28, 29), Dr. Sepp attempts to connect the legend of the holy house of Loretto with Indian, Greek, Mahommedan, Scandinavian, Keltic, and other legends of miraculous and migratory sanctuaries on the one hand, and on the other with an old Italian tradition of the landing of Aeneas with his household gods at Laurentum, which would make the black Madonna of Loretto the direct representative of the dark Acca Larentia. Both views are intrinsically plausible, but at present a little more direct evidence is needed to make them acceptable.

A correspondent of the *Journal de Saint-Pétersbourg* describes the magnificence of an illuminated copy of the sacred writings of Buddha, in the language of Thibet, which is being executed for a Mongol prince; it will consist of 108 folio volumes, of which 80 are completed, all in letters of gold, and bound in embroidered silk with silver clasps. The copyist is to receive 30,000 roubles (about 5000*l.*) for the whole work.

Bishop Nicholas Grundwig, well known as a collector of Danish national songs, &c., died on the 2nd of September. He was born in 1783; his first work on Northern mythology was published in 1808, and his enthusiasm for the provincial literature of Denmark continued all his life unequalled except by his dislike of the political influence of Germany. As priest and bishop, his liberal views met with much opposition among the clergy; but they augmented rather than impaired his popularity as a man of letters.

In the *Contemporary Review*, Mr. J. A. Symonds translates some of Michael Angelo's sonnets, from the new and corrected edition by Signor Guasti. He is very successful in straightening the involved constructions of the original, and the clearness is attained without any sacrifice of dignity; of course, something must be lost in poems which Wordsworth pronounced altogether untranslateable; and in this case it is perhaps the crowded richness of thought and imagery which is Elizabethan rather than Miltonic.

In the *Fortnightly Review*, Mr. Swinburne dwells on the passages of poetical beauty in Victor Hugo's *L'Année terrible*, and objects that most of the author's critics are desirous of gathering figs from the vine, and grapes from the fig-tree. He excuses the exaltation of Paris, with all its faults and follies, by suggesting that the Paris of the poet is a kind of ideal city—metropolis of regenerate humanity; but he thinks a few lines of penitence for the sins (beginning with the Roman expedition), for which *L'Année terrible* was the expiation, would not have been out of place.

Blackwood and *Fraser* contain alarmist articles on the industrial future of England, the former in the prophetic manner of the *Battle of Dorking*, the latter by "W. R. G." According to both articles, high wages mean high prices and diminished profits, and short hours mean diminished production; high prices mean lower purchasing power of wages, diminished profits mean transfer of capital to other trades, and diminished production means foreign competition, and all these together mean the impoverishment of the country through the ignorant greed of the working-classes; to which Mr. Greg adds, with justice, that the Poor Law interferes with the free action of supply and demand on the labour market. Mr. Harrison, in the *Fortnightly Review*, in treating the same subject, has the advantage of borrowing from Mr. Brassey (son of the great

contractor, and author of a candid book on *Work and Wages*) facts which are more consistent with the present commercial prosperity of the country and of better augury for its future. From these it appears that the cost of labour is very nearly the same all over the world, skilled labour being as much more efficient as it is higher-priced than unskilled, while its higher price stimulates the invention of mechanical contrivances for economy, which again call for more skill in the workman and still more ample remuneration. Similarly a day's work, whatever its length, varies very little in productiveness, the explanation of which lies in the remark of a workman to Mr. Harrison: "A man who can't tire himself out in eight hours isn't worth his salt;" that is to say, the expenditure of the maximum of physical strength in the minimum of time is an art to be acquired like others, and great skill in it fairly commands a high price. Capitalists using the best machinery and the best labour find that they can produce faster and cheaper now than formerly; and Mr. Harrison, as a positivist, infers that the trade of the country ought to be left to those who have proved themselves able to direct it most economically. But when we learn how very nearly stationary wages have been in almost all English trades during the last twenty years, it appears doubtful whether capitalists can be depended on to give a fair share of their growing profits to their employés, unless the competition of co-operative societies is added to the wasteful pressure of strikes. All three articles seem to look upon the struggle between labour and capital as a question of class rivalry, and deal more with the rights of each class against the other rather than with their duties to themselves and to the society of which they are each only a part. Mr. Greg thinks that the capitalist has a right to workmen at "reasonable" wages, and that the public has a right to have its bread baked and its coals dug by the classes that have been in the habit of baking and mining; and though this is not exactly true, in practice the capitalist and the public have never yet failed to find workmen for wages very well within their means. Mr. Harrison, on the other hand, asserts the right of the miners, for instance, to be idle three days a week if they like, which is undeniable; still, for their own sakes and that of society, they had better work all the six days unless they have something decidedly better to do; if they have, or when they have, and society wants more coal than they supply, it will have to employ fresh miners to the relief of more crowded employments. England is certainly rich enough to support her population, and no class is interested in diminishing the total wealth, only in modifying its distribution, which Mr. Greg would not assert to be perfect. The only way to do so without pauperisation, and with production at its present standard, is to divide the work to be done more equally amongst all who want wages, and to make the minimum wage sufficient for the decent maintenance of its recipients. Till this point has been reached, it is premature to talk about the "extravagant demands" of labour, for society as a whole is plainly concerned to secure necessaries to all before allowing luxuries to any.

Art.

ART NOTES.

During Mr. Layard's short tenure of office at home, he initiated what might have proved an enterprise of great extent and utility. Everyone is aware of the constant and gradual waste of the remains of antiquity which is taking place in this country. With the view to arrest the progress of this incessant dilapidation, at any rate in one direction, Mr. Layard projected a complete "Catalogue of such Regal and other Historical Tombs or Monuments existing in cathedrals, churches, and other public places and buildings, as it would be desirable to place under the protection and supervision of the Government with a view to their proper custody and preservation," and he applied to the Society of Antiquaries of London to furnish him with such a list. The council of the society met on February 23, 1869, and accepted with alacrity the onerous task proposed to them, pointing out at the same time that the labour of drawing up, even with approximate accuracy, such a list as that proposed in the letter from the Office of Works was one of no small magnitude, and would of necessity occupy considerable time. By the beginning, however, of 1872 the committee appointed by the society to consider and act upon the application which had been made to it, had completed their labours in so far at least as regards the Sepulchral Monuments of England and Wales. The report presented by them was adopted by the president and council and forwarded to the Office of Works. But Mr. Layard was no longer First Commissioner, and painful misgiving seems to have come across the mind of the council lest all the trouble and expense which they had taken upon themselves at his instance should prove fruitless. For in the letter which accompanied the Report they express their wish "to be informed whether Her Majesty's Government designs on its own part to lay this Report and Appendix on the table of both Houses of Parliament for public information." Remembering the peculiar style in which the duties of First Commissioner of Works are discharged by the person who now fills that important office, it will not surprise anyone to find that the doubts of the council of the Society of Antiquaries were well founded, and that, beyond the copy of the correspondence and catalogue printed in return to an order of the House of Commons, no further result will come from Mr. Layard's wise and seasonable project. We find from this correspondence that the present First Commissioner, who is apparently wholly ignorant of, as well as indifferent to, the past history of his own country, not only declines to afford government aid in the preservation of these perishable records of the past, but has snubbed the Society of Antiquaries in the style of a pert attorney for the trouble which they have gratuitously undertaken. He writes back in acknowledgment of the receipt of the Report and Appendix that the object contemplated could not apparently be accomplished without legislation, and that there is no intention either of introducing a Bill or of laying before Parliament the Report which has been made by the Sepulchral Monuments Committee. The whole affair is thus at an end. Meanwhile we have in our hands the very valuable and careful catalogue of the Society of Antiquaries, which is in itself a most important document for the purposes of English antiquarian research. The list is confined, agreeably to the terms of the letter (written February 13, 1869, by Mr. Layard's instructions), to the tombs and monuments of occupants of the Throne and members of the Royal Family, or of such other persons as could fairly be considered, in respect of their actions or writings, to have distinguished themselves in the political or literary history of England. And the enquiry has been brought down to a date as late as anyone could desire, for it extends to the monuments of all those persons who died before the year 1760, that of the accession of George III. It will be seen that in the framing of these resolutions regard is not paid to the value of the monuments as mere works of art, but to the importance of the persons commemorated as actors in the great drama of national history. In this aspect it was felt that the simple gravestone which marks the interment of John Locke was more worthy of record than any more sumptuous monument erected to a person who had left no trace behind him in the history of his country. The committee distributed the counties of England and Wales amongst such of the Fellows of the Society, whether members of the committee or not, as appeared most likely, from their local knowledge or other reasons, to be able to furnish satisfactory information as to the monuments in existence in the districts assigned to them. These returns were made on a uniform plan, suitable for tabulation, and the list was finally prepared by the committee from the materials thus obtained. The list is arranged in two tables. Table A contains the personal and chronological arrangement in two divisions: first come the Regal monuments, and secondly the Historical, in which the claims of men of science, of authors, artists, actors, and musicians, are not forgotten. Table B gives the monuments described in Table A, but arranged topographically, according to counties and parishes, in alphabetical order. It is needless here to say anything in praise of the orderly method and thoroughness with which the scheme has been carried out. The names of Mr. Perceval, Mr. Oldfield, and Mr. Knight Watson, are in themselves a sufficient guarantee.

The *Gazette des Beaux-Arts* for September 1 contains:—A notice of the retrospective exhibition at Vendôme and of Vendôme antiquities. The notice is accompanied by an interesting

etching of La Poissonnière, the old manor-house in which Ronsard was born, by M. A. Queyroy.—A second article on the South Kensington Museum by M. Réné Ménard.—A critique by M. Henry Havard on the most remarkable examples of the Dutch School exhibited in Amsterdam in 1872. This paper is to be continued; the first section comments the Rembrandts, the Frans Hals, the van der Helsts, and a fine composition of van den Tempel, an artist whose work is rarely to be met with even in Holland. The present work belongs to the *Wale Weeshuis* (a charitable institution), and represents four directors of the establishment; it is so masterly and remarkable a painting as to justify to a certain extent, says M. Havard, the opinion pronounced by M. Viardot, that the most of van den Tempel's works pass in galleries at the present day under the name of van der Helst.—Letters of Vien and Lagrenée, forming the eleventh article of the correspondence of the directors of the French Academy at Rome.—London Exhibitions (first article), by M. Eugène Müntz. The writer says regarding English jewellery as represented *en masse* at the International, "a few examples will suffice to show that of all the heresies, of all the barbarisms, of all the nonsense, of which an art can be capable, not one has been avoided by the masters on the other side of the Channel." In support of the justice of this opinion M. Müntz brings ample proofs.—Two etchings after Rembrandts in the Hermitage, by M. Massaloff, have an accompanying text by M. Émile Galichon.—A paper on Byzantine Architecture in France is an extract from an unpublished portion of the third edition of M. Alfred Michiels' work, *L'Architecture et la Peinture en Europe du* IVe *au* XVIe *Siècle*, which is on the point of appearing.

Herr R. Bergau writes to the *Zeitschrift für bildende Kunst* to say that there occurs in the fourth number of *Nürnbergische Künstler* (p. 47) for the year 1831 the unsigned statement that the celebrated "Gitter von Messing" made by Peter Visscher and his sons for the grave of Fugger, at Augsburg, but subsequently purchased by the town council of Nürnberg, and placed in the town-hall, to be eventually (in 1806) sold, was not melted down as supposed, but was then in the garden of a private person at Lyons, this person refusing offers for the purchase of the work in question made to him by King Louis I. of Bavaria. Herr Bergau has vainly endeavoured to obtain any information on the subject, and communicates the above to the public in the hope that some one else may be more successful in discovering the present fate of this valuable treasure.

A second edition of M. Georges Duplessis' useful work, *Les Merveilles de la Gravure*, has recently appeared.

A very considerable collection of works of art and curiosities, having principally a local value, is to be sold by auction at Danzig on September 26 and 27. The collection was made by Professor Schultz, director of the art-school at a time when Danzig was richer than it is at present in this class of objects. The catalogue contains, amongst other paintings, four remarkable portraits by the old Danzig painter, Andreas Stech; many miniatures of value, chiefly of kings of Poland and Danzig patricians; ebony caskets distinguished for the beauty of their workmanship, ivory reliefs, and old glass. A separate division is formed by old Chinese, Japanese, Meissen, and Berlin china, and much of the antique furniture is said to be of genuine and considerable value. Professor Schultz has been obliged to resign his post on account of decaying health.

New Publications.

Dictionnaire archéologique de la Gaule. Époque celtique. Publié par la Commission de la Topographie des Gaules, sous les auspices du Ministère de l'Instruction publique. 3e fascicule. In-4, avec 9 planches, gravées et légendes.

Danett, Alfred. Ranolf and Amohia; a South Sea Day Dream. Smith, Elder, and Co.

Girardin, Émile de. L'Égale de son fils: les droits de la femme et les devoirs de la mère. Paris: Michel Lévy.

Heigel, C. Th. Ludwig I., König von Bayern. Leipzig: Duncker und Humblot.

Jacoby, Dr. Johann. Gesammelte Schriften und Reden. Hamburg: Meissner.

Keats's Endymion. Illustrated by E. J. Poynter, A.R.A. (Six Engravings on steel.) Moxon.

Pradère, O. La Bretagne poétique: traditions, moeurs, coutumes, chansons, légendes, ballades etc. Paris: Libraire générale.

Schöne, Richard. Griechische Reliefs aus Athenischen Sammlungen: xxxviii Tafeln in Steindruck, mit erläuterndem Text. Leipzig: Breitkopf und Härtel.

Stieler, Rob. Illustrationen zu Franz Schubert's vorzüglichsten Liedern. (In Farbendruck.) Leipzig: Arnoldische Buchhandlung,

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Theology.

Three Lectures on Buddhism. By the Rev. Ernest T. Eitel. Hongkong: at the London Mission House. (Trübner.)

The Wheel of the Law. By Henry Alabaster, Esq. Trübner, 1871.

Mr. Eitel has intended to give, in this pamphlet, a complete picture of Buddhism. The first lecture is a *résumé* of its history, the second of its doctrine, and the third is an account of the various forms it has assumed in the different countries where it prevails.

It may be supposed that these lectures, delivered in China, probably before a very mixed audience, on a subject which would fill volumes, cannot have great scientific pretensions; and the author himself refers such of his readers as may desire to study the subject more deeply to another work, to which the one before us may serve as an introduction (see preface). Our business therefore is only, in the interest of the general reader, to enquire if the author has been sufficiently complete in his exposition, exact in his appreciation, and impartial in his judgments. He appears to us to have fulfilled satisfactorily these various conditions, and with regard to the third, to deserve especial praise, seeing that his publication is in reality a polemical work.

For he not only proposes to set before us the history and doctrines of Buddhism, although that may be his principal and avowed object: he also intends to weigh its merits, and to show that this religion, professed by so great a number of men, cannot satisfy the wants of the human soul, as a rival of Christianity. This set purpose makes itself felt throughout the work, but does not prevent the author from doing justice to his adversaries; he points out the moral truths which Buddhism has proclaimed, and even the scientific laws of which it appears to have had a presentiment..

In his first lecture, Mr. Eitel is engaged on the similarity which exists between the life of Buddha and that of Christ. The subject does not cause him uneasiness, because, according to him, the Buddhistic writings on which this similarity is founded are posterior to the formation of the evangelical canon. Although the age of the different Buddhistic treatises is still far from being fixed, yet it is certain that the legend of Çâkyamuni was gradually developed; and that in its latest form it is comparatively recent. But the ease with which it is possible to explain this similarity should not be a motive for exaggerating it. Why say, for example, that Çâkyamuni was baptized? Is it intended to connect the Gospel narratives (Matt. and Luke iii., Mark and John i.) with the episode of the two currents of hot and cold water which two serpent-kings cause to descend from heaven and wash the body of the newly born babe? (*Lalitavistara*, chap. vii.) We need not, in order to avoid the error of those who see in Christianity a mere imitation of Buddhism, fall into the opposite extreme. Christianity and Buddhism are perfectly independent of each other. Still, one cannot

but admit that there exists in certain doctrines, in certain narratives, and especially in certain exterior institutions (such as monachism) a similarity which may lead one to infer a mutual influence. But in explaining these points of connection, our first care should be to define them, not to multiply them unnecessarily.

In the third lecture, which contains the newest matter, and in which northern Buddhism is described in an interesting manner in its most curious and most popular legends, the author, in speaking of the Adi-Buddha, returns to the important question which he has already touched upon more than once, that of Buddhistic Atheism. The last king of Siam was right when he said to a European traveller (Bastian, *Reisen in Siam*, p. 20) that the doctrine of the Adi-Buddha (primitive or primordial Buddha) resembles Christianity more nearly than any other. It certainly satisfies monotheistic tendencies up to a certain point; but this metaphysical speculation cannot be the basis of a true Theism. Buddhism, it must be admitted, is a religion without a god: it places in man, and in him alone, the elements and means of deliverance. The supreme justice which it recognises, and which determines the destinies of men, the Karma, is an impersonal, unconscious force, which we might call blind were it not for the harmony which it ordains between human fortunes and actions. In considering all great questions, the divinity, the Nirvâna, we must carefully distinguish between popular superstition, which instinctively rejects the negative conclusions of a subtle and obscure philosophy, and this philosophy, which deduces with inexorable rigour consequences from principles. In Buddhism, more than in any other religion, there is a great difference between what the vulgar believe and what the learned teach; for in no religion is science more profound, more inaccessible, more impenetrable, and at the same time more ready to adapt itself to the belief of the crowd. Buddhism is not an idolatrous religion, and yet there is no religion in which idolatry is more general. It is, or at least it has become, a nihilistic religion; and yet the mass of its followers are far from comprehending or admitting the negative conclusions of its most learned doctors.

The *Wheel of the Law* is properly the name of Buddha's first discourse, which contains the essence of his doctrine, and may, by extension, designate the entire system. Mr. Alabaster has nevertheless given this title to a volume which is neither a special treatise on the fundamental *Sûtra* nor a complete exposition of Buddhism; but he justifies his appropriation of the name by the plan of his book, which presents this religion to us under three different aspects—1st, the spirit of reform and of philosophical transformation; 2ndly, the maintenance of tradition; 3rdly, superstitious exaggeration. As the diversity of these subjects admits of a rather vague and general title, the author could not find a more expressive one than that which he has chosen.

This book treats solely of Siamese Buddhism. The author himself declares that he is not a "scholar"; but knowing Siamese thoroughly, and having long lived among the Thai, he has given us the fruit of his studies and observations. Such assistance rendered to erudition by men who do not make it their profession may be most useful, but its value is in proportion as the authors are more or less acquainted with the works of the learned. Mr. Alabaster acknowledges this himself in his preface. An educated and intelligent traveller may translate a Burmese or Siamese religious book: if the book is original, well and good, but if it is merely a version of a Pâli book, the work is no longer of the same importance.

The volume before us is not, properly speaking, a book; it is a collection of three distinct pamphlets, completely independent of each other. The preface tells us under what circumstances they were composed, and why they were brought together; it concludes with a defence of Buddhism from the strictures of M. Barthélemy-St.-Hilaire. Mr. Alabaster reproaches the French critic with having written in a spirit of partiality, with attributing to Buddhism social and political consequences which are not traceable to it, and finally with judging the Buddhist religion in too unfavourable a manner. We cannot here enter upon the grave questions raised by this controversy; but we shall presently have occasion to make an observation which proves how difficult it is to carry on discussions of this kind. For the present let us notice the three pamphlets which compose *The Wheel of the Law*.

I. "The Modern Buddhist" appeared separately in 1870; it is therefore no longer a new work. Mr. Alabaster hoped to prepare his second edition with the assistance of the Siamese author, late minister of the last king of Siam, and a sharer in the projects of reform entertained by his sovereign: but the death of this distinguished man has thrown Mr. Alabaster on his own resources. The new edition contains but little fresh matter. The following, however, is both new and rather curious. Dr. Caswell had observed to the learned Siamese that the triumph of Buddhism, by condemning all men to celibacy and the convent, would end in the extinction of the human race (it is to be remarked that this reproach was in India addressed to Buddha himself, from the beginning). The Siamese, being embarrassed, answered in an evasive manner, saying, among other things, that Buddha had not intended to found a universal religion; yet universalism appears to be one of the pretensions of Buddhism, and is a feature in which it resembles Christianity. On this subject Mr. Alabaster makes the following remark:

> "Had I been in our author's place, answering from a Buddhist point of view, I should have said that, as Buddha recognised that all existence in this world was unsatisfactory and miserable, the suggested cessation of the renewal of the species was not a matter to be at all deplored."

Has Mr. Alabaster considered that, by these words, he has given an advantage to M. Barthélemy-St.-Hilaire, who reproaches Buddhism with its "incurable despair," its "fanatical aversion for this life," its "inconsolable sadness in a world which it does not understand"? (*Le Buddha et sa Religion*, pp. 141 and 161). Does he think that a religion founded on such notions is favourable to the development of the human faculties?

II. "The Life of Buddha" is the translation of a Siamese book entitled *Pathomma sampho Hiyam*, from which Pallégoix borrowed the *résumé* of the life of Buddha which he gives in his *Description du Royaume Thai* (ii. pp. 1–23). By this translation Mr. Alabaster has furnished us with a Siamese life of Buddha, as Bigaudet has given us a Burmese life, Foucaux a Thibetan and Nepaulese life, and Beal a Chinese life (see *Academy*, vol. iii. p. 46–50). We need not point out the interest attached to these different versions of the same subject. It is remarkable, for example, that the Siamese work, though differing in a number of details from the Lalitavistara, is constructed on the same plan; that is to say, it embraces the same period of the life of Buddha (the first thirty-five years), whilst the Burmese work includes his whole life. But here an all-important question arises. Is this work purely Siamese? We already know that the Burmese book translated by Bigaudet,* the *Mâlâlankaravatthu*, is of Pâli origin. The Siamese work translated by

* There exists another translation by the American missionary, Chester Bennett, more complete than the first edition of Bigaudet. It is strange to find no allusion to this work, which, indeed, did not appear separately, but was published in the *Journal of the American Oriental Society at New York* (vol. iii.).

Mr. Alabaster appears to us a similar case; for there exists a book in Pâli, the *Pathama Sambodhi*, of which the Siamese title quoted above is only an alteration (the word *jñâna*, represented, according to Mr. Alabaster, by the termination *yan* in the Siamese title, does not figure in the Pâli). There are, in the National Library in Paris, sheets of this work forming nearly a complete copy. On comparing this manuscript with the translation of Mr. Alabaster, we notice that the division into chapters is not the same; but that the two works are very similar, although the correspondence is not always exact. It is difficult to admit that one of the two works is not derived from the other. The Pâli work is not canonical; but what is its place in Pâli literature? What relation does it bear to the Siamese work? These are points to be cleared up; and we recommend them to the notice of Mr. Alabaster, in case he should, with the perseverance which appears to belong to his character, set himself one day, as he expresses a hope of doing, to revise and perfect his book.

III. The "Pra-Bat" (Holy Foot) contains two parts: the journey of the author to a celebrated place of pilgrimage, and the description of the sacred foot-print. The first is calculated to interest all readers; concerning the second, Mr. Alabaster does not deceive himself, and expects but a moderate success. We may take a lively interest in Buddhism itself, and but very little in the "Holy Foot." Burnouf said that this point would always be of secondary importance; but he said this at the conclusion of a long and minute study of the 65 signs of the Pra-Bat (*Lotus de la bonne Loi*, p. 623, &c.). Mr. Alabaster, who makes a similar observation, nevertheless gives a plate representing the 108 signs of the same Pra-Bat. This number of 108 seems to be the exact number of these signs, though for a long time this was an undecided point—Low reckoning 96, Burnouf 69, Baldaeus 68. Does the merit of the number 108 consist, as Mr. Alabaster suggests, in its being the product of the square of 2 multiplied by the cube of 3? It is impossible to say; but it is certain that this number is held in great esteem by the Buddhists, especially those of the north: the *Kandjour* enumerates the 108 names of Manjuçri, of Devî, &c., and we also find in the Mahâbhârata the 108 names of the sun. The 68 signs of Burnouf may be brought to very nearly as many as 108; for, by counting the figures to which he gives but one number, but which, in Mr. Alabaster's plate, are each repeated a certain number of times, we arrive at the number 106, or even 107, if we add the central and principal sign, the Çakra (the wheel), which Mr. Alabaster does not count. Nevertheless this coincidence is more apparent than real. Several signs, mentioned by Burnouf, appear not to exist in Mr. Alabaster's drawing; he also divides the signs which Mr. Alabaster unites: thus the sun and the moon count for two signs in Burnouf's list, for a single sign in Mr. Alabaster's. Thus much may be inferred from these divergencies: the normal number is 108, and certain signs are found in all the drawings; but with regard to several, there exists a certain liberty; they may be added, or suppressed, or one may replace another.

To verify this conclusion, we ought to be sure that all the drawings of the Pra-Bat are alike; that, for example, that represented by the plate in Mr. Alabaster's book, and which is to be seen in a convent at Bangkok, is identical with "the Burmese foot-print now in the British Museum" (p. 289), and not only that the number of the signs is the same. The last word has not yet been said on the subject of the Pra-Bat, but Mr. Alabaster has advanced the question by furnishing as the basis of new studies a drawing, which, being made from a photograph, is perfectly reliable.

Léon Feer.

Intelligence.

The new edition of Delitzsch's *Genesis* is enriched by three excursus on points of Biblical geography from the competent pen of Consul Wetzstein. The writer identifies "Hobah, which is on the left hand of Damascus" (Gen. xiv. 15) with a fountain called Ḥôba near Karjetên in the "land of Menâḍir" (the district east of Hasiâ and Ḥimṣ). He also proves that Zoar was not on the peninsula which juts out into the Dead Sea from the east (as Robinson and others supposed), but on the south-east end of the lake in the Gor-eṣ-Ṣâfia; and that Kadesh (Gen. xiv. 7) is not Ain Ḳudeis, which is too far to the westward, but Ḳâdûs, a station on the southern caravan-road, between Hebron and Zoar. The last identification rests on the authority of the traveller Maḳdisi (tenth century), who was a native of Jerusalem, and lived before the pre-Islamic civilisation of Syria had been seriously injured. The second excursus should be compared with a paper by Dr. Grätz in the August number of his *Monatsschrift*, who arrives at the same conclusion as Dr. Wetzstein by a comparison of Biblical passages. He thinks that "the city of palm trees" (Judg. i. 16; iii. 13) is Zoar, which is actually called "villa palmarum," or Palmer, Paulmier, by the Christian writers of the Crusades. In Deut. xxxiv. 3, he assumes a transposition (cf. Gen. x. 14), the words "city of palm trees" being unnecessary and contrary to usage, if taken as an epithet of Jericho. The site of Zoar is defined by Deut. *l. c.* and Josh. xv. 2, 3; also by Ezek. xlvii. 10; xlviii. 28, where Tamar must be a place at the south end of the Dead Sea, and, as appears by a comparison of passages in Eusebius, is to be identified with Zoar. Two other identifications are proposed for the first time by Dr. Grätz, (1) that Shur = Geshur (??), and (2) that "the smooth mount which goes up towards Seir" (Josh. xi. 17; xii. 7) is the well-known salt-hill of the south-west end of the Dead Sea.—We notice that Consul Wetzstein pays a deserved compliment to Mr. E. H. Palmer for his exploration of the Negeb or "south country" of Palestine.

Dr. Paul Kleinert, Professor of Theology in Berlin, and well known as one of the contributors to Lange's *Bibelwerk*, is the author of a volume entitled *Das Deuteronomium und die Deuteronomiker*. His point of view in the present work is not apologetic but critical. His position as a critic, however, is isolated in the extreme (he is anticipated, it is true, by Stähelin), for while he fully admits that Deuteronomy *cannot* have been written in the age of Moses, he thinks it may still be in a sense Mosaic, as being a reproduction of ancient laws, some of which were committed to writing by Moses himself (p. 238). The compiler was probably Samuel, the second Moses of the Israelitish religion. After showing that the book of Deuteronomy is composed of a code (ch. v. to ch. xxvi.) and a historical setting, Dr. Kleinert discusses at some length the relation of this code to the middle books of the Pentateuch. The characteristics of the former differ widely from those of the latter, though not more so perhaps than may be accounted for by the different points of view from which the same subjects are regarded. Besides, points of contact between the two legislations are not wanting (p. 44). The following passages are shown to be prae-Deuteronomic, Ex. xx.–xxiii., xxxiv. 11–26, xix. 5 f., xiii. 1–13, Lev. xvii. 8 f., Num. xxxiii. 50 ff., iii. 12 ff.; also the principal directions in Lev. xviii.–xx., the contents of Ex. xii. 1–14, 21–23, 43–50, Lev. xiii., xiv.; and the following post-Deuteronomic, Lev. xi., xv. 16 ff., xvii. 15 ff., xxii. 17 ff., xxiii., xxv. 39 ff., xxvii. 26 f., 30 ff., Num. xv. 37 ff., xviii. 15 ff., 21 ff., xxviii., xxix. An attempt is then made to show that there is little to be said for and much against referring Deuteronomy to the reign of Josiah; cp. the command to extirpate the Canaanites and Amalekites, the friendly mention of Edom and Egypt, &c. Thus the way is smoothed for the admission of an earlier date, not indeed in the age of Moses, for a complete social revolution must have intervened between the oldest extant laws and Deuteronomy (p. 128). The only date which suits the historical references is the conclusion of the period of the judges; cp. the mention of the elders of the city as judges; the law of the king; the worship of the sun and moon; and the idea of religious centralisation, though the religious centre itself is conceived as fluctuating—it is "the place which," from time to time through a prophet, "the Lord thy God shall choose." In the concluding dissertation it is shown that the historical passages which form the setting of the code give no reason for referring them to a different date. An appendix contains a most useful phraseological index, with the twofold object of ascertaining how far the style of Deuteronomy is uniform, and how far it has influenced that of other Old Testament books. On the whole, though Dr. Kleinert's work can hardly be called satisfactory, it will be valuable to the student from the completeness with which the *data* for forming an opinion are presented, and the clear historical summary of previous hypotheses in the introduction.

We understand that Messrs. Clark, of Edinburgh, intend to publish a supplement to the translation of Cremer's *Lexicon to the New Testament*, containing the additional matter inserted in the second edition of the German work (1871–72), together with corrections, &c.

Contents of the Journals.

Journal of the American Oriental Society (No. 1 for 1872).—One of Mr. Burgon's many startling assertions in his work on *The Last Twelve Verses of the Gospel according to St. Mark* (see *Academy*, vol. ii. pp. 518, 519) is subjected to a searching examination by Mr. Ezra Abbot, a professor at Harvard University, and one of the contributors to the *North American Review*. In one of his concluding dissertations, Mr. Burgon has maintained that certain "notes of superior antiquity," which he specifies, "infallibly set Cod. B before Cod. ℵ, though it may be impossible to determine whether by 50, by 75, or by 100 years" (p. 293). Prof. Abbot shows conclusively that Mr. Burgon's arguments on this head are frequently misleading, and due to a strange misapprehension of facts. He allows, however, that some new critical material is amassed in the body of the work, and that some special topics, as the so-called Ammonian sections, are discussed in a satisfactory manner. But "his conclusions are often strangely remote from his premises," and he writes "in the spirit of a passionate advocate, rather than that of a calm inquirer."

New Publications.

AUBER, L'Abbé. Histoire et Théorie du Symbolisme religieux, avant et depuis le Christianisme. 4 vols. in 8vo. Paris: Franck.

COLENSO, the Right Rev. J. W., Bishop of Natal. The New Bible Commentary, by Bishops and other Clergy of the Anglican Church, critically examined. Part II. Longmans.

CORPUS Apologetarum Christianorum Saeculi Secundi. Rec. Otto. Vol. IX. Jena: Mauke.

LÜDEMANN, Lic. Privatdoc. Dr. Herm. Die Anthropologie d. Apostels Paulus u. ihre Stellung innerhalb seiner Heilslehre. Nach den vier Hauptbriefen dargestellt. Kiel: Universitäts-Buchhandlung.

ZITTEL, Pfr. Emil. Die Entstehung der Bibel. Carlsruhe: Braun.

Philosophy and Physical Science.

Kant's Critical Philosophy for English Readers. By J. P. Mahaffy, A.M. Vol. I. Part I. and Vol. III.

MR. MAHAFFY'S exposition of Kantism for English readers is very well planned, and (as far as can be judged from the instalment before us) satisfactorily executed. His work will consist, when complete, of three volumes; two containing an abridgment and explanation of the *Kritik*, together with some controversial matter; and the third consisting of a translation of the *Prolegomena*, together with some portions of the *Kritik*. The *Prolegomena* is more popularly written, and much better adapted to give the student a general grasp of Kant's aim, method, and results than the *Kritik*: and Mr. Lewes (*History of Philosophy*) recommends the English reader to begin with it. But many portions of it are not thoroughly intelligible without some knowledge of the earlier treatise: yet the prolix obscurity of this is calculated to repel even an earnest reader. In order to give a thorough grasp of the general features of Kant's system with the least possible waste of labour, we want a good popularisation of the *Kritik* to be read along with the *Prolegomena*: and this is just what Mr. Mahaffy proposes to give.

I have said that Mr. Mahaffy's execution of this scheme is adequate *as far as can be judged*: but he would be the first to allow the importance of this qualification. He has as yet only expounded the *Transcendental Aesthetik*: and this is precisely the portion of Kant's system which English readers have pretty well contrived to understand. Indeed Kantian views as to Time and Space have been avowed by some writers (*e.g.* Whewell) whose works show no sign of their having penetrated any further into Kantism. But I cannot mention one Englishman, even among the distinguished persons who have spoken of Kant with an air of thorough familiarity, who has given the least evidence that he really understood the *Transcendental Analytik*. Certainly neither in Hamilton's criticism of the Categories and Ideas (*Discussions*, pp. 16, 17) nor in Mansel's elaborate discussion of Substance and Causality (*Prolegomena Logica*, c. v.) is there any such evidence. So that if Mr. Mahaffy succeeds in giving a really clear and intelligible exposition of this part of the *Kritik*, he may fairly claim to have achieved a work hitherto unattempted.

The commentary already published does not perhaps give much scope for the display of expository talent: in fact, it is more an abridgment, somewhat rearranged, than an exposition. But it is certainly easier to read than the original, merely because it is shorter: and both here and in the translation of the *Prolegomena* the English is clear and vigorous, and the rendering, so far as I have examined it, very exact. The slight licenses which Mr. Mahaffy has allowed himself (consisting chiefly in dismemberment of the most unwieldy sentences) are always used with good taste: and only in one case (vol. iii. p. 85) has the sense of the original suffered in the reconstruction. A list of the few passages in which Mr. Mahaffy's rendering has appeared objectionable is subjoined.*

In the commentary, perhaps a little more explanation of Kant's special phraseology would be advantageous. For example a beginner needs some introduction to Kant's complicated and perplexing use of "object" and "objective." He can scarcely be expected to guess that "objective Gültigkeit" means no more than "nothwendige Allgemeingültigkeit," and hence that the same principle or element of cognition may be called "subjective" or "objective" according as we view it. I admit that it is very difficult to know when to explain a term, if such explanation involves the exposition of a doctrine. In one passage where Mr. Mahaffy attempts to explain by an example Kant's use of "Unconditioned," his accommodation to the beginner seems rather misleading. He says:—

> "We cannot comprehend our mental phenomena without presupposing necessarily a substance called Mind, beyond and beneath all its various manifestations. This illustration will explain what Kant means by the necessary belief in the Unconditioned."

Now this certainly seems to confound the functions of the (Kantian) Reason and Understanding. What the Understanding necessarily adds to sense-phenomena in order to render them intelligible is the notion of Substance = somewhat perdurable. What the Reason seeks in the world of experience and cannot find there is Absolute Subject = somewhat that cannot be conceived as predicate. That the pre-Kantian metaphysic combined the two notions, and that it is a peculiarity of Kant's system to argue the illegitimacy of this combination, Mr. Mahaffy is of course aware: but if he had realised how very difficult it is for a beginner to seize and retain Kant's view on this point, he would hardly have used this illustration.

I proceed to notice some controversial points.

I. At the end of vol. iii. Mr. Mahaffy reprints his translation of suppressed passages in Kant's first edition of the *Kritik*; partly to justify his defence of Kant against the current charge of retracting in the second edition his original

* Vol. i. p. 16.—"If our intuition must conform to the nature of its objects, how can we know anything *à priori about these objects?*" Kant says, "*von ihr*" = "about the intuition;" and the sequence of his argument requires this.

Vol. iii. p. 27.—"It must proceed beyond the concept to *that which contains the corresponding intuition.*" Surely it must be "that which the corresponding intuition contains." The German is of course ambiguous.

P. 39.—"The mere natural, though *in spite of its truth* not unsuspected cognition *à priori* which lies at the basis of [Metaphysic]." Kant says, "obgleich wegen ihrer Wahrheit nicht unverdächtige." The metaphysical affirmation is natural, but its validity nevertheless suspected.

P. 85 (last line but one).—"So far" seems meant as a translation of "so ferne" (so far as), and is in any case confusing.

P. 115.—The second sentence seems curiously confused.

P. 150, l. 4.—"Intuition" seems a clerical error for "function."

In p. 122, "Gesetzmässigkeit" should be rendered "legitimacy" (and not "regularity"), as afterwards, p. 129.

I may add that in p. 155, l. 1, a "not" is omitted, where the omission may perhaps puzzle a beginner.

Idealism.* I have no doubt that the charge is unfounded, and that the "Refutation of Idealism" (second edition) has been gravely misapprehended: but I cannot but think that the author himself is somewhat to blame for this misapprehension. It appears (compare *Prolegomena*, § 13, remark ii. with remark iii.) that there are two quite distinct grounds on which Kant is disposed to argue the difference between his system and Idealism (whether Berkeleian or Cartesian). First, that he allows the existence, *beyond experience*, of Things in themselves, causing, though not constituting, the matter of experience. Secondly, that *within experience* he gives no prerogative of certainty to the cognition of the Ego *as an empirical object*, compared with that of the Non-ego: rather he can demonstrate that the consciousness of my own existence in time involves and presupposes an immediate consciousness of the existence of material objects in space. Now Kant had a perfect right to call attention to these two points of difference: but it seems clear that (1) they have nothing to do with each other; (2) he exaggerates the importance of the first (for he does no more than substitute an *x* for the God of Berkeleian Idealism); (3) he facilitates a confusion between the two by applying the same phrase, "things existing without us," both to the empirical and to the extra-empirical world.

II. Mr. Mahaffy thinks that he has effectually refuted the common error that Kant based the science of arithmetic on the intuition of Time (not Space). He says, with some *naïveté*, "Since the publication of my criticism on Kuno Fischer's *Commentary*, I think this position has tacitly been abandoned." It is time, then, to come to its support. We find in the *Prolegomena* (§ 10) that—"Geometry is based upon the pure intuition of space. Arithmetic accomplishes its concept of number by the successive addition of units in time." This seems sufficiently explicit: but Mr. Mahaffy only sees in it "a lurking doubt whether arithmetic may not be derived from time." He seems to rely for the opposite view on two passages in the *Kritik*: one in the Introduction (p. 10†), where Kant speaks of having "recourse to an intuition . . . our five fingers for example or . . . five points"; the other in c. i. of bk. ii. of the *Analytik*, where "five points placed one after another" are said to be "an image of the number five." But obviously here Kant is not separating *pure* from *mixed* intuition: he is merely indicating the common empirical examples to which we naturally refer in making evident to ourselves the principles of arithmetic: therefore *à fortiori* he has no occasion to specify the pure intuition which arithmetic requires. When he came to do this, he could not but specify Time, as the objects of the inner sense are numerable as well as those of the outer.

III. Mr. Mahaffy repeats (in the strongest terms) his assertion that Locke "completely anticipated" Kant's general division of Judgments. He refers to three of Locke's "kinds of agreement and disagreement between our ideas"—(1) Identity and Diversity, (2) Relation, (3) Coexistence: and says, "here are Kant's analytical, synthetical *à priori*, and synthetical *à posteriori* judgments *accurately distinguished*." It seems to me perfectly incomprehensible how any one who had read Locke's fourth book could make this assertion. First, Kant's analytical judgments do not correspond even roughly to Locke's affirmations of identity and diversity. These are only one species of what Locke calls "Trifling Propositions," which may more plausibly be identified with Kant's Analytical Judgments; but even here the correspondence is very rough, because Locke would only call "trifling" those analytical judgments in which the analysis is so obvious that its statement is no gain to our knowledge. In fact, we find that he gives, under the head of Relation, propositions clearly (by his own account of them) analytical: *e.g.*—"where there is no property there is no injustice;" "no government allows absolute liberty" (bk. iv. c. iii. § 18). Secondly, Locke's distinction of Relation and Coexistence is in itself most unsatisfactory. It is not only, as he himself says, that coexistence is a kind of relation; it is also true that from one point of view all propositions affirm coexistence, *i.e.* logical coexistence of predicate with subject. It may be said that Locke means to restrict the term to the coexistence of attributes in a substance; and certainly his express examples are all of this kind. But in his original account of it he only says that "this belongs particularly to substances." And it is a curious illustration of the vagueness of his whole view that he actually analyses the same piece of intuitive knowledge—that the angles of a triangle are equal to two right angles—in two different ways, so that it must almost necessarily belong to two different classes. Compare c. i. § 2 and c. ii. § 2. In the latter passage the "agreement" is between the three angles of a triangle and two right ones, and is obviously an agreement of relation: in the former it is said to be between "*equality to two right ones*" and the three angles, and I do not see how Locke could have classified this except as an agreement of coexistence. But all this is unimportant beside the fact that the affirmations of coexistence *with which Locke is chiefly concerned* are synthetical *à priori*. How Mr. Mahaffy can have overlooked this, I cannot conceive (cf. c. iii. §§ 8–16 and c. vi. §§ 6–10). It is true that Locke says, and is indeed concerned to maintain, that there are "very few" such certain universal affirmations of coexistence: but he still allows that there are a few cases of primary qualities known to be necessarily coexistent, and more of "repugnancy to coexistence" cognisable *à priori*. Indeed, one may almost say that no better way could be found of proving to a beginner the difficulty and merit of discovering this classification of Kant's than a careful examination of Locke's fourth book.

IV. Nearly one-half of Mr. Mahaffy's first part is occupied with a polemic against the Empirical or Associationist theories of Space and mathematical truth, partly new and partly reprinted from the introduction to his translation of Fischer's *Kant*. It is probably desirable, in an English exposition of Kantism, to exhibit its relations to the mode of thought at present prevailing in England: but one cannot but wish that the treatment of the subject had been somewhat broader, with less tendency to resolve itself into a private wrangle with Messrs Mill and Bain. One wishes this the more because the view that our author combats, which I may call pure psychological associationism, already seems almost antiquated, owing to the extensive influence exercised of late years by the theory of Evolution through successive generations, of which Mr. Spencer is the leading expositor. Mr. Mahaffy's proposal to call his opponents "the physiological school" seems thus peculiarly infelicitous: since to most physiologists at the present time the older Empiricists appear to err as much in considering the mind as characterless at birth as the still older Transcendentalists did in considering it as transcendentally charactered. However, his statement of the issue between Kantism and Associationism must be allowed to be fair, with one or two qualifications. First, he makes, as all Kantists, the assumption which to all but Kantists seems so baseless, that while the universal element in cognition is rightly referred to the

* Mr. Mahaffy does not always bear in mind the difference of editions. *E.g.* he says (*Prolegomena*, p. 23) that a passage is "transcribed verbatim *from* the *Kritik* without a single explanation," whereas it only occurs in the second edition, into which it was transferred from the *Prolegomena*.

† I quote from Mr. Meiklejohn's translation. This passage is also in the *Prolegomena*.

mind, the particular, variable element *must* be due to foreign causes. He urges that the latter element cannot be changed at will by the mind: but then no more can the former. Our apprehension of things as extended is just as independent of our volition as our apprehension of them as coloured and heavy. Again, he claims that the Kantian theory is "not more complex" than the other, and is the only one which explains all the phenomena. His argument is that the Empiricists have to assume Memory and Expectation and the laws of association, and do not explain these: whereas Kant refers all association to the synthetical unity of apperception. But the elaborate apparatus of mental forms by which Kant is said to "explain" our experience does not become any simpler because these forms are, so to speak, strung on one thread and called modes of apperception. The different characteristics of cognition which are thus referred to different transcendental causes remain as separate and irreducible after as before the reference. Now the Associationists do at any rate attempt a certain reduction: they try for example to derive the "external sense" of Kant from the internal, and to exhibit Cause and Substance as results of different applications to phenomena of the same fundamental laws of association. Thirdly, our author forgets in dealing with Mr. Mill that the latter's exposition naturally faces not Kantism, but Common Sense: and so is encountered by the belief (which Kantism and Empiricism agree in rejecting) in the independent existence, apart from the mind, of Percepts, not Things in themselves. It is this that he calls a "belief in an external world," using that unhappily ambiguous term not in a spatial sense, but to signify "independent," "existing out of perception." Hence the charge that he neglects the "conviction that *present* objects are given as external" is beside the mark, as extra-perceptional existence does not come into question in respect of *present* objects of perception, considered as present.

This agreement between the two schools in restricting cognisable reality to the world of possible experience reduces the controversy about Space within manageable limits. The point at issue is merely the universality and necessity of a particular element of cognition. Still even this narrower question is found to resolve itself into two, of which the logical connection is somewhat disputable. The "necessity" of geometrical truth is commonly (and by our author) thought to be bound up with the "originality" of our apprehension of Space. But Mr. Mahaffy himself in a suggestive passage distinguishes "subjective" and "objective" necessity: and it is quite conceivable that the notion of Space may be a necessary element of our clear and matured cognition, and yet not have been possessed by the mind at first in its present form. Now the enquiry into the *nature* of the notion of Space is usually so mixed up with the enquiry into its origin that, when an Empiricist speaks of "analysing" the notion, it is not easy to say what sort of an operation he means: whether the analysis is introspective and immediate, disclosing the elements of which the notion is seen, on reflection, to consist: or whether it is a hypothetical process of reasoning by which the psychological antecedents of the notion in the remote past are conjectured. As I understand the Empiricists, they argue that the two processes lead to similar results and so support and confirm each other. Hence it is scarcely fair to describe Mr. Bain's assertion, that "the perception of space *means* muscular sensation," as "boldly begging the question": he is merely stating the results of his introspective analysis as an argument in favour of his hypothetical synthesis. If Mr. Mahaffy finds on reflection that *his* notion of Space, so far from resolving itself into muscular sensation, is not even inseparably associated with it, Mr. Bain's hypothetical account of its origin naturally appears to be slenderly supported. Still, when he in his turn asserts that "it is matter of fact that the image on the retina of every eye is originally perceived as extended," he clearly goes beyond all possible evidence. An absolutely decisive experiment as to the state of an infant's consciousness can never be made. The best evidence we can collect is derived from the cases of those who, born blind, have acquired vision when grown up. One such case—Dr. Franz's—is given here at some length, and, as far as it goes, is clearly in Mr. Mahaffy's favour.

On the other question of the intuitive universality of mathematical judgments it is scarcely possible to say anything new: but one of our author's arguments deserves notice. Granted, he says, that we have had much general experience of things extended and numbered before we frame mathematical judgments, there is no evidence that we have definitely abstracted and attended to the precise notions which we conjoin in these judgments: or at any rate that we have done this with sufficient frequency to form the indissoluble link of association. This argument is strongest in the case of geometry: where the Empiricists admit and indeed earnestly maintain that the exact lines and circles to which our judgments relate have never been presented in experience. When Mr. Mill is forced to suggest that the empirical association which has given the appearance of necessity to these judgments has been "Induction by method of Concomitant Variations," one feels that this dexterous and persuasive reasoner must be very hard pressed.

H. Sidgwick.

BASTIAN'S ETHNOLOGICAL COLLECTIONS.

1. **The Laws of Various Races.** [*Die Rechtsverhältnisse bei verschiedenen Völkern der Erde. Ein Beitrag zur vergleichenden Ethnologie.*] By Dr. A. Bastian. Berlin: 1872.
2. **Contributions to Ethnology and its Derivative Studies.** [*Beiträge zur Ethnologie und darauf begründete Studien.*] By Dr. A. Bastian. Berlin: 1871.
3. **Ethnological Investigations, &c.** [*Ethnologische Forschungen und Sammlung von Material für dieselben.* Erster Band.] By Dr. A. Bastian. Jena: 1871.

Few writers, living or dead, have done more than Professor Bastian of Berlin to convert the study of civilisation from a branch of speculative philosophy into a branch of positive science. To general students, however, his voluminous works are little known and almost inaccessible. His opinion is that ethnology is as yet only passing beyond the stage of accumulating and co-ordinating data, from which systematic theories are at some future day to be worked out. Thus his vast labours have been and still are so consistently carried on among the foundations of his science, that the literary public seldom even sees his head above ground. Dr. Bastian's most satisfactory ethnological publications, such as his great work, *Der Mensch in der Geschichte*, published in 1860, consist for the most part of masses of materials collected and grouped under their proper headings, with short introductions to acquaint the reader with the author's views as to each topic. Were the process carried a stage farther, by shaping these ideas and facts into a systematic whole, the book would become a standard treatise, instead of a mine of materials for the writers of standard treatises. But Dr. Bastian deliberately prefers to leave his work in its incomplete stage for others, sacrificing to the eventual prosperity of his science much of the personal fame which rewards a popular style and method. To those who use his volumes with profit, we would only suggest this caution, not too readily to consider as original their own

inferences from Bastian's collections of evidence. These inferences are often conveyed to their minds in some shrewd hint in the introductory paragraphs, or are latent in the very arrangement of the materials, which plainly suggest the general principle they prove and illustrate.

Dr. Bastian's new volume, *Die Rechtsverhältnisse bei verschiedenen Völkern der Erde*, is constructed on this principle. Its introduction starts with the doctrine that—

"the organization of man, in the character of a ζῶον πολιτικὸν, arranges itself in political institutions, which, as the regular result of uniform existence, must ever come to light under the same principles, except in so far as regards variations in the characters of varieties arising from the different characters of ethnological provinces. Thus the physical organism of man, as based on specific unity, is throughout similar in all its vital organs, although displaying itself in manifold varieties within the range of different anthropological districts, and under the influence of different climates," &c.

Taking the thoughts and habits of mankind as reducible by classification to results of general laws, Dr. Bastian collects and examines evidence on numerous topics of social science, such as the institutions of chiefship, patriarchal and military, the laws of property, caste, marriage, slavery, commerce, &c. As examples of the value of evidence collected on this method, so as to display its inner meaning in its very collection, the following group (p. 185) may serve, which is in fact a compact little dissertation on the well-known custom of inheritance by the youngest son, referring it to an obvious natural cause, and showing it not to be limited to the Aryan race :—

"Bei den Tartaren erbt (nach du Halde) der Jüngste, der im Vaterhause zurückbleibt, während die Aelteren nach einander mit ihren Heerden fortgezogen und selbstständig geworden sind." "On trouve une pareille coutume en Bretagne dans le duché de Rohan, où elle a lieu pour les rotures." "Utdschigin (Feuerhüter) hiess der jüngste Sohn bei den Mongolen, als erbend." "Item, dass Inn der herrschaft Pfirdt gebreuchig das under den geschwisterigen und ehelicher geburt der jüngst son seines Vathers seligen hofreite oder behausung besitzet." "Le droit de Juveigneurie était général dans la Haute-Alsace (Bonvalot)." "C'était le plus jeune fils, qui héritait de la propriété paternelle dans le pays Grimberghe en Brabant."

For an instance of the accompaniment of compiled facts with a theory to account for them, it may be mentioned that Dr. Bastian collects evidence as to that frequent but perplexing custom among savages and barbarians which prohibits parents-in-law from looking at or speaking to their children-in-law, and even compels them to go through an absurd pretence of not seeing one another. On this, he makes (p. 169) the suggestion (as to which we express no opinion except that it is ingenious) that the practice dates from an earlier state of the marriage-law, in which the wife was the property not of the individual husband, but of the family; so that under changed social conditions, the wife of the individual is practically secured in her rights, though formally her very existence is ignored.

Speaking in the name of ethnologists generally, we may venture to ask Dr. Bastian, in his future publications, to give not less but more liberally the theories and generalisations on which not merely their convenient use but their scientific value so much depends. In the *Beiträge* and the *Ethnologische Forschungen*, the absence of scheme, table of contents, and index, must make their matter only available to the few readers who will go through them for the purpose of extracting such passages as bear on their own particular lines of research.

Edward B. Tylor.

Air and Rain: the Beginnings of a Chemical Climatology.
By R. Angus Smith, F.R.S. Longmans.

This work is the partial fulfilment of a task undertaken by Dr. Smith more than eight years ago; we say partial, because it consists of a reproduction of a number of separate papers and notes, some of them published originally in the author's official reports, others read before various scientific bodies. It is more a collection of individual investigations than a scientific treatise exhibiting a definite plan, and the mutual connection of its several parts is far from clear. Thus we find under the heading of Rain a discussion of the determination of organic matter in the air, a problem which has nothing to do with rain. It is evident that the text-book of this important subject has yet to be written.

After saying thus much, we can bear full and free testimony to the value of what the author has given us, and the pains which he has taken to throw light on subjects hitherto so neglected, although of such vital interest to all. The general idea of air as taught in chemical text-books is that there is practically no appreciable difference in composition between the purest country air and the worst we find in towns, as the percentage differences as regards oxygen are all in the second decimal place. Almost all "open" air which Dr. Smith has tested contains 20·9 per cent. of oxygen; but in close confined places he finds considerably less, viz. 20·7 in the pit of a theatre, and even 18·27 in one mine specimen, the worst he has ever tested. Here then he takes his stand, and deals almost exclusively with these small quantities, which he makes more worthy of notice by quoting them as parts of a million. As he says :—

"Some people will probably enquire why we give attention to such minute quantities—between 29·980 and 29·999—thinking these small differences can in no way affect us. A little more or less oxygen might not affect us; but supposing its place occupied by hurtful matter, we must not look on the amount as too small. Subtracting ·980 from ·999, we have a difference of 190 in a million. In a gallon of water there are 70,000 grains; let us put into it an impurity at the rate of 190 in 1,000,000, it amounts to 13·3 grains in a gallon. This amount would be considered enormous if it consisted of putrefying matter, or any organic matter usually found in waters. But we drink only a comparatively small quantity of water, and the whole 13 grains would not be swallowed in a day, whereas we take into our lungs from 1000 to 2000 gallons of air daily."

The most important impurity is carbonic acid, and of its amounts in various places we have copious tables. From these we learn that when people speak of good ventilation in dwelling-houses, *they mean, without knowing it, air with not less than ·07 per cent. of carbonic acid.* The mean amounts breathed ordinarily vary between 1·45, the average of several tunnels in the Metropolitan Railway, and ·033, the proportion on the Scotch hills. It is not the carbonic acid in these small amounts which renders the air unpleasant to us. In towns it is no doubt sulphurous acid, but generally it is organic matter and gases arising from putrefaction, or from the ordinary processes of animal life. During a visit to a soda-water manufactory, the author found an atmosphere containing 0·19 of carbonic acid "very agreeable and not, at least in half an hour, to be distinguished from pure air." By other experiments in a closed lead chamber he had breathed much worse air than even this was, and as he says :—

"We are not yet able to say that 0·19 of carbonic acid caused no physiological effect; the absence of an effect which the sense of smell could detect did not hinder a very remarkable lowering of the pulse when air containing nearly 4 per cent. of carbonic acid was breathed. Here however a step is distinctly gained. We owe our discomfort to organic matter: although this has been said for years, it is not anywhere so fully proved as by the several facts now gained."

When we come to metalliferous mines, however, we find very different values for the composition of the air from that prevailing above ground. Thus, out of 339 analyses made by the author, the average was 20·26 per cent. of oxygen, thus showing a deficiency of 7390 in a million, and only *eleven per cent.* of the specimens could be called normal air.

"The state of these mines must exceed all that we who live above ground can comprehend. We enter gradually, and cannot very well

judge: if we leapt from the pure air into a close end in an instant, we should recoil with horror."

We next have a theoretical calculation of what the real composition of mine atmosphere must be, supposing a given amount of powder to be burnt in the day, followed by a notice of the microscopical examination of the solid contents of the air, most of which are crystals of nitre, &c. from the powder.

Among the most interesting portions of the book is the account of the personal experiments made in a closed lead chamber.

"After staying in the chamber for 100 minutes, the air had an unpleasant flavour or smell, and I came out: three persons entered at once, and pronounced it very bad; I entered after a minute, and found it extremely bad. It seemed to me, however, that we are frequently exposed to air equally bad, although I have not found any daily life so much deprived of its oxygen as this must have been—reduced, that is, to 20 per cent."

After an experiment on the combustion of candles, Dr. Smith says:—

"We entered with candles and a spirit lamp. The lights were soon extinguished, and it was found impossible to rekindle them with matches: wooden matches were used, they refused to ignite. Still we breathed without difficulty at first, but a gradual feeling of discomfort appeared, of a kind which is not easily described: it was restlessness and anxiety without pain, whilst the breathing increased in rapidity. Afterwards gas was lighted, and it burnt with brilliancy."

They stayed in the chamber till the gas went out, when a feeling of faintness came on; beyond this, and a feeling of closeness, nothing detrimental could be detected by the senses. A specimen of the air taken a few seconds after the door was opened contained 17·45 per cent. of oxygen.

Dr. Smith speaks of the constant struggle between our requirements of warmth and of ventilation, showing how putrefaction goes on but slowly up to 54°, then a sudden change is noticed, and it proceeds exactly as the temperature rises, not ceasing at a little above 130°. According as the temperature rises within any limits natural to this country, the necessity for ventilation is felt.

"It is therefore not right to demand as much air for ventilation on a cold day as a warm. The chemical action, and with it the feelings, demand warmth first above all things. It is the very first thing, and no function can go on without it. You may live for hours, days, or years, in badly ventilated places with more or less discomfort and danger; but a draught of cold air may kill you like a sword, almost instantly."

We can only allude here to the author's proposed method of "minimetric analyses," viz.—the testing air by shaking it in a bottle with lime-water, and remembering the character of the precipitate formed, but he gives a very practical and useful rule.

"*Let us keep our rooms so that the air gives no precipitate when a 10½ oz. bottle full is shaken with half an ounce of clear lime-water.*"

The second portion of the work has reference to rain, and it is chiefly made up of tabular matter, introduced with very little discussion. The author treats of the general characteristics of rain, as given in the "Alkali Report for 1868," and justifies his views by 109 tables of analyses of rain, principally from the United Kingdom; the first few of these tables do not give absolute amounts, but are comparative only, some one locality, in several instances Valencia, as a typical sea-coast place, being taken as the unit.

The rain from the sea contains chiefly common salt, but that this does not arise from spray is shown by the fact that it contains a larger proportion of sulphates to chlorides than is found in sea-water. Sulphates increase inland, and rise very high in large towns, and when the sulphuric acid increases more rapidly than the ammonia, the air becomes acid. Free acid is always traceable to combustion or manufacturing processes; but as in manufacturing districts the chlorides and sulphates may become neutral, acidity of itself is not a safe test.

The plates of crystals obtained by the evaporation of rain-water are very interesting. London rain leaves a mass of needle-shaped crystals which yield chloride of ammonium by sublimation. Manchester shows similar needles with the addition of coal dust, oxide of iron, and organic matter. Newcastle rain gives crystals of Glauber's salt, and rain from the west coast of Scotland common salt. Of course these results are not strictly comparative, as the degree of concentration of the solutions is not uniform.

The results obtained by the analysis of air led Dr. Smith to adopt an artificial method of collecting the impurities of the air by means of water. This is what he calls "air-washing." He fills a bottle containing a little pure water with the air to be examined, and shakes it. By this means he collects all the foreign bodies in the air, and can accumulate a sufficient quantity for examination by repeating the operation with fresh bottlefuls of air. This then is a most practical and useful process for all sanitary inspectors, as it is so simple, requiring hardly any apparatus. The results are extremely satisfactory, showing very considerable accordance with each other when the operation is repeated under similar conditions.

The book concludes with a number of short notes on various points discussed in the body of the work, and some remarks on smoke and ventilation. The former of these are out of place, as they clash with some of his earlier statements—a natural defect, and one almost unavoidable when so busy a man as Dr. Smith puts the results of his current labours into the form of a text-book. R. H. Scott.

Notes of Scientific Work.

Physics.

The Colour of the Metals.—The rays thrown off from a coloured object are mixed more or less with white rays, because the light illuminating the object is incompletely decomposed. The colour of a brightly polished metallic surface is usually invisible, because the coloration due to decomposed light is disguised by the more powerful reflected light. As moreover attempts to develop the actual colour of a metallic surface by reflecting white light a great many times from it fail through the loss of the coloured light by dispersion, Seeley has proposed a modification of the experiment. As, when white light is decomposed, the reflected coloured ray is complementary to that which is transmitted or absorbed, he recommends the examination of solutions of metals in a fluid that is without chemical action on them. For the alkaline metals he used dry liquid ammonia, in which they slowly dissolve, forming a solution that appears blue by transmitted light; and he concludes therefore that the colour of these metals by reflected light is red like copper. (*Der Naturforscher*, No. 36, 289.)

It is announced in the *Journal de Sicile* that Donati has constructed a spectroscope of twenty-five prisms, which shows only the line C and a small portion of the red on either side of the line. This instrument, which enabled him to detect the line C on the centre of a solar spot, will be used for examining not only the protuberances of the edge, but more particularly those on the disc of the sun.

The Ultra-Violet Rays of the Spectrum.—Though under ordinary conditions only the portion of the spectrum which lies between A and H is visible to the eye, it has been found by Sekulić that the rays beyond the violet are distinctly seen if *direct* sunlight be allowed to fall upon the prism. Fraunhofer's lines as far as the N group make their appearance, and the M group comes out so clearly that its third broad line can be easily covered with the wire of the telescope. The N group is somewhat indistinct, only the bright bands being identified. The colour of this light is pale-blue or silver-gray. When examined with blue glass, this portion of the spectrum resembles a pale-blue vapour, at the background of which lie the dark lines; by using a violet glass, it appears as a silver-gray band with the lines on a completely dark field. The lines of this very refrangible portion of the spectrum agree most completely with those of the photographic spectrum given in Müller's *Lehrbuch der Physik*. (*Archives des Sciences*, No. 175, 237.)

The Generation of Electricity by a Current of Water.—Zöllner has ascribed the production of the electric currents of the earth to the

incandescent molten masses in motion beneath the crust which generate currents in the direction of their own motion; and he has expressed the opinion that all current-movements of fluids, especially when in contact with solid bodies, are to some extent accompanied with currents of electricity that have the same direction as the fluids themselves. Zöllner inserted the ends of the copper wires of a very delicate galvanometer of Sauerwald just within the wall of a caoutchouc tube conveying a stream of water, and observed a deflection of several degrees of the scale, thereby indicating the existence of a current whose direction is that of the water. The greater the distance between the ends of the wires—which, by the way, need not be exposed to the force of the current, but may be replaced by metallic plates lying against the wall of the tube—the stronger the deflection of the needle. While recently repeating Zöllner's experiments, Beetz obtained (*Poggendorff's Annalen*, No. 7, 486) similar results, but found that the currents have a much simpler origin. The needle is deflected so long as the reservoir in which the water falls is not isolated. The metal tap, the stream of water, and the reservoir, in fact, form a voltaic element (brass, water, lead) whose current it is which deflects the needle. By filling the reservoir, and dipping the free end of the tube, also filled, into it, the current is observed though the water be shut off, nor does any change take place when the tap is opened. By simply inverting the position of the tube, the direction of the current is reversed; this is observed to be the case with or without a flow of water. If the reservoir be isolated, no current is formed; this is so whether the water be allowed to flow or not. When tap and reservoir are of zinc, no current is produced with or without a flow of water, and with or without isolation of the reservoir. According to Beetz's observations, then, no electricity is generated by a stream of water.

The Susceptibility of the Eye to Variations in Intensity of Colour.—The human eye, it is found, is over a considerably wide range susceptible to changes of brilliancy of white light, when the differences are equal fractional parts of the total luminous effect. Experiment has shown that on an average a change of one-hundredth of the total luminous effect, or even under favourable circumstances from $\frac{1}{150}$th to $\frac{1}{160}$th, can be recognised. Dobrowolsky has experimented with the various colours of the spectrum (*Der Naturforscher*, No. 24, 193), and determined the limit of susceptibility of the eye to changes of brilliancy in each instance. He finds it to be for red, at A $\frac{1}{11}$, at B $\frac{1}{19\cdot76}$, and at C $\frac{1}{25\cdot16}$; for orange, betwen C and D, $\frac{1}{33\cdot16}$; for golden yellow, at D, $\frac{1}{45\cdot77}$; for green, between D and E, $\frac{1}{58\cdot7}$; for bluish-green, between E and *b*, $\frac{1}{67\cdot34}$; for cyanogen-blue, at F, $\frac{1}{131\cdot6}$; for indigo, near G, $\frac{1}{268}$; and for violet, between G and H, $\frac{1}{268}$, and at H, $\frac{1}{67\cdot83}$, at which point the intensity of the light fails. These numbers show that the susceptibility of the eye to these changes of brilliancy increases continuously as we pass from red to violet, being in the case of the latter colour from ten to twenty times what it is with the red. These observations agree with what has been noticed by Helmholtz, that by a proportional decrease of illumination of brilliantly coloured surfaces the red fades from sight more rapidly and sooner than the blue.

Conversion of Vis Viva into Heat.—It is well known that a fall of temperature is recorded when a current of compressed air is driven against the face of a thermo-pile. Volpicelli (*Poggendorff's Annalen*, No. 6, 305), on allowing air which had been cooled to the ordinary temperature to escape from a pressure of four atmospheres against a thermo-pile, noticed three effects. When the nozzle was near the pile, a rise of temperature was remarked; when it was removed to some distance, a fall of temperature was observed; and when it occupied an intermediate position, the needle remained motionless. The causes of these variations of temperature are of three kinds: one arises from the destruction of the vis viva of the air; a second is brought about by the condensation of the molecules of air in the pores of the metal of the pile; and a third is due to the expansion of the molecules during their passage. The first two causes produce a rise, the third a fall of temperature. The movement of the needle will show whether the first two causes of variation are greater, equal to, or less than the third. Volpicelli's observations accord with those already described by Tyndall in his lectures on Heat.

Thermo-electric Characters of Crystals.—H. Hankel has made an examination (*Der Naturforscher*, No. 22, 177) of the nature of the electricity developed in crystals, especially in topaz, by a rise or fall of temperature, and has arrived at the following conclusions: 1. The thermo-electricity of a crystal is not directly due to hemimorphism, but appears to be a property of all crystals where other physical characters favour its development and accumulation. 2. As in crystals that are not hemimorphous the terminations of one and the same axis are crystallographically similar, these crystals have similar electrical characters, or, in other words, exhibit the same polarity, provided their development is actually the same. 3. The distribution of electricity on crystals that are not hemimorphous depends not alone on their molecular structure, but also on exterior form, and may by any change occurring thereon undergo modification. 4. As hemimorphism is to be regarded as an exceptional case in crystallography, the development of opposite electricities at the two ends of the axis, a direct result of hemimorphic structure, is likewise exceptional. An alteration of the outer form of hemimorphic crystals appears to cause no quantitative change in the distribution of electricity, which appears therefore to be materially conditioned by want of symmetry in the molecule.

Development of Heat by Friction of Liquids with Solid Bodies.—O. Maschke (*Pogg. Annalen*, No. 7, 431) has carefully investigated the rise of temperature which is observed when amorphous silicic acid is moistened with water and other liquids. Of his results a few require mention. Amorphous silicic acid which had been moistened with water, and so far dried that it had the appearance of porcelain, and contained 39·8 per cent. of water, showed a rise in temperature from 15° C. to 16°·5; silicic acid, $H_2Si_2O_5$, rose from 15° to to 21°·5. Silica which had been strongly heated and afterwards exposed to a very damp atmosphere rose from 19° to 22°. Silica which had been strongly heated and allowed to cool over sulphuric acid rose from 16° to 23°·8 when water was added; another portion of the substance moistened with benzol rose from 19°·7 to 24°·5; a further quantity treated with oil of almonds showed a rise from 20°·5 to 26°·5; and a fourth portion moistened with sulphuric acid of the specific gravity 1·841 rose from 19°·2 to 33°·5. About 20 grammes were taken in each case, and the bulb of the thermometer was placed in the centre of the powder. Glass and quartz reduced to a similarly fine state of division, on being moistened with water, showed no rise of temperature that could be detected by the ordinary means.

The Heat Spectra of Sunlight and the Limelight.—In an elaborate paper on this subject by S. Lamansky in *Pogg. Annalen*, No. 6, 200, the author, on comparing the position of the maxima of heat-effect in the two spectra obtained from flint-glass prisms, finds that the source of less heat-intensity attains a maximum heat-effect in rays of greater wave-length than is the case with the more powerful source of heat. He determined the absorptive powers of water, glass, mica, calcite, quartz, &c., and established the truth in each instance of what Melloni had previously observed with water: that the ultra-red rays on their passage through transparent substances suffer a loss which increases as the refrangibility of the rays themselves diminishes.

Explosions in Flour Mills.—An interesting article in *The Engineer* of 30th August, p. 145, having this heading, gives the results of an enquiry conducted by Professor Rankine and Dr. Macadam on behalf of the fire insurance offices into the circumstances which probably led to the explosion at the Tradeston Flour Mills, near Glasgow, in July last. The primary cause of the explosion was the accidental stoppage of the feed of a pair of stones, which led to their becoming heated and striking fire. This inflamed the finely divided dust diffused through the air of the exhaust conduits, the fire passing on to the exhaust box. The sudden ignition of the extremely inflammable dust diffused through the air would produce a very high temperature, and would necessarily be accompanied by a gust and sudden increase, in pressure and bulk, of the gaseous products of the combustion. The effect of this explosion was to burst the exhaust box, and allow a diffusion of dust and flame through the mill. A second explosion was the consequence, and the mill was reduced to ruins. The authors determined by direct experiment the interesting fact that this mixture of air and dust, when in the proportion best suited by theory to cause an explosion, produces, by being fired in a limited space, a pressure of eight atmospheres.

Geology.

Fossil Vertebrates from the Niobrara and Upper Missouri.—Prof. Leidy has founded a species of lion, *Felis augustus*, on several teeth and fragments of jaws discovered by Dr. Hayden at the Loup Fork of the Niobrara, Nebraska. The most characteristic specimen is an upper sectional molar about as large as that of the Bengal tiger. He also describes one of the caudal vertebrae of an animal related to *Plesiosaurus* and *Discosaurus*; and regarding the specimen as probably representing a genus different from those mentioned, he proposes for the species the name *Oligosimus grandaevus*. Another specimen obtained by Dr. Hayden in the "Black Foot country," at the head of the Missouri, has the appearance of having formed part of the dermal armour of a huge saurian, or possibly of an animal allied to the armadillo. Accompanying this specimen is a distal phalanx, which may belong to the same species, named *Tylosteus ornatus*. (*Proc. Acad. Nat. Sc. Philad.* April.)

A New Arachnide from the Coal-measures of Lancashire.—In the *Geological Magazine* for September, p. 385, Mr. H. Woodward gives a description of a new species of *Arachnide* found in the clay-ironstone nodules of the Lancashire Coal-measures, which is remarkable for the close relationship it bears to a species of arachnide, *Architarbus rotundatus*, Scudder, from the Coal-measures of Grundy Co., Illinois. It is interesting to note how many of the old forms of life from the Carboniferous series of North America occur also with us, under similar conditions of fossilisation, in the clay-ironstone nodules of the Coal-

measures. Mr. Woodward proposes for this new species the name of *Architarbus sub-ovalis*.

The Divisions of the Chalk Formation.—At the last meeting of the British Association, Prof. E. Hébert proposed a new classification of this formation, which will embrace the deposits on both sides of the Channel. He names each bed after a characteristic fossil, and taking the Gault as the natural base of the Chalk, classes the overlying beds, in ascending order, as follow :—1. *Craie glauconieuse* (Upper Greensand and Grey Chalk); 2. *Craie à Inoceramus labiatus* (Chalk marl, chalk without flints, and part of the chalk with flints); 3. *Craie à Micraster cor-testudinarium* (part of the chalk with flints); 4. *Craie à Micraster cor-anguinum* (chalk with flints); 5. *Craie à Belemnitella mucronata* (Norwich chalk). Between the first and second divisions come the Sandstones of the Maine, and between the second and third division lies the Hippurite limestone. For a series of papers on the classification of the cretaceous rocks according to all the various leading geologists, compiled with great care and labour by Mr. Davidson, see *Geol. Mag.* 1869, vol. vi. pp. 162, 199, 251, 300.

The Primordial Group of Canada.—The St. John's, or Primordial, bed, the most interesting of all the formations originally recognised as distinguished from the adjacent beds by Mr. Matthew, was first proved to be Primordial by Prof. C. F. Hartt. His discoveries with regard to the fossils, added to those previously obtained, enabled him to announce this conclusion with full confidence, the species of *Lingula*, *Paradoxides*, *Agnostus*, *Conocephalites*, *Obolellae*, &c. placing it beyond doubt. The formation mainly consists of shales, and is stated to be over 2000 feet in thickness. It occurs in southern New Brunswick, in the depression extending from the city of St. John by way of the Loch Lomond lakes to Hammond river, in the valley of the Kennebecasis and St. John's rivers, in St. John's and Northern King's counties, and perhaps also in the Nerepis valley, as well as at some other points. The strata of these districts are described in detail in the Report of Progress for 1870–71 of the Geological Survey of Canada.

Trachyte-porphyry of Antrim.—At the last meeting of the British Association, Prof. E. Hull read a paper on the trachyte-porphyries of the north of Ireland and the county of Antrim, which constitute a group of eminences about four miles to the north of the town of Antrim. The tops of these hills are formed of basalt capping the trachyte rocks, and it is supposed that basalt covers in the whole of the trachytic area; as the survey of the district is incomplete, the actual limits have not been determined in every direction. The rock consists generally of a nearly white or grey felspathic base, with individual crystals of sanidine, a triclinic felspar, grains of smoked quartz, and rarely a little mica. In some places the granules of silica are exceedingly abundant, giving the rock the appearance of rhyolite or perlyte as described by v. Cotta, and minute crystalline grains of magnetite are seen in a microscopic section. It is in this form that the iron found by analysis probably occurs. No passage or gradation between the basalts and the trachytes is met with, and as each has been erupted and spread out in sheets, they exhibit a laminated or bedded structure, which enables the observer to determine their relative positions without much difficulty. At several points the trachytic porphyry is observed to dip beneath the basaltic rocks of the neighbourhood; and observations on its direction tend to show that the trachyte is the older.

Researches on Fossil Crustacea.—Mr. Henry Woodward stated, in the sixth report of the committee for the prosecution of these researches presented to the last meeting of the British Association, that since last year he had completed his monograph on the Eurypterida, that on the Xiphosura alone being required to make the history of the Merostomata complete, four 4to parts on this order, comprising 180 pages and 30 plates, having already been printed by the Palaeontographical Society. Mr. Woodward gives some interesting information on the branchiae of *Ceratiocaris*, and descriptions of three new forms of Phyllopods from Dumfries; two *Limuli* from the Coal-measures named *Prestwichia Birtwelli* and *Bellinurus Konigianus*; a new Cape trilobite (*Encrinurus crista-galli*) from the Cock's Comb Mountains, S. Africa; a new British arachnide (*Architarbus subovalis*) from the Coal-measures; some new shore-crabs from the Lower Eocene, Portsmouth; and a series of Miocene Crustacea from Malta. Mr. Woodward controverted the views of Haeckel and Dohrn respecting the systematic position of the Merostomata among the Arthropoda, and contended that they should for the present be retained as an order of the class Crustacea; he illustrated their range, and that of the entire sub-kingdom of Arthropoda, by a diagram exhibiting the first appearance of Myriapods, Insects, Arachnides, and Crustacea, in geological time.

Botany.

Formation of Ozone by Plants.—C. Belucci has contributed to the *Gazetta chimica italiana* (i. 687) a note on this subject. The experiments of Scoutetten, Bineau, Kosmann, and De Luca produced results which led those observers to infer that plants are sources of ozone; Cloëz, on the contrary, appeared to show conclusively that the ozone was due to other causes. He passed the gaseous products from the plants through two tubes ranged side by side, and containing the iodized test paper; in one of these, which was exposed to the action of light, the test paper became coloured, while in the other, which was screened from the light, it remained unaltered, thus indicating that the action was due, not to ozone evolved from the plants, but to the effects of moisture, oxygen, and light on the test paper. The author has carefully repeated the experiments of Cloëz, and has devised new ones, in one of which he introduced into a large Wolfe's bottle of water saturated with carbonic acid, and containing a small quantity of potassium iodide and starch, sprigs and leaves of the following plants:—*Taxus baccata*, *Juniperus virginiana*, *Abies vulgaris*, *Thuja orientalis*, *Prunus Lauro-cerasus*, *Buxus sempervirens*, and *Chara foetida*. The apparatus was then placed in bright sunshine, but no change of colour was observed in the liquid, thereby proving that the green parts of plants do not evolve ozone under the influence of the solar rays.

Remarkable Elastic Force of Capsules.—At a recent meeting of the Academy of Natural Sciences of Philadelphia, Mr. Thomas Meehan stated that, while travelling through a wood, he had been struck in the face by some seeds of *Hamamelis virginica*, the common witch-hazel of the United States. He gathered a quantity of the capsules of this plant in order to ascertain the cause of the projecting power and to measure its force. Laying the capsules on the floor, he found the seeds were thrown generally from four to six feet, and in one instance as much as twelve feet. The cause of this immense projecting power he found to be due simply to the contraction of the horny albumen which surrounds the embryo. The seeds are oval, and are enclosed in a smooth bony envelope; and when the albumen has burst and expanded sufficiently to get just beyond the middle where the embryo narrows again, the contraction of the albumen causes the embryo to slip out with force, just as we should squeeze out a smooth tapering stone between the finger and thumb.

The Decomposition of Carbonic Acid by Plants in Coloured Light.—Prillieux and Baranetzky have maintained that the power of plants to break up this gas is dependent, not on the colour of the light to which they are exposed, but on the degree of its brilliancy. The incorrectness of this theory has been established by Sachs and Pfeffer, and a recent paper by the latter observer read before the *Gesellschaft zur Beförderung der gesammten Naturwissenschaften in Marburg* (*Botan. Zeitung*, Nos. 23 and 25), gives the results of his experiments on this question. He exposed a water-plant in turn to the several parts of a very brilliant and extended spectrum, formed of concentrated solar light, and observed the number of bubbles of gas given off from the surface in a given time; from his results he drew up the following table:—

Red	25·4	Blue	22·1
Orange	63·0	Indigo	13·5
Yellow	100·0	Violet	7·1
Green	37·2		

The Silicium of Plants.—Recent researches have demonstrated the great analogy, in respect to chemical character, which exists between carbon and silicium. Though the presence of silicic acid in the ash of plants has hitherto been regarded as a proof of the existence of this substance as such in the living plant, it can no longer be denied that a portion of that silica may be due to the combustion of organic compounds containing silicium. In the present state of vegetable physiology, such a hypothesis cannot but meet with approval, for, on the one hand, no explanation has yet been offered of the function of silica in plants, while on the other it is known that certain plants can develop and thrive when deprived of silicium. If the chemist should show that silicium can replace carbon in plant-structure, much light will be thrown on this subject. A communication by A. Ladenburg (*Ber. Deut. Chem. Gesell. Berlin*, No. 12, 568) on this point requires notice, not that he has found a solution, but because he shows the direction in which it must be sought for. He first endeavoured to ascertain if a small, but constantly occurring, percentage of silicium in cellulose could not be ascribed to a silicium-cellulose or a similar body. After impure cellulose had been treated with nitric acid and potash successively, it left an ash containing 40 per cent. of silica. Pure cellulose, in the form of Swedish filter paper, which had been dissolved in copper-ammonia solution and precipitated with hydrochloric acid, left from 0·11 to 0·16 per cent. of ash, one-third of which was silica; the remaining two-thirds, however, being bases, leaves the matter doubtful. He next operated on *Equisetum arvense*, a plant containing 20 per cent. of ash, one-fourth of which is silica. After treatment with strong acid and potash, the amount of ash fell to 16 per cent., of which one-tenth is silica. In testing for a carburetted silica, analogous to silico-proprionic acid, in the alkaline extract he obtained a body consisting chiefly of pure silicic acid, which on combustion gave 0·1 per cent. of carbonic acid.

New Publications.

Boulay, L'abbé. Flore cryptogamique de l'Est. Paris: Savy.

Brébission, M. de. De la Structure des Valves des Diatomacées. Caen: Blanc-Hardel.

Büchner, L. Sechs Vorlesungen über die Darwin'sche Theorie. Leipzig: Thomas.
Büchner, T. Lehrbuch der anorganischen Chemie. Braunschweig: Vieweg und Sohn.
Duseigneur-Kléber. Monographie du Cocon de Soie. Lyon: Pitrat.
Gümbel, C. W. Die sogenannten Nulliporen und ihre Betheiligung an der Zusammensetzung der Kalksteine. 2. Theil: Die Nulliporen des Thierreichs (Dactyloporideae). München: Franz.
Hannotin, E. Dix Ans d'Études philosophiques. Paris: Sandoz et Fischbacher.
Harting, J. E. A Handbook of British Birds. Van Voorst.
Lamont, J. v. Verzeichniss von 4003 telescopischen Sternen zwischen $-9°$ und $-15°$ Declination. München: Franz.
Loth, J. Lehrbuch der Chemie und Mineralogie. Leipzig: Wigand.
Moigno, L'abbé. L'Art des Projections. Paris: Gauthier-Villars.
Moinet, J. C., et Gouët, J. Des Eaux minérales sulfureuses de Cauterets (Hautes-Pyrénées). Paris: Masson.
Pellarin, A. Hygiène des Pays chauds. Paris: Baillière et Fils.
Saint-Robert, P. de. Mémoires scientifiques réunis et mis en ordre. Tome I. Balistique. Turin: Bona.
Shelley, G. E. A Handbook of the Birds of Egypt. Van Voorst.
Tschermak, G. Die Meteoriten von Shergotty und Gopalpur. Wien: Gerold's Sohn.
Vanderkindere, L. Recherches sur l'Ethnologie de la Belgique. Bruxelles: Muquardt.
Zinno, C. S. Analisi qualitativa e quantitativa del Limo delle acque termominerali di Sclafani. Napoli.

Philology.

The Development of Latin Word Formation. [*Die Entwickelung der Lateinischen Formenbildung.* Von Dr. H. Merguet.] Berlin: Borntraeger, 1870.

The Derivation of Verbal Endings from Auxiliary Verbs. [*Die Ableitung der Verbalendungen aus Hilfsverben und die Entstehung der Lateinischen* e-*Declination.* Von demselben.] Berlin: 1871.

The treatise of which the title stands first at the head of this article is an attempt to account for the origin and trace the development of the known phenomena of Latin grammatical formation. For his facts the author seems to have drawn chiefly upon Neue, Corssen, and Schuchardt, nor does he make any profession of independent research in this direction: the speculative portion of the book, so to speak, is therefore the most important, as being evidently that on which the writer has spent most of his pains and ingenuity. As several of his conclusions are seriously at variance with the views hitherto commonly received by Latin philologists, the book appears to have provoked a good deal of adverse criticism; and the tract of which the title stands second is a reply to the objections raised by various scholars (notably Corssen and G. Curtius) against some of the author's theories, especially his theories of the *-e* or fifth declension, and of the part played (according to common opinion) by auxiliary verbs in forming Latin tenses.

Let us take the question of the *-e* declension first, as Dr. Merguet's treatment of this point is fairly typical of his whole method. "Its origin was," he says (p. 27), "as follows: From the feminine stems in *-ia*, belonging to the first declension, there branched off collateral forms in *-ies*. In some cases *-ia* remained the most usual form, in others *-ies* was preferred and *-ia* given up; in the latter case the *i* was consequently lost, and finally altogether suppressed through the influence of the accent" (*fames*, *fides*, *plebes* standing for *famies*, *fidies*, *plebies*); "in other instances it was sometimes preserved (e.g. *rabies*), in others partly preserved and partly suppressed" (*faces* being an old form attested by Paullus, perhaps for *facies*). "Subsequently this declension was swelled by such polysyllabic consonantal stems as, after dropping their characteristic consonant, still ended in *-ie* (*quies*, *dies*), and the monosyllabic stems which by this means preserved the *e* of their solitary syllable."

The assumption here made that words in *-ies* formed the original stock of the fifth declension seems somewhat arbitrary, especially as the great majority of words with that termination consists of the names of abstractions (*segnities*, &c.) and obviously late formations. As for *fames*, *fides*, and *plebes*, it cannot be said to be anything like certain that they originally ended in *-ies*; nor can the obscure sentence of Paullus about *faces*, "*faces* antiqui dicebant ut *fides*," be said to yield more than problematical evidence about a collateral form of *facies*. The monosyllables *res* and *spes* have as good a right as any words in *-ies* to be considered as originally belonging to the *-e* declension. As for *dies*, there is really nothing to show that its stem was not *die-*: *diur-nus*, to which those who take a different view appeal, has always seemed to us to be most simply derived from the ablative *diu*. The simplest way of dealing with this puzzling set of nouns seems to be to avoid the theory of mutual transitions from declension to declension, except in the few cases in which such a process can be certainly proved, and to assume the existence of two sets of stems, one in *-e* and the other in *-es*, the first of which formed the fifth and the last part of the third declension. If this hypothesis be correct, the *-s* in genuine fifth-declension words, such as *res*, *dies*, and (according to one declension) *spes*, would belong not to the stem, but to the nominative ending; if it be incorrect, and *res* (for instance) be a complete stem, why do we not have *reribus* instead of *rebus* in the dative and ablative plural? *Spes*, it is true, shows a nominative plural *speres* as well as *spes*, and *sper-are* is its derivative: on the other hand, it also shows forms belonging to the fifth declension, and its diminutive is not *sper-i-cula*, but *spe-cula*. No evidence can be produced to show which form of the stem is the oldest; but analogy may be fairly said to be in favour of the form in *e*. Why the *e* stems retained the *s* of the nominative while the *a* stems dropped it, is difficult to say, nor do we think that Dr. Merguet has solved the problem: perhaps a bare *e* would have been too indefinite an ending, to say nothing of its liability to confusion with the short final *e* of neuters such as *retĕ*, &c.

With regard to the third-declension nouns in *-ēs* and *-īs*, Bopp appears to be right in considering them to belong to a class corresponding to the Greek nouns in -ης, genitive -εος: a hypothesis which Dr. Merguet declines to admit. This class in Greek forms the masculine and feminine complements to neuters in -ος or -ες: compare Μεγακλεής with κλέος, εὐγενής with γένος, and the like. Thus *nubes* may perhaps be taken as a feminine corresponding to the neuter νέφος. In Greek the oblique cases of both genders are formed alike, and this is the case in a few instances in Latin: compare *pulvīs* (the original quantity), *pulveris*; *vis*, *vires* with *genus*, *generis*: the change of the *s* in the stem to *r* in Latin corresponding here, as so often, to its omission in Greek (γένε-(σ)ος, κ.τ.λ.). Between the *-ēs* of the consonant and that of the vowel declension, however, there easily arose a confusion, shown already in genitives like *dies* and uniformly in the nominative plural. Thus, without any attempt at regular filiation, we may explain the variation of declension in *spes* and other words that exhibit it. The Latin language has in general a tendency to reduce similar forms to one type; and the confusion, or tendency to unification, noticed here may be compared with that which took place between the verbs with *ē* and those with consonant or *ĕ* stems.

In his account of the genitive of the first declension, Dr. Merguet, if we rightly understand him, is not consistent. He says (p. 70) that *Prosepnais* (*C. I. L.* i. 57) is the only instance of the full ending of this case; that the genitives in *-as* (*familias*, &c.) are abbreviations of it, but that in later

forms of its development the *i* appeared again. Does this mean that the genitive in *-ai*, *-ae*, is an abbreviation of the genitive in *-ais*, *-aes*? If so, it is difficult to reconcile this page with page 81, where we understand Dr. Merguet to contend that the genitive in *-ai*, *-ae*, is identical with the locative.

Coming to the pronouns, we find that Dr. Merguet considers *qui* to be a secondary form of *quis* (pp. 155, 156): a hypothesis which seems to us in the highest degree improbable. On reading over carefully all that Dr. Merguet has to urge both in his main treatise and in his reply to his critics, we are still of opinion that the hypothesis of the older philologists was right, and that *qui* and *quis* are separate stems. There is, first, the exceeding unlikelihood of the *i* of *quis* being lengthened; secondly, the patent fact that *qui* shows almost throughout an *o* stem, with or without the addition of *i* (compare also the conjunction *quom* or *cum* and the adverb *quo-t*), while *quis* and *quid* as obviously show an *i* stem. *Quem* and *quibus* seem, indeed, to point to an *i* stem, but *quem* may perhaps have come into use in order to avoid confusion with the conjunction *cum*, while side by side with *quibus* we also have the form *quis*. *Qui* and *quae* resolve themselves naturally into *quo-i* and *qua-i*, forms which are supported by the corresponding forms in the Italian dialects. The declension of the two pronouns has, perhaps, owing to the singularity of the nominative singular, been nearly reduced to one, the oblique cases of *quis* being mostly formed from an *o* stem, as in the case of *is*; but this seems rather to prove some later confusion than the original identity of the two stems.

But the most startling novelty of all is to be found in the section on the verbs, where the dreams of our childhood are rudely dispelled by the author's denial (p. 199, foll.) that the perfects in *-ui* und *-si* are formed directly or remotely from the auxiliary stems *fu-* and *es-*. This paradox, for such we must still consider it, is supported by a number of minor arguments; but the author lays most stress upon what he considers the improbability of a Latin compound being formed by the junction of an inflected word with an uninflected stem (*ama-fui*, *die-si*). He will not accept as instances to the contrary such words as *assue-facio*, *cande-facio*, *are-facio*, the first part of which he considers may possibly represent old infinitives in *-e*, arguing from such phrases as *cande quoque faciunt*, *facit are*, &c., in which the two parts of the compound are separated, that a consciousness of the independence of the parts must have been present to the minds of the writers who used these expressions. Possibly; but Ennius does not scruple to separate the two parts of *cerebrum* in his celebrated *saxo cere comminuit brum*, from which it would not be prudent to draw any etymological inference; nor is it at all improbable that in using phrases like *cande quoque faciunt* the Romans were misled by the analogy of *bene* and *male facere*. But even if we were to concede that in *cande-facere*, &c. the first part of the word is an old infinitive, what is to be said of such compounds as *arci-tenens*, *silvi-cultrix*, or the Greek χερνίπτομαι? Here surely we have an uninflected stem compounded with an inflected word. The possibility of such compounds being shown, we have to consider whether in *ama-vi*, *mon-ui*, and perfects like them, *-ui* grew out of an original simple *-i*, or represented in its *-u* an independent stem. Without dwelling too much on the case of *pot-ui*, which may possibly be a copy and not the model of other perfects in *-ui*, it may unhesitatingly be said that all analogy both of Latin and of the Italian dialects, which exhibit perfect-endings in *-fi* and *-fed* corresponding to Latin *-ui* and *-uit*, is quite against the notion of the growth of a *u* out of the vowel which followed it. The growth of consonants out of following vowels is an exceptional, not an ordinary, fact: forms such as *matuva*, *posuvit*, *Larisaevus*, and others quoted from Schuchardt by Dr. Merguet, are bastard growths, which probably admit of their own explanations either as mistakes or as false analogies: the general tendency of Latin being far more to wear away existing consonants than to create new ones before a vowel by a strengthening of the breathing. The ordinary theory that *-ui* is an abbreviation of *-fui*, if it does not absolutely run on all fours, offers at least a highly probable explanation of the facts, as the present writer endeavoured to show in his notice in these pages of Mr. Roby's *Latin Grammar*: as for the perfects in *-si*, Dr. Merguet himself grants that they correspond to the Greek aorists in *-σα*, nor do we think he shows any sufficient reason for rejecting the commonly received explanation of them.

It is to be regretted that a writer who shows at times so much insight and ingenuity as is displayed on many minor points in the discussions in this treatise should, on some of the main questions of Latin grammar, have adopted (as it seems to us) such perverse conclusions. The book, it should be observed, is left very incomplete by the absence of all treatment of the prepositions, adverbs, and conjunctions.

H. Nettleship.

Six Lectures introductory to the Philosophical Writings of Cicero; with some Explanatory Notes on the subject-matter of the *Academica* and *De Finibus*. By T. W. Levin, M.A. Cambridge: Deighton, Bell, and Co., 1871.

This book has a somewhat misleading title, since it is in the main a survey of ancient Scepticism, from its small beginnings in the days of Socrates to the time when it became an organized assault on all forms of theoretic belief and the accepted doctrine of a school. The chief points which come within the survey are the scepticism of Pyrrho, who seems to have formulated the universal doubt in the interests of practical ethics, and that of the New Academy, which was probably inspired by no higher motive than sectarian animosity to Stoicism. The author has not restricted himself to a merely historical review of his subject. Evidently no believer in M. Renan's axiom, "le jugement critique exclut le jugement dogmatique," he gives us along with the bane the antidote, in the shape of an exposition of the grounds of Scepticism with hints as to the way to meet the sceptical conclusion. The antidote, it seems, involves the acceptance of what we may call, in default of a better name, an insular variety of Kantism. Whether Carneades would be bound to admit this solution of his doubts, is perhaps for us, as for him, supremely unimportant. Nor is it necessary on our part to do more than enter a protest when we meet with the confident assertion that "the morality of Pyrrhonism, however low and unsatisfactory it may have been, was really only the inevitable result of the rejection of all *à priori* sources of knowledge" (p. 37); or when it is assumed that there was some natural correspondence between Scepticism and "the universal corruption of morals" which, if we may trust Mr. Levin, characterized a certain period of antiquity. Setting aside our dissent from his conception of history and of the logic and ethics of historical enquiry, we cannot say that his procedure in less disputable matters deserves unqualified approval. We think he might certainly have taken a wider view of the literature of his subject and made a wiser use of the materials he had. His authorities hardly appear to advantage in his pages. He gives us, for instance, an English version of a long passage in Brandis, who, in some remarks on the sceptical theory of evidence, naturally enough introduces the expression, "erin-

nernde Zeichen," a perfectly intelligible German equivalent for the Greek ὑπομνηστικὰ σημεῖα more than once employed by Sextus Empiricus. Now instead of adopting the traditional English equivalent, "admonitive signs," or inventing some new one, Mr. Levin in two places suppresses this technicality altogether, and in a third represents it by a highly dubious paraphrase, "remembered impressions"! However, if the translations from the German are inexact, a stronger epithet is needed to describe those from the Latin. We fail to discover any sense or coherence in a passage like the following :—

"He has obscured it, however, either by his scholastic handling, or, as those who are well acquainted with this kind of Cicero's works will more probably think, he has derived it from that Greek writer whom he had elected as his guide when composing the book" (p. 189).

The original of all this, nevertheless, is a perfectly simple and straightforward sentence :—

"Eum [*sc.* ordinem] aut ipse adumbravit scholae formam sequens, aut, quod probabilius putabunt, qui hoc genus librorum Ciceronianorum intus norunt, ab eo scriptore Graeco sumpsit, quem sibi ducem elegerat in hoc libro componendo."

This is what Madvig says (in an excursus to his edition of the *De Finibus*), and one would have thought it impossible for any one to misunderstand it. Yet in the dozen pages which Mr. Levin has been so ill-advised as to translate from Madvig we might easily point out a dozen specimens of interpretation of precisely the same stamp as the above, or even worse. Strange as it may seem, the translator would have avoided one or two of his most serious errors, had he remembered that Madvig was writing for students of the *De Finibus*, and presupposed in his readers an acquaintance with the philosophical ideas and language of that book, as well as a competent knowledge of Latin. I. Bywater.

Observationes Criticae in Cl. Galeni librum περὶ ψυχῆς παθῶν καὶ ἁμαρτημάτων. Scripsit Johannes Marquardt. Leipzig : Hirzel, 1870.

Iwani Muelleri Quaestiones Criticae de Galeni libris περὶ τῶν καθ' Ἱπποκράτην καὶ Πλάτωνα δογμάτων. Erlangen : Junge, 1871.

De Galeni Historia Philosopha. Hermannus Diels. Bonn : Georgi, 1871.

It would be difficult to say why modern philology has done so little for Galen—a writer who occupies no inconsiderable space among our extant remains of classical antiquity, and one who presents much of indisputable interest to the historian of science and philosophy. To this neglect alone we must attribute the shameful fact that Kühn's edition still keeps its place in libraries. If the scandal remains much longer, we shall certainly be without excuse, as we now know (what we before only suspected) that Kühn's book is the merest makeshift, and as offensive to the critical sense as it is to the eyes of the reader. The better light we now enjoy is in great measure due to the labours of three scholars, who, simultaneously but independently of one another, have been working in the same mine and arrived at similar results. First in order of publication comes Herr Marquardt with a dissertation on the treatise περὶ ψυχῆς παθῶν καὶ ἁμαρτημάτων, pointing out the paramount importance for textual purposes of a Laurentian MS. (74, 3) of the twelfth century. In a similar spirit, and with an ampler supply of materials, Prof. Iwan Müller, of Erlangen, discusses the treatise περὶ τῶν καθ' Ἱπποκράτην καὶ Πλάτωνα δογμάτων. With the exception of the Aldine editor and an erudite countryman of our own, famous in Cambridge annals as having given his name to Caius College, the critics of the book have worked in the dark, and with no knowledge of the manuscripts: Kühn's edition depends on that of Chartier, Chartier's on the Basiliensis of 1538, and this last on the Aldine ; so that it may be imagined how seriously the vulgate has receded from the genuine and primitive form of the manuscript tradition. Thanks to Prof. Müller it is now ascertained that the oldest and best text is that preserved in a Laurentian MS. (lxxiv. 22), and one at Cambridge, both incomplete, but supplementing each other in such a way that they must be considered to have originally formed part of one and the same volume. Still more valuable is the essay of Dr. Diels, who shows (1) that the Ἱστορία φιλόσοφος, so far from being Galen's, is the work of some sorry compiler who took his materials from Sextus Empiricus and the collection of *placita* in Plutarch ; and (2) that the book as we now have it is in the most unsatisfactory condition that can be conceived. When first printed (in the Ed. Princ. of Aristotle), the text seems to have been directly or indirectly derived from the excellent Laurentian MS. (74, 3) to which Herr Marquardt has drawn attention. It assumed a new form, however, in the hands of Martianus Rota, a learned Venetian physician, author of a Latin translation which appeared at Basel in 1542. The additions and improvements suggested by him were adopted by Chartier, and thus passed into Kühn's edition, where we read them without note or comment, as though they had been an integral part of the Greek text from the first. Having pointed out the delusive character of the book as it stands, Dr. Diels proceeds to give us a considerable specimen of an entirely new recension founded directly on the Laurentianus, and with emendations by himself and other scholars. But, as Prof. Curtius Wachsmuth reminds us in an elaborate article in the *Gött. gel. Anz.* (1871, St. 18), the Laurentianus is not our sole authority in the matter, since there exists a medieval Latin version by Nicolaus of Reggio, dating from as early as 1341, and preserving a number of important and suggestive variations. Dr. Diels will doubtless tell us more about these in the larger work of which the present dissertation is the forerunner.

I. Bywater.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In the *Academy* of April 1 (vol. iii. p. 140) a review of certain Assyrian discoveries of Dr. Oppert, which appeared in the *Journal asiatique*, xviii. 67 (1871), and was signed J. M., was ascribed to M. Joachim Ménant, the well-known Assyriologue. The statement has been repeated in my *Grammar* (p. 182). M. Ménant, however, has written to inform me that this is a mistake, as the article in question was not from his pen. A. H. Sayce.

Queen's College, Oxford, September 1, 1872.

Contents of the Journals.

The Journal of the Cambrian Archaeological Association for July opens with an excellent essay by Stephens on the Bardic alphabet called "Coelbren y Beirdd," which is shown to have been a mere modification of the Roman alphabet cut on wood by the Welsh, when the importation of paper into Wales had been successfully prevented by the English in the fifteenth century. The Bridell Ogham made out by Fergusson to be "Netta Sagro hoc Oudoco effeci" is made by Brash to read, "Neqasagrom Maqi Mucoi Neci," and explained in his usual wild way. Karl Meyer's article on the Welsh poems in the Codex Juvencus is quite a curiosity. The journal is however fast improving in the hands of its present editor.

New Publications.

Aristotelis Politicorum libri octo cum vetusta translatione Guilelmi de Moerbeka. Recensuit Franciscus Susemihl. Accedunt variae lectiones Oeconomicorum. Leipzig : Teubner.

Burnouf, Émile (directeur de l'École française d'Athènes). La Légende athénienne : étude de mythologie comparée. Paris : Maissonneuve.

Draeger, Dr. A., Director des Gymnasiums zu Friedland i. M. Historische Syntax der lateinischen Sprache. Zweiter Theil, erste Hälfte. Leipzig : Teubner.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 57.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Tuesday, October 15, *and Advertisements should be sent in by October* 11.

General Literature.

Ranolf and Amohia. By Alfred Domett. Smith, Elder, and Co.
Poems by V., Author of *Paul Ferroll.* Longmans.

It is common enough to find the form and something of the spirit of poetry without the substance; it is not so common, and to those who can distinguish between substance and shadow it is a welcome surprise, to find the raw material of genuine poetry in rich profusion, though uninformed by a true poetic thought. In *Ranolf and Amohia* we have charming scenery (in the widest sense) depicted from the fullest knowledge; we have characters conceived with a good deal of insight and realised with a good deal of force; we have even a romantic story managed with enough regard to probability to be interesting, and the result of all is an unsatisfactory poem. There is no unity in the style and manner of the book: the plan and management of the story and the metre in the happiest passages remind us continually of Scott; here and there we come across a flavour of Shelley in his most abstract and least felicitous mood. And, as perhaps might be expected, we have paragraphs upon paragraphs not in the manner of Mr. Browning, but in the manner into which it would be easiest for Mr. Browning to degenerate, if we could conceive him divested of his tutelary subtlety and with all his mannerisms heightened—especially the fondness for describing one thing in terms of another, with which it is only related through the arbitrary associations of a too fertile fancy. And these elements lie together in juxtaposition without penetrating one another, without being fused into even a superficial unity by the individuality of the writer. The substance of the book is not quite so disjointed as its form, but such unity as it has is ethical, not artistic. One gets a tolerably complete impression, not of an episode in the hero's career, but of a stage in his spiritual development. He is introduced to us at the close of a hunt, like James Fitzjames, only he has had his dog killed instead of his horse, and he has killed a boar instead of having lost a stag; also he moralises, which Fitzjames does not, for a page or so on the immortality of animals. After this he meets the heroine, and delivers her from his own followers, who meant to carry her off to their own chief as soon as their master (the hero) could dispense with their services. Then for two mortal cantos we have a succinct and tedious account of the hero's education: how he went to sea and came home and studied speculative philosophy, from Buddha to Hegel; how he found commonsense reasons which satisfied him for disagreeing with all philosophers (for one thing, most came round to Buddhism), and falling back upon the simplest form of cultivated optimism. The analysis and criticism of the different systems show that a good deal of reading and thought has run to waste upon them. There is no direction in which the unsustained pretensions and the unfulfilled promises of metaphysicians do more mischief than by attracting the misplaced curiosity of intelligent persons without a genuine speculative impulse. Having thrown away Hegel and exorcised materialism, Ranolf has to exhaust the "earnest" commonplaces as to the *pros* and *cons* of a profession. Before he has decided, his father dies and leaves him free to go to sea again. After half a canto of nautical experiences, which might have been polished up into pretty little independent poems, we have a shipwreck, not without power, but much too long. Then he and we are introduced to the natives, their manners and customs, and mythology; this part of the poem proves that the *Lady of the Lake* would still have been readable if Scott had versified all the notes and embodied them in the text. The chief to whom Amohia was betrothed in her infancy is happily buried by a liquid landslip, but the sorcerer who made the match to keep up his own importance immediately arranges another. By this time Amohia is in love with Ranolf, so she flies to avoid being made "tapu" again. To prevent her escape, all the canoes have been drawn up; but she swims the lake to him. This is beautifully described, but there are too many beauties; for instance, she rests herself by floating, and as it is night she sees and admires the stars, though, as she knew no astronomy, they could not be for her what Mr. Domett cannot help describing for four pages. When the lovers meet, they marry (which in New Zealand seems to be as informal a business as seduction is elsewhere), and set off to the tribe of the heroine's mother. On the way they receive intelligence that the lady's father, Tangi Moana, "The Wailing Sea," has quarrelled with the priest, and is prepared to sanction the match, so they wander home through the strange country round Lake Mahana. On their arrival they find the priest has stirred up a coalition against Tangi Moana, who is attacked in his island fort, and, though mortally wounded, gains the victory by the help of Ranolf's revolver. The battle is capitally described, after Mr. Domett has protested through six pages that fighting among savages cannot be so poetical as the civilised warfare of Wellington and Nelson and other British heroes. After the death of Tangi a new complication arises. Ranolf begins to pine for books, while he shrinks from the obvious embarrassments of taking a savage wife to England; Amohia chooses to assume that he is pining for English girls, so she resolves to prove her love for him by surrendering herself voluntarily to the chief of a new coalition, which the sorcerer has egged on to secure her hand, and, in case of presumable resistance, to demolish her tribe and her husband. On her way to the sacrifice she meets the sorcerer, who makes an unsuccessful attempt to arrest her, and is swallowed up in a pool of pitch. She falls into a river, and is supposed to be drowned, and on her revival is detained by the chief of the village where she has been nursed, who wishes to have the merit of surrendering her to his lord-paramount, the chief of the coalition. Here she meets Ranolf, who is in despair at losing her, and is waiting for a passage to England. Her escape is easily arranged, and we take leave of them making love on the voyage, but the author will not let us go without some final moralising on the effects which his experience must have produced on the hero's character.

The best and most original parts of the book are the descriptions of New Zealand scenery (the manners and mythology, though cleverly managed, are done at second hand), and the purely idyllic passages. We give a specimen of the latter, not as the prettiest but as the easiest to isolate:—

"The kisses prest with youthful passion
On Amohia's cheek were not alone
The first those lips from one she loved had known—
They were the first she ever felt at all!
A novel mode, a strange too fervent fashion,
Of salutation or caressing this!
What aid, what safeguard to her side to call
This subtle soft assailant to repel,
This cunning and insidious foe—a kiss!
Was it not thrice too thrilling? Might not well
This meeting of the lips and breath appear
Spirit to spirit, soul to soul, to bring
Too dangerously close—too fondly near?
Through joining lips seemed heart to heart to cling,
And had not breath and spirit but one name—
In hers as many a rougher tongue the same?"

It is a pity that an author who can write so well should have spoilt what might have been a really beautiful poem, by trying to pour all the thought and experience of a lifetime into it.

The title-page of the volume of poems by the author of *Paul Ferroll* reminds us that the *Quarterly Review* in 1840 committed itself to the belief that the nine poems, which were all Mrs. Archer Clive had yet published, contained stanzas "worthy of any one of our greatest poets in his happiest moments." Certainly we are more struck with the quality of the writer's talent than with its quantity, and yet this quality is too abstract, not to say too ghostly, to be really individual. The originality of the poems lies wholly in their intensity. There is nothing uncommon about the style, which never emancipates itself from the conventional range of the better class of album verses. There is nothing uncommon about the topics. We are all familiar with the certainty that the young will be old if they live long enough, with the hope that death may be the gate of a new life, and reunite parted friends. The thoughts are common even when the writer gets hold of such an out-of-the-way subject as the death of Cancellor, whom Mr. Hopley conscientiously went on beating as recommended by Locke, but unluckily the boy died under the treatment before it had subdued his half stupid, half vicious obstinacy. Any modern writer taking up such a subject would turn from the horror to the psychological curiosity, but "V." fastens upon one corner of the horror and keeps to it. She dilates upon the thought how shocked the poor lad's mother must have been to think she was comfortably in bed while it was happening. The poem is not one of V.'s best; but even here one half-stanza is unmistakably powerful and strange—

"Next morn an hireling did the first kind deed,
And wiped the face no longer his but its."

And this is V.'s peculiar distinction to be so powerful as to be strange without ceasing to be obvious; she sees nothing which other people do not see, but she cares with all the strength of a proud, passionate nature about things that other people seldom care about. Anybody who read in the paper that a hundred and fifty invitations were sent for a Queen's ball for people who had died since the last could have guessed that some ghosts might have accepted the invitation to see if their daughters or sweethearts or brothers remembered them. Yet the *Queen's Ball* is a genuine and remarkable poem, because the writer expends so much deep and sustained feeling upon her hypothetical ghosts that we hardly miss the dry *recherché* subtleties which Miss Rossetti, for instance, would have invented for said ghosts to think. It is the intensity of realisation which makes *The Grave* solemn instead of rhetorical, not to say theatrical. The silence of the grave is a common thought, but this is not a common stanza—

"Around me stretched the slumbers of the dead,
Whereof the silence ached upon mine ear;
More and more noiseless did I make my tread,
And yet its echoes chilled my heart with fear."

In the later poems there is at least one instance where the writer's singular personality has clothed itself in something like the inventive prettiness which we expect from all the readers of the Laureate. The following stanzas close a poem on *Old Age*:—

"And once or twice in age there shines
Brief gladness, as when winter weaves
In frosty days o'er naked trees
A sudden splendour of white leaves.

"The past revives, and thoughts return
Which kindled once the youthful breast;
They light us, though no more they burn,
Then turn to grey and are at rest."

Both metaphors are beautiful, and beautiful as they are, their value is increased by the plain sobriety of what goes before.

It is curious, perhaps, that so abnormal a nature should be so eagerly submissive to traditional beliefs; the only approach to a cry of revolt is the feverish prayer for death at once sudden and triumphant, which forms the substance of the lines written in health. Perhaps it may explain this submission if we remember that mental intensity does not always imply mental activity, and that the author of *Paul Ferroll* has certainly written very little. Perhaps, too, this submission is one condition of the sustained quietness to which so much of the power and the horror of that singular tale is due.

G. A. Simcox.

LITERARY NOTES.

The German papers contain interesting accounts of the last illness, death, and funeral of Ludwig Feuerbach (on whose place in modern speculation we had some remarks not long since). The aged philosopher had been seriously impaired in his faculties since his first stroke in 1867, and had almost entirely lost his power of speech since the second, a few months ago. On the evening of September 2nd, he was enjoying the sunset from the verandah of his house at Nürnberg, with the members of his family and a Russian visitor, and was immediately afterwards taken with bronchitis, which ended fatally on the morning of the 13th. An immense concourse attended his funeral at the famous cemetery of St. John, and many speeches were pronounced. The occasion was taken for a demonstration on the part of the Socialist Democrats of the *Section Fürth* and *Section Nürnberg*, who marched to the funeral five hundred strong, bearing red flags; their leader, Herr Memminger, after the official oration had been delivered by Herr Scholl, coming forward to lay a wreath upon the grave in the name of Herren Marx, Jacoby, Bebel, Liebknecht, and the socialist and republican party in general.

The fifth number of *La Crónica de los Cervantistas* contains an article by the editor on "Cervantes in Toledo."—Don N. Diaz Benjumea, chief of the school of "spiritual" interpreters of *Don Quixote*, writes from London giving news of the progress of a new English translation, spoken of, as we have reason to know, too favourably as being "very far advanced."—The eminent Cervantophile, Pardo de Figueroa, who chooses to wear the thin mask of M. Droap, contributes another "Epistola Droapiana."—Señor Barrera defends his opinion of the genuineness of a tract usually attributed to Cervantes, though published without his name, containing a narrative of the festivities at Valladolid on the occasion of the birth of Philip IV. in 1605.—Don Manuel Cerda continues his bibliography of Cervantes' works; and Father Sbarbi his astonishing polemic, proving the author of *Don Quixote* to have been a sound theologian.

Friedrich Bodenstedt, whose *Lieder des Mirza Schaffy* have already passed through forty-one editions, has just published his first novel, *Das Herrenhaus im Eschenwalde*, which is expected to have as much vogue as the shorter tales published last year under the title, *Aus deutschen Gauen*.

The 20th of October will be the two hundredth aniversary of the birth of the great compiler, Lodovico Antonio Muratori. The firm of Zanichelli in Bologna announce their intention to commemorate this date with a volume of documents and original pieces—*Scritti inediti di L. A. Muratori*—prepared with the collaboration of various scholars. The volume will be divided into two parts : the first will contain contemporary documents, edited by Cesare Foucard, in illustration of Muratori's career as archivist, librarian, and court councillor ; the *Treatise of Moral Philosophy for the use of the Prince*, edited by Professor Galassini, a set of letters to Cardinal Quirini on the restriction of festival expenses, and some more miscellaneous letters ;—the second, an *Autobiography*, addressed to Giovanni Antico de' Conti di Porcia, and a *Catalogue* of the bard's *Archives*.

There are some important English announcements for the ensuing season. Mr. Tennyson will finally complete his Arthurian cycle with an Idyll of *Gareth*, to be published in a volume together with *The Last Tournament*. Mr. Morris's poem of *Love is Enough*, which has been written some time, and was to have awaited the completion of a set of designs and illustrations by the author and Mr. E. Burne Jones, is now, we understand, to anticipate these embellishments in a plain edition already in the press. Lord Lytton announces a novel of society and reflection, under the title *Kenelm Chillingly*.

Art.

ART NOTES.

A fine portrait of Eugène Delacroix, painted by himself, has been hung in that gallery of the Louvre which is appropriated to works of the modern French school. The painting in question is a vigorous but rather slight piece of work, and appears to belong to that period of the artist's life in which he was in the fullest exercise of his powers, and comparatively simple in the methods he employed. He bequeathed the picture to his servant, Mlle Leguillon, who in her turn has bequeathed it to the museum of the Louvre.

M. Hector Horeau, one of the most distinguished amongst modern French architects, has just been carried off by death. M. Horeau was born at Versailles on October 4, 1801. In 1850, he competed for the Crystal Palace ; but although his design was selected from amongst two hundred and forty-five others contributed by artists of all nations, and although it received the first medal, it was set aside for that of Sir Joseph Paxton, who was strongly supported by Prince Albert and the great engineer Stephenson.

On August 11, Friedrich Eggers, Dr. Phil. and Professor of Art-history at the Royal Academy of Berlin, died in that city. After the death of Kugler, Dr. Eggers conducted the *Deutsche Kunstblatt* up to the date of its extinction.

Count von Usedom has recently entered on his office of General-Director of the Royal Museum of Berlin. Dr. Ernst Curtius has been named Director of the Museum of Antiquities ; and Dr. W. Bode as Directorial Assistant to the Galleries of Sculpture and Painting. Professor Springer has been called to the University of Leipzig, to fill the newly created chair of middle-age and modern art-history. Professor Springer was but recently nominated to Strassburg from Bonn.

Signor Demetrio Salazaro communicates, in a letter to the editor of the *Zeitschrift für bildende Kunst*, two interesting discoveries which have been lately made in the library of the Naples National Museum. The first is that of a *Trattato della Miniatura* of the fourth century, a treatise on the technic of miniature-painting at that time, on the preparation of the colours, on the employment of gold, &c., which has never been published nor even inscribed in any catalogue. The second find is a portrait of Desiderius, afterwards Pope Victor III., which occurs in a Montecassino MS. Judging from the importance of the portrait and the style of the drawing, Signor Salazaro is inclined to consider it the work of Leone Amalfitano, the originator of another Codex of Montecassino, in which a similar portrait is found. The zealous inspector of antiquities expresses a hope that he may speedily be able to publish the treatise, and he announces that the portrait will be reproduced in his intended work on South Italian antiquities from the fourth to the thirteenth century.

The example set by the town-council of Nürnberg in commencing the wholesale destruction of the historical monuments of the city has not been without its result. Inspired by a like ardour, some unknown person or persons have been going about destroying whatever lay handy to their reach. First one of the stone oxen on the Fleischbrücke had its horns knocked off, next the figure of God the Father on the Moritzcapelle was mutilated, and now the ironwork which protected Rauch's statue of Dürer has been torn down and partially carried away. A bystander of the poorest class, seeing two civic dignitaries gazing curiously at the wreck, gave vent to his feelings with "*Na, der macht's eben dem Magistrat nach, die reissen ja auch Alles ein !*"

The Milan Exhibition, opened August 26 (see *Academy*, vol. iii. p. 327), is divided into two parts : one represents the modern, the other the earlier Italian school. Something over five hundred artists have contributed to the division of modern Italian painting and sculpture. The division for earlier work is devoted especially to the epoch of Lionardo da Vinci, in honour of the erection of his memorial. The gallery of paintings contains about two hundred and fifty works of the chief and most interesting masters of the old Lombard school, such as Mantegna, Luini, Gaudenzio Ferrari, Beltraffio, &c. Works of sculpture, goldsmith's work, woodcarving, all of the same age, abound ; a special place is also provided for Agostino Busti's monument to Gaston de Foix.

A descriptive catalogue of the contents of the Grüne Gewölbe has now been given to the public by Dr. J. G. Th. Grässe, the director of the Grüne Gewölbe.

The *Zeitschrift für bildende Kunst* for September 6 contains—an article on Eduard von Gebhardt, one of the most distinguished pupils of the Düsseldorf school, by Bruno Meyer. The article is accompanied by an engraving of von Gebhardt's painting, "Die Erweckung von Jairi Töchterlein," painted in 1864.—Von Engelmann concludes his series of valuable notices of the last excavations at Pompeii and Herculaneum.—R. Zimmermann writes a short notice, but much to the point, on *Neue Schriften über Aesthetik*.—Dr. Thausing reviews Arnold's recent publication, *Das Werk von Georg Christian Wilder*.—The present number is distinguished by containing various proofs of wood-engravings from the catalogue of the *Ornamentstichsammlung* of the Austrian Museum of Art and Industry. One example after Jobst Amman is remarkably spirited and artistic. An etching after Tintoretto by Unger also deserves notice. As a piece of translation it is admirable.

The number for the 31st August of the *Jahrbücher für Kunstwissenschaft* commences with an essay by Professor F. Piper on the subject of *Maria als Thron Salomo's*. Professor Piper's original intention in writing the paper was simply to furnish a descriptive comment on a picture in the Christian Museum of the Berlin University to the catalogue of the collection. He enters upon a very elaborate and careful investigation of the symbol, of the various modifications in its treatment, and of the signification of the different and varying accessories. Having found in Christ the true Solomon, and addressed his mother, "Ave veri Salomonis mater," the next step was to find in the component parts of Solomon's throne foreshadowings of the virtues of the Virgin. Then Peter Damien, preaching on the birth of the Virgin, points out that she is herself that marvellous throne ; the ivory betokens her maiden modesty, the gold the Godhead by which she is overshadowed ; the two lions at the elbows are the Archangel Gabriel and St. John the Evangelist, and the twelve lions of the steps are the Twelve Apostles. Professor Piper gives a plan of the picture to which we owe his interesting paper.—

Dr. Ed. Dobbert contributes a few remarks on the treatment of the Last Supper in Byzantine art.—Wilhelm Schmidt sends notes on Holbein's portrait of himself, in the Uffizi at Florence, and on Nicolaus von Neufchâtel.—Dr. A. von Zahn writes on the *Ergebnisse der Holbein-Ausstellung zu Dresden.* In a note he gives a communication made to him by Professor Fechner, of Leipzig, after the essay was in print, which may possibly prove of importance by making fast one more link in the pedigree of the Darmstadt Madonna. Herr Ernst Benedict Kietz, an artist who resided long in France, writes to Professor Fechner from Zürich, 7th August 1872: "M. [Pierre] Érard, the pianoforte manufacturer, now dead, showed me in his château La Muette at Passy, which belonged to Marie Antoinette, the gallery which his uncle (Sebastian), the founder of the business, had had built expressly for his fine collection of pictures, in which still hung only a few but good old paintings. He expressed his sorrow that this collection, after his uncle's death without children, had to be sold on account of the heirs, and amongst others a Holbein Madonna, which was in no wise behind the famous Dresden one." Waagen mentions that Spontini obtained the Darmstadt picture for Prince Wilhelm through his brother-in-law Delahante, and it is a significant fact that Spontini's wife was a sister of Pierre Érard. But there are some dates to be set straight. Sebastian Érard, at whose death the picture should have changed hands, died in 1831, and according to Waagen in 1822 the Madonna had already arrived in Berlin. Possibly M. Pierre Érard may be in error as to the time at which his family parted with their Holbein.—Albert Jahn has some interesting notes on the sketchbooks of three Renaissance masters, in which he draws attention to the rich fund of materials lying unexplored in the library at Siena.—A paper by Georg Dehio, on the Theodoric statue at Aachen, concludes the number.

New Publications.

Bersezio, Vittorio. Roma la Capitale d'Italia. Con 260 incisioni. Milano: E. Treves.

Cobbett, Rev. R. S. Memorials of Twickenham, Parochial and Topographical. Smith, Elder, and Co.

Dincklage, E. v. Geschichten aus dem Emslande. Zweiter Band. Mit dem Portrait der Verfasserin. Leipzig: Schlicke.

Dullo, Gustav. Richard Wagner. Ein Wort der Aufklärung über die Nibelungen-Trilogie. Königsberg: Braun und Weber.

Kohut, Adolph. Alexander von Humboldt und das Judenthum. Ein Beitrag zur Culturgeschichte des 19. Jahrhunderts. Leipzig: F. W. Pardubitz'sche Buchhandlung.

Lippert, Dr. Paul. Napoleon I. und sein Capua in Berlin. Roman.

Mithoft, H. Wilh. H. Kunstdenkmale und Alterthümer im Hannoverschen. Hannover: Helwing'sche Hofbuchhandlung.

Tautphoeus, Baroness von. Cyrilla: a Novel. Bentley.

Theology.

The Authorship and Historical Character of the Fourth Gospel considered in reference to the Contents of the Gospel itself. A Critical Essay by William Sanday, M.A., Fellow of Trinity College, Oxford. Macmillan and Co.

In this essay, which has been already commended to the notice of the readers of the *Academy* (vol. iii. pp. 167, f.), Mr. Sanday has examined in detail the contents of the Fourth Gospel with the object of determining from internal evidence the authorship and the historical character of the record. For carrying out this purpose he has submitted the whole Gospel to an elaborate analysis, and discussed with exhaustive care the various details which affect his enquiry as they present themselves. This critical investigation of the Gospel occupies the first seventeen chapters of the essay. The three remaining chapters deal with the *Current Arguments against the Genuineness of the Gospel* (xviii.), the *Summary Proof of the Genuineness of the Gospel* (xix.), and the *Hypothesis of Mediate Johannean Authorship* (xx.).

The general conclusion at which Mr. Sanday arrives is the only one, as we believe, to which a complete, impartial, open-hearted examination of the Gospel, as a whole, such as Mr. Sanday has set before the English reader, can lead, that "the Gospel is the work of the Apostle, the son of Zebedee;" that "it is the record of an eye-witness of the life of our Lord Jesus Christ;" and that "its historical character is such as under the circumstances might be expected;" "it needs" (Mr. Sanday adds) "no adventitious commendation to make it higher." But to obtain this conclusion from internal evidence, it is necessary that the enquiry should be free; and it is obvious that no critical examination of the Gospel can be free which starts with the assumption that the Resurrection (for example) is a myth and not a fact. In such a case the critic has to account for the appearance of phenomena in the narrative which are inconsistent with historical truth; and this assumption, which is generally made tacitly, produces a problem so different from that which is ostensibly put forward in the criticism of the life of Christ that nothing but error can arise from confusing the two together. To conduct an investigation into the worth of a record after predetermining either avowedly or by implication that an essential part of its contents must be legendary is to beg the question in debate. "The attitude proper to an enquiry . . . when the exact value of the historical evidence is the point at issue, will be" (as Mr. Sanday most justly observes, p. 48) "to assume provisionally that miracles are credible" (comp. p. 126, *note;* p. 271, *note*).

This necessary assumption, however, is the only one which Mr. Sanday makes; and even those who refuse to grant it will acknowledge the perfect truthfulness, candour, and sobriety, with which he takes account of the separate difficulties of each miraculous narrative. If the difficulties appear in his analysis to be less than they are commonly held to be, it is simply because they are not picked out and grouped together, but left as parts of an organic whole. Nothing is slurred over or extenuated, but the grounds of objection naturally assume their true proportion when they are regarded in connection with all the phenomena of the Gospel (see pp. 163, f.; 295, f.; 302, f.). The greatest merit of Mr. Sanday, and there can scarcely be a greater, is indeed this: that he brings before the student the many-sided character of the record with calm and patient exposition; that he points out its spiritual affinities with particular forms of thought and a definite crisis of national development; that he brings back the attention from isolated points to the general scope of the entire history; that he treats the author as a living man, and the events which he describes as actual events, reflecting in countless subtle ways the influences of an age and place rich beyond all others in the elements of an intense and manifold yet transitory religious life. Thus, for instance, he traces out with singular skill the relation of the current Messianic idea to the progress of the work of Christ as depicted by St. John. "It is almost superfluous," he remarks—and the observation may be extended to St. John's portraiture of Judaism throughout—"to point out how difficult, how impossible, it would have been for a writer wholly *ab extra* to throw himself into the midst of these hopes and feelings, and to reproduce them, not as if they were something new that he had learnt, but as part of an atmosphere that he had himself once breathed" (p. 124).

But the question of real difficulty in the Gospel of St. John is not that of authorship, nor yet of the truth of the facts which it relates, but of the essential authenticity of the discourses of the Lord contained in it. On this question Mr. Sanday decides that "the discourses must have undergone a sensible modification in the mind of the Apostle

before they came to be written down" (p. 73); that they "are deeply tinged with the individuality of the Evangelist" (p. 128); that "what is presented as a single discourse is probably made up of the fragments of several fused together and transmuted in the mind and memory of the Apostle" (p. 114); that "it had become impossible for the Apostle to separate the subjective and objective elements in his own mind" (p. 141); that "the discourses are all no doubt repeated under the impression that they represent what was actually spoken;" but that "it is impossible for an active mind to retain the exact recollection of words over a space of perhaps fifty years" (p. 222, comp. p. 300); while still "they are not so far subjective as that they cannot have been written by an ear-witness and an apostle, or so as essentially to misrepresent the originals of which they are the reproduction" (p. 275).

In drawing these conclusions, we venture to think that Mr. Sanday has not given sufficient weight to several considerations which tend to modify them very greatly. It is at the outset unlikely, as a mental phenomenon, that the memory of the Evangelist should have preserved with intense vividness the minutest circumstances of action, and then at once have failed in the reproduction of words which were bound up with the facts. Moreover, if we once admit that the Gospel lives in an atmosphere of miracle, there can be no difficulty in believing that the natural powers of St. John were quickened to enable him to fulfil his work. It may also be added that it is a perfectly gratuitous assumption (though it seems to be universally current) that the discourses in St. John's Gospel were put together or committed to writing later than the discourses in the Synoptists. So much is clear from the whole structure of St. John's narrative that it represents oral teaching which he had long addressed to a circle of believers (this explains the comments, iii. 16–21; 31–36, on the discourses which precede them), just as the public oral teaching of the Apostles generally was unquestionably the ultimate basis of the Synoptic narratives. There is then nothing improbable in the supposition that the two cycles of teaching began to take shape from the first establishment of the Church (see v. 2, ἐστίν); and if it were so, it is evident that one would have a wide and open currency, while the other would be kept within very narrow limits, and circulated only under something of reserve, and not shaped into a gospel till the very close of the apostolic age. But not to insist on this conjecture, which is at least as plausible as the popular opinion, there are several features in the Johannean discourses themselves which require to be brought into prominence before they can be rightly understood. They are compressed, often discontinuous, and at once (by a strange paradox) most specific and most universal.

The record of a living controversy is like the record of a battle. It is no more necessary to reproduce all the words spoken in the one than it is to describe all the incidents in the other, in order to give a true account of it. No one probably, supposes that St. John has preserved all the words which the Lord spoke on the occasions described in chapters v.–viii. It is enough if the selection of utterances which he has given conveys (as we believe it does) a perfect record of that aspect of the discourses which the Evangelist designed to portray. There is often need of the greatest patience and of the most watchful criticism to observe and follow the thread of thought which was (no doubt) fully developed in the spoken discourse. Such (to take one instance) is the origin of the difficulty in viii. 13, 14. In the same way, we find implied or explicit reference to unrecorded conversations which were present to the mind of the Evangelist, and probably were familiar to his first hearers. Thus, for example, some earlier discussion on Isaiah liii. (and what could be more natural?) seems to have given occasion to the words of the Baptist, i. 29 (comp. pp. 40, ff.).

A sense of the discontinuity of the discourse is even more necessary to the right understanding of them in many cases than a sense of their compression. It happens frequently that the interlocutors are changed, that questions or objections are passed over silently, that even the scene is altered, while, on a superficial view, nothing of all this is apparent. In viii. 30; 32, ff., the change of tone depends upon a distinction in the character of the audience, which even Mr. Sanday overlooks (p. 155). Out of the "many who believed on Him" (ἐπίστευσαν εἰς αὐτόν) a special group are taken—"the Jews who believed Him" (οἱ πεπιστευκότες αὐτῷ Ἰουδαῖοι). In the body of the new disciples there were representatives of the degenerate hierarchy who admitted the claims of Jesus to be Messiah as true, and yet interpreted His office according to their own false views wilfully and persistently. St. John's use of the term "Jews," and the change in the construction of the verb, emphasize the transition, and when it is recognised, the general difficulties of the discourse which follows disappear. But the sixth chapter furnishes the most remarkable illustration of this phenomenon. Mr. Sanday, following the commentators, speaks of the teaching of the Lord contained in it as a long discourse, "addressed . . . to a mixed audience in the synagogue at Capernaum." A closer study of the record will show, as it seems, that there are three distinct audiences (or rather four), three distinct types of discourse, and certainly two distinct scenes. It is quite inconceivable that the Galilean crowd (verses 22, ff.) found the Lord in the synagogue (verse 59), and that the first animated dialogue (verses 26–35) took place there. Again, there is no mention of "the Jews" till verse 41, though they reappear in verse 52. Nothing, then, can be clearer than that "the Jews" are specifically distinct (as elsewhere in St. John) from "the multitude" (verse 24).* The "disciples" appear to have formed a third group, who are specially addressed (verses 37–40); for it will be observed that the objectors in verse 41 go back to verse 35, and take no notice of the more explicit claims advanced by Christ in the verses which follow. It must be sufficient now simply to indicate these constituent elements of the great discourses of this chapter, which really present specimens of (1) the Galilean teaching, (2) the controversial teaching with "the Jews," and (3) the fuller revelations to the disciples. Thus it is that this Galilean narrative, so far from telling against the belief that the peculiarities of the discourses of the Lord recorded by St. John depend on the circumstances of their delivery, really confirms the belief in a most unexpected manner.

This result would be further strengthened if it were possible now to show the individuality even of the open controversies of the Lord in St. John's Gospel, which places them in a peculiar category. This point, however, must be reserved for another occasion; but one subject still calls for notice, where there is less room for difference of opinion.

There can be no doubt that a critical determination of the evangelic texts must precede the critical interpretation of them; and nothing is more surprising than the perfunctory method in which scholars, who spare no pains in dissecting a text, prepare the subject for their experiments. A question of reading, if it happens to be noticed, is treated as if it were an isolated fact, and disposed of either by a mechanical calculation, in which authorities are supposed to have constant (numerical?) values, or by an autocratic judgment on "internal evidence." Mr. Sanday has not yet,

* It is characteristic of Prof. Maurice that he notices and rightly insists on this distinction (*The Gospel of St. John*, pp. 182, f.).

as he modestly confesses, given time to textual criticism. This is, perhaps, a defect of secondary importance in the present work, but to attempt to deal with the Synoptists (as we trust he will do) without a clear perception of the affinities of the chief authorities and of their cumulative value in different groupings would be little short of courting failure. A single example furnished by the present essay will suffice to make this clear. The omission of the words "neither the Son" in Matthew xxiv. 36, as compared with Mark xiii. 32, is quoted in passing (p. 19) as one of "the principal instances of alterations" [in the common groundwork of the first three Gospels] "made from dogmatic grounds." Now, whatever may have been the cause of the omission of the words in the later copies, there can be no doubt that they were found in the original Greek text of St. Matthew. (Comp. also the false reading of Mark xi. 9, given on p. 194; and the remark on Luke xxiv. 12, p. 259.) But even in St. John, Mr. Sanday wavers, or, in our judgment, errs, as to readings which are of more or less importance. Thus, in iii. 25 he adopts silently the reading Ἰουδαίων (p. 85), and consequently misses the vivid particularity of the singular Ἰουδαίου, which is certainly right; in vi. 9 he makes a point of ἓν, which is no less certainly spurious; in xiii. 2 an internal consideration is allowed to outweigh the decisive ancient authority for γινομένου; and though the reading in xviii. 24 may, in the opinion of some, be made uncertain by other arguments, it is quite impossible for any one who has studied the combinations of authorities through a few chapters of St. John to say that "there appears to be a nearly even balance of authorities for οὖν and against it" (p. 244).

If we have thus frankly indicated some points on which we feel constrained to differ from Mr. Sanday, we trust that he will see in our remarks only a sign of the deep interest and pleasure with which we have read his book. The essay is not only most valuable in itself, but full of promise for the future. Mr. Sanday has proposed to himself a work for a lifetime (preface, p. viii); and we heartily desire that he may be enabled to execute the plan which he has sketched out with the calm, manysided, reverent labour, with the subtlety and sympathy of thought, with the grace and clearness of style of which he has given us the first-fruits. The criticism of the Bible has suffered grievously from haste under the guise of candour; but even when Mr. Sanday's conclusions differ from our own on grave points, we feel that what he has written will in the end be of good service to the Truth, which we have alike at heart. We are at present only on the outskirts of the knowledge of Holy Scripture, and yet we can perceive that the apostolic writings have a message to our own age, which only needs an interpreter that it may satisfy our doubts and aspirations.

B. F. Westcott.

Le Christianisme et ses Origines. Première partie: L'Hellénisme. Par Ernest Havet. Paris: Michel Lévy Frères, 1871.

M. Havet is best known by his edition (1852) of Pascal's *Pensées*, rearranging and annotating the text recovered by M. Faugère, and by an article on M. Renan's *Vie de Jésus* in the *Revue des deux Mondes*, published separately under the title *Jésus dans l'Histoire* (1863). In the present volumes, which, he wishes his countrymen to observe, were all but ready before the war, he republishes a series of papers which appeared in the *Revue moderne* and the *Revue contemporaine* from 1867 to 1869 (vol. i. p. xliv). They exhibit the Pagan element in the sources from which M. Havet holds Christianity to be derived, and there is to be another part exhibiting the Jewish element: it will probably (i. p. xv) bear the second title, *Ancien et Nouveau Testament.* The work will then be complete; for in spite of the principal title, which seems to owe its precise form to the necessity of avoiding a title employed by M. Renan, there is to be no division dealing with Christianity irrespectively of its sources. This is chiefly to be regretted on account of the clearer and fuller view of Christianity in germ which would have been gained by a more first-hand study of it as developed: otherwise the plan is not so defective as might be supposed; for the real subject of these two volumes is independent of all question as to what Christianity is, and would be most accurately stated without using the word at all, as the detailed answer to the question—How much of the theology, religion, and morality, of Western civilisation existed less developed in it before the preaching of Christ? The author would probably accept this account of his programme, but he does not always adhere to it; a strict adherence to it would have excluded much that should rather be classed as Paganism in Christianity than as Christianity in Paganism, and would have cleared his pages of a number of coincidences between the language of the poets and philosophers and the language of the Bible or the "Catechism." We should have missed some epigrammatic points, but have been spared much irrelevant matter.

The subject is not new, and M. Havet does not profess to have much that is new to say about it. At one place (i. p. xxix) he is so modest as to represent his work as a classified collection of materials. But this does no justice to his generally picturesque style, to his well managed transitions and connections, to much thoughtful criticism, and to the warm, if not exactly wide, sympathies which keep the reader in the world of men and not in a world of books. His plan is best explained when he says (i. 4, compare p. 244) that the grand impression of an education of humanity, which a few powerful writers have conveyed in large outlines, he hopes to complete and deepen in his readers by fulness and richness of detail. The general effect approaches that of Mr. Lecky's books.

Unfortunately M. Havet is obliged to confess (i. p. xl) that he has hardly used any foreign works not translated. "J'ai souvent souffert," he adds, "de cette ignorance": yet he hardly seems to see how serious the confession is; especially as the exception in favour of translated books is very scantily represented among his authorities, and his "langues étrangères" turn out to include modern Latin, at least when not written by Frenchmen. This being so, the reader will not be surprised that the treatment of the pre-Socratic philosophy is slight almost to frivolity (i. 29, 43, 99); or that such a question as that of Socrates' belief in immortality is discussed with what can only be called *naïveté* (i. 146, 377); or that the Xenophontean *Apology* is without discussion cited about as freely as Plato's, and employed to correct the testimony of Xenophon's *Memoirs* (i. 147, 377); or that Plato is made without misgiving the author of a coherent system of philosophy (i. 203, and chapter vii. generally); or that the Neopythagoreans are barely touched upon (ii. 142, 234). Perhaps these latter will be handled episodically in the Jewish division. Meanwhile it must be said that there is not too much about the old Pythagoreans, nor much too much about the Eleusinian mysteries (though, as usual, these are too freely used as representing the mysteries generally), and very little about Oriental influences. Only, these things would occupy their proper places still more accurately if the influence of Delphi, which lies on the face of history, had been more conspicuous in the book.

Of the above deficiencies the slight treatment of the pre-Socratic philosophy is not in itself the most important; but

it is the most significant, for it is the first serious symptom that the exposition is to be far too exclusively ethical. Now there is much in Christianity which cannot be brought under the widest definition of ethics. If Diogenes Laërtius or any ancient historian or critic of philosophy had written of St. Paul, he would have been obliged to deal with a large part of the apostle's doctrine under the head of physics. It is, therefore, needless to point out in detail how an examination of the sources of Christianity must suffer directly from such a narrowing of the field. But indirectly this one-sided treatment is connected with something which goes deeper, the excessive value M. Havet attaches to the negative or destructive operation of philosophic progress. He actually believes (i. 121) that if "such men as Diagoras" (whom he seems to take for a philosopher because he is proverbial as an atheist) could have had their own way, a sound edifice of morals, politics, and science might have been established in the fifth century before Christ; only the gods were too strong for us. He says himself (i. 138) that their strength was reinforced by a moral reaction against the license which had been encouraged by destructive criticism, and he knows how to illustrate very happily (i. 351) the natural horror of a theological vacuum. But he does not seem to recognise that unless the unrealities of superstition are replaced by real knowledge, the void is prematurely created. Nothing would have enforced this truth more effectually than a conception of the subject wide enough to embrace its more scientific branches.

At the same time the whole work is written in a polemical spirit, which is the more active cause of this over-valuing of merely destructive work. M. Havet writes the history of theology and religion from a point of view which is certainly antitheological, and which he would not mind hearing called antireligious. It is quite right that a man who occupies this point of view should write the history of theology and religion from it: but the historian ought to sympathize with the theological and religious spirit more than M. Havet does. He has formed his own notion of God, and, without the excuse of believing in its reality, measures by it any theology which comes in his way. If a notion of God does not include for instance a supernatural power of entering into and taking up, as it were, into himself the misery of mankind, it is not a good instrument for dealing impartially with those who suppose themselves to apprehend God under that aspect among others. The most conspicuous instance of M. Havet's unsympathetic treatment of theology (i. 166, on Rousseau's contrast of the death of Jesus with the death of Socrates) would take too long to examine in detail, but it is agreeable to observe that it is also a conspicuous instance of his ready appreciation of spiritual greatness as soon as he is allowed to approach it on the level of humanity. Yet his want of historical sympathy extends further. He has little sense of the spontaneous play of thought and curiosity. He cannot imagine that the paradoxes of Zeno, Protagoras, and Pyrrho, could have had any aim short of undermining Olympus. Generally he seems too fond of attributing an *arrière-pensée* to the earlier thinkers: not the esoteric doctrine which a venerable school of interpretation attributed to them, but something more like the well-bred reticences of modern unbelievers. He does not give Socrates credit, much less Plato, for believing in the existence of the gods. On the other hand, Diagoras having denied it, he resorts to an arbitrary anachronism to account for the audacity of the avowal. The passage (i. 136) is an instructive one, not to the student of the Hellenic sources of Christianity, but to the reader of M. Havet.

It is consistent with all this that the best thing in the book is the force with which it brings out the religiousness of Greek and Roman philosophy. It is well shown how from the time of Socrates philosophy became constantly more practical, more conversant with morality, sounder in its morality, more the affair of all sorts and conditions of men, more religious, more like Christianity. Accordingly the second volume (for the order of exposition is chronological) is the more valuable of the two. Otherwise M. Havet is happiest where he deals with literature, as in Euripides, or where problems of personal character are concerned, as in Cicero and Seneca. This cannot be said to be the case with his account of Socrates: and Plato seems somewhat to elude him.

If not exactly a critical writer, M. Havet seems accurate in details. His references are full and exact, and his translations are generally good, if occasionally strained. He is less to be depended on beyond the strict limits of his subject; as when he says (ii. 45) we have scarcely any author and absolutely no historian belonging to a period during which Polybius, if he had not begun to write about it, lived, acted, and observed; and less again beyond the widest limits his subject can be supposed to have, as when he summarily corrects Megasthenes (ii. 37) for saying that Indian learning was preserved by oral tradition. Quite within the subject however, and not unimportant, is the misleading statement that the word "salut" or *salvation* comes from the Stoics and not from the Bible. The Stoical *salus*, we need not quit M. Havet to learn (ii. 266 and elsewhere, but see Cicero, *Tusc.* iv. 10, on Chrysippus), is *health*; whereas the *salus* of the Church is *deliverance*, σωτηρία, *y'shû'â*; insomuch that we read *salus ex inimicis*, *de manu*, &c. (Luke i. 71). In general M. Havet is disposed to criticize too severely the moral and psychological nomenclature of the Bible. Sometimes what he says comes merely to this, that Semitic languages do not form the close compounds of Aryan languages. To infer that the Jews never formed the conception of idolatry does strange justice to "Isaiah" at least. It may be feared that in the second part of the work, although (to judge by an interesting and powerful passage at the end of the preface) full justice will be done to the moral energy and enthusiasm of the Hebrews, their power of originating ideas will be limited too narrowly.

It is hard to know what to say of M. Havet's opinion on the relative importance of the Pagan and Jewish sources of Christianity. If we are to take him at his word in the preface (vi–viii, xiv–xvi), the Jewish and "Galilean" elements effected the "Christian revolution," but go for next to nothing in fully developed Christianity. Yet it is inconceivable that he should imagine he has accounted in the volumes before us for the vast edifice of Christian dogma, and improbable that he should not think it worth accounting for. But until we possess the other part of the work, all discussion of the question would be out of place: and it is to be feared that in consequence of the author's unfortunate limitation of his subject, such discussion will be almost equally out of place when the work is finished. C. J. Monro.

RECENT WORKS ON WESLEY AND WHITFIELD.

The works of Messrs. Tyerman, Gledstone, and Urlin, and Miss Wedgwood, on Wesley and Whitfield, cannot be allowed to pass without recognition, though the time for a critical estimate of the subject is perhaps still distant. Differing as they do in purpose and merit, they are an evidence of the change which has passed over the religious press in its way of treating a great spiritual movement. One of them, at least, viz. Miss Wedgwood's, is distinguished by its freedom not only from the prejudices of dogmatism, but from those of a submissive discipleship. The authoress describes her work as—not a biography—but an "attempt to delineate the influence of a particular man upon his age." In accordance with this plan, she

has analysed the various influences which in her opinion contributed to mould Wesley, *e.g.* his race; the ascetic movement in Oxford; his contact with German mystics among the immigrants whom he met with in his American mission. She attempts to explain the nature of his views, the gradual development of his missionary plans for England, the causes which aided and those which opposed their development. Her sketch is more slight with regard to the perfected system, and to its influence indirect as well as direct. The analysis of influences may perhaps be challenged not so much on the ground of inaccuracy as of incompleteness, while the estimate of Wesley's teaching, if even theologically defective, is at any rate truthful in its general effect. Mr. Tyerman's *Life and Times of Wesley* is a work of far greater pretensions, but fails to satisfy even a moderate literary standard. Offences against good taste are but too common, and we cannot repress the wish that the book may be rewritten and abridged in a future edition. It seems in fact to be mainly designed for the use of the Methodist community, and hence it gives expression to an admiration for Wesley which borders sometimes on the ludicrous. Yet with a rare and commendable frankness it sets forth the great leader just as he was, with his little failings as well as his great virtues. Purely personal matters like Wesley's falling in love and courtship are described with a fulness of detail which reminds one of an ordinary novel. Far be it from us to condemn this amusing particularity. There is nothing in the facts thus revealed disgraceful to Wesley. They relieve the Loyola sternness which is usually ascribed to him; they show him to have been full of tenderness and feeling, capable of loving, and in fact very destitute of worldly wisdom and calculating prudence. On the whole, with all his defects of style, Mr. Tyerman has produced a book of permanent value. Southey's *Life*, checked and corrected by R. Watson's criticisms, must always hold its ground as the classical memoir, and the *Centenary of Methodism* (by the Rev. T. Jackson, a Wesleyan minister) as the best source for a general sketch of Wesley's system; Mr. Tyerman's work will always be a museum to which students will resort for its copious and in great part hitherto unpublished materials for the life of Wesley.

Memoirs of Whitfield were few and out of print, and Mr. Gledstone (an Independent minister, we believe, at Sheffield) has furnished us with a full and sympathetic yet not extravagant picture of Wesley's great rival. There is hardly a sentence which could offend even a secular reader, except one at the end of the volume about "Grace, Grace, Grace;" but Mr. Gledstone is doubtless right in believing that Whitfield himself would have regarded those few last lines as the true explanation of his life. The limited interest felt in Whitfield's biography is due to the temporary character of his work, which was partly overshadowed by that of his coadjutors and rivals. It is the man, what he was, not what he did, which attracts us: and it is this view of him which M. Gledstone has succeeded in presenting to his readers.

Mr. Urlin's modest little book (*John Wesley's Place in Church History*) forms, by its pamphleteering spirit, a curious contrast to Miss Wedgwood's. The object of the writer is to exhibit Wesley as a high-churchman, and to produce the impression that Methodists would fulfil the designs of their founder by reuniting with the church. He certainly contributes some interesting and novel materials towards understanding one aspect of Wesley's mind. There is no doubt that Wesley passed through a state of high-church feeling, and had a slight acquaintance, through the works of the Nonjurors, with some early Christian liturgies. A slight trace of this is now and then perceptible in his later history, but his general views were the reverse, and his work mainly antagonistic. It was not his high-churchmanship which made Wesley the founder of Methodism.

Intelligence.

The *Ordnance Survey of Palestine* has appeared, accompanied by a letterpress volume, with reports and appendices by the members of the expedition and other scholars.

Dr. Abbeloos, of Malines, and Dr. Lamy, of Louvain, have brought out the first volume of the ecclesiastical chronicle of Bar-Hebraeus (A.D. 1226–1286; see title in full under "Philology"), edited from the MS. in the British Museum, with a translation and historical and geographical notes. It will no doubt supply much important material for the history of the Jacobite and Nestorian heresies.

M. Herder, of Freiburg, a Roman Catholic publisher, has issued a prospectus of a *Cyclopaedia of Christian Antiquities*, to be edited by Prof. F. X. Kraus. A second, corrected, edition of Hefele's *Conciliengeschichte* is in the press.

The *Zeitschrift für historische Theologie*, No. 2, contains a revised edition of the text of Commodian's *Apologeticum*, by Rönsch; and an article on the age of Irenaeus, and the origin of the old Catholic Church, by Lipsius (whose recent remarkable work on the legend of Peter will be reviewed in the *Academy*).

Dr. Pusey has just published a volume of University Sermons (from 1859 to 1872).

A new work by D. F. Strauss, *Der alte und der neue Glaube, ein Bekenntniss*, is announced for this month.

Contents of the Journals.

Zeitschrift für wissensch. Theologie, vol. xv. No. 4.—Contributions to the history of the conciliatory form of Pauline doctrine (*Unions-Paulinismus*), by A. Hilgenfeld. [1. The genuineness of Rom. xv., xvi. 2. The Acts of the Apostles and Justin Martyr.]—On the Doxology in Rom. ix. 5, by E. Harmsen.—On Luther's translation of Sirach, by W. Grimm.—On a newly discovered MS. of the Vulgate, by H. Sevin. [A MS., probably of the fourteenth century, now in the possession of Herr du Fay, of Heidelberg. It is complete, except in the first leaf of the New Testament. Extracts and specimen readings are given.]—On the so-called Muratorian Fragment, by A. Hilgenfeld. [1. A connected text of the fragment. 2. A retranslation into Greek, with critical notes. A historical estimate of the fragment in conclusion. Cp. notice in *Centralblatt*, Aug. 10, by R . . . h.]—Notices: Weiss' *Marcusevangelium*; Keim's and Hausrath's *Histories*, &c., by A. H.; Martensen's *Christliche Ethik;* and Rothe's *Stille Stunden*, by O. Pfleiderer; &c.

Theologisch Tijdschrift, July.—History of the Logia-hypothesis, part ii.; by H. U. Meijboom. [Ch. iii. Application of Schleiermacher's hypothesis to Synoptic criticism in Germany. Ch. iv. The opponents of the hypothesis since 1848.]—Marten's *Faith and Works according to the Epistle of James;* rev. by Jungius. [A very able work of a conservative critic, called forth apparently by the equally able work of Blom on the opposite side.]—Bouvier on *Social Progress and the Pastors;* rev. by van Goens. [An opportune address to theological students at Geneva; social questions to be taken up in a practical spirit from a Christian point of view.]—Notices: Waitz' *Anthropology*, vol. vi.; Lenormant's *Essai sur Bérose;* Muir's *Sanskrit Texts*, vol. ii.; Ralston's *Songs of the Russian People*, &c.; by C. P. Title. [Able discriminating notices, which we have not space to analyse.]—Theological periodicals, by A. D. Loman.—Ranke's edition of the Würzburg palimpsests; new part of Field's *Hexabla;* Diestel's edition of Knobel's *Isaiah;* Keil's *Jeremiah;* Martineau's lecture on *The Place of Mind in Nature*, &c.; by A. Kuenen.

New Publications.

Crowfoot, J. R. Observations on the Collation in Greek of Cureton's Syriac Fragments of the Gospels with Schaaf's Edition of the Peshito and the Greek Text of Scholz. Williams and Norgate.

Ewald, H. Die Bücher des Neuen Bundes übersetzt und erklärt. 1. Theil. 2. Hälfte. Göttingen: Dieterich.

Jervis, H. History of the Church of France from the Concordat of Bologna, A.D. 1516, to the Revolution. 2 vols. Murray.

Phillips, G., President of Queen's Coll., Cambridge. A Commentary on the Psalms. 2 vols. Deighton, Bell, and Co.

Tyler, T. Some New Evidence as to the Date of Ecclesiastes. Williams and Norgate.

Wittichen, C. Die Idee des Reiches Gottes. Dritter Beitrag zur biblischen Theologie. Göttingen: Dieterich.

Wünsche, A. Die Weissagungen des Propheten Joel übersetzt und erklärt. Leipzig: Fues.

Science.

Introduction to the Study of Palaeontological Botany. By J. H. Balfour. Edinburgh: Adam and Charles Black.

Palaeontology is far from occupying a satisfactory place in modern scientific work. The services it renders to stratigraphical geology in supplying indications by which the relative age of rock masses can be ascertained encourages palaeontologists to assume for it the rank of a distinct science, to which from a biological point of view it has not the slightest claim. Palaeontology, indeed, stands in much

the same relation to biology that the study of inscriptions and manuscripts does to that of literature—using the word in a wide sense. In either case the student finds the more ancient materials for his work far less complete collectively, and far less perfect individually, than the more recent. In either case, also, without disregarding a certain technical dexterity in interpretation which comes with the familiarity of experience, the full significance of what is ancient will be more likely to be apprehended, and the information drawn from it to be placed in its proper relations, in proportion as a wide and critical knowledge of what is modern is brought to bear upon it. But the study of the records of the past, whether belonging to literature or to the life-history of the Earth, can never, however intelligently conducted, be an adequate end in itself. It is simply to put in order part of the material from which general conclusions will have finally to be drawn.

Unfortunately, however, in many cases the palaeontologist, especially in dealing with fossil plant-remains, has been very little influenced by considerations of this kind. He has been often content to describe name and figure as a distinct organism any fragment which could not be matched with some other fragment already treated in this way. It is no matter, therefore, for surprise to find that in one case portions of what there is reason to believe to have been one and the same plant have been referred to as many as nine distinct genera. The fragments are different simply because they belonged to different organs, or represented the same organ in different states of preservation. A botanist bringing his knowledge of recent plants to bear upon them makes allowance for this, and by a reasonable synthesis unites the *disjecta membra* into a single and complete organism.

Two hundred years ago it was still held in England that fossil forms were to be explained by a "plastic virtue latent in the Earth." No reasonable person holds such a belief now, or feels any hesitation about admitting that fossil organic remains really belonged to organisms that once lived on the Earth's surface. But in our National Museum our practice is so far behind our theory that instead of the remains of different groups of extinct organisms being associated with those of their recent representatives, in comparison with which they would be most profitably studied, we find them forming a single heterogeneous assemblage, arranged in the same gallery as that in which the collection of minerals is displayed. This is a system which cannot be maintained. Extensive palaeontological collections are not indispensable to the study of stratigraphical geology. The geologist, in fact, is compelled to accept from different naturalists the determination of the organic contents of the rocks he examines, just as he has recourse to the chemist and the mineralogist for his knowledge of the composition of the rocks themselves. On the other hand, the ultimate problem which presses itself more and more on the attention of the student in every branch of biology is to trace out the order which evolution has followed along different lines of organic descent. In studying recent organisms, we hold in our hands the ends of threads which stretch back into the past, if we could only follow them. Too often the threads are broken, lost, or but faintly seen. But the very difficulties which beset the investigation only prove the necessity of bringing to bear upon such traces as exist every means of elucidation at our disposal.

Considerations of this kind naturally prepare us to receive with satisfaction from the hands of an experienced botanist the first English attempt to sum up in an independent treatise the results which fossil botany has achieved. The *Fossil Flora* of Lindley and Hutton, although an exceedingly valuable work, was merely a miscellany of figures and descriptions, without any attempt at method. But Professor Balfour has aimed rather at giving conclusions than the materials for them, and in this respect his book will suggest a comparison with the *Tableau des Genres de Végétaux fossiles*, published now nearly a quarter of a century ago by Brongniart. Any one who has not kept pace with the very scattered literature of the subject will find his attention drawn in Professor Balfour's pages to almost everything of importance that has been recently published in it. Although in many foreign countries vegetable fossil remains have been the subject of more numerous and more splendid publications, yet it may be fairly claimed that it is with ourselves that the greatest progress has been made in the critical determination of their structure.

Professor Balfour has preferred to describe the vegetation of successive geological periods, so far as it is known, to tracing the history in time of different vegetable groups. No doubt this is a convenient as it is the conventional plan, but it is somewhat deficient in suggestiveness, and certainly opens the way to some misapprehensions. For example, Professor Balfour adopts Brongniart's identification of the Palaeozoic, Mesozoic, and Cainozoic periods in time (including in the last the Cretaceous epoch) with the reigns of Acrogens, Gymnosperms, and Angiosperms respectively. Twenty-three years ago this was not an unreasonable as it was certainly an elegant generalisation. That, in fact, was its defect; neat and sharply defined limits in natural phenomena generally fade away in the light of more ample knowledge. Nine years after the publication of Brongniart's *Tableau*, Dr. Paterson discovered in a bituminous shale near Edinburgh *Pothocites Grantoni*, which has been generally accepted ever since as a monocotyledonous flowering plant. It can therefore no longer be asserted that in the Palaeozoic period the higher Phanerogams were absent. Nor can it be even said that amongst Phanerogams *Pothocites* belongs to a very primitive type. The condensation of its inflorescence and the reduced structure of its flowers imply, on any hypothesis of evolution, the previous existence of flowering plants which had undergone less differentiation. Indeed, for anything that can be positively said to the contrary, there may have been during the Carboniferous epoch a phanerogamic covering to the Earth hardly less varied or less complicated than there is now. Our knowledge of the vegetation of that time is confined to the forests of arborescent Cryptogams fringing the deltas of great rivers. Stems of coniferous trees were occasionally floated down from the higher ground; of the plants that grew with them we know nothing.

Still less can it be said of the Mesozoic period that its fossil remains convey any adequate notion of the contemporary *facies* of the vegetation. The cones and driftwood that occur in rocks of marine formation of this age would have been little injured by immersion in water in which the flowers and foliage of less rigid plants would speedily have decomposed beyond recognition. Such guesses as we can make about the actual vegetation of Mesozoic land surfaces stand in the same relation to the reality as those which a traveller would make in approaching a new country from the ocean, and in collecting the vegetable waifs and strays borne out to sea by currents, do to the estimate which he afterwards forms when he botanises at leisure on the land itself. It is, however, only fair to admit that if arborescent Dicotyledons existed to any large extent anterior to the chalk, it is hardly explicable that we have as yet no evidence from driftwood that this was the fact, except Mr. Sorby's notice of some non-gymnospermous wood from the Lias near Bristol,* which appears to have been over-

* *Trans. Mic. Soc.* vol. iii. p. 91.

looked. In the "dirt-bed" of the Upper Oolite we have a true land surface, but the ligneous plants of this were undoubtedly gymnospermous. It is far from improbable however that, at any rate, herbaceous Dicotyledons had made their appearance in the Mesozoic period. Monocotyledons, as already pointed out, are certainly known to date from a time still earlier, and in the herbaceous condition Dicotyledons are less different from Monocotyledons than when they become woody. Several facts seem to prove that existing trees are more modern than herbaceous plants belonging to the same groups. They have, for example, more confined ranges, and often represent on oceanic islands, apparently because the exaltation of their stature has had less to struggle against, orders which elsewhere comprise only herbaceous plants. Probably in every group the arborescent habit has been a subsequent development.

It seems, therefore, rather hazardous to speak, as Professor Balfour repeatedly does throughout his book, as if we had any adequate knowledge of the floras of different stages in geologic time, and especially hazardous to institute comparisons between them. The proper function of palaeontological study in relation to biology seems to be, not to attempt to reconstruct pictures of the life of the past, but to compare the structure of extinct organisms with the more recent in order to determine the laws, if possible, which connect the two.

And in this respect, it must be confessed, Professor Balfour's book is somewhat disappointing. That it is really an expansion of a chapter in one of his larger works is an explanation why it should be so; but the somewhat sketchy treatment, which was suitable enough under those circumstances, is unsatisfying in the pages of a separate treatise. There are, in fact, too many lists of mere names—suggestions only of knowledge—and too few detailed descriptions of what the names stand for. A few instances will illustrate this. *Prototaxites*, originally described by Principal Dawson as the oldest existing coniferous wood, is properly referred by Professor Balfour to the *Algae;* nothing is however said of its very curious structure which would explain the bare possibility of such opposite views about it. The stems of ferns from the Coal-measures, Professor Balfour states, "are referred to the genus *Caulopteris*." But this reference is only a cumbrous way of saying that they are certainly fern-stems, and that nothing more is known about them. The very remarkable fossils known as *Cardiocarpum* were possibly, as Mr. Carruthers believes, Gymnosperms. The suggestion, however, at first sight seems more bold than felicitous, and it would certainly seem to render desirable some setting forth of reasons in its support in Professor Balfour's pages, as well as some expression of his own opinion about it. A very remarkable fossil type—*Bennettites*—is merely said (p. 84) to correspond amongst *Cycadaceae* to *Taxus*, a view which may be disputed if Dr. Hooker* is right in considering the female flower of *Taxus* as really forming a cone. In any case, it is curious to speculate what amount of information ordinary readers of the book are likely to get from the accompanying figure (pl. ii. f. 3), with no further explanation to aid them than the above remark. Those who know what to look for will find in it sufficient material for reflection; but Professor Balfour's pages do not guide them.

To return to an analogy used already, there can be no advantage in perpetuating a bad reading, whether of a manuscript or of a fossil. It was hardly, therefore, worth while, in the preliminary account of the flora of the Mesozoic period, to insert the obsolete synonyms of various coniferous fossils once believed to be cycadean (p. 78). Moreover, as some of them, *Pinites macrocephalus*, for example, are Tertiary, their introduction in this connection may be even misleading.

* *Trans. Linn. Soc.* vol. xxii. p. 138.

Our knowledge of the botany of the Cainozoic period is sufficiently ample to suggest some very interesting problems. One of the most important is the relation of the Miocene European to the existing North American flora. Professor Balfour has possibly regarded the discussion of this as belonging rather to geographical than to fossil botany. Unger, as is well known, struck with the resemblance between the plants which formerly grew in Central Europe and those now found in the Southern United States, especially on their eastern side, proposed the theory of an Atlantis. Professor Oliver* has, however, shown the much greater probability of the migration having taken place by land connections between North-eastern Asia and North-western America. The Tertiary element in the vegetation of the Old World, which has died out in Europe, seems to increase in strength proceeding eastward towards Japan, where it is at its maximum. A gradual convergence of evidence from other branches of natural history is also tending to establish beyond doubt a former Asiatic connection of the Old and New Worlds.

But with regard to these criticisms, it is only fair to point out that they have been made from an entirely different standpoint to that of Professor Balfour. "There can be no doubt," he says, "that there have been successive deposits of stratified rocks, and successive creations of living beings." But the two things by no means necessarily go together. Changes in the distribution of land and sea produced discontinuities in the sequence of sedimentary rocks. Yet it is impossible to show from geological evidence that the lines of descent amongst organisms have not been continuous. No doubt we have positive proof of their often having come to an abrupt conclusion; but, at the best, nothing stronger than negative evidence can ever be urged in favour of their having had an equally abrupt beginning.

W. T. Thiselton Dyer.

FATHER SECCHI ON SOLAR DISCOVERIES.

TO THE EDITOR OF *THE ACADEMY.*

Sir,—In Mr. Lockyer's review of my book, *Le Soleil* (*Academy*, No. 53, vol. iii. pp. 288–290), I find some remarks to which, as they tend to the discredit of my scientific loyalty, I beg you will allow me to take exception.

The book which Mr. Lockyer reviews was written in 1869 and published in 1870. Therefore it is not surprising if he should find my work incomplete as regards contributions made to the science since the date when it was done. Such are those publications of the Kew astronomers which were laid before the Royal Society in March 1870, and others which have appeared in 1871, and even (see the columns of *Nature*) in 1872. Would it not have been at the present date more to the purpose if Mr. Lockyer had chosen for review the German edition of my book (translated by M. Schellen, of Cologne), in which I have made additions increasing its matter to one-half more than that of the French edition? He would not in that case have been able to reproach me with doing less than justice to British astronomers—himself included—and their discoveries. Indeed, I think there is hardly a section in the book which does not mention and appreciate the labours of British astronomers. I cannot be sure of having, in a work of such compass, omitted no single name of those which I ought to have mentioned; but this I know, that I have received thanks and acknowledgments from many quarters in England for the justice which I have done to English science. And I have considered myself honoured by the spontaneous offer of Mr. R. A. Proctor to translate my work for the English reader. This English edition will contain a still further quantity of new matter.

Besides the case of the Kew astronomers, Mr. Lockyer complains that I have not alluded to the thermo-electric researches of M. Henry on the sun; and that I have erroneously put forward as my own

* *Natural History Review*, 1862.

the division of stellar spectra into three types. Now, M. Henry did not really precede me in this matter. If he advanced any hypothesis before me, as Arago certainly did, still it was I who first brought the subject into the domain of established fact. That I did so, as Mr. Lockyer must surely be aware, was fully agreed in Arago's time (1851).

Neither is my reviewer correct in what he says of Mr. Rutherfurd's distribution of stellar spectra. Mr. Rutherfurd's three groups differ radically from mine. He takes his divisions from the general colour of the star, so that in his first group he ranges Capella, β Geminorum, and γ Leonis, which are of my second type; as well as α Orionis, β Pegasi, which are of my third. The difference is obvious. My divisions are not based on the colours, but on the principal bands of the spectra. Now, I think that Mr. Rutherfurd entertains no clear distinction of these, and has not proved their constancy in the different stars. Mr. Rutherfurd's second order agrees with my first; but this is such a natural distinction that I had made it also myself in 1863, before I was acquainted with the labours of Mr. Rutherfurd. Mr. Rutherfurd's third group is made up of β Orionis (Rigel), α Virginis, and others, as being stars supposed to have spectra without lines. Now this is quite mistaken. Accordingly, no valid claim to priority concerning these can be made in favour of Mr. Rutherfurd; and of the fourth type, which is not less essential, he has no word. Besides, to establish positively the reality of the types in question, it was necessary to examine many more stars than were examined by Mr. Rutherfurd. And the merit of this examination is exclusively mine.

Again, to test the maturity and soundness of Mr. Lockyer's criticisms, I should like to ask him:—(1) Is there necessarily the contradiction which he says between my propositions that "solar spots are due to eruptions," and that "in the solar spots there are tornadoes and rotatory motions"? Do these two propositions really exclude one another: and if so, was that to be certainly known at the date 1869?

Again, as to Mr. Lockyer's allegation of the *perfect ignorance* which I display with reference to Mr. Balfour Stewart's objections to the theory of the gaseous sun, I should like to ask him:—(2) Is it certain that a gas must always be perfectly transparent, whatever the depth of its stratum? (3) Is it certain that a gas must retain this transparency constant and complete, even at the highest possible temperature which it may reach in the body of the sun? (4) Is it certain that those gases and vapours which by their absorption produce the Fraunhofer lines are perfectly transparent?

To my ignorance it seems that, if all these questions could be positively answered in the affirmative, several received points of solar theory would be in great danger.

Finally, I would by no means be understood as supporting for the exact truth everything advanced in my first edition, any more than my reviewer would himself maintain all his own past opinions on the solar constitution. In this matter ALIQUID *audendi semper fuit aequa potestas;* but also, *hanc veniam petimusque damusque vicissim.*

P. A. Secchi.

Notes of Scientific Work.

Physiology.

Lymphatics of Mucous Membranes.—Axel Key and G. Retzius have recently demonstrated the presence of a lymphatic system in serous membranes, and Hjalmar Heiberg has just published a paper showing that a similar system exists in mucous membranes (*Centralblatt*, No. 32). His investigations have been chiefly made on the mucous membrane of the nose of man. The portion employed in the examination was usually taken from the inferior turbinated bone, and was then hardened in alcohol, and stained with gold or carmine. He describes the mucous membrane as being more or less fused with the periosteum, and its *Tunica propria* to be very vascular, so that at the posterior portion of the inferior turbinated bone it forms quite a cavernous tissue. The connective tissue of the mucosa is fibrillar in its deeper part, but becomes more homogeneous superficially, and ultimately merges into the basement or Bowman's membrane. The most superficial layer is often infiltrated with lymph corpuscles. The epithelium is laminated, and the superficial layer is ciliated. The basement membrane, above alluded to, when examined with high powers (Hartnack: ocular vii. objective 3), exhibits many fine vertical striae, which with ocular No. ix. appear as fine tubes destitute of special walls; they vary in number at different points, but are on the whole most numerous posteriorly. In certain regions, however, the basement membrane appears homogeneous, and no trace of the canals can be discovered. The diameter of these tubules varies from that of mere processes of the cells to that of ordinary capillaries; above and below they not unfrequently widen out and become trumpet-shaped. Lymph corpuscles are visible in their interior, especially in the dilated portion. No apertures are discoverable in the epithelial investment corresponding to the mouths of these tubules. The tubules appear to open into small cavities, of irregular form, lying immediately beneath the *Tunica propria*. In surface sections, the tubules appear as a narrow mesh of vessels lying close beneath the epithelium. A similar structure is exhibited, though less distinctly, by other mucous membranes. Thus, in the trachea and larynx the vertical canals are fewer in number, whilst in the urethra the basement membrane is altogether absent. It has not hitherto been found possible to inject these canals, and their connection with the lymphatics still remains doubtful.

Note on Recurrent Vision.—Professor C. Young, of Dartmouth College, U.S., states that in the course of some experiments with a new double-plate Holtz machine he observed a very curious phenomenon. The machine easily gave intense Leyden jar sparks from seven to nine inches in length, and of most dazzling brilliance. When he screened his eyes from the direct light of the spark, in a darkened room, the illumination produced was sufficient to render everything in the apartment perfectly visible, and, what was remarkable, every conspicuous object was seen *twice*, at least, with an interval of a trifle less than one-quarter of a second, the first time vividly, the second time faintly. Objects may often be seen a third and sometimes even a fourth time, but then only with great difficulty. The appearance presented was precisely as if the object had been suddenly illuminated by a light at first bright, but rapidly fading to extinction, and as though during the illumination the observer were winking as fast as possible. Professor Young obtained the best effect by fixing in front of the machine, and at a distance of eight or ten feet from it, a white screen bearing a black cross, with arms about three feet long and one foot wide, made of strips of cambric. That the phenomenon was really subjective, and not due to a succession of sparks, was shown by swinging the screen from side to side. The black cross at all the periods of visibility occupied the same place, and was apparently stationary. The same was true of a stroboscopic disc in rapid revolution; it was seen several times by each spark, but each time in the same position. Professor Young remarks that, whatever may be the true explanation of the phenomenon, it at least suggests the idea of a reflection of the nervous impulse at the nerve extremities—as if the intense impression upon the retina, after being the first time propagated to the brain, were thence reflected, returned to the retina, and by travelling from the retina again to the brain renewed the sensation. He has hence proposed to term it "recurrent vision." Professor Young's paper is published in the *Amer. Jour. Sc.* vol. iii. No. 16.

Action of Quinine on the White Corpuscles of the Blood.—A paper appeared in the *Practitioner* for June by Dr. Geltowsky, containing an account of some experiments he has recently undertaken at the Brown Institution of the University of London, to determine the effects of quinine upon the white corpuscles of the blood. He finds that quinine arrests the movements of the colourless globules of the newt's blood if it be used in the proportion of one part to eight or nine hundred. It is remarkable that the globules of the blood of the female resist the action of quinine longer than those of the male. He finds moreover that the globules of the blood of animals already enfeebled by loss of blood in previous experiments resist the action of quinine a shorter time than the globules of animals entirely fresh. The solution of quinine, whether it be in water or in serum, acts with the same force. As regards the solution of quinine in serum, however, it is singular that the movement of the colourless globules ceases in a much shorter time when the serum is not perfectly fresh, although its reaction be neither more nor less alkaline than that of normal serum. The limit at which he finds quinine to stop the movements of the corpuscles is with one of the alkaloid to 2100 of blood. One part to 4000 had no action at all, either with the blood of man or of the guinea-pig. He remarks, in conclusion, that though quinine clearly possesses the power of arresting the movements of the corpuscles, this action can perhaps only be obtained on the stage of the microscope. On injecting into the blood doses which cause the death of the animal, quinine is without effect on the colourless blood corpuscles. Even if the quinine had the same influence on the colourless corpuscles of the blood in the interior of the organism as it has under the microscope, it would still be impossible to explain by the action of quinine on these corpuscles the cure of certain maladies under treatment by this drug, for according to the preceding experiments it is necessary to employ one part of quinine to 2800 parts of the blood of man. This in the case of a man in whom the quantity of blood is from 15 to 20 lbs. would amount to almost one drachm of quinine. In a critique on the foregoing paper in a subsequent number of the same journal, M. Binz, whose observations have thus been confirmed, remarks that it should never be our object to kill the colourless blood corpuscles in the human body with quinine. They are necessary for life, and their death would be our death: all that can be expected or required is that in certain forms of disease in which they are produced in excessive quantity their numbers and their energies should be reduced.

Chemistry.

Derivatives of Sulphocarbamic Acid.—At the Leipzig meeting, Hlasiwetz and Kachler (*Tageblatt*, 116) described the following reaction: When carbon disulphide and ammonia come together in the presence of a third body like camphor, phenol, &c., which merely exercises a catalytic action, they produce very beautiful, large, and nearly colourless crystals of a compound of somewhat unstable character, which is formed in the following manner:

$$4NH_3 + 2CS_2 = C_2H_{10}N_4S_3 + H_2S.$$

When exposed to a weakly oxidising agent, iron chloride being preferable, this body, which may be regarded as the NH_4 salt of $C_2H_2N_2S_3$, undergoes the following change:

$$2C_2H_{10}N_4S_3 + Fe_2Cl_6 = C_2H_4N_2S_4 + 2(NH_4,CNS) + 2NH_4Cl + Fe_2Cl_4.$$

$C_2H_4N_2S_4$ is a body which crystallises in beautiful brilliant scales that are nearly insoluble in cold water, but are decomposed when heated with it into carbon disulphide, ammonium sulphocyanide and sulphur. Aniline gives magnificent prismatic crystals of a corresponding compound having the composition $C_{14}H_{18}N_4S_3$, that can be recrystallised from alcohol, but which with boiling water quickly decompose,[1] giving beautiful crystalline plates of a sulphurea containing C_6H_5, that Hofmann has called sulphocarbanilide:

$$C_{14}H_{18}N_4S_3 = C_{13}H_{12}N_2S + CS_2 + 2NH_3.$$

As regards their constitution, the new bodies appear to be nearly allied to sulphocarbamic acid and sulphurea.

The Occurrence of Rubidium in Plants.—It has been found by E. Pfeiffer (*Chem. Centralblatt*, 33, 520) that this metal is present in the ash of the beet-root grown in the north of France, one kilogramme containing on an average 1·75 grammes of the chloride of this metal, or the plants grown on one hectare (2 acres, 1 rd., 35 p.) of land will take up 255 grammes of the chloride of this metal from the soil. The ratios of the chlorides of rubidium, sodium, and potassium in the ash of the beet of this district are as 1 : 126 : 331. Grandeau has likewise detected caesium in these chlorides. While the beet takes up no lithium, the tobacco grown in this district contains potassium, rubidium, and lithium, but only a trace of sodium. The rape grown in this locality contains potassium and sodium, but absorbs neither rubidium nor lithium.

The Influence of Time on Chemical Reaction.—Becquerel, in the *Compt. rend.* 75, 52, describes the formation of a number of crystalline bodies by weak chemical reactions extended over long periods of time. In two electro-capillary apparatus containing a solution of lead in potash and one of gold respectively, lead oxide in crystals in one case and metallic gold in the other were formed after a lapse of two years. In a series of tubes hermetically sealed twenty years ago, changes had taken place in their contents developing the following bodies: crystals of arragonite formed from a piece of gypsum in a solution of potassium bicarbonate, the gypsum having almost entirely disappeared; rhombohedra of calcium carbonate; crystals of calcium arseniate that almost rivalled in beauty those occurring in nature (they were produced from a piece of gypsum lying in a solution of ammonium arseniate); crystals of a double salt of calcium and potassium sulphate deposited from solutions of gypsum and alumina in potash; well-developed rhombic crystals of lead carbonate by the action of potassium bicarbonate on galena; hydrated lead carbonate in crystalline scales with pearly lustre by the action of lead oxide dissolved in potash on a piece of limestone; as well as malachite and other products.

The Ferric Hydrates.—E. Brescius has endeavoured (*Jour. prakt. Chemie*, 3, 272) to determine the constitution of some of the hydrates of ferric oxide. He examined the hydrate thrown down by ammonia of specific gravity 0·99 from a solution of ferric chloride of the specific gravity 1·01, but it gave no formula. This hydrate is very hygroscopic; when placed over sulphuric acid, it did not give a constant weight till after the lapse of six months. At 100° it begins to lose some portion of the water chemically combined with it. When placed in water for some time, it gradually loses the property of dissolving in acid, and becomes to some extent soluble in water, from which it can be precipitated by the addition of acid. On removing the water mechanically entangled in the hydrate by means of alcohol and ether and with the aid of a Bunsen filter, he obtained a powder having the formula $Fe_2O_3\ 2H_2O$.

The Gases contained in Coal.—A number of specimens of English coal have been examined by E. v. Meyer with the view of determining (*Jour. prakt. Chemie*, 5, 407) the amount and constituents of the gases entangled in its mass. The gases varied greatly in amount and quality. In a specimen from the Bewick Main Colliery they consisted of 5·5 per cent. of carbonic acid, 6·5 per cent. of marsh-gas, and 85·6 per cent. of nitrogen. In three specimens from the Wingate Grange Colliery there was much more gas, the mixture consisting of from 85 to 90 per cent. of marsh-gas, 10 to 15 per cent. of nitrogen, and only a trace of carbonic acid. As a rule, the proportion of carbonic acid increases as that of marsh-gas decreases, and in some kinds of coal the occluded gases are condensed into one-third their volume.—More recently Kolbe has published in his journal (*Jour. prakt. Chemie*, 6, 79) a note on the gases enclosed in the earthy brown coals from Bohemia. They contain no marsh-gas, but from 80 to 90 per cent. of carbonic acid, and an appreciable quantity of carbonic oxide, amounting in one case to 3 per cent.

The Formation of Transparent Crystals of Salt.—Mohr showed that salt was deposited in crystals resembling rock-salt by allowing its solution to become supersaturated by very slow evaporation, and inducing the excess to deposit, not at the surface of the liquid, but on the bottom of the vessel. It has recently been noticed by Buchner (*Zeitschrift für Chemie*, vii. 736) that the same thing happens on introducing a hygroscopic salt of some kind into a concentrated solution of sodium chloride. When iron chloride or magnesium chloride is used, the cubes are perfectly transparent, and exactly resemble rock-salt. It is highly probable that the larger proportion of magnesium chloride met with in the mother-liquors of salt-beds may have been an active agent in the deposition of the rock-salt.

Distribution of Lithium in Vegetable Structures.—It is stated by Focke (*Abhandl. naturwiss. Vereins zu Bremen*, iii. 270) that when this metal forms a constituent of a plant, it is met with most abundantly in the leaf, in less amount in the parts of the stem or the flower, a few pieces of a leaf often being sufficient to show the reaction. It is present in not inconsiderable amount in species of *Thalictrum*, *Carduus*, *Cirsium*, and *Salvia*, in two varieties of *Samolus*, and *Lathyrus tuberosus*. Many species of plants growing in the same soil contain no trace of lithium. From his examination of the plants that absorb the salts of this metal, Focke has been led to the belief that for certain of them to thrive a supply of lithium is absolutely necessary. A somewhat greater number of plants thrive preferably on soil containing this metal, and take up its salts when possible, although an absence of such compounds seems to cause them no injury.

Intelligence.

The annual general meeting of the German Geological Society was held during the last week at Bonn.—The Ungarischer Naturforscher-versammlung met at the same time at Hercules-Bad, Dr. Kubinyi presiding, with Professors Szabó and Róza as vice-presidents.—The next general meeting of the Austrian Association is postponed to some date next year, while the Exhibition is open at Vienna.—The next Italian Scientific Congress commences on the 5th inst. at Rome.

New Publications.

Biesiadecki, A. Untersuchungen aus dem pathologisch-anatomischen Institute in Krakau. Wien: Braumüller.

Carus, Victor. Geschichte der Zoologie. Munich Series.

Commission internationale du Mètre. Procès-verbaux des séances du comité de recherches préparatoires. Paris: Viéville et Capiomont.

Cornu, M. Monographie des Saprolégniés. Paris: Martinet.

De-Bosis, F. La Caverna ossifera di Frasassi. Ancona: Mengarelli.

Desnoyers, L'abbé. Objets trouvés dans la Loire durant l'été de 1870. Orléans: Jacob.

Exner, S. Ueber die physiologische Wirkung der Iridectomie. Wien: Gerold's Sohn.

Flammarion, C. Vie de Copernic et Histoire de la Découverte du Système du Monde. Paris: Hachette.

Hess, W. Bilder aus dem Leben schädlicher Insekten. Die Käfer. Leipzig: Wilfferodt.

Hippauf, H. Lösung des Problems der Trisection mittelst der Conchoide auf circularer Basis. Leipzig: Teubner.

Hofmann, F. Berechung des Vorübergangs der Venus vor der Sonnenscheibe. Bayreuth: Grau.

Joachimsthal, F. Anwendung der Differential- und Integralrechnung auf die allgemeine Theorie der Flächen und der Linien doppelter Krümmung. Leipzig: Teubner.

Landois, L. Die Lehre vom Arterienpuls. Berlin: Hirschwald.

Langlet, J. B. Étude critique sur quelques points de la Physiologie du Sommeil. Paris.

Mattei, G. Gli Antisettici e Progresso nuovo di Conservazione dei Corpi animali o loro parti. Cremona: Ronzi e Signori.

Montier, J. Éléments de Thermodynamique. Paris: Gauthier-Villars.

Portanova, S. G. Errori e Delirii del Darvinismo. Napoli: Accattonelli.

Schroeder, E. Lehrbuch der Arithmetik und Algebra für Lehrer und Studirende. 1. Band: Die sieben algebraischen Operationen. Leipzig: Teubner.

Sonderhof, A. Beiträge zur höheren Geodäsie. Leipzig: Teubner.

Verdet, E. Theorie mécanique de la Chaleur. Paris: Prudhon et Violle.

Viollet-le-Duc, E. De l'Étude de la Géographie et de la Topographie dans l'Armée. Paris: Dumaine.

Woldrich, J. N. Ueberblick der Urgeschichte der Menschen. Wien: Beck.

History.

Notabilia from the Papers of Stockmar. [*Denkwürdigkeiten aus den Papieren des Freiherrn Christian Friedrich von Stockmar.*] Arranged by Ernst Freih. von Stockmar. Brunswick: Vieweg.

The late Baron Stockmar himself likens his personal action in the public affairs of Europe to that of the sower of the seed. Fostered by kindly outward and palpable influences, the plant grows up; these are taken as the sole agents, and the careful hand which hid the germ in the right spot at the fitting moment goes unrecognised. This condition of his career was, he adds, fully accepted by him, "and," continues his son at the close of the biographical sketch with which the present volume opens, "as Stockmar himself was content with this obscurity before the world during life, this book, true to his own feeling, but slightly raises the veil for posterity." A tantalising announcement! Still in spite of the reticence imposed by filial piety, the succeeding chapters furnish considerable material illustrative of European history from 1817 to 1857, and of the Baron's personal share in the dynastic and political negotiations carried on during that eventful period. And at the same time they furnish the key to the obscure action of so highly gifted and sagacious a politician. As in science he only discovers who proves, so in politics he only gains public credit for statesmanship who through the toil and antagonism incident to public life can achieve the practical recognition of his policy by a nation. For this glorious but arduous career, Stockmar's antecedents, first as the citizen of a minor German state, and afterwards as the political adviser of a minor German prince, afforded no adequate training. And, too, being naturally ineloquent, and unable to master the science of debate, he could never have exercised influence as a public speaker. But, brought into close relations with a prince who could appreciate his single-minded devotion and rare political insight, his natural capabilities developed in a congenial atmosphere, and the *ci-devant* physician ranks in the first order of consulting politicians.

Baron Stockmar's career may be briefly summed up. While acting as head physician to the Coburg contingent, incorporated with the allied armies during the campaigns of 1814 and 1815, he attracted the notice of Prince Leopold, who appointed him his body physician upon his marriage with the princess Charlotte. Upon her death in 1817, Stockmar's deep and affectionate sympathy cemented the bond between him and his royal master. From that day forward he became not only the faithful servant of the house of Coburg, but its most valued adviser and trusted agent. His medical office was soon exchanged for those of private secretary, treasurer, and comptroller of the household, and in 1821 he was ennobled. After 1831, when Prince Leopold accepted the Belgian crown, the Baron acted as his confidential agent in this country. In 1839 he accompanied Prince Albert of Saxe-Coburg to Italy, and in the autumn of the same year King Leopold and Stockmar, who were together at Wiesbaden, received the announcement of the Prince's engagement to Queen Victoria. In the following January he arrived in London to act for the Prince in the settlement of the marriage treaty with the English government. For many years after the Queen's marriage his visits to the English court were long and frequent. He took a final farewell of England in 1857; his latest services to our royal family having been given in aid of the negotiations for the marriage of the Crown Princess of Prussia. His closing years were passed in retirement at Coburg, where he died (1863) in his seventy-seventh year, a few months after King Leopold.

Baron Stockmar was wont to ascribe much of his success as confidant and counsellor of royalty to his medical training. In 1853 he writes: "My initial study of medicine was a fortunate step; but for the knowledge thus gained and the insight, both psychological and physiological, thus acquired, my *savoir-faire* must often have gone a-begging." It seems to us that his good fortune was in some degree also due to a prudent avoidance, both for himself and his patrons, of all doubtful responsibilities. His refusal to take any share in the medical treatment of the princess Charlotte, and his rejection of office under the short-lived government of the archduke John, are signal instances of this cautious spirit. In both cases the event justified Stockmar's decision. The passages of European history upon which this volume throws special light are the negotiations between Prince Leopold and the five great powers touching the sovereignty of Greece and the crown of Belgium, and also the complicated transactions between the Frankfort parliament and certain of the German sovereigns. The historical student may profitably compare the statements presented by these memoirs—statements, however, strictly limited to the Baron's personal action—with the current histories of these events.

The details and observations bearing upon the affairs of Germany during 1848–1851 merit special attention, and can leave no doubt that a solution of the great problem of German unity was not then practicable amidst the inextricable confusion among the princes and statesmen of that country. Stockmar himself was strongly in favour of a Prussian hegemony; he was for including Austria in the new-formed confederacy, with the exclusion of the non-German members of that empire. Of course the refusal of the Vienna government to entertain such an arrangement, and the rejection of the imperial dignity by King Frederick William IV., together with the humiliation that prince met with at the hands of Austria, proved the futility of the half-measure advocated by Stockmar, and pointed out the remedy against future failure applied by Prince Bismarck in 1866.

The Baron's views upon the British constitution cannot fail to interest English readers. He examines and criticizes our polity exclusively upon one point, the relations between the crown and the parliament, parliament with him meaning the House of Commons. Two principles are emphatically set forth by him, first that the sovereign should act independently of party; secondly, that in all questions touching the interests, the pecuniary interests especially, of the crown, parliament should waive all party considerations to carry out the wishes of the sovereign. Stockmar's constitutional theory is formulated in a paragraph worth quoting; he writes, in 1851:—

> "One want especially makes itself felt just now in England; that of able statesmen. Thereby the inconvenience we have suffered since the Reform Bill (of 1832) goes on increasing, namely, the growing omnipotence of the Commons, and its steady encroachment upon the province of the executive. A successsion of able premiers alone could check this evil. The broad distinction between a republic and a constitutional monarchy is neither duly propounded nor adequately upheld. Yet its maintenance is the first duty of the minister. It must be brought to bear whenever the Commons, consciously or unconsciously, employ the form of the constitution to jeopardise its spirit, and, unsuspected by the people, to bring the country under a form of government other than its own. Such an attempt on the part of the Commons must be most strenuously resisted by the minister. It then becomes his duty publicly to assert the fundamental maxim: 'You have a constitution which the majority of the people desire to see maintained; and I will never permit a minority like the House of Commons to cheat the majority of the people and rob them of their rights.' . . . It is with a parliament as with a regiment; it is worthless and useless without an able leader—as is the minister, so is the parliament."

Is it conceivable that any English statesman would take in hand to put the precepts of such a political manual into practice? It is noteworthy that Stockmar has not a word to say upon the position and duties of the House of Lords in the British polity. The difference between that assembly

from the ideal of an upper chamber sketched by himself, a body called to its functions by popular election, solely on the score of talent, and with a temporary tenure of office, perhaps explains this conspicuous omission.

Several points of interest in this book must be passed over for want of space, but we must recommend to the reader's notice, as one of its most attractive features, the character sketches of the royal and distinguished persons with whom Stockmar was brought into contact. These portraits, which mark the connoisseur of men and manners, are drawn with a firm and discriminating hand; in some of them, too, a natural correspondence in the personal character of the respective originals with the course and upshot of their political action is distinctly traceable. In one case, however, prejudice seems to have warped the Baron's judgment. Whatever faults a severe critic might impute to Lord Palmerston, no one would now uphold the verdict that so astute and cool-headed a statesman had, at any crisis of his career, "committed so many follies as to justify the suspicion that he had lost his wits." It was Stockmar's belief that an indiscretion of Palmerston had afforded Louis-Philippe and Guizot a pretext for their breach of faith in the wretched business of the Spanish marriages; the English minister was consequently included in the deep-rooted antipathy cherished by the Baron against every one who had contributed to the success of that disgraceful intrigue. The leading circumstances of this business are related, and their mutual bearings pointed out with minute carefulness; more efficacious means could not have been taken to affix an indelible stigma upon the French king and his chief adviser. GEORGE WARING.

Oeuvres du Cardinal de Retz. Tomes I. II. Nouvelle édition. Par M. Alphonse Feillet.

THIS edition forms part of the series, *Les grands Écrivains de la France*, published under the direction of M. Ad. Regnier, and, like its predecessors, it aims at restoring an absolutely correct and authentic text, and at exhausting, to all intents and purposes, the work of annotation. Treated in this manner, a bare quarter of the cardinal's *Mémoires* occupies two thick volumes, and the editor's industry is necessarily more conspicuous than his judgment, when the object in view is to communicate, without exception, *all* the information that can be collected respecting the author and his work. There is scarcely a proper name in the text that does not suggest a circumstantial biographical note; parallel accounts by other contemporaries of the same events are carefully compared; the various readings of different MSS. and the early editions are given; and what is still more interesting, we are enabled to follow the author in the very act of composition; for though, of course, the text is based upon the final form of the autograph MS., the critical notes mention if a word is crossed out or a phrase altered or transposed, and might almost serve as a substitute for the sight of the original. Work of this kind is more useful than brilliant, and M. Feillet is not disposed to hazard the completeness of his performance by premature display, for the biographical notice which should have appeared at the head of the *Mémoires* is still delayed, doubtless to enable the author to incorporate anything of interest that may be discovered in the subsequent course of his editorial labours.

There is a general tendency amongst French historians to disparage the political abilities as well as the veracity of de Retz; and in an earlier work, *La Misère au temps de la Fronde*, M. Feillet seems to have shared the common disposition; but M. Bazin is the only careful student of the *Mémoires* who has been able to resist the fascination of their marvellous cleverness, and their present editor is so far converted as to render quite even-handed justice to his author on all controverted points of fact. His general inferences and final appreciation are naturally reserved for the *Life;* but meanwhile the ordinary reader can form his own opinion *en connaissance de cause*, rejecting those of Retz's statements which are proved to be inaccurate, suspecting, perhaps, those which are unsupported, but relieved from the unsatisfactory impression that everything is untrustworthy alike. These two volumes stop short in December 1649, just before Mme de Chevreuse arranges the interviews between the coadjutor and Queen Anne, when the intrigue is at its liveliest point, just before the arrest of the princes, an episode that, tried by Retz's peculiar code of conspirators' honour, needs a good deal of explanation. But they include, besides some of the most brilliant writing in the whole work, all that part which is of most importance to illustrate the growth and development of the Retz of history, who finally blends with or supersedes the Retz of autobiographical fiction. It is a curious fact that by far the most impudent of de Retz's inventions, his most unfounded fabrications, relate to the time of his youth and early manhood, before there was any reasonable possibility of his having become as distinguished as he always meant to be and tried to persuade himself he always had been. Up to the *Journée des Barricades* inclusive—and in August 1648 Retz was nearly thirty-five—he had never filled the space in public attention which he held to be his by right; and as he had no intention of posing before the world as one of its unappreciated great ones, he was constrained to persuade himself that the trifling successes, which were all he could claim hitherto, were really straws showing the current that was subsequently to bear him to power and popularity. But when he had actually become the most powerful and the most popular man in Paris (with one exception that could scarcely give umbrage to a reasoning being), he had no motive for systematically perverting the truth; on the contrary, his self-esteem, one of those defects that do half the work of a virtue, would naturally lead him to record with complacent accuracy all that he really did when he was free to do his best, or, as some would say, his worst. For the insurrection which he helped to lead is often condemned as vexatious, merely because it was unsuccessful—an impious rebellion against the fated glories of the Grand Siècle. The touch that troubled the political surface just when the calm waters of absolute monarchy were coming into sight was not precisely that of an angel's wing; nor was the process a healing one. But history, except of recent times, does not necessarily judge by results. While the monarchy flourished, the Fronde seemed an abortive reaction against the central authority in favour of feudalism and anarchy; but when the monarchy had fallen by its own weight, the Fronde, viewed as a premature revolution, might claim to have been before its age instead of behind, and with as good reason. For liberty has always been found attainable by the coalition of two estates out of three; and if the clergy—that is to say, Retz—had been able to negotiate an alliance between the nobility—that is to say, Mme de Longueville and her allies—and the people—that is to say, the shopkeepers of Paris—it would have been possible to limit the powers of the crown, and perhaps to establish a durable equilibrium in the state. But there is foundation in fact for the contradictory judgments passed on the Fronde, for there were from the first two parties in the anti-Mazarin camp: the coadjutor and the Duc de Beaufort with the parliament representing the popular and revolutionary side, and the nobles with their ancient claims and obsolete ambitions, who were bribed to abandon their allies of the

moment by the promise of a position of unexampled brilliancy in the most brilliant society that had then been known. But the alliance between the crown and the aristocracy was never hearty; it was a selfish bargain, in which both were overreached, the nobles first because it was they who lent to the monarchy the splendour they professed to borrow from it, the king afterwards, because, to purchase the neutrality of a narrow class, he had sacrificed the prosperity of the whole nation. The aristocratic Fronde was certainly ridiculous enough, with its wars and peaces, its treaties and alliances, the mere parody or caricature of serious history, a storm in a tea-cup, *la guerre civile tombée en quenouille;* but, after all, the end of the monarchy was nearly as inglorious as those expiring struggles of an independent military *noblesse.* Every one knows that the greatness of Louis Quatorze was vicarious, and half of it consisted in this, that during his minority he was the lawful sovereign of some dozen of men and women who were very nearly capable of upsetting a state that had just been fortified by Richelieu.

The motives and interests of the court and the Frondeurs in general were intelligible enough, but Retz succeeded in making for himself a position as singular as his vanity could desire. He was disinterested, not from virtue, but from a natural indifference to the stakes for which ordinary politicians play; he was a conspirator, partly for pure love of the work, partly from the love of fame in its airiest, least palpable shape, the breath of the multitude, not for any material reward, nor to realise a theoretic purpose. He had a few fixed principles of conduct, based on the inner light of a queer conscience, but he had no abstract convictions, no general principles of action, and for want of these his vast energy and versatile ingenuity led to little or no practical result. La Rochefoucauld is supposed to have been thinking of him in the phrase "Quelqu'éclatante que soit une action, elle ne doit pas passer pour grande lorsqu'elle n'est pas l'effet d'un grand dessein," and the reflection is more just than most of the same writer's avowed criticisms upon him. His ambition was too exclusively personal for a really great man; he tried to build a reputation that should be its own support, and he would have been jealous even of his own great deeds if he had believed they would serve to distract attention from the brilliancy of his individual character. In his schoolboy day-dreams he fancied himself a Caesar, but Rome was somehow always left out of the vision, and it is not impossible that, if he had been allowed to follow the profession of arms, he might have rested satisfied with uniting the attainable glories of, let us say, du Guesclin or Bayard and—the Chevalier de Lauzun. But he excelled in executing a change of front in the face of adverse circumstances; and when his father, a well-meaning man, whose honest self-deception he laid bare with gentle tolerance, insisted in bestowing upon the church, for the greater glory of God and His servants, the Gondis, "l'âme peut-être le moins ecclésiastique qui fût dans l'univers," the young Retz wasted very little time in vain regrets. It may be true, as he tells us. that he fought as many duels as he could, and that he arranged to run away with an heiress, all in order to get rid of the hated *soutane;* but it is more certain that he began to pursue the studies proper to his enforced calling at an age and with a zeal uncalled for in a prelate of family. He dedicated his first *thèse*, according to Tallemant des Réaux, to saints, that he might not have to dedicate it to mundane potentates; but he acquitted himself more than creditably in the eyes of the Sorbonne, was victorious in public disputations, where he confounded an elder adversary out of St. Augustine, and actually took to preaching at all the fashionable churches in Paris.

At this time Richelieu was the model he had in his mind, and his object seems to have been to rise to such ecclesiastical dignity as would allow of his pretending to the succession of the great cardinal—the archbishopric of Paris, which was a kind of heirloom in the family, being naturally the first stepping-stone to this result. M. Feillet is sceptical as to the reality of the plot to assassinate Richelieu in which Retz professes to have been concerned, but it should be borne in mind that Richelieu's death was a *sine quâ non* of the overthrow of his policy, so that to plan the latter, malcontents were obliged, at least in talk, to contemplate the former. At any rate, Retz's was amongst those ambitions that were disappointed by Louis XIII.'s unexpected fidelity to the counsels of his departed master; Mazarin was retained in power, and short as was the time accorded him by the king's illness, he put it to such good use that, when the new reign began, he was already master of the confidence and affections of the queen-regent. Retz would fain have superseded him in both, but it was too late; Anne was constant where a wiser woman would have been false on principle to all such politic gallants; and it is very doubtful whether, of the two candidates for her favour, she chose either the most able or the most virtuous. Both were clever, both were unscrupulous; neither had a large scheme of foreign or domestic policy, but Retz was a Frenchman and personally disinterested; his undoubted talents would have gone further in office than in opposition, and as inclination would have led him to make the regency a popular government, it would have been necessary to revive the traditions of the good old times of Henri Quatre. Mazarin was honestly desirous to carry on the policy of Richelieu, who is commonly supposed to have completed that of Henri, but there is one important difference between the two, for Richelieu's policy had no domestic aims, whereas Henri's had the prosperity of France, and the foreign policy, which with the latter was only a means to the other result, was by the cardinal made subordinate to the aggrandisement of the monarchy as such. In this spirit Mazarin records in his private note-book the reflection that to bring the affairs of France to the highest point of prosperity, it is only necessary "que les Français soient pour la France;" the parallel necessity, "que la France fût pour les Français," was not likely to occur to an alien adventurer. "Interest of state" with him means interest of statesmen, and he so far identified his cause with that of his royal mistress that in the *Carnets* he seems to have been unfeignedly surprised and hurt at the opposition of which he was the object. The effect is comical; we seem to hear Reynard the Fox bemoaning himself (in very bad French) because the hens and chickens do not approve of his appointment as prime minister.

The coadjutorship of Paris was a slight consolation to Retz for the disappointment of hopes that were not altogether unreasonable in themselves. The *Mémoires* are not to be relied upon implicitly for this period, during which, to keep himself before the reader, he gives undue importance to certain squabbles about precedence, in which he claims to have upheld the rights of the church and the see of Paris against all manner of powers and principalities. But these misrepresentations cover a background of fact, for the favour of those of his cloth was always one of the strings which the coadjutor kept in reserve for his bow. Despite his scandalous life, his old tutor Vincent de Paul had been heard to say of him that he "was not far from the kingdom of heaven:" "j'estimois beaucoup les dévots; et à leur égard, c'est un des plus grands points de la piété," is his own account of the matter; and he would have been perfectly in his element, if the circumstances of his age had been suitable, as the leader of a popular clerical opposition to the secular powers. Too late for this *rôle*, he was too early to

put himself at the head of a merely democratic movement, for besides that such a movement would have had to be half created, he distrusted the populace while bidding for its favour, and he disliked the thought of associating on equal terms with middle-class revolutionaries like Cromwell, whose first overtures he peremptorily declined. Yet in theory he thoroughly understood what was needed to make a successful revolution, and in practice he resolutely refused to commit high-treason unless the parliament would be a party to the act. The *gros bourgeois*, the citizens *en noir*, were the men he trusted, and whose support he valued, but they are just the men who will fight for an idea; not driven by pressing necessity like the mob, nor by insatiable appetites like the nobility, they could command both time and prudence, they only wanted a cause, and that Retz could not give them; but he may certainly claim the merit of having made the causes of his failure more intelligible than any other writer has done. The passage in which he describes (and probably antedates) the arts that founded his popularity with the class next below this is one of the most curious in the *Mémoires*. Mme de Maignelais, his aunt, was a *dévote*, and one of the charitable ladies who shared in Vincent de Paul's labours for the succour of the distress which was becoming a serious danger to the state. Through her agency Retz distributed large sums that were entrusted to him for political purposes amongst the virtuous poor of Paris, not the professed mendicants, but those whose praise was rather creditable to a churchman, especially while they and he kept the secret of how it was earned. The children were not neglected: "je connaissais Nanon et Babet;" and the delighted aunt never failed to dismiss her *protégés* with the injunction, "Priez bien Dieu pour mon neveu; c'est lui de qui il lui a plu de se servir pour cette bonne oeuvre." In the faubourgs of Paris in 1652, we are told, there were 12,000 families of respectable poor in distress, besides beggars, and if only half these were amongst the coadjutor's clients, his power is easily explained. Condé tried at one time to arm the most desperate amongst them, but he could neither control nor utilise them as soldiers, and before the end of the civil war the horrors which it added to those already existing had the effect of converting the poor, and the inferior clergy who were nearest to the distress, into Mazarinists or partisans of peace at any price.

Retz had no right to complain of their defection, because he had expressly declined the part of tribune of the people; to borrow his favourite metaphor, history is a comedy, and he preferred to perform before an audience in full dress. But before sinking to the level of a mere factious partisan leader, he had one more combination to propose, which is enough by itself to mark him as the equal of Mazarin in the shifty turns and tortuous tricks of statecraft. A civil war in France was incomplete without the Spaniard; the two countries were at war in 1649, but M. de Longueville, "qui avait déjà été de quatre ou cinq guerres civiles," and the aristocratic Fronde attached little importance to that circumstance, and were anxious to treat at once with the invader. Retz's exposition of the dangers and drawbacks to such a course is the more masterly because he disdains the support of vulgar moral and patriotic prejudices. The popular cry of the day was, "La paix et point de Mazarin:" by adopting this platform the Fronde assumed an intelligible attitude towards the court, and Retz hoped to succeed in committing the parliament to it as an ultimatum. The Spaniards were willing to accept the offer of mediation; by refusing it, Mazarin was expected to put himself more than ever in the wrong with the country. Turenne was ready to march to the support of the parliament, Paris was in the mood to rise as one man, fetch back its young king, and instal the coadjutor as his prime minister. If, on the other hand, matters did not proceed to extremities, the parliamentary and other Frondeurs would have achieved a great diplomatic triumph, and the country would have been pacified by their efforts; Mazarin must have disappeared, and the conduct of the government would naturally have passed into their hands. The timid loyalty of the parliament and sudden defection of Turenne's army, even more than the impracticable demands of the nobles, ruined this promising scheme, and Retz, with the elasticity of mind that characterized him, set to work undismayed to frame fresh schemes to save his own popularity with the masses, while he secretly encouraged his allies to make favourable terms for themselves at court.

It is unnecessary to speak of the ever fresh interest which his art lends to the story of all these contemptible intrigues; he may have altered a little here and there, but nothing but nature and life could have the variety, the intricacy, of the pictures that crowd his pages, and nature and life are dull and obscure as compared with this brilliant paraphrase and commentary on their secrets. The only reservation to be made with respect to his general trustworthiness for this period is that suggested by La Rochefoucauld: "Il a une grande présence d'esprit, et il sait tellement tourner à son avantage les occasions que la fortune lui offre qu'il semble qu'il les ait prévues et désirées." But this very fertility of resource may have helped to deceive his critic into believing him more *malin* than he really was. His candid enthusiasm for himself kept him back from many falsehoods if it led him into a few, and we have no difficulty in accepting Saint-Évremond's statement: "il découvrit le fond de son âme *à ses amis*" (amongst whom La Rochefoucauld was never reckoned) . . . "jamais courtisan ne fut moins dissimulé et plus sincère." His pride was of that magnificent kind that only condescends to show itself to superiors; his disinterestedness was partly pride, partly real indifference, and only served incidentally for ostentation. In person he was abstemious, awkward, absent; there was a large element of fantastic romance in his character which is quite lost sight of by the ordinary moral historians, who treat him as a mere vulgar firebrand or *brouillon*. In the civil discords he was scrupulous in adhering to the rules of the game as he understood it; he was entirely free from malignant passions, and, though it is almost a paradox to say so, considering his opportunities, he did singularly little harm either to individuals or the state. Some of the good that he might have done was lost by his own fault, some by fortune, who was not on the whole propitious to him; but his public life was not that of a bad or mischievous man. His personal character is too complicated to be dismissed in a paragraph, except by such a master of portraiture as himself; but the doubts which the *Mémoires* suggest are such as we expect the last years of an ambiguous life to solve, and we know that Retz died as he had lived, popular, amiable, and still notorious, for the whim had taken him to devote his princely revenues to the discharge of his still more princely debts.

M. Feillet has a new theory to suggest as to the lady to whom the *Mémoires* are professedly addressed. Mme de Caumartin, who is generally supposed to have that honour, was not on very intimate terms with the cardinal, though it is probable that the MS. was shown to her husband, and M. Feillet even conjectures that some notes on an extant MS. copy may be from his hand. But the *Mémoires* were evidently written for posthumous publication, not for the private amusement of any individual, and if they were addressed in imagination to a lady who might never read them, why is Mme Caumartin to be she? Why not Mme de Sévigné, whose letters are full of friendly admiration for

"notre cardinal," and hopes that he may be persuaded some day to write the history of his life? Direct evidence is perhaps out of the question, but M. Feillet succeeds in showing in most cases where Retz adds to a name, So and So, "whom you know," "whom you visit," that the individuals mentioned are amongst Mme de Sévigné's acquaintances. Several other interesting questions are discussed in the notes and introductions, such as the date of the composition of the *Mémoires*, and whether Retz was nineteen or twenty-nine when he wrote the *Conjuration de Fiesque;* but the latter point will be treated more at length when the editor comes to the turn of that Machiavellian little pamphlet. We shall look anxiously for a fresh instalment of his conscientious and interesting work. H. Lawrenny.

Contents of the Journals.

Gött. gel. Anzeigen, Aug. 7.—Reviews Nippold's interesting book, *The Old Catholic Church of Utrecht;* and Liebrecht compares the stories in Grundtvig's *Danish Popular Tales* with similar ones in other countries. ——Aug. 14.—Contains an appreciative notice of Tylor's *Primitive Culture.*—The publication of the first volume of Pertz's *Diplomata Imperii* (the Merovingian times) has called forth some reviews of books on the same subject, such as Bresslau's *Diplomata centum in usum scholarum diplomaticarum* (Aug. 28), and Gegenbaur's *The Monastery of Fulda in Carolingian Times* (Sept. 4). Pertz's national work contains 224 documents, 121 being genuine and 103 forged—the forgeries being as usual in the interest of the great ecclesiastical bodies of St.-Denis, Le Mans, Treves, &c., just as the forged Anglo-Saxon charters are due to Malmesbury, Peterborough, &c. Historical students would be glad of such a handbook to English charters as Bresslau's is to German. A number of characteristic specimens, with sufficient explanations, is what is wanted: *e.g.* the knowledge of the continued use of the Greek Indictions (Sept. 1–Aug. 31) in papal documents down to A.D. 1087 shows us that a document should be dated in 811 instead of 812.—There is also a notice of Jähn's interesting book, *Ross und Reiter.* ——Aug. 21.—Reviews August Baur's *Deutschland in* 1517–25 (illustrated from the popular literature and pamphlets of the time).——Aug. 28.—Notices Brandes' *History of the Church Policy of the House of Brandenburg;* and gives a brief account of the globe at Vienna with the name "America" on it, which is valuable in reference to early geographical treatises on the New World.——Sept. 4.—Geiger controverts the view expressed in Kückelhahn's *Johannes Sturm, Strassburg's erster Schulrector*, that Sturm was one of those who led the advance of education; it is shown that he rather belonged to the reaction in the sixteenth century.——Sept. 11.—Contains a long review by Pauli of Stockmar's *Life*, so interesting to English readers from its frequent references to the princess Charlotte and our present Queen, and the state of English society and politics.

New Publications.

Beyschlag, Willib. Karl Immanuel Nitzsch. Eine Lichtgestalt der neueren deutsch-evangel. Kirchengeschichte. Berlin: Rauh.

Blasiis, Giuseppe de. La Insurrezione Pugliese e la Conquista Normanna nel secolo XI. Napoli: Detken e Rocholl.

Bouché-Leclercq, A. Les Pontifes de l'ancienne Rome. Paris.

Chabas, F. Études sur l'Antiquité historique, d'après les sources égyptiennes et les monuments réputés préhistoriques. 560 pages, 7 planches et nombreuses figures dans le texte. Paris: Maisonneuve.

Curtius, Ernst. Beiträge zur Geschichte und Topographie Kleinasiens (Ephesus, Pergamus, Smyrna, Sardis). Berlin: Dümmler.

Hahn, J. G. v. Sagwissenschaftliche Studien. 2. Liefg. Jena: Mauke.

Halléguen, Dr. E. Armorique et Bretagne. Origines armorico-bretonnes, ouvrage accompagné de documents rares et inédits. Deux volumes. Paris.

Klüpfel, K. Geschichte der deutschen Einheitsbestrebungen bis zu ihrer Erfüllung, 1848–1871. Erster Band: 1848–1865.

Müller, Wilhelm. Politische Geschichte der Gegenwart. V. Das Jahr 1871. Nebst einer Chronik der Ereignisse des Jahres 1871. Berlin: Springer.

Plauta, P. C. Das alte Raetien. Berlin: Weidmann.

Puyol, M. l'abbé. Louis XIII et le Béarn; ou Rétablissement du Catholicisme en Béarn et Réunion du Béarn et de la Navarre à la France. Paris: Soye.

Schwarz, Ad. Der jüdische Kalender historisch und astronomisch untersucht. (Gekrönte Preisschrift.) Breslau: Schletter.

Spinello, Annali di Matteo di Giovenazzo. Edizione eseguita sopra una stampa del XVII secolo ignota; publicata per cura di Gennaro Vico e Giuseppe Dura. Napoli: Dura.

Vámbéry, Herm. Geschichte Bochara's od. Transoxaniens. 2 Bände. Stuttgart: Cotta.

Philology.

Grammaire hiéroglyphique, contenant les Principes généraux de la Langue et de l'Écriture sacrées des anciens Égyptiens, composée à l'usage des Étudiants par Henri Brugsch. Leipzig: J. E. Hinrichs.

Index des Hiéroglyphes phonétiques y compris des Valeurs de l'Écriture secrète et des Signes déterminatifs qui se recontrent dans le Système graphique des anciens Égyptiens, composé et appliqué à son *Dictionnaire hiéroglyphique* par Henri Brugsch. Leipzig: J. E. Hinrichs. (Extrait de la *Grammaire hiéroglyphique.*)

M. Brugsch's work contains twenty chapters, one of which treats of the System of the Hieroglyphic Writing, fourteen of the Forms, and four of the Syntax. Two most important treatises are appended to it: (1) "A General Table of such Hieroglyphs as have Phonetic Values;" (2) "A General Table of the General Determinative Signs which are most used in the Hieroglyphic Writings." These tables, extracted from the bulk of the work by M. Brugsch, have been published separately with the title of *Index of the Phonetic Hieroglyphs, &c.*, so that the two books inscribed at the head of this review are in fact but one, the second being contained from beginning to end in the first. It is almost unnecessary to say that a work from the pen of M. Brugsch contains a vast amount of science and well-founded observation: indeed the author of the *Demotic Grammar*, *Geographical Inscriptions*, and *Hieroglyphical Dictionary*, has once more proved true to himself. I therefore can make no pretence to analyse minutely or sufficiently so new and so complete a book. I must content myself with quoting at random some of the observations my own studies have suggested to me about it.

And first, it seems to me that M. Brugsch has been somewhat misled by the idea that he was making a grammar *à l'usage des étudiants.* The beginner in the hieroglyphics is generally a man well versed in classical studies, and not devoid of philological notions: he knows Hebrew and Coptic more or less, and needs not the merely empirical grammar we are used to put into the hands of common beginners. Now M. Brugsch's grammar is merely empirical: instead of arranging his matter according to the peculiar genius of the tongue, he has arranged it according to the laws of the classical languages, and so tried as it were to force it into clothes which are unfit for it. Thus, although he is one of the few Egyptologists who are conversant with Coptic and Demotic, he has neglected those two forms of the Egyptian. Once only, in speaking of the verb, he expresses his ideas about the formation of the roots; and, from the few words he says there, we may easily gather what great results he might have realised had he thought proper to apply his attention to the investigation of origins.*

The great majority of Egyptian roots are biliteral, that is to say, include two radical letters which are sounded as one syllable, and no more: sᵉm, *to hear;* qᵉb, *to refresh.* The two radicals are not necessarily consonants: hᵉâ, *to stand;* âā, *to be great;* iû, *to go;* ûā, *to cry*, contain either one consonant and one vowel or two vowels forming a diphthong. In the course of time these primitive roots underwent modifications by which the number of their constituent letters was raised from two to four, and then to three; indeed, most of them have got a whole retinue of quadriliteral and biliteral roots which are derived from them and possess the same value.

There are two means of modifying a root: (1) by repeating it; (2) by adding to it auxiliary letters.

1. Repetition is the simplest manner of increasing the sense of a root; and, therefore, in Egyptian, as well as in

* *Grammaire*, pp. 36, 37.

most languages, radical repetition is sometimes intended to mark an increase of the action. Q^eN, *to beat*, develops itself into Q^eNQ^eN, *to give somebody a sound thrashing*. But this is rarely the case: repetition ordinarily is a modification of the word without any modification of the idea. S^eNS^eN, *to breathe*, B^eNB^eN, *to spring*, have no more value than S^eN, B^eN: they are both of them mere variations of the words, corresponding to no particular shade of variety in the fundamental thought. The sole difference between them is that S^eN is a monosyllable, while S^eNS^eN is a dissyllable, which goes against one of the most decided tendencies of the tongue, being that each root counts for one syllable. To overcome that difficulty, the Egyptians had no resource left but to drop one of the three last radicals, the first being always respected. Thus, Q^eBQ^eB becomes Q^eQB, by dropping the second radical; Q^eBB or QB^eB, by dropping the third; Q^eBQ or QB^eQ, by dropping the fourth; so that each biliteral monosyllable, being raised to the square, turns out to be the common stock for three triliteral monosyllables, all of them signifying the same thing.

2. Some of the auxiliary letters get intercalated between the radicals, apparently in order to raise the root from its biliteral to the triliteral state. The dentals *t'* and *z'* are rarely used for this purpose, and I know of no guttural employed for it. The most of the remaining letters are apt to play the part of first (*a*), second (*b*), or third (*c*) radical, according to the place in which they are set.

(*a*) The aspirates *a*, *h'*: Q^eB, *to refresh;* Q^iM, *to find;* B^eN, *to spring up*, give AQ^eB, AQ^iM, H'B^eN. (*b*) The dentals *t*, *d*, and, sometimes, *t'*, *z'*: S^eM, *to hear;* N^eM, *sweet*, give S^ôTM, N^ôTM, or N^ôZ'M. Then every root of which the last radical is a consonant has, besides its primitive form, a nasal form, the *n* of which is suffixed to the first radical and prefixed to the last: S^eD, S^eT, *to tremble*, give S^eND, S^eNT. (*c*) The aspirates *h'*, χ: Q^eB, Q^eBH'; D^eB, *to pray*, D^eBH'; S^eB, *a door*, S^eBχ; AB, *to rise*, *to penetrate*, ABχ. The nasals *n*, *m*: MÂD, *way*, give M^oTN; H^eB, χ^eB, *to plough*, H^eBN, χ^eBN; χ^eT, *to seal*, χ^eTM; the additional *n* may be doubled thus: M^oTN, M^ôTENNÛ, H^eBN, H^eB^eNNÛ. In a root of which the second radical is a nasal, when the last happens to be a dental *d*, *t*, *t'*, *or z'*, the intercalated *n* attracts a *nû* final as if it were the last radical, and the dental being assimilated, disappears from the writing as well as from the pronunciation: thus, S^aWT (√W^eD), *to suffer*, becomes S^aW^eND or S^aW^eNT and S^aW^eNNÛ; χ^eNT, *to run up a river*, χ^eNNÛ.

The remainder of the auxiliary letters possess a grammatical value. *s*, *d*, *r*, and *m* (*mâ*), prefixed to the root give to it a causative signification: H^ûN, *to incline*, become SH^ûN, D^ûH^ûN, R^oH^ûN; H'Â, *to stand;* SH'Â, *to raise*. Three of these letters may be traced up to roots still living in the tongue: *r* to ARÏ, ^eR, *to do;* *d* to DÛ, and *m* to MÂ, *to give:* the origin of *s* is unknown.

Besides these absolute forms, a careful analysis of the texts enables us to affirm that there is in the old Egyptian something analogous to the construct state of Semitic philology. Every root biliteral or triliteral may accept the suffix *t*, vocalised often *ût* or *tû:* M^eR, *to love*, M^eRT, M^eR^ûT, M^eRT^ûT. Until now this has been considered as denoting exclusively the passive of the verbs: M^eR, *to love;* M^eRT, M^eR^ûT, M^eRT^ûT, *loved*. But it is used in many places where it cannot possibly have an intransitive value; in *Papyrus Abbot*, *Aû-û-u qim*-TÛ-*w m azâ*, the text does not admit of a passive translation, "He was found guilty," but only of an active one, "They found him guilty." Then *ût*, *tû*, occurs at the end of such words as ARÏT, *an eye;* DÛT, *a hand;* H'ÂT, *a beginning*, *a chief*, which it is impossible to view in the light of passive formations (*Pap. Anastasi*, ii. 6, 2): *ûbeχ*-T *art*-TÛ-*k er seb nû pet*, "Thy eye shines more than a star in the sky." That its adjunction was entirely facultative, and did not alter the signification of the roots, is proved by variations of the same text in which one manuscript gives the absolute state of a word, while another has the construct state of the same. Thus, taking for instance the above-quoted passage in *Papyrus Anastasi*, ii. 6, 2, we have *art*-TÛ-*k*, and in *Papyrus Anastasi*, iv. 5, 10, *art-ek*. If we pass from the older texts to the newest ones, we find: (1) that the construct state of hieroglyphical times is extant in Coptic μισε, *to be born*, construct state μαστ . . ., &c.; (2) the old roots have for the most part two Coptic forms, the one responding to the absolute state of the root, Coptic HA, *a chief*, from Egyptian H'Â, the other responding to the construct state of the same, Coptic *houετ*, *the first*, *the chief*, from *h'â*-TÛ. Thus it is that we are able to reject the last remnant of Champollion's theory concerning the graphic expletives. The *t*—written, now with a mere segment of the circle ◓, now with a segment of the circle and a perpendicular line—which follows *ad libitum* almost all the words, and has been mistaken for an expletive, is, when not a feminine mark, a mark of the construct or emphatic state we have pointed out. Its origin is evident: it comes from the essential verb *tû*, which helps to form the tenses. Suffixed to a root, it adds an idea of being and reality which transfers it from the abstract to the concrete state, and enables it to receive grammatical particles, or to play its part in the general construction of the phrase.

Egyptian roots are not, properly speaking, nouns, adjectives, or verbs: they express the idea independently of grammatical category, and may, according to their relative position, play the same part that nouns, adjectives, and verbs, play in our modern languages. Thus, √ÂĀ may signify *great*, *greatness*, *to be great;* S^eM, *to hear* (*to obey*), *obedience*, *obedient*, and are therefore not definite nouns, adjectives, or verbs, but only possibilities of nouns, adjectives, or verbs. Their grammatical category resides not in their material form, but in the mind of him who speaks or hears. Hence it comes that the Egyptians possess nothing which we may say corresponds exactly to our declinations or conjugations. By dint of personal pronouns affixed as signs of the subject to the roots of appellative value, they contrived to build small phrases M^eR-A, M^eR-K, by which they devolved the possession of the idea expressed by the root upon one of the three persons, but without creating any definite grammatical category. M^eR-A, M^eR-K, signify, after a general fashion, *love-o' mine*, *love-o' thine;* but we were not right to interpret them, when taken isolatedly, by *I love*, *thou lovest*, more than by *my love*, *thy love:* it is only their position in a sentence which determines the special value we are obliged to give them for the nonce, and enables us to see whether they are to be rendered by one of our substantives or by one of our verbs. M^eR-A AT^eW-A is translated: "I love my father;" and we say that M^eR-A is the first person of a verb the regimen of which is AT^eW-A. But M^eR-A and AT^eW-A are two locutions constructed on exactly the same pattern, and which, when isolated, express the attribution to the first person of the general ideas *love*, *father;* being united in the same proposition, they become the two terms of an equation, M^eR-A = AT^eW-A, *Love-o' mine = Father-o' mine*, where the relative position of the factors induces us to bestow upon M^eR-A the quality verb, *I love*, while in another equation MĀĀ NÛT^eR M^eR-A, *God sees my love*, we would be obliged to give it the substantive value of *my love*. M^eR-A, being alike a substantive or a verb, may, in its verbal impersonations, denote the past as well as the present, and the future as well as the past. The Egyptians contented themselves with indicating the fact of the action being done, and with naming the doing person; they left to the hearer's or reader's mind the care of ascertaining, according to the tenor of the phrase, the moment of

duration in which the action is, has been, or will be present.

To remedy the inconveniences resulting from such a system, they used a number of auxiliary words which, being set before a root or after it, but without ever being blended into it, limit its extension. Four roots, *a*, *p*, *t*, *n*, when vocalised with *û*, into AÛ, P*û*, T*û* [N*û*] = *û*N, were considered in the light of auxiliary verbs, and, when vocalised with *ā*, into P*ā*, T*ā*, N*ā*, become the articles *the* (*le*), *the* (*la*), *the* (*les*): so it was enough to see a root preceded by an *û*-form to be sure that it was endowed, for the nonce at least, with the value of a verb, or to see it preceded by an *ā*-form to be sure that it was endowed, for the nonce at least, with the value of a noun. T*ā* Z°D-A, or T*ā*ⁱ-A Z°D, signifies "*my* word;" T*û* Z°D-A, or T*û*-A Z°D, "*I* speak;" N*ā* AR-A, or NAⁱ-A AR, "*my* deeds;" and *û*N AR-A, *û*N A AR, "*I* do." Every auxiliary verb may be combined with the personal pronouns after three different fashions, the subject being affixed (1) to the sole auxiliary AÛ-*a* M^eR, *I am the fact of loving = I love;* (2) to the sole verb AÛ M^eR-A, *is my loving = I love;* (3) to the auxiliary and to the verb AÛ-*a* M^eR-*a*, *I am, I love = I love.* If you multiply those three forms by the number of the above-mentioned auxiliaries, *pû* being excepted; if you remember that in the course of time some verbs χOP^eR, *to become*, H'Â, *to stand*, MÂK, *to mind*, become auxiliaries too, you will conceive easily how it is that we find in the texts an almost incredible quantity of verbal locutions which are not distinct tenses, but distinct forms of one tense identical to the indefinite tense of which I have spoken already.

Thus, the great quantity of verbal forms and, for all that, the complete want of precise tenses and moods, are the two capital faults with which the Egyptian tongue had to grapple, and which it never succeeded in rejecting entirely. From the auxiliary *û*N [= N*û*] derived the participle N, which, being placed between two words, denotes: (1) a state in which the idea expressed by the first word is assimilated to or made dependent of the idea expressed by the second: ÛN-*n*-AMEN, *The being* WHICH IS *Ammon;* ÛN-*n*-A, *The being* WHICH IS *me*, *Ammon's being*, *my being;* (2) the past tense ÛN-*n*-A, *I was*, Z°D-*n*-AMEN, *Said Ammon.* A past thus formed differs from the present, not in signifying a possession of the verb by the subject, since M^eR-A, *I love*, implies also an idea of possession, but in marking the possession more strongly that the present marks it, M^eR-*n*-A, *Loving* WHICH IS *mine*, insisting on the idea of possession more pointedly than M^eR-A, *Loving o' mine.* Hence it is that the distinction between the two tenses is frequently overlooked, and that M^eR-N-A signifies oftenest *loved*, yet often also *I love, or I will love.** So between the auxiliary and the verb they intercalated prepositions which design the direction of the action H'^eR towards the present and the past, ^eR towards the future: AÛ-A H'^eR M^eR, *I love, I loved;* AÛ-A-R M^eR, *I am to love, I will love*, although the ^eR form is employed often for the past or the present. In the language of the Demotic texts, the *n*-past and the H'^eR-conjugations fell out of use, and the conjugations with auxiliary verbs were almost always reserved to the expression of the past. In Coptic, the tense which results from the suffixion of personal pronouns to the root disappeared almost entirely: the auxiliary *tû* and certain forms of the auxiliary *aû* marked mainly the present, while other forms of the same were used mainly to mark the past. However, in Demotic and Coptic, as well as in the language of older times, we find the most perplexing indecision in the manner of rendering the relation of tense: the verbal forms showed a tendency towards a tense, but were not definite tenses.

* See Maspero, *Sur les Formes de la Conjugaison*, p. 8, *sqq.*

CHAPTER II.—*The Substantive.*—M. Brugsch has adopted with reason the views of M. Lepage-Renouf about the feminine of the nouns,* and considers the *t*-ending as a *phonetic* sign of the feminine. To M. Lepage-Renouf's testimony I am able to add a proof deducted from the analogy of the Coptic language. In Coptic, the feminine of the nouns is shown by an -ι (*M.*) or -ε (*T.*) ending: σον, *brother*, σωνε, σωνι; βωκ, *servant*, βωκι. Now, the feminine pronoun of the second person, which is written in Egyptian -^eT, -^eT', lost in Coptic its final -T, and became -ε. I think the same process which deprived this pronoun of its *t* deprived the nouns of theirs; and that, as we must attribute to the feminine pronoun -ε a prototype ^eT, ^eT', so we may attribute to the feminine in -ε, -ι, of the Coptic nouns an Egyptian prototype in ^eT, ^eT': σωνε = SON^eT; βωκε = B^eK^eT.

CHAPTER VIII.—*The Verb.*—"The Egyptian verb, in its conjugation, offers an active voice and a passive voice; the indicative, subjunctive, optative, imperative, participle, and infinitive moods."† As we have just said, the Egyptian has no moods: the relations of the subjunctive, imperative, potential, infinitive, which we express by a special modification of the root, are indicated either by syntactical locutions, or by the adjunction to the verb of independent particles. So it is that M. Brugsch, after having affirmed that there are moods in Egyptian, is constrained by the facts to contradict his declaration. "The Egyptian speech and writing have no special forms to express the subjunctive mood, which latter is announced by particles placed before the various forms of the tenses."‡ Speaking of the imperative, "The naked root of the verb without the addition of any sign whatever is employed oftenest to mark the presence of the categoric imperative." The remaining forms of the imperative are composed by an addition of other precative or supplicative verbs, MÂ, *give;* AR, *do;* or the exclamation A, *oh!*§ The infinitive is "represented by the verbal root, without addition of any particular sign."‖ Thus the modality possesses no special and definite marks: it is expressed by various syntactical devices which have nothing common with the processes of what we call conjugation. It is the same as saying that there are no moods in Egyptian.

There is something really alarming in M. Brugsch's notion of thirty-two tenses for the Egyptian indicative. If he had divided the forms of the verb according to the principles I have mentioned above, he would have obtained only three types of conjugation: (1) by suffixing to the verbal root the subject, whatever it be, either noun or pronoun, or member of a phrase; (2) by preposing to it one or more auxiliaries; (3) by placing between the auxiliary and the verb a preposition which marks the direction of the action done or undergone by the subject. Most of the forms given by M. Brugsch, and many others in M^eK, H'Â, χ°P^eR, he has not given, would have been more naturally distributed in those three categories; perhaps he would have been induced by this division to take away several forms, the eleventh for instance, ARÏ PÛ ARÏ-N-EW, which are not, properly speaking, verbal forms, but syntactical combinations, or the third, AR-N-EW, which is a mere phonetic variation of the second, AR-AN-EW.

According to M. Brugsch, the Coptic futures in ε and νε are derived from the verbs EÏ, *to go*, and AN, *to bear, to come;* so that εἰεμεῖ, εἰναμεῖ, should be translated *I go, I come to love*, like the French *je vais aimer.* I would not insist upon this etymology but that it might, if allowed to pass, become a cause of great errors. The Coptic futures are not formed with the help of these two verbs: they are derived from

* Lepage-Renouf, "On Several Hieroglyphic Words," in the *Zeitschrift für Aegyptische Sprache*, 1871, pp. 129-131. † Brugsch, *Gram.* p. 29.
‡ *Id.* p. 51. § *Id.* pp. 53-55. ‖ *Id.* p. 55.

the forms of the Demotic futures in *n*, and ᵉR, the latter of which not extant in M. Brugsch's *Demotic Grammar*. I have found of late ϵϊϵμϵϊ, ϵϊναμϵϊ, *I will love;* ϵκϵμϵϊ, ϵκναμϵϊ, *thou wilt love*, are but the exact transcription of the Demotic futures : AÛ-A-ᵉ*r*-MEÏ, AÛ-A-*n*-MEÏ, *I am to love;* AÛ-R-ᵉ*r*-MEÏ, AÛ-R-*n*-MEÏ, *thou art to love*, &c.

Thus for the controverted points : as for the new principles M. Brugsch has hit upon, they are too numerous for me to enumerate in the space at my disposal. In this as in his other works, M. Brugsch has widened the old roads and opened new ones : it is for us who come after him to follow and outstrip him if we can. G. Maspero.

Intelligence.

The present season has been fruitful in works bearing on historical theology. A new book by Professor Schrader on *The Cuneiform Inscriptions and the Old Testament* (see under New Publications, "Philology") seeks to apply the best ascertained results of Assyrian and Babylonian researches to the illustration of the Old Testament writings. It is arranged in the convenient form of annotations on the several books, and, out of consideration for the uninitiated, gives the cuneiform proof-passages in Roman letters, with a translation and occasional notes. There is also a glossary, and excellent indices. The work aims at completeness, so far as the published Assyrian texts allow ; but it should be remembered that we are but at the beginning of our discoveries. The author (a contributor to this journal) is the elected successor of Dr. Diestel at Jena.

Professor W. D. Whitney has collected his articles and essays in a volume, which will appear shortly under the title, *Oriental and Linguistic Studies.*

A catalogue is promised of the *Bibliotheca Bongarsiana*, the important collection of manuscripts formed in the sixteenth century by Peter Daniel and Jacob Bongars, and presented by them to the city of Berne, where it now is. It is to be edited with a preface by Professor H. Hagen, and will be accompanied by lithographed facsimiles, giving specimens especially of the dated manuscripts of different periods.

The Bibliotheca Palatina was transported to Rome from Heidelberg in the time of the Thirty Years' War, under the charge of a certain Leo Alacci. He wrote a full account of his journey to and from that place, and this document has recently been found in a village near Udine, and printed in the *Heidelberger Jahrbücher.*

Contents of the Journals.

Journal Asiatique, No. 69.—Sabean Inscriptions ; by J. Halévy.—Observations on two recent works of M. Maspero ; by Eug. Révillout. [Criticizes M. M.'s Coptic scholarship.]—Miscellaneous. On the words *Avesta* and *Zend* ; by M. Oppert. [Rendered "law" and "prayer" respectively.] — Supplementary note to the memoir on the ancient history of Japan ; by M. d'Hervey de Saint-Denys.—Nordtmann's *Textes classiques . . . des Israélites* ; rev. by St.-Guyard.——No. 71.—The Sabean Inscriptions ; translated by J. Halévy. ["Partielle et provisoire." A subsequent work will contain a detailed analysis of the texts. There are three appendices : 1. A comparative alphabet ; 2. An examination of the statements of Herodotus respecting the religion of the Arabs ; 3. On the inscription of 'Aṭtar at Me'în.]—Miscellaneous. Pasargadae and Murghâb ; by M. Oppert.—Interpretation of an inscription of Artaxerxes III. Mnemon found at Susa ; by M. Oppert.—M. Janneau on the Cambogian language ; rev. by M. Pauthier.

Zeitschrift für vergleichende Sprachforschung (vol. xxi. [new series, vol. i.] part 1).—This periodical, of which we need only say that it has grown in importance and popularity with the Science of Language itself, begins a new series with the beginning of its third decennium. The size of each number has been increased at the same time to ninety-six pages, and an index to the last ten volumes is promised. The contents of the present number are :—Contributions to Etymology ; by A. Fick. [Lat. *nitere*, Old Germ. *gneist ;* Lat. *adolere*, from a root *al*, "to burn"; Eng. *dregs;* Gr. οἰδάω, οἶδος ; Lat. *meta ;* Sanskr. and Celtic feminines of the numerals three and four ; Lat. *caesius ;* Lat. *quŏtus ;* Gr. ἔγκατα, Lat. *exta ;* Eng. *icicle ;* Prussian and Lith. forms answering to Gr. ϝέξ = ἕξ ; Sanskr. *vrika*, "a plough," Lacon. εὐλάκα, &c.]—On the Theory of the Accents ; by F. Misteli. [Corrects a misunderstanding of the writer's views (in vols. xvii. and xix.) into which Mr. Whitney had fallen ; and shows that Mr. Whitney's theory of the *svarita* is substantially the same as his own. Explains the accent of μιᾶς, μιᾷ, as arising from contraction of μιά-ας, μιά-ᾳ, and confirms this from an Old Persian gen. in *-hyâyâ*, as well as by some Gothic forms.]—The new High German Aspirates and Tenues ; by J. F. Kräuter. [An interesting analysis of the phonetic value of the mutes in German. It appears that in a large part of Germany the true *mediae* do not exist, *g, d, b* being sounded as the *tenues* of other languages, while *k, t, p* are *tenues aspiratae* (Sanskr. *kh, th, ph*, Gr. χ, θ, φ), except in certain cases, viz. (1) before mutes, as *wirkt;* (2) before surd spirants (*f, s*, &c.), as *Werks ;* (3) after surd spirants, as *Spass ;* (4) at the end of a word not followed by a pause ; (5) between vowels of which the former is short and accented, as *Säcke ;* (6) in the "Inlaut" after any accented vowel, as *welke, Seiten.* A parallel to the last exception is found in the silent *h* of words like *blähen*, &c. ; and many other illustrations are given from German dialects and from other languages. The physiological grounds of the chief phenomena are clearly pointed out, viz. the effort required to pronounce the sound *h*, and the slight degree of prominence which it has by comparison with most other letters. The difficulties of observation, created by the traditional spelling, may be recommended to the notice of those who imagine that a phonetic system would deprive us of a help in tracing etymologies. The article concludes by examining sounds usually but wrongly regarded as true *tenues*, in particular the mutes in the combinations *kn, km, tn, tm, pn, pm.*]—The German *tsch ;* by G. Gerland. [A comparatively late formation, in the "Inlaut" and "Auslaut" from *tz*, and that again often from *kz*, in the "Anlaut," a dialectical strengthening of *z* or *sch.* It never arises, as in the Romance languages, from *k.*]—Reviews :—*Zur Geschichte des indogermanischen Vocalismus*, by Joh. Schmidt ; rev. by B. Delbrück. [Brilliant and convincing in the main ; makes important use of the doctrine of a special kinship between the German and Slavonic groups of languages.]—*A Comparative Grammar of the Anglo-Saxon Language*, by Francis A. March ; rev. by Moritz Heyne. [Much praised, especially the syntax.]—Lit. *kirmýti ;* by Joh. Schmidt.

Philologischer Anzeiger, iv. 8.—The new publications chiefly recommended are :—J. E. Ellendt : *Sammlung der Parallelstellen zum ersten Buch der Odyssee.* [A specimen of a complete "Parallel-Homer" left in manuscript by the author.]—Arnold Hug : *De arte critica in Antiphontis* Orationibus *factitanda.* [Supports the claims of the MS. Crippsianus A to be the safest guide.]—A. O. F. Lorenz : *Collationen des Codex vetus Camerarii* [B] *und des Codex Ursinianus* [D] *zur* Aulularia *des Plautus.* [Corrects Ritschl's estimate of J (the MS. of the British Museum), showing that it agrees closely with the other MSS. of the first eight plays ; and, again, that D and J are akin as compared with B.]—O. Kreussleri *Observationes in Ovidii* Fastos.—W. Oetling : *Librorum manuscrr. qui Ciceronis* Or. pro Flacco *continent qualis sit conditio demonstratur.*—L. Pomtow : *Das Leben des Epaminondas.* [Reviewer complains of the want of sifting of the sources of Greek history.]—A. Philippi : *Symbolae ad doctrinam juris Attici de syngraphis et de* οὐσίας *notione.* [To show that more care is needed in applying Roman ideas, and in using the notices of grammarians and lexicographers.]—A. Müller : *Die Ausrüstung und Bewaffnung des römischen Heeres in der Kaiserzeit.* [In the form of a commentary on fourteen models made by E. du Bois.]

New Publications.

Barhebraeus. Chronicon ecclesiasticum. (Syriac and Latin, with Notes.) Ed. J. B. Abbeloos et T. J. Lamy. Tom. I. Louvain : Peeters.

Martin, L'abbé. Essai sur les deux principaux Dialectes araméens. Paris : Maisonneuve.

Pentateuchus Samaritanus. Ed. H. Petermann. Fasc. I. : Genesis. Berlin : Möser.

Rühl, Frz. Die Textesquellen des Justinus. Leipzig : Teubner.

Schiefner, A. Ausführlicher Bericht über Baron P. v. Uslar's Awarische Studien. St. Petersburg.

Schlegel, G. Sinico-Aryaca, ou Recherches sur les racines primitives dans les langues chinoises et aryennes. Batavia.

Schrader, Eb. Die Keilinschriften und das Alte Testament. Nebst chronolog. Beilagen, einem Glossar, Registern u. zwei (lith.) Karten. Giessen : Ricker.

Schrader, Eb. Die assyrisch-babylonischen Keilinschriften. Kritische Untersuchung der Grundlagen ihrer Entzifferung. Nebst dem babyl. Texte der trilinguer Inschriften in Transcription, sammt Uebersetzung und Glossar. Leipzig : Brockhaus, in Comm.

Symmachi, Q. Aurelii, Relationes. Recensuit Guil. Meyer. Leipzig : Teubner.

Tacitus, Cornelius. Dialogus de Oratoribus. Für den Schulgebrauch erklärt von Georg Andresen. Leipzig : Teubner.

ERRATA IN No. 56.

Page 345, col. 2, note fifth, for "Grundwig" read "Grundtvig."
,, ,, ,, ,, for "provincial" read "poetical."
,, 348, col 1, *New Publications*, for "Danett" read "Domett."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 58.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Friday, November 1, *and Advertisements should be sent in by October* 28.

General Literature.

BUDDHIST FOLKLORE.

Ten Játakas; the original Pali Text, with a Translation and Notes. By V. Fausböll. Copenhagen: Hagerup. London: Trübner and Co.

In this little volume M. Fausböll has given us a new instalment of the Buddhist *Játaka*, consisting of ten consecutive stories taken from the second great division called the *Duka Nipáta*, and forming a valuable addition to our stock of knowledge of this remarkable collection of ancient tales. The first of the ten Játakas is entitled, "A Royal Admonition," and the story is briefly as follows. There was once a king of Benares named Brahmadatta, whose righteous administration of justice put an end to litigation in his kingdom, and left him time to turn his attention to his own faults, with a view to their correction. He accordingly questioned first his own retinue, then the public officials, then the citizens of Benares, then the suburban inhabitants, and lastly, mounting his chariot, he drove through the length and breadth of the land, begging all whom he met to tell him his faults. But all with one accord told him only of his virtues, and he was returning, baffled, from his expedition, when in a narrow defile his chariot met that of Mallika, king of Kosala, who was bound on a precisely similar mission. It at once became evident that one of the chariots must make way for the other, and the charioteers of the rival monarchs commenced a dispute for the precedence, which seemed hopeless when it was ascertained that neither could claim any advantage over the other in age, wealth, fame, or military power. At length, however, it was decided that the more virtuous should have the precedence, and the charioteer of king Mallika, challenged to describe the virtues of his royal master, replies as follows, "King Mallika overthrows the strong by strength, the mild by mildness, good he overcomes with good, and evil with evil." The other charioteer retorts, "If these are his virtues, what are his faults?" and thus sums up his own master's practice, "With meekness he conquers anger, he overcomes evil with good, he disarms avarice with liberality, and the liar with truth." These noble words have drawn from M. Fausböll a well-merited panegyric; he points out that the teaching they convey is absolutely identical with that of Jesus, and he adds, "The more I learn to know Buddha the more I admire him, and the sooner all mankind shall have been made acquainted with his doctrines the better it will be, for he is certainly one of the heroes of humanity"—a sentiment which most of those who have given Buddhism more than a passing study will heartily echo. The story ends by saying that Mallika and his charioteer instantly alight and draw aside their chariot, and the good king Brahmadatta, who is Çákyamuni in an anterior existence, returns to his capital, after giving Mallika some wise admonition. In the second Játaka, the Bodhisattva is a lion who has six brothers and one sister. A jackal, the meanest of the animals, dares to lift his eyes to the young lioness and offer her marriage. Indignant at this affront put upon their family, the younger lions one after another rush hastily upon the jackal, who is snugly ensconced in the "Crystal Cave," and dash themselves to pieces upon the transparent adamant. But the Bodhisattva, warned by the fate of his brethren, noiselessly approaching the cave, sends forth a roar so terrific that the jackal's heart bursts with terror, and he dies a craven's death. The moral is, "Look before you leap," or, as the text says, "The hasty man is ruined by his own actions." The third is an amusing tale of a hog who fancies he has inspired a lion with fear, and challenges him to mortal combat. The lion fixes that day week for the duel, and the hog, scampering back to his herd, proudly declares that he is going to fight the lion. The announcement is received with terror, and the crestfallen hog takes the advice of his friends to roll in a dunghill before encountering his dreadful foe. Accordingly on the fateful day our hero presents himself before the lion armed in a panoply of filth, and the noble beast, scorning to touch so contemptible a foe, says, "If you want to fight, I leave you the victory." The story adds, with a dry humour, that the hog told his friends he had "conquered the lion!" I pass on to the fable of the lion and the jackal, which is the seventh of this series, and breathes the true spirit of Buddhism. A jackal having by his cunning extricated a lion from a position which threatened him with death, the two animals from that day became sworn friends. But after a time the lioness, jealous of the jackal's mate, did all she could to terrify her and her cubs, with a view to procuring the dismissal of the obnoxious family. The jackal went to the lion and humbly sued for permission to break off an intimacy which had become dangerous to him. But the lion, after enquiring into the circumstances of the dispute, nobly stood by his friend, and, rebuking his lioness with the words, "A steadfast friend, even if he be weak, is a relative and kinsman," for the first time told her the origin of his intimacy with a creature so low as a jackal. The story ends by saying that the two families lived happily together for seven generations. The *Suhanu Játaka* relates how two exceedingly vicious horses, being let loose upon each other, exhibited, to the amazement of all beholders, every sign of satisfaction, and began licking each other affectionately. The moral is, "Birds of a feather flock together," or, as the tale expresses it, "the vicious Suhanu makes friends with every plunging, rearing, biting horse; the wicked with the wicked, the sinner with the sinner." The ninth story is entitled, "The Peacock," and is of very high interest. Once upon a time the Bodhisattva was born as a golden peacock, "beautiful and graceful, and variegated between his wings with bands of exquisite colour." Taking his stand on a Himalayan mountain-top, the radiant bird salutes the rising sun with this "sublime hymn," which he has composed to ward off evil during the day:—

"Rises the all-seeing universal king, who shines upon the earth with golden ray:
Thee I revere, lord of the golden sheen; 'neath thy protection may we live this day."

"The saints whose knowledge doth all things transcend, their be my homage, may they me sustain;
Praise to the Buddhas, praise to their truth sublime, praise to the holy freed from error's chain."

Again at sunset, gazing from his lofty post upon the vanishing orb, he breaks out into the song:—

"He sinks, the all-seeing universal king, the golden-hued who fills the earth with light:
Thee I revere, lord of the golden sheen; 'neath thy protection may we rest this night."

"The saints whose knowledge doth all things transcend, theirs be my homage, may they me sustain;
Praise to the Buddhas, praise to their truth sublime, praise to the holy freed from error's chain."

M. Fausböll has entirely altered the character of the second stanza of these invocations by taking *bráhmaṇa** in its ordinary sense of "a brahmin," and by rendering *buddhá* "the wise," and *bodhi* "wisdom." He justifies this course in the following words: "There are no grounds for interpreting the single words of this tale Buddhistically, nearly all the tales of the Játaka-book are old folklore in common for all India without regard to religion, and many of them treat evidently of pre-Buddhistic brahmanical affairs, and have been made Buddhistic in their application only." But this does not really meet the question, which is whether a non-Buddhist would make use of such expressions as *nam' atthu buddhánaṁ*, *nam' atthu bodhiyá*. I think not; at any rate the subject is not one that can be summarily dismissed in a few lines: it is scarcely necessary to observe that the comment on the lines takes them in a strictly Buddhist sense. The story continues as follows. One night Khemá, the wife of Brahmadatta king of Benares, dreamt that she saw a golden peacock, and she entreated the king next morning to get the bird for her. A fowler was sent to snare the Bodhisattva, but owing to the efficacy of the charm repeated night and morning all his efforts were in vain, and at length the queen died without obtaining her wish. The king, bitterly complaining that the peacock had caused his wife's death, wrote on a gold plate the following inscription: "A golden peacock dwells in the Himalaya, whose flesh confers perpetual youth and immortality." The first five successors of Brahmadatta in turn read this inscription, and, eager to obtain eternal youth, sent fowlers to capture the wonderful bird, but in vain, the magic spell rendered all their snares unavailing. But at length the wiles of the fowler commissioned by the sixth king were successful, the peacock forgot to repeat his spell, and fell into the hands of the sportsman, who carried him in triumph to the king of Benares. The delighted monarch was rejoicing in the prospect of immortality when he received from the peacock a revelation which induced him to spare his captive's life. "I was once," says the Bodhisattva, "a universal monarch (cakravartin) in this city, and made all men obey the precepts of Buddhism. As the reward of my conduct I was re-born at my death in the Távatiṁsa heaven. But when I left that abode, owing to some misdeeds in a previous existence, I was re-born as a peacock,† but became golden-coloured as a reward for my piety while a universal monarch." The king rejoins, "You say your colour is owing to your having once been a pious cakravartin in this city, but how am I to believe this? have you a witness?" "I have," replies the Bodhisattva, "When I was king I travelled through the air in a jewelled chariot, and this chariot was buried in the royal pleasure tank, where you will find it." The king drains his pleasure tank, finds the chariot, becomes a convert to the Buddhist faith, and bestows royal honours on the peacock, who, after a brief sojourn, returns to his mountain home, with the parting injunction, "Make haste, great king, to work out your salvation." Such is the beautiful *Mora Játaka*, a tale which appears to me thoroughly Buddhist from beginning to end.* M. Fausböll would be the first to admit that all except the peacock's invocation is Buddhistic, and his taking the invocation in a brahmanic sense involves the bold theory that the verses of some, at least, of the Játaka tales can be dissociated from the story which contains them. M. Fausböll has nowhere stated such a theory, and it is scarcely within the bounds of possibility that it should be a true one. In his preface M. Fausböll has justly observed that the "framework" or preamble of each tale is no doubt less ancient than the tale itself, but this in no way bears on the connection between the tale and the verses which it contains. The moral of the tenth story is, "Pride goes before a fall." Once upon a time a golden swan, who lived in the deva world and had two sons as beautiful as himself, formed a connection with a crow who lived in the kingdom of Videha, near the capital Mithilá, and their offspring was a mongrel bird, to whom they gave the name of Dapple. The young swans, having ascertained the cause of their father's frequent visits to the world of men, begged him to let them bring their low-born brother to their own celestial world. They received permission to do so, and, perching Dapple upon a stick, seized each an end, and soared into the air above the city of Mithilá. It so happened that king Videha was at that moment driving round the city in his state chariot, drawn by four snow-white Scinde horses, and the base-born Dapple no sooner caught sight of the royal equipage than he exclaimed, "Why, I am every bit as grand as king Videha; he has a chariot with white horses, and I have a chariot with golden swans." Indignant at his presumption, the swans were at first about to let him fall to the ground, but relented and carried him to their father. The latter, hearing the story, sent his unworthy offspring back to earth with these scornful words, "You tread on dangerous ground, my son, this place is too good for you; go back to your village and your mother's home." And the crestfallen bird ended his days on his native dunghill.

In an appendix M. Fausböll has given the Pali text, without a translation, of two tales taken from a different part of the Játaka-book. One of these has the same title as the first of the Ten Játakas. It relates how a king Brahmadatta, wandering about in search of some one who will tell him of his faults, comes into a part of the Himavanta fairyland, in which everything he eats, even a banyan leaf, has a delicious taste. He is informed by a pious hermit (the Bodhisattva), who dwells there, that in this district everything tastes sweet to those who live virtuously, and bitter to those who live wickedly. To test the truth of this assertion, Brahmadatta goes back and rules unrighteously for a short while, after which he returns to Himavanta and finds the food bitter, as predicted. The hermit then recites some stanzas to the effect that as cattle in crossing a river follow their leader whether he goes straight or crookedly, so if a king goes wrong his people go wrong also, while if he rules well the people are happy. The king profits by the Bodhisattva's admonition, and returning to his kingdom reigns righteously ever afterwards. The remaining tale is called *Mahámora Játaka*, and up to a certain point follows the *Mora Játaka* pretty closely, but ends differently, the peacock, when captured, converting the fowler, who sets him free. It is worthy of note that this tale presupposes a knowledge of the *Mora Játaka*, of which, up to the capture of the peacock, it is little more than an amplification.

In editing these tales M. Fausböll has fully maintained the high standard of his *Five Játakas* and his *Dasaratha*

* I have elsewhere shown that *bráhmaṇa* in Pali is constantly used in the sense of an Arhat or Buddhist saint.

† The animal existence is one of the four states of punishment.

* The peacock's invocation forms part of the *Pirit Pota* (or "Book of Spells against Evil Spirits"), translated by Gogerly.

Játaka. The text is collated, and the variants are recorded, with a laborious care deserving of the highest praise, and the translation is scrupulously accurate throughout, indeed too accurate for elegance, the occasional use of the historical present, for instance, being a decided blot on an English version. I have noticed one or two slips, as at p. 80, where *pakkhánaṁ antare* is inadvertently rendered, "among the birds," and at p. 47, where *te me namo* is rendered, "those I worship": it should be either, "they are (the objects of) my homage," or, as the comment takes it, "may they receive my homage." I may observe that *namo* in Pali seldom or never means "worship" in our sense.

The twenty pages of notes contain much interesting matter, but might, I think, have been shortened with advantage.*

The appearance in rapid succession of the *Dasaratha Játaka* and the *Ten Játakas* is a pledge that M. Fausböll has returned to his labours in the field of Pali literature with all his old zest and energy; and we may hope that he will henceforth devote himself exclusively to the Buddhist folklore, a department which he has made so entirely his own. In concluding this notice of his latest work, I would venture to suggest that, instead of giving us from time to time detached fragments of the Játaka-book, he should begin at the beginning and go regularly through it, issuing at stated intervals a volume containing either a certain number of tales or a certain number of pages. We should thus gradually get a clear idea of the book as a whole; and if the *Játaka Nidána* was made the first volume of the series, we should know what the Buddhists themselves have to say concerning the origin of the tales. By omitting notes and appendices (which do not interest the general student of folklore), M. Fausböll would greatly expedite his labours; and at the rate of thirty or forty Játakas a year, he might well hope to accomplish in his lifetime the task of editing the entire *Játaka*, a task worthy of one who divides with the illustrious Burnouf the fame of having created Pali scholarship.

R. C. Childers.

LITERARY NOTES.

In *Im Neuen Reich* (September 27) Dr. A. Dove, one of the *collaborateurs* in the Life of Humboldt recently published, sums up the results arrived at by his biographers. He took a serious interest in a variety of special studies, but before he had attained to real eminence in any one, he always left it for a fresh pursuit. His *Kosmos*, though a marvellous compilation, was only begun after his independent contributions to science had ceased. His reputation therefore was highest when he was doing least to deserve it, but if he is regarded as a representative of the scientific culture of his age, it will scarcely appear exaggerated.—In the same periodical, an article, "Blicke über Klostermauern," is chiefly remarkable as a picture of the comfortable worldliness of monastic life in the well-to-do orders in Germany.

We understand that a work on Dante, by Mr. J. A. Symonds, will shortly appear. It is intended to serve as an introduction to the study of Dante's poems as well as of his life.

The last of ten articles on "France and the French," by Karl Hillebrand (*Allgemeine Zeitung*, October 6), discusses the curious technical facility and *savoir-faire* which makes French mediocrity in literature and art more tolerable than the mediocrity of any other people. The writer traces it in part to the traditions of a high social cultivation, and touches on the opposite weak point of German literature by observing that Lessing, Göthe, and Schopenhauer are nearly the only German writers who were neither tutors nor professors.

A writer in the *Allgemeine Zeitung* (September 30) is reminded by the annexation of Alsace (including Saverne and the site of the furnace in which the godly knave Fridolin was *not* burnt) of some singular Welsh parallels to Schiller's *Der Gang nach dem Eisenhammer*. The lines—

> "Dem lieben Gotte weich nicht aus,
> Findst du ihn auf dem Weg!"

are all that remains in the ballad pointing to a phase of the legend in which the faithful servant owes his escape to the observance of three rather oracular precepts. This is fully developed in a Welsh version of uncertain age, but ancient origin, which illustrates the proverb, "Envy consumes itself." The writer quotes from the same collection the story of a "Half-man," explained in the same allegorical manner as "the force of habit," which becomes irresistible if not wrestled with at once. Of course the primitive popular tale is always older than moral interpretations of this kind, but the latter are commoner than is generally known, and their comparative antiquity is a curious problem in folklore.

"Norwegian poetry since 1814" is so little known in England that Mr. Gosse's short account (in *Fraser*) of the chief modern Norwegian poets will be read with interest, though it is difficult, without more numerous translations, to give a really distinct representation of the quality and strength of their several claims to poetical eminence.

Art.

The Dream of Poliphilus. [*Ueber den kunsthistorischen Werth der Hypnerotomachia Poliphili:* ein Beitrag zur Geschichte der Kunstliteratur in der Renaissance. Von Albert Ilg.] Wien: Braumüller.

There is no book, I think it may be said advisedly, in which a whole phase of human culture is reflected so fully and vividly, and from so many sides, as in the romantic vision of the Dominican father Francesco Colonna. And yet the name of Francesco Colonna is a name next to unknown, and his book of *Poliphilus* a book unknown beyond a narrow circle of collectors and the curious, who prize it only for its engraved embellishments, a small portion of its vast real significance. The present author does indeed (as we shall see by and by) underrate the amount of attention which has been paid to his subject by previous writers. But he rates very justly, and as no one else before him had done, the amount of attention which is its due. In fastening on the book of the *Hypnerotomachia* as the most concentrated, most comprehensive and many-sided expression of the early Italian Renaissance in its myriad enthusiastic modes at once, Dr. Ilg has shown a true sympathy with the spirit of the time; and he has sketched out what might grow into a contribution of the first value towards its spiritual history. Dr. Ilg is editor of several parts, published and projected, of the admirable Vienna series of *Quellenschriften für Kunstgeschichte und Kunsttechnik.* The piece before us was written as an essay for the degree of Doctor of Philosophy at Tübingen. Hence, upon some strictures presently to be made, it should be borne in mind that we are dealing with what professes to be no more than a sketch, and may accordingly be permitted in the shortcomings of a sketch, towards a subject of which the issues are without number.

In the year 1499 there came from the press of the elder Aldus at Venice a book in the vulgar tongue, bearing the following title in Latin: *Hypnerotomachia Poliphili, ubi humana omnia non nisi somnium esse docet atque obiter plurima scitu sane quam digna commemorat.* This title is arranged in an inverted cone, and followed by seven stars and a warning against piracy by any other printer within the Venetian dominions—one of the earliest declarations of copyright known. On the last page of the volume (234 pages folio) are the errata, and the printer's imprint, as follows:

* For some philological criticisms, see *infra*, "Philology," p. 399.

Venetiis, mense decembris M.I.D *in aedibus Aldi Manutii.* The author's name is not expressly given. That the book had been composed by him thirty-two years before its publication, and at another place, is indicated by this subscription on the last page but one: *Tarvisiis cum decorissimis Poliae amore lorulis distineretur misellus Poliphilus,* M.CCCLXVII *Calendis Maii.* Poliphilus means lover of Polia; the author means to tell us that he finished writing his book on the 1st of May in the year 1467, at Treviso, when he was enchained by the love of Polia in sweet and honourable bonds. And the tenor of his story is how once upon a time he thought himself enamoured of Polia in a morning dream, and how his dream led him, through strange adventures and ravishing sights and lessons in her company, to the very point of fruition, when sunrise broke upon his sleep, and the vision vanished away. The example of Dante has been in his mind. He represents himself as wandering in a wood in his dream, as drinking the waters of a brook, as terrified anon by a ravening monster, before whom he flees, presently to find himself within a world all enchantment and magnificence, with nymphs, as free and friendly as they are beautiful, to do him its honours. There he meets the lady of his love, at first without knowing her, and is by her accompanied, encouraged, and instructed in the meanings of all that he sees and admires. The love story is constantly subordinated or forgotten; the progress of events is clogged by an extraordinary profusion of descriptive details, that unite in a curious degree the most minute and fatiguing technical pedantry with the most enthusiastic and enjoying affection and poetical rapture. It is a more than childish facility of imagination, a more than Asiatic exuberance of gorgeous or mystic material imagery. And such a style!—a Lombard Italian larded with unheard-of forms which the writer has incorporated or invented from the Latin, Greek, and Hebrew. "La mia *abrodieta* Polia," "*zacharissimamente,*" "*strophiosamente,*" "*enucleatamente,*" "*profuse lachrymule,*" "*mustulenti morsiunculi,*" "*limatissimo eloquio,*" these are the kind of flowery vocables with which his pages teem. According to a childish fashion of the Renaissance in more than one of the Romance literatures, every other epithet has either the superlative or the diminutive Latin form, and every other substantive the Latin diminutive, for expressing adequately the marvellous and delightful nature of the things which they describe. The effect of this language is grotesque, pedantic, and puerile in the last degree; it is an Italian both barbarised and effeminated, and could not be read but for the extraordinary warmth and richness of the imagination by which the scenes described in it have been bodied forth. It is the style stigmatised in Italian literature as *Fidentian* (according to the burlesque of Camillo Scrofa, published not many years later under the name Fidentio Glottochrysio). You get accustomed to it as you read, and find that you are in the company of one who possesses, and pours forth without stinting, all the jumbled and excited new knowledge of an age that has just struck the lost fountains of antiquity. It is the early Renaissance—drunk with antiquity: lifted up with the delights of marble and manuscript; a world rejoicing with the sense of new blood in its veins, new freedom for its thoughts, the lust of the eye and the pride of life made lawful and honourable again. You soon discover that you are reading an allegory, and that under the figure of Polia you are to understand the classic age, the antiquity of Greece and Rome; under the figure of the five nymphs, the five senses that conduct the lover of that antiquity with delight towards what he seeks. Poliphilus wooing Polia is the Renaissance wooing the past. And the passion of the age is by no means overstrained in that similitude. Indeed it is just the kind of similitude which modern criticism, reflecting from a distance on the age's spirit, might have chosen to represent it under. The profound genuineness of the passion carries you, with a certain cordial amusement and sympathy, over even the most profuse and tedious pauses of its progress, the most lingering amplifications of antiquarian and artistic pedantry. The writer is a marvel of scholarship; he has Vitruvius and Pliny at his fingers' ends; half his book is taken up with technical descriptions of architecture, palaces, temples, mausoleums, baths, fountains, gardens, which he imagines and lays out with infinite detail according to the divine precepts of the ancients as he has understood them. He devises monuments, tombs, and urns, with funerary inscriptions in a sentimentalised Ciceronian, good enough to pass with some later scholars for original. He has an idea of his own as to what the hieroglyphs must have been, and describes a quantity of relief carvings, having the nature of a modern rebus, which he conceives to correspond to that word. He is full of connoisseurship about ancient gems and intaglios. He is steeped in classical fable and history, and cannot breathe a sigh to his mistress without sending after it a dozen learned reminiscences of ancient heroes in predicaments parallel to his own. He invents pageants and triumphs without end, and describes them with rapture—pageants, triumphs in the spirit of Mantegna, Priapic festivals, and sacrifices to Venus. And beside his knowledge and passion for art and the antique, he has a parallel passion for nature and what one ought to call science: he makes the most immense and affectionate exhibition of botany and herbal knowledge according to the lights of his day.

And all this, which makes of the text of his book so romantic and fantastic an encyclopaedia of his age, its eager acquisitions and aspirations, is illustrated with one hundred and seventy-two woodcuts—the prize of the collector and the curious—which are as interesting for the history of the art as they are beautiful in themselves. They are pure, almost bald, outline designs, some in illustration of the architectural and antiquarian imaginations of the book, some of its figure incidents, the adventures, pageants, spectacles, and love passages. And these latter are without their like in the history of woodcutting. They breathe the spirit of that delightful moment when the utmost of imaginative *naïveté* is combined with all that is needed of artistic accomplishment; and in their simplicity are, in the best instances, of a noble composition, a masculine firmness, a delicate vigour and grave tenderness in the midst of luxurious or even licentious fancy, which cannot be too much admired. They have that union of force and energy with a sober sweetness, beneath a last vestige of the primitive, which in the northern schools of Italy betokens the concurrent influence of the school of Mantegna and the school of Bellini.

Who is the learned linguist, architect, botanist, antiquarian, poet, the anonymous author of this wonderful and wonderfully embellished composition? The anonymousness is thin after all; for, in his riddling way, the author has revealed himself by the initial letters of his thirty-eight chapters. Put these together, and they read: *Poliam Frater Franciscus Columna peramavit.* Brother Francesco Colonna accordingly is the name of one who by this work comes down to us as one of the most variously gifted, one of the most poetical and encyclopaedic, of all the illustrious group of the early humanists in Italy. And yet his personage is by far the most obscure among them all. All that the learned Prosper Marchand, writing in the first half of the last century, could learn about him from the chroniclers of the Dominican order, was that he was a brother of that order, born at Venice, resident part of his life at Treviso, the author of a famous work of literature in the mother tongue,

and by and by buried at Venice in the Church of SS. Giovanni e Paolo. The later researches of Federici, as quoted by Marchese, prove him to have been born in 1433, to have already belonged to the Predicants so soon as 1455, to have resided at Treviso up till 1472 (and there, as we have seen, to have composed the *Hypnerotomachia* by his thirty-fourth year): to have professed rhetoric and languages at Treviso, and theology, subsequently to 1473, at Padua; to have been at Venice on a mission from his order in Padua in 1483; again, after a long gap, to have been in receipt of relief in food and fuel, on account of age and infirmity, from the convent of SS. Giovanni e Paolo; and finally to have died at that convent in the ninety-fourth year of his age, October 2nd, 1527. It has been inferred, rather than proved, that he must in his youth have been a great traveller in order to acquire the precocious mass of knowledge which places him in the front rank of the investigating students of his time, and which would have done honour to a Poggio or a Cyriaco. There is evidence of friendship between him and Ermolao Barbaro.

Another doubtful point is whether he really celebrates any earthly love under the allegoric figure of Polia. The early commentators unhesitatingly assumed that his heroine was a lady of Treviso, and called her, according to indications which they found in the text of the book, a Lelia Mauro, or a Lucrezia or Ippolita de' Poli. Later ones, and principally Father Marchese, whom Dr. Ilg follows, believe that there was no such lady, and that Polia is a personification only—as it were the Greek πολιά, the adorable and venerated antiquity. I think the opinion of Lamonnaye the more probable, according to which an abstract passion for antiquity and a concrete passion for a mortal lady would both be typified and blended together in the heroine. We have seen how Colonna has his eye upon Dante; and as Beatrice was for Dante a mortal lady sublimated into the Heavenly Wisdom and identified with it, so would Polia be for Colonna a mortal lady sublimated into and identified with the Antique Learning, the new wisdom and new spiritual passion of his time. The human nature of Italy and its fashion alike would make the fact of an earthly passion antecedently probable, even in a brother of the order of Dominic. If there were no such real passion in question, I cannot see any meaning in Polia's long description of herself at the beginning of the second book, pointing explicitly to a Christian name *Lucretia*, and to a family of Trevisan fame supposed to be descended from the Laelia gens; neither, if such a lady had not lived and died, could I see any sense in the epitaph to her which closes the second edition of the book.

The history of the *Hypnerotomachia* and its editions and fortunes is curious. The first edition had been put into the hands of the printer Aldus, not, as we see, by the author himself, but in his lifetime by Leonardo Crasso (a forgotten jurist of Verona) long after it had been composed; and it contains a preface to that effect. The second Italian edition was published, with corrections of errata and one or two other slight changes, by the younger Aldi in 1545. The next year a French translation appeared, printed by Kerven in Paris for Jan Martin, secretary of the Cardinal de Lenoncour, who wrote a preface to it explaining how the translation, or free imitation rather, had been put into his hands by a friend. Here the affectations of the Italian style are pointed out and corrected; and the result is a fine specimen of sixteenth-century French prose. In 1554 another issue of this was called for; another in 1561, to which one Jacques Gohori wrote a preface, stating that the original French translator had been a knight of Malta, and he, Gohori, the friend who had put it into the hands of Martin. At the same time Gohori gave a hint of its containing mysteries of price for the alchemist. This opinion grew, together with the superstitious respect founded upon it; the book, besides its enormous popularity as a romance and encycloplaedia of classic learning, got in France the fame of a treasure-house of hermetic science besides. Its next French editor (1600) was Beroald de Verville, a deep alchemist and Paracelsian, who made some trifling alterations in the text and the wording of the acrostich, and hinted ineffable things about the philosopher's stone being there for such as knew how to find it. Many students now take its fabricated inscriptions for genuine; but Isaac Casaubon, and one or two such heads, smile and say *they* are not to be taken in by "suaviludius ille" on this point. These French editions (I have not seen that of Beroald, and speak of the earlier) were adorned with engravings cut on wood by a native artist in imitation of the Italian. These, too, are excellent in their manner, so excellent as to have been attributed by modern criticism, without quite sufficient reason so far as I am aware, to either Jehan Cousin or Jehan Goujon, the great painter and great sculptor of the latter Valois reigns. Nothing is more interesting than to compare the designs one by one; the French artist takes the motive of the original faithfully enough, but transforms it according to his own spirit, puts in more motion and agitation, less grave grace and simplicity, a freer cast of draperies, a less disciplined drawing, a more elaborate and less simple —but in its way very admirable and powerful—mode of treating landscapes and flowers. About the same time an English version was published by S. Waterson. Then the popularity of the work dies out, and the notices of it get vague and muddled. It has got about that the designs are by Raphael forsooth. That mistake serves the value of the book, and is used in sale and library catalogues; it has been repeated into later times by Papillon. The author's name is even partly forgotten, in spite of the transparent nature of the acrostich in which it is conveyed. From Rabelais to Bayle, casual notices of *The Poliphilus* occur in French writers; but after Balzac and sound taste its contents have come to be solemnly denounced as "in the highest degree irregular," or more briefly to be dubbed *galimatias;* and there is a passage in which the great Despréaux is supposed to ridicule the style. Ménage has an allusion to the volume, and Lamonnaye, in his addenda to the Amsterdam edition of the *Ménagiana* (1726), collects a quantity of information relative to it, and starts the theory which I have quoted, of Polia being at the same time a real lady of flesh and blood, and an abstract ideal of the antiquarian mind. The Italian engineer and architectural writer Temanza, and the French Félibien, both discuss at length, in the early part of the eighteenth century, the attainments of the author in Vitruvius and in architecture generally. The posthumous *Dictionary* of Prosper Marchand (1758) contains a formidable mass of citations and authorities in connection with the work. In subsequent histories of literature, Colonna is slightingly mentioned by Tiraboschi and Guinguené. And finally, many readers are probably acquainted with the pleasant little romance (*Francesco Colonna*) into which Charles Nodier turned the somewhat slender knowledge and ample fancy which he possessed on the subject; as well as with M. Michelet's forcible allusions to *The Poliphilus* (in his twelfth volume) as the favourite and typical literary food of that France of the Renaissance into which the versions of it were published.

There are obviously a vast number of aspects in which this singular book has to be regarded by a writer undertaking to examine it as Dr. Ilg has done. First and most important, there is its general relation to the culture and ideas of its time. For that Dr. Ilg is admirable. His opening section on the peculiar character assumed by the Renaissance

in Venice, the different form which the humanistic impulse took there and, for example, in Florence, are full of instruction. Again, his ample general knowledge of technical art literature and its sources in the Renaissance age give the utmost weight to what he says of the importance of the *Hypnerotomachia* from this point of view — if its artistic could be segregrated from its romance portions—and of its relative place beside the treatises of Alberti, Serlio, Lionardo, Piero della Francesca, and the other great humanists, classicists, geometricians, encyclopaedic students of antiquity and of nature, pioneers of the modern humanity. In the course of this section Dr. Ilg has frequent sentences, which we regret that space makes it impossible to quote, touching his subject with a tact of appreciation which, over and above the remarkable force and grace of his style, mark him out for a writer of whom we may expect the utmost in the fields which he has chosen.

Then there is the side of the romantic contents and narrative movement of the *Hypnerotomachia*, and these Dr. Ilg has set forth with great industry and spirit. He has travelled conscientiously through the book, and gives us a *précis* of each chapter, with a discriminating enlargement on all the more significant and characteristic episodes.

There is the side of its literary and linguistic interest, and on this Dr. Ilg is silent. He does not follow Tiraboschi and the other authorities into any discussion of the "Fidentian" or pedantesque style, which was adopted by some of the humanists who did not, like most of them, eschew the mother tongue altogether, and of which this is so memorable an example. But he has a conjecture of his own, which bears on the question of style. He points to the dedication of Poliphilus to Polia at the beginning of the book, in which Poliphilus says that he had for Polia's sake, and at her instance, abandoned *il principiato stile*, and translated (*traducto*) his work into its present form. Dr. Ilg is wrong in saying that he is the first to have noticed this point in the dedication. It was noticed by Lamonnaye, and understood by him, and by others after him, as meaning that Colonna had begun his work in the ordinary Italian vernacular, but afterwards, perhaps owing to pedantical tastes in the mortal Polia, changed it into the larded or Fidentian style. Dr. Ilg, on the other hand, remembering the rumour current among the older commentators of an original Latin version, supposes the work to have been composed, although never published, in Latin at the first date, 1467, and that then, for the sake of a more extended popularity (and thus, as it were, for the glory and at the instance of Polia herself), the author transferred or translated it into its present form for publication. That, I think, is acute, and would account for the kind of fundamental and quintessential Latinism which, in spite of Grecian and Chaldaic admixtures, is the note of the style, better than it can be accounted for by the hypothesis of unaided pedantry.

Then there is a whole fountain of interest in the comparison both of figure and ornamental subjects in the French and Italian editions—the comparison of human ideals and architectural ideals (for both artists treat the text with considerable freedom) in the Venice of the closing *quattrocento* and in the Paris of the latter Valois, half a century off. On this our author has nothing to say, being personally unacquainted, as we may gather, with the French editions.

There is also the side of bibliography and literary history: and here Dr. Ilg is rather weak. He says the number of writers who have mentioned the book is very small, and includes only Apostolo Zeno, in his *Life of the Aldi;* Leander, in his *Writers of the Preaching Orders;* Federici, in his *Memorials of Treviso;* Marchese, in his *Lives of the Dominican Artists;* Cicognara, Selvatico, d'Agincourt, Zahn, Papillon, Passavant, and Nagler—generally, says he, with only a few words each. The very imperfect sketch we have ourselves run through above will show that, besides Félibien, Dr. Ilg here passes over the two capital and particular authorities, Lamonnaye and Marchand. And this leads him into a further error. He speaks of a few secondary Italian commentators in the seventeenth century as ignorant of their author's name, and then says that the truth was first found out, and the acrostich solved, by P. Pedrogalli and Apostolo Zeno. This comes of blindly following Marchese. I have not been able to refer to Apostolo Zeno's *Lives of the Aldi*, in which it seems he relates his discovery; neither do I know if the date of his solution can be earlier than Villani and Aprosio's *Discorso della Poesia Giocosa*, quoted by Marchand as explicitly giving the key to the riddle. But here is a chain of evidence to show that the key was held by some from the beginning, and in France at least can never have been lost. In the first place, the frequent half punning insistance upon the words *columna* and *colume* in the original text points to a very meagre desire in the author to keep his secret at all. In the next, Marchand quotes from the *Giornale dei Letterati d'Italia* the description of a copy of the first edition, in private possession, bearing on the title a MS. note dated 1512 and naming Francesco Colonna as the author. And I am able to add a curious inedited testimony of a similar kind. The Cambridge University Library possesses a copy of the first edition, on the title of which is written an eulogistic sonnet of unmistakable genuineness, in *versi sdruccioli*, as follows :—

"Libro degno di cedro et di memoria,
Bello, dotto, gentil, ampio, decorulo,
Disceso dallo Dio del sacro chorulo,
Del Pegaseo liquor trionfo et gloria;
In te chiudi ogni fabula ogni historia,
Architetture da divin lavorulo,
Hieroliphici, gemmo, argento, et orulo,
Et dal fanciul cupido ogni vittoria.

"*Francesco di virtu ferma colonnula*
Ti scrisse in stil latin, greco, et hebraico,
Lodando Muse, Apollo, et ogni gratia.
Sin chè Febo et la candida Latonula
Il cielo illustreran, serai duratico.
Va dunq̃ in man d' ognun cō buona audacia
Et li bei spirti facia
Del soavo scritto tuo, tuo vago flosculo,
Ch' assai più odora del fragrante mosculo."

This is signed by one of the house of Medici, as it seems—*Sixtus medices*—in the sixteenth year of his age, *anno dñi* 1518: and the writer with his mincing diminutives shows himself an apt pupil of his master. (The second line printed in italics suggests questions into which one cannot enter here; but it points probably rather to the semi-macaronic constitution of Colonna's language than to separate versions, which it is impossible to conceive, written by him in all three learned languages.) So that a countryman of the author's names him during his own lifetime in 1512, another in 1518. Then a Frenchman, Benoît de Court, names him in a Lyons book of 1533; then Jan Martin, in his preface to the translation of 1546, directly and elaborately gives his readers the acrostichal key, the system of initial letters having been carefully observed on purpose by the French paraphrast. So that it is misleading to talk of the mystery ever having been really complete or needed rediscovery.

Once more, the question of the artistic spirit and authorship of the designs is a most tempting and extensive one. Dr. Ilg is fairly satisfactory about this. He catalogues and describes the illustrations intelligently, one by one, and then makes suggestions as to their possible attribution. He rightly points to two hands (as indeed there may be more)

of unequal skill as being apparent in the work; and finally fixes hypothetically on Bartolommeo and Benedetto Montagna. He is no doubt accurate in seeing here that blending of the solemn and tender Bellinesque and the robust and scientific Mantegnesque spirits which you find, and which is so delightful, in the secondary Lombard artists of the closing *quattrocento*, and especially in the Vicentine school — a Buonconsiglio, a Bartolommeo Montagna. But I should say it is more than doubtful if criticism in the matter will ever be able to go nearer than this. And Dr. Ilg ignores what seems to have been conclusively proved by Messrs. Crowe-Cavalcaselle: that Benedetto was not the brother of Bartolommeo Montagna, as had been supposed, but his son, whose career could not have begun at all till twenty years after the publication of the *Hypnerotomachia*. Again, our author writes of Squarcione, and the Paduan school of Squarcione, in a way that would have been more appropriate before the latest criticism had attenuated that name to little more than mythical proportions.

It will be seen, thus, that Dr. Ilg's spirited and elegant monograph has one or two shortcomings of a kind that are not quite to be permitted to it as being a sketch and no more. He has been led into one or two positive errors by want of acquaintance with French editions and French authorities, and one or two minor critical laxities besides. But these are in the least important sections of his work. Its most important sections, those that deal with the essential significance of his subject, spiritual and artistic, and with the elements amidst which it has its place, are all that can possibly be desired. And no one could better follow up than our author himself the task which he has here sketched out in relation to this fantastic, this colossal and pathetic memorial of learning happy in its blunders, of curiosity unembarrassed in its conjectures, of enthusiasm with its buoyant imagination and luxurious pictures—the memorial, and in part the parody, of an exuberant and unexhausted hour which we have learnt to envy in laughing, and to love even while we yawn. SIDNEY COLVIN.

ART NOTES.

Dr. Dove writes in the present number of *Im Neuen Reich* a paper in remembrance of Edward Magnus, whose death was recently announced in these pages (see *Academy*, vol. iii. p. 327). The paper in question ultimately resolves itself into a brief review of Magnus' last contribution to art literature, *Die Polychromie vom künstlerischen Standpunkte*. It is agreed by all that the unspotted freshness of a new material, be it what it may, is unpleasant to the eye. We all desire something of a patina. The patina bestowed by the hand of time on marble or bronze is seldom quite what we want, and we recur to the hope of discovering some means by which we may produce from the beginning a thoroughly satisfactory patina, softening, heightening, or enforcing those portions only which require such additional touches. Magnus recapitulates in his pamphlet the not unsuccessful attempts made by modern artists to bestow the desired surface on bronze; as to marble, he is obliged to confess that the secret which he believes the Greeks to have possessed still remains a secret in their hands. The much debated *circumlitio* of Pliny, "*Hic est Nikias de quo dicebat Praxiteles interrogatus, quae maxime opera sua probaret in marmoribus: quibus Nikias manum admovisset; tantum circumlitioni eius tribuebat*" (35, 11, 134), was, Dr. Magnus ingeniously suggests, a carefully overlaid artificial patina, such as might be achieved by treating faults in the marble with rosin, &c., and at the same time adding a delicate and subdued tinting of details, borders on drapery, hair, and the like. In the palmy days of Greek art these modest limits were never overstepped, but as taste became corrupted, and Oriental influence made itself felt after the time of Alexander, Dr. Magnus thinks that variegated colour, what may be called the waxwork style, which the people's art had in truth never renounced, again got the upper hand. Dr. Magnus concludes his essay with a word or two on the less complex question of colour as a means of architectural decoration. He is strongly of opinion that on the outside of a building it should never go beyond the variety afforded by the natural colours of the stones, marbles, &c. employed.

The Bishop of Augsburg is restoring the St. Ulrich's Church, which is one of the most important buildings in the town. The church derives peculiar interest from the fact that it is a very beautiful example of late Gothic, at the moment when late Gothic was developing into early Renaissance. The fittings of the interior are indeed all but pure Renaissance. The ordinary course of the modern restorer would be to remove these at once, as being out of keeping with the rest of the edifice. But the works at Augsburg seem to be conducted with the discretion which accompanies thorough knowledge. The restorers of the St. Ulrich's Church are not unmindful of the fact that the so-called industrial art of any given epoch is always in advance by some years of the style prevailing in those great main branches the study of which demands the acquisition of sound scientific knowledge. It is in the minor and more facile departments of internal fittings, furniture, and decorations that we must look for those germs of change which appear as pioneers breaking the way before the coming of a great new style. The fittings of the St. Ulrich's Church are therefore to remain in their places, and even the repainting and gilding is to be kept within modest limits. The high altar, which has been happily called a translation from the late Gothic into the Renaissance tongue, seems to have been originally somewhat over-gilt; this defect has now disappeared through the action of time, and great care will be taken not to reproduce it. The fine ironwork which was formerly thrust into an unobserved portion of the building is to be brought into a suitable and prominent position; and it is proposed to fill the empty windows with stained glass. St. Ulrich's, in short, will now reassume its rightful place, and take rank, after the cathedral, as the second great monument produced by Augsburg in the blossom-moment of the Renaissance.

Kaulbach's "Todtentanz," begun many years ago, is at last given to the public. In one portion figures Pio Nono, who, as the champion of Infallibility, triumphantly holds aloft the keys of St. Peter with which he has locked the doors behind him. In spite of all precautions, Death enters in the guise of a Garibaldian with the red cap on his head. In like manner throughout, the old motive is made to carry allusions to all the special questions of the day. The work is published by Hanfstängel at Munich.

Dr. Helbig writes from Rome to the *Zeitschrift für bildende Kunst* a letter which contains an account of some recent purchases made in that city by the direction of the Berlin Museum. In the first place comes a head of Marsyas in Greek marble, found about five years ago in the excavations at the baths of Caracalla undertaken under the auspices of the Papal government. Besides this, a fragment of a relief, also executed in Greek marble, has been obtained, which came to light when the pavement of the Piazza di Pescheria was taken up last February. The third object is a portrait head of a Roman patrician found near Palestrina, some two metres below a mosaic pavement. In addition to these sculptures, two fine vases, the product of the excavations carried on at Cervetri by the brothers Bocca, and last, but not least, a bowl signed Duris: the figures are in red, and those on the outside represent a school; each branch of learning has its group of learners standing before a seated teacher; on the other side a youth teaches the flute, but the significance of the next set of figures is doubtful; we have again a youthful teacher, but whether he teaches writing or drawing, Dr. Helbig (who however inclines to suppose drawing) will not undertake positively to decide.

Dr. Julius Meyer, the author of *Die Geschichte der modernen französischen Malerei* and editor of the *Allgemeines Künstler-Lexikon*, has been named director of the picture galleries of the Royal Museum at Berlin. Dr. Meyer, who has hitherto resided at Munich, has not achieved a reputation for that urbanity of

manner which the public generally desiderates in official personages. It is indeed possible that Dr. Meyer has but occasionally given evidence of that just resentment which all workers feel when called upon to sacrifice their time in amusing the vacuity of those who have nothing to do. At any rate in point of knowledge and insight we may feel assured that this post, vacant since the death of Dr. Waagen, will now be worthily filled.

A course of lectures has been announced for the coming winter, which are to be given in the hall of the Austrian Museum for Art and Industry at Vienna. Amongst the names of intending lecturers we observe those of Professor Conze, "On Expression in Ancient Art;" Dr. Thausing, "On the German Art Movement of the Sixteenth Century;" Regierungsrath Falke, "On Benvenuto Cellini and the Goldsmith's Work of the Renaissance;" Custos Lippmann, "On the History of Engraving"; &c.

There have been one or two reports of late of attempts made to injure the paintings exhibited in certain German picture galleries by cutting them with a sharp instrument or otherwise disfiguring them. In one instance at least (that of Rössler's picture in the gallery at Wiesbaden) religious fanaticism seems to have instigated the mischief. We now learn that three paintings in the Berlin Museum have suffered the most serious and disgraceful injuries, *i.e.* "Bathsheba Bathing," by Cornelius von Haarlem, on canvas (Cat. No. 734); "Portrait of an Old Woman," by Gerhard Dow, on wood (Cat. No. 847)—in this instance the slash goes right across the face; finally, "Perseus and Andromeda," a well-known masterpiece of Rubens, on wood (Cat. No. 785), has been cruelly gashed, a deep cut going right across the lightest portion of the flesh painting in the figure of Andromeda. It is a surprising fact that such an act could have been dared and have escaped remark at the present time when the museum is constantly thronged with visitors.

The *Gazette des Beaux-Arts* for October contains "Eros, a Study on the Symbolism of Desire" (first article), by Louis Ménard. The writer suggests that Hermaphrodite, the symbol of the union of the two sexes in nature, was intended to represent, under a plastic form, the same function elevated by marriage to the dignity of a social law. In the most perfect and beautiful example of the type, the Hermaphrodite of the Berlin Museum, M. Ménard thinks it impossible to see anything but a personification of Hymen; the head is covered with the veil, the emblem of marriage, and the action of the hand suggests the torch.—M. René Ménard concludes his account of the South Kensington Museum: "The first impression of the visitor is that of wild confusion; thought is impossible in the midst of this mixture of all things, and the mind is wholly prevented from fixing itself on any point whatever."—M. Émile Galichon has a notice of "Les Estampes des petits Maîtres."—M. Henry Havard continues his lively notice of the gems of Dutch art exhibited at Amsterdam in 1872.—M. Eugène Muntz concludes his notice of London Exhibitions. In running the eye over the cuts of modern English jewellery which accompany the article, it is curious to observe how, with one or two exceptions, the beauties of every ornament are nullified by some little sin of omission or commission; some ends unseen, which are wanted to explain the whole; some knot untied where firm hitch is necessary; or some solid rod inserted where a slight chain only is required. The one or two exceptions come from the workshops of Howell and James; and the text explains the mystery by informing us that this firm has called to its aid no other than Mr. Leighton, whose eye for patterning spaces is marvellously quick and refined. —M. F. de Tal reviews M. Tancrède Abraham's etchings from Château Gontier and its environs.—M. Saint-Cyr de Rayssac, in a paper on the Lyons Exhibition, reclaims against the brutal idea, which emanated from England, of mixing up pictures and other works of art with the products of manufacturing industry in one heterogeneous pell-mell.—The number closes with a portion of M. Houdog's essay on "The Church of Brou and the Artists of the Renaissance in Flanders." The reproduction of an engraving of Hans-Sebald Beham, from a silver plaque in the collection of M. Adolphe Bouillat, is deserving of special attention.

New Publications.

Bibliothek Orientalischer Märchen und Erzählungen in deutscher Bearbeitung, mit Einleitung, Anmerkungen und Nachweisen v. Hermann Oesterley. 1. Bändchen: Baitál Pachisi oder die 25 Erzählungen eines Dämon. Leipzig: Fleischer.

De Morgan, A. A Budget of Paradoxes; reprinted with the Author's Additions from the *Athenaeum*. Longmans.

Froehner, W. Le Crocodile de Nîmes. Paris: Baur et Détaille.

Philosophy and Physical Science.

Jödl on the Life and Philosophy of David Hume. [*Leben und Philosophie David Hume's.* Dargestellt von Dr. Friedrich Jödl.]

The plan of Dr. Jödl's prize-essay on Hume appears somewhat narrow and timid: but its execution is certainly meritorious. The criticisms which he offers of Hume's positions are slight and fragmentary: he modestly declares it to have been beyond his powers to undertake a thorough philosophical estimate of the system or a complete exhibition of its historical relations. But his exposition of Hume's doctrines is not only always clear and accurate, but often skilful and discriminating, where some little skill and discrimination were requisite to combine properly the results of several compositions, divergent in plan and published at different times. Especially careful and judicious is his account of Hume's religious opinions. With regard to these there is some difficulty in arriving at a definite conclusion. It is certain that he was not, as is often represented, an Atheist: and there seems no reason to doubt the sincerity of his affirmation (*Nat. Hist. of Relig.* § xv.) that "any one of good understanding must adopt the idea of some intelligent cause or author of the Universe," nor of the similar statements in the *Dialogues* published after his death. It is true that in this latter treatise he develops, with unsurpassed force and subtlety, the speculative difficulties involved in the adoption of Theistic conceptions: but he does not sum up in favour of atheism, or even suspense of judgment as regards the simple immediate inference from the ordered universe to an Ordering Mind. The avowed scope of his scepticism seems limited to showing that this inference of Natural Religion cannot be made sufficiently cogent and definite to afford a basis for Rational Theology: and if the negative argument has more effect than the positive, as he presents them, it is still quite in the spirit of Hume's later philosophy to give the victory nevertheless to common sense and ineradicable instinct. That atheism has been popularly attributed to him, is probably due to the affected concealment of view in his famous essays on Miracles and Providence. The frigid irony with which he excepts the "inspired penmen" from his theory of testimony, and proposes an alliance between the sceptical reason and "Faith," naturally led his readers to regard the statement "that the whole frame of Nature bespeaks an intelligent author" as merely a pinch of incense on the altar of orthodoxy. In truth Hume and his friends seem to have curiously miscalculated the respective effects of different modes of expression of his unpalatable opinions. The *Dialogues* which he suppressed during his life, and which his literary executor regarded as a most unwelcome legacy, would really offend even orthodox readers less than the essays which he thought fit to publish. In these latter the irony merely envenoms the strokes of argument: but in the *Dialogues* there is a strain of earnest sincerity which all must feel, and a reverence for truth and sense of mystery which were perhaps the best substitutes for piety and awe that a mind like Hume's could give.

In treating of Hume's system of philosophy, it is funda-

mentally important to determine the mutual relation of the two editions of it which he offered at different times to the public. Dr. Jödl considers the *Treatise on Human Nature* on the one hand, and the two *Inquiries* on the other, as substantially identical, and dovetails them together not unskilfully in his exposition. But without saying that this procedure involves any serious misrepresentation, I still think that a study of Hume should include a careful observation and explanation of the changes which Dr. Jödl overlooks: especially since the extent and nature of these changes are so different in different portions of the system. In recasting his metaphysics, Hume's aim seems to have been to suppress or throw into shade the more unpopular parts of his speculations. As these were generally just the most subtle and profound parts, the result is that the *Inquiry into the Human Understanding* is as inferior in substance to the earlier work as it is superior in style. The resolution of the Ego into a heap of perceptions is omitted: the sensationalist theory of Time, Space, and the objects of geometry, is merely hinted in a brief, sceptical suggestion of difficulties involved in current mathematical conceptions: and the critical comparison of the vulgar and philosophical views of the external world loses much in force and completeness. Hence no one really interested in Hume's metaphysics can consent to comply with his request that the later treatise "should alone be regarded as containing his philosophical sentiments and principles." The case is otherwise with the ethical *Inquiry*, which Hume justly looked on as his masterpiece. Here all the changes appear improvements. Not only are the different discussions better proportioned and compacted to produce conviction as to the general thesis that Utility is the essential object of moral approbation: but in the important chapter in which he discusses the titles to property recognised by positive law, his views in becoming less paradoxical have become sounder and truer. In both treatises he maintains that these titles are determined partly by perception of utility and partly by "habitual connection of ideas and smooth transition of the imagination": but in the earlier work he had obviously much exaggerated this latter element.

Granting, however, that the difference between the two publications was to be ignored, there seems little fault to be found with Dr. Jödl's exposition: except that he sometimes inclines to the common error of treating Hume as a dogmatic Empiricist rather than a Sceptic. Thus he assimilates his author's doctrine as to the external world too closely to Berkeley's: and gives too Kantian a colour to his account of causality, as (*e.g.*) in the following summary:—

"Der Gebrauch des Causalitätsverhältnisses ist zwar für unsere Erkenntniss innerhalb unseres Vorstellens und für unsern praktischen Gebrauch *von unbestreitbarer Gültigkeit*, soweit die Aufeinanderfolge zweier Objecte eine regelmässige ist: seine Anwendung *auf das Sein an sich* und ausserhalb unserer Erfahrung in seinem Vernunftgebrauche aber durchaus unsicher und unzulässig."

Now this distinction of "Sein an sich" and "Erfahrung" does not properly belong to Hume: and it is misleading to represent him as claiming "indisputable validity" for the use of the principle of causality even within the sphere of experience. He held that its application within that sphere was irresistibly prompted by Habit and imperatively imposed by Common Sense: but still not justifiable, on strictly rational grounds.

The few criticisms on which Dr. Jödl has ventured seem rather loose and superficial. Even where they are substantially well founded, they are wanting in the closeness which we may reasonably expect from a commentator: as Dr. Jödl generally fails to notice and meet the answers which Hume has made beforehand to his objections. For example, he argues (after Maine de Biran and others) that the original "impression" from which our "idea" of cause is derived may be found in our inner experience: that "das freiwillige Hervorrufen von Erinnerungen, die Verstärkung von Gedanken, die Bewegung eines Gliedes von einem darauf gerichteten Willensakte aus," &c. afford us an "unmittelbare Wahrnehmung des Causalitätsverhältnisses." But if by "unmittelbar" it is implied that the perception is certain and infallible, Hume's refutation of this view (in § vii. of the *Inquiry into the Nature of the Understanding*) is surely complete. If however it be argued—as I should myself argue—that perfect clearness and certainty are to be found in no class of our empirical judgments, and therefore the Empiricist has no right to demand them in the apprehension of causation: then there seems no reason to deny "immediateness"—thus qualified—to our cognitions of the causal nexus in the case of familiar external phenomena.

H. Sidgwick.

Notes of Scientific Work.

Geography.

Arctic Regions.—The sixty-seventh paper on the Geography and Exploration of the Polar Regions by Dr. Petermann, about to be published in the *Mittheilungen*, gives news of voyages made during this season, down to September. Two Norwegian steam-ship fishing expeditions, planned to penetrate the Siberian seas, have failed through the obstruction of heavy ice and damage of the vessels, and both were compelled to return early in the year; on the other hand, a scientific expedition from Norway next season is much spoken of at Tromsö.—The French expedition under Ambert and Mack has also been delayed, on account of the litigation which has arisen in Paris respecting the disposition of the legacy of Gustave Lambert, the originator of the scheme. M. Octave Pavy, it is believed, has at length started with his long-prepared expedition from San Francisco; he aims at reaching Wrangell Land, north of Siberia, in September, and to move thence northward over the ice till May 1873, about which time, it is anticipated, an open polar sea will be reached; this polynia he intends to navigate in a raft constructed mainly of india-rubber, crossing it to Smith Sound and North America, taking the North Pole by the way. Pavy's chosen companions for the enterprise are: Dr. Chesmore, an experienced traveller in Alaska; Captain Mikes, who a few years ago attempted a voyage from America to Europe in an india-rubber boat; Watkins, a Rocky Mountain hunter; and two sailors.—The latest authentic news of the American expedition under Hall comes from Tessiusak, in 73° 22′ N., the furthest Danish colony of Greenland; and the report of the condition of the ice to northward, in August 1871, is favourable to the voyage. Very interesting letters despatched by Payer and Weyprecht, the leaders of the Austrian expedition, immediately before its departure from Tromsö in July, give full particulars of the outfit and plan of this scientific voyage; the supplementary expedition to this under Count Wiltchek left Tromsö on the 20th of June.—The Swedish government expedition in the iron steamer *Polhem* left Tromsö on the 20th of July, and on the 4th of August reached Green Island, on the west coast of Spitzbergen, on its way to the Parry Islands. Most interesting news is contained in a telegraphic message from Hammerfest, dated 24th of August: Captain Altmann, in a fishing vessel, sailed this summer along the whole east coast of Spitzbergen, as far as King Karl Land, which this voyager found to be a group of three larger and many smaller islands. The sea was quite free from ice.—Of interest in connection with this subject is an account of the finding of the relics of Barents' expedition of 1597 to Novaia Zemlia, by Captain Carlsen in 1871, prepared by M. de Jonge, and newly published under the auspices of the Dutch government at the Hague.* The pamphlet contains the journal kept by Carlsen, and a minute description of the relics, accompanied by a photograph of these in a group, and charts comparing the Novaia Zemlia of Barents with the island as mapped from our present knowledge of it.

Elevation of Eastern Siberia.—An annotated list of the geographical positions and absolute height above the sea-level of several hundreds of places in Siberia, the north coast lands and Kamtchatka alone excepted, prepared by Prince Krapotkin for the *Mittheilungen*, forms a most valuable contribution to exact geography. The name of the authority for each elevation is given, as well as the observatory to which it is referred, and the heights of the more important points are fully discussed in detail.

* *Nova Zembla. De voorwerpen door de Nederlandsche zeevarders na hunne overwintering aldaar in* 1597 *achtergelaten en in* 1871 *door Kapitein Carlsen teruggevonden*, beschreven en toegelicht door Ihr. Mr. J. K. G. de Jonge; 's Gravenhage: Nijhoff.

Present Population of the Globe.—*Ergänzungsheft* No. 33 of the *Mittheilungen* is devoted to an essay by Dr. Behm, the editor of the now standard *Geographisches Jahrbuch*, and Dr. Wagner, under whose care the statistical tables of the *Almanach de Gotha* are prepared, on the changes which have taken place in territory and population throughout the globe during 1869, 1870, and 1871. The untiring labours of these gentlemen in collecting accurate statistics of these subjects from all parts of the world, and the exceeding care which has been taken in comparing and selecting them, have made Gotha the head-quarters of information in this branch of science. The summation of the many special tables for each region gives the total population of the globe at present as thirteen hundred and seventy-seven millions of souls, which must be accepted as the nearest approach yet made to the true number.

Physiology.

Physiology of the Sphincter Vesicae.—Dr. J. Kupressow, in an inaugural dissertation upon this subject in *Pflüger's Archiv*, states that his experiments have been conducted in a manner essentially similar to those of Heidenhain and Colberg, a tube being fastened into the ureter of rabbits, and water poured through it into the bladder till the pressure of the fluid overcame the resistance of the sphincter. He found that in the living rabbit the pressure required to produce a flow of water from the urethra varied from that of a column of water 36 centimetres in height to one of 58 centimetres. Sex did not appear to make any remarkable difference. After death the height of the column required to cause a flow was only from 8 to 16 centimetres. Division of the spinal cord opposite the fifth lumbar vertebra reduced the height of the column of fluid rather slowly to the latter amount, but division at the sixth reduced it immediately. Section between the first and fourth lumbar vertebra was without influence upon the height of the column. It appears clear then that the centre of innervation of the sphincter lies in the spinal cord opposite the fifth and sixth lumbar vertebrae. The question arises, what is to be included in the term Sphincter vesicae? is it to be limited to the circular fibres of the neck of the bladder, the so-called *Musculus sphincter vesicae internus* of Henle, or to the similarly running fibres which are found in the urethra, and especially in the *pars membranacea*? Kupressow's experiments have led him to the conclusion that both sets of fibres aid in effecting the closure of the bladder, though their relative importance varies with the sex of the animal; in males the circular muscular fibres of the urethra play a much more important part than in the female, for whilst in the former after slitting up the urethra the height of the expelling water column is reduced to one-half of its original amount, with females the same operation only reduces it one-fourth.

Action of Tartar Emetic in producing Vomiting.—There are two views regarding the nature of the action of this substance in producing vomiting. By some it is attributed to the action of this salt on a special nervous centre, whence proceed the impulses co-ordinating the muscles by which vomiting is effected. Others maintain that it results from the irritation of the peripheric extremities of the nerves of the stomach. Strong evidence in favour of this is afforded by the fact stated by Grimm, and recently substantiated by Kleimann and Simonowitsch (*Pflüger's Archiv*, p. 281), that a solution of tartar emetic acts more rapidly and energetically when introduced into the stomach than when injected into the veins. The following is one of their experiments. About two-thirds of a grain of tartarised antimony was injected into the stomach of a middle-sized dog; vomiting occurred in fifteen minutes. Two hours later half a grain more was given, and vomiting again occurred in two hours. On the following day half a grain was injected into the jugular vein, which caused no vomiting. Three days later a grain and a half was injected into the vein at 11 A.M.; vomiting occurred, but not until the evening. Analysis showed moreover that, after injection into the veins, tartarised antimony made its appearance in the first matters that were ejected from the stomach. The authors do not find any real opposition to their views in the fact that efforts at vomiting will still occur after the stomach has been excised from the body altogether, since there may still be nerve terminations in the oesophagus and intestines which occasion efforts at vomiting when irritated by tartar emetic.

Effects of Compressed Air.—At the Séance of the Académie des Sciences held 1st July, M. Bert communicated the results of his investigations regarding the influence of pressure upon animals. He has arrived at the conclusion that pressure is injurious, not *per se*, but because it leads to an increase or accumulation of the quantity of oxygen in the blood, consequent upon the respiration of the compressed air. He recommends therefore as likely to prove of use an artificial modification in the composition of the air supplied to divers.

Zoology.

The Sumatran Rhinoceros in London.—We learn with regret that one of the two-horned rhinoceroses in the possession of the Zoological Society of London died about a fortnight ago. One was captured at Chittagong, and the other, which is dead, in Malacca, both being thought at one time to belong to the Sumatran species described by Bell in the *Philos. Transactions* of 1793 under the name of *Rhinoceros sumatrensis*. When the two animals were compared side by side, no doubt could be entertained of their specific distinctness, and, consequently, Mr. Sclater, the secretary of the society, named the grey-coloured Chittagong specimen *Rhinoceros lasiotis* (the animal having a fringe of long hairs round the ears), retaining Bell's denomination for the black Malacca animal. Dr. Gray, after an examination of the published accounts of these animals, came to a different conclusion, viz. that the Chittagong specimen was the true *Rhinoceros sumatrensis*, and the other was most probably the animal to which the horn should be assigned, named by him, many years ago, *Rhinoceros crossii*. A third and different view is taken by Mr. Blyth, who points out that neither of the two examples can be referred with certainty to the Sumatran type; that the Chittagong animal is probably Gray's *Rhinoceros crossii*, and the Malacca animal a new species. It is not very likely that with the scanty materials in London the question will or can be satisfactorily settled at present, still it is not unimportant to have it finally solved. Abstractly from the point of view that we should ascertain as soon as possible everything respecting the big land creatures of the present period, a correct knowledge of them would prove of the greatest assistance in understanding the remains of their extinct congeners. Only a short time since the existence of a greater number of species than that generally adopted by zoologists was maintained by Dr. Gray, on apparently dubious osteological evidence, though this idea was entertained by very few zoologists, and ridiculed by others. Now it seems that of the type of two-horned Asiatic rhinoceroses, two months ago believed to be represented by a single species, three different kinds exist, and possibly four, if the Bornean rhinoceros, known by hearsay only, should prove to be distinct.

Picus leuconotus in Great Britain.—In the years 1861 and 1868 large flocks of a spotted woodpecker appeared in various parts of the Shetland Islands. They appear to have come from a considerable distance, and alighting in a locality ill adapted to their natural habits, they were compelled to seek their food along the shore; one specimen, on dissection, was found to have earthworms in its stomach. At first the birds were taken for the greater spotted woodpecker (*Picus major*) which had wandered from some other part of Great Britain; and in the account of this species the fact has already been recorded by Messrs. Sharpe and Dresser (*Birds of Europe*, vol. i.). Mr. Gould, however, who has obtained an example, is of the opinion that it is *Picus leuconotus*, a species whose home is Scandinavia and the North of Europe generally. If Mr. Gould's view be correct, and we have no doubt it is, these birds have immigrated, probably from Norway; and the white-backed woodpecker must now be added to the British Fauna.

Vanessa antiopa in Great Britain.—Nearly two hundred reports have been received from all parts of the country of the appearance of the rare and beautiful butterfly commonly known by the name of the "Camberwell Beauty." Entomologists are not agreed whether the specimens are genuine natives, or imported, or immigrants from the continent; some observers believe they have observed the recurrence of this species every seventh year. It has also been remarked that nearly all the specimens taken in Great Britain differ, to a perceptible extent, in colouring from the continental type, the border being creamy-white instead of buff-coloured. No conclusion regarding their origin, however, can be drawn from this circumstance, inasmuch as it is the general opinion of continental collectors that the buff or yellow border of the wing is the sexual characteristic of the male, while in the females this part is of a white colour. Nothing would be easier than for some person to introduce large numbers of this butterfly, as the caterpillar is gregarious, feeding on the willow; still the facts of the insect in the perfect state having been found in many districts, from the Channel Islands to Aberdeen, and that not a single instance of its having been discovered in the larval state is recorded, favour the opinion that this is a case of spontaneous immigration.

Madeiran Spiders.—Mr. F. Pollock has published some observations on Madeiran spiders in the *Ann. and Mag. Nat. Hist.* for the present month. Although the islands of Madeira, Porto Santo, and Deserta Grande, lie within a range of about fifty miles, each has its own peculiar spider of the genus *Lycosa*; and it is a remarkable fact that these spiders vary in size inversely with the magnitude of the island in which they are found—Madeira, the largest island, having the smallest species, and Deserta Grande, the smallest island, being inhabited by the largest (*Lycosa ingens*). The latter species is able to prey on lizards three inches long, which it devours, head, bones, claws, and all, the only remnant of the feast being a small ball, about ¼ of an inch in diameter, which is cast aside at the bottom of the cage.

Tortoises, Terrapins, and Turtles, drawn from Life. By James de Carle Sowerby and Edward Lear.—This work contains sixty coloured lithographic plates, representing thirty-six species, drawn from living examples. They have been prepared under the superintendence of Mr. Th. Bell, to illustrate his *Monograph of the Testudinata*, a work the

publication of which was unfortunately interrupted many years ago. The unpublished plates were afterwards purchased by Mr. Sotheran, and Mr. Bell having declined to furnish descriptions of them, Dr. Gray consented to edit the work. In the notes of the editor the original name given by Bell to each species is retained, as well as the name used in the British Museum Catalogue, together with the references to a work in which the synonymy of the species is to be found. A few lines on the habits of of the species are added from works of authors who have had the opportunity of observing them in their wild state. It would indeed have been a matter of regret if such beautiful plates, and the amount of work bestowed on them, had been lost to science.

A Handbook of British Birds, showing the Distribution of the Resident and Migratory Species in the British Islands, with an Index to the Records of the Rarer Visitants. By J. E. Harting.—This is an extremely useful and handy little volume. The author divides the real British birds into three groups:—1. *Residents*, or those species which rear their young annually in the British Islands, and are to be found in one part or other of the United Kingdom throughout the year; they are 130 in number. 2. *Periodical Migrants*, or those which visit us annually and regularly at particular seasons, and whose advent and departure may be foretold with precision; they are 100 in number. 3. *Annual Visitants*, that is, such as annually occur in some part of the British Islands, but in comparatively very limited numbers, and at irregular and uncertain intervals; only 30 belong to this division. In addition to this fauna are the *Rare and Accidental Visitants*, numbering 135, among which we notice 48 to be of European, 14 of Asiatic, 11 of African, and 42 of American origin, oceanic birds excluded. The author has conscientiously collected and critically examined all the instances of occurrence of birds of this class.

On Recent Moa Remains in New Zealand.—In the fourth volume of the *Transactions and Proceedings of the New Zealand Institute*, Dr. Hector gives an interesting description and figure of a moa's egg containing the bones of an embryo chick found at Cromwell in 1867, imbedded in sand; and he further records the recent discovery of the cervical vertebrae of a full-sized moa, with the skin partly covered by feathers still attached by the shrivelled muscles and ligaments. This interesting relic is from a cave at the foot of the Obelisk range of hills between Obelisk and Alexandra, Otago; into which it, as well as numerous other moa remains, had been washed. The colour of the barbs of the feathers, which have two equal plumes to each quill, is a chesnut red, the surface of the skin of a dirty red-brown colour roughened by numerous elevated conical papillae. The occurrence of this example, as well as that of some moa remains found by Mr. W. A. Low in 1871, in which portions of the bird's flesh "not the least fossilized, but simply well-dried, can be easily separated into fibres," affords strong evidence in favour of Dr. Hector's view that the moa must have existed at no very remote period in the province of Otago. Apropos of the comparatively recent discovery of large quantities of Dinornis remains, it is interesting to find that the natives most carefully preserved both the forests and the underwood as cover for the game upon which their subsistence depended. Since European settlers have occupied the islands, immense tracts have been disafforested by fire and the undergrowth destroyed. The rains, formerly impeded in their eroding action by the vegetation, now cut deep ravines and wash the soil from the undulating surfaces of the country, and in this way first expose and then wash away and destroy the buried remains of the moa, which the vegetation had preserved since the extinction of this bird by the early ancestors of the present Maori race.

With the conclusion of the seventh volume, the publication of the *American Journal on Conchology* has ceased. It was issued under the auspices of the Academy of Natural Sciences of Philadelphia, in the *Journal* and *Proceedings* of which institution all future communications will appear.

Botany.

Genealogy of the Wellingtonias.—The address by Professor Asa Gray, the retiring president of the American Association for the Advancement of Science, delivered at the meeting held in August last, at Dubuque, Iowa, was mainly occupied with an attempt to trace the history of the gigantic trees which form such a conspicuous feature of the vegetation of California. The only members of the tribe to which they belong at present existing are four in number, scattered over different quarters of the globe: the two species of Californian redwood, the *Sequoia* (*Wellingtonia gigantea*) of the Sierra, and *S. sempervirens* of the coast; the bald cypress (*Taxodium distichum*) of the Southern States, inhabiting swamps of the Atlantic coast from Maryland to Texas, and Mexico; and the *Glyptostrobus* of China. In its general features the vegetation of California is most strikingly unlike that of the Eastern United States; while, notwithstanding the attempt of Grisebach to prove the contrary, the relations between the floras of the Atlantic United States and Japan (including Northern China) are remarkably close. Fossil remains of a species of *Sequoia* almost identical with *S. sempervirens* have been found by Heer in the Miocene formation which extends over the whole of Northern Europe, and of an extremely similar one by Hayden in the Rocky Mountains. There seems every reason to believe that at this period a nearly uniform flora overspread almost the whole of what are now the arctic and temperate regions of the northern hemispheres, of which the present floras of North-Eastern Asia and North-Eastern America are remnants. Of the three hypotheses which might be framed to account for the existence of these solitary detached representatives of the tribe—that they are the progenitors of a new form of vegetation, that they were created as we now find them, or that they are the last representatives of a race rapidly dying out—the above considerations leave us in no doubt to accept the last. The *Sequoia gigantea* now exists in numbers so limited that the separate groves may be reckoned on the fingers, and the trees of most of them have been counted, except near their southern limit, where they are said to be more abundant. A somewhat greater dryness of the climate, which must once have been much more moist than it is now, would probably bring about its speedy extinction.

Luminosity of Fungi.—The Rev. M. J. Berkeley records in the *Gardener's Chronicle* a very remarkable instance of luminosity in Fungi which has been observed in Northamptonshire. A quantity of wood, it is uncertain whether larch or spruce, being dragged along a road, was found to emit a bright light. The entire inner surface of the bark of the log was covered with a white byssoid mycelium of a peculiarly strong smell, and so luminous a character that it was almost possible to read the time on the face of a watch. This luminosity continued for three days. Rubbing the luminous part appeared to render the brightness more intense. The parts of the wood that were most luminous were not only deeply penetrated by the more delicate parts of the mycelium, but were also the most decomposed. Mr. W. G. Smith believes the mycelium to be that of *Polyporus annosus*, which is occasionally phosphorescent when found growing in the coal mines of Glamorganshire and Carmarthenshire.

Fertilisation of the Yucca.—At the last meeting of the American Association for the Advancement of Science, Mr. C. V. Riley read a paper on the Fertilisation of the American Yucca, showing that it is accomplished by a small moth, hitherto undescribed, which he called *Pronuba Yuccasella*, and which appears to be specially adapted for the purpose. The female only has the basal joint of the maxillary palpus wonderfully modified into a long prehensile-spined tentacle. With this tentacle she collects the pollen, thrusts it into the stigmatic tube, and having thus fertilised the flower, she consigns a few eggs to the young fruit, the seeds of which her larvae feed on. The yucca is said to be the only plant known which absolutely depends for fertilisation on a single species of insect. The plant and its fructifier are inseparable, under natural conditions, and the latter occurs throughout the native home of the flower. In the northern parts of the United States, and in Europe, where the yuccas have been introduced and are cultivated for their showy blossoms, the plant, being deprived of the good offices of this insect, produces no seed. The larva of the *Pronuba*, it should be mentioned, eats through the yucca capsule constituting its food, enters the ground, and hibernates there in an oval silken cocoon. It would no doubt be possible to introduce it in foreign countries, and thus secure the fertilisation of the yucca.

Chemistry.

Synthesis of Orcin.—At the first meeting of the Association française pour l'Avancement des Sciences, held last month at Bordeaux, several important papers were laid before the chemical section over which M. Balard presided. One by M. Berthelot on the state of substances in solution is of great interest. In another (*Revue scientifique*, 12, 272), M. Henniger communicated the results of the endeavours of M. Vogt and himself to obtain orcin artificially, which they accomplished from toluene. They converted the chloride into the acid sulphoconjugate by Wurtz's method, and by fusing this product with potash obtained orcin identical with that occurring in lichens. Orcin is a diphenol of the aromatic series, $C_6H_3(CH_3)(OH)_2$.

Guadalcazarite.—This name has been given by T. Petersen (*Jour. prakt. Chemie*, 6, 80) to a new mineral occurring with cinnabar, at Guadalcazar, in Mexico. It is compact, sub-crystalline, of an iron-black colour with a bluish streak, very brittle, and so soft that it may easily be crumbled between the fingers. It has a specific gravity of 7·15, and a composition indicated by the formula $6HgS+ZnS$, where some portion of the sulphur is replaced by selenium, and a still smaller quantity of the zinc by cadmium.

Syngenite.—At the fourty-fifth Versammlung Deutscher Naturforscher held last month at Leipzig, Prof. v. Zepharovich (*Tageblatt*, 135) described a new mineral from the potash beds of the salt mines of Kalusz, in Galicia. It occurs with cubes of sylvine in colourless pellucid crystals that at first sight suggest selenite. Analysis proved them to have a composition corresponding with the formula $CaSO_4, K_2SO_4, H_2O$, showing it to be a substance nearly allied to polyhalite. The crystals are rhombic, and accord in every respect with the well-known laboratory product, except that they show a greater abundance of crystal faces. The hardness of this new mineral is 2·5, the specific gravity 2·73.

Nitric Anhydride.—At the same meeting, Prof. Weber described his method of forming the anhydrous acid by decomposing the most concentrated acid with phosphoric anhydride. This is added in small portions to the acid cooled in ice, and the mixture is then cautiously distilled. Two liquids pass over that are not miscible, the upper consisting for the most part of the anhydride, the other a new hydrate. From the former the anhydride is prepared by first gentle, then powerful cooling; hydrated compounds separate first, then the anhydride. The latter is without action on the majority of metallic substances, but reacts with great violence on the metalloids as well as on organic bodies. It is soluble to some extent in the strongest nitric acid, whence by cooling a crystallised hydrate evaporates, containing half the water of the monohydrate.—The author likewise exhibited crystallized phosphoric anhydride formed by sublimation.

New Publications.

Boeckel, J. Étude clinique et expérimentale sur les Battements du Tissu médullaire des Os. Strassburg: Treuttel und Würtz.

Brauer, F. Beiträge zur Kenntniss der Phyllopoden. Wien: Gerold's Sohn.

Carus, J. v. Geschichte der Zoologie. München: Oldenbourg.

Deschanel, A. P. Elementary Treatise on Natural Philosophy. Translated by J. D. Everett. Blackie and Son.

Dupont, E. L'Homme pendant les âges de la pierre dans les environs de Dinant-sur-Meuse. Bruxelles: Muquardt.

Faivre, A. De quelques Travaux récents sur les corps organisés flottant dans l'atmosphère. Lyon: Vingtrinier.

Georg, W., und Wanderley, G. Der Metallbau. Halle: Knapp.

Hoeffel, J. Aperçu historique sur l'ancienne Faculté de Médecine de Strasbourg. Strassburg: Treuttel und Würtz.

Hofmeister, F. Untersuchungen über die Zwischensubstanz im Hoden der Säugethiere. Wien: Gerold's Sohn.

Littrow, C. v. Bericht über die von C. Bruhns, W. Förster und E. Weiss ausgeführten Bestimmungen der Meridiandifferenzen Berlin-Wien-Leipzig. Wien: Gerold's Sohn.

History.

Tridentine Archives in Austria. [*Zur Geschichte des Concils von Trient* (1559–1563). Actenstücke aus Oesterreichischen Archiven. Herausgegeben von Th. Sickel.] Wien: Gerold's Sohn.

It is partly, perhaps, to the Vatican Council that we may ascribe the increased interest felt of late in the history of the Council of Trent, but something is also due to the recent opening up of the Austrian archives to historical enquirers, which has for the first time given us access to many of the original documents. Thus, also, it has become possible to test the statements of the two great party Histories of Sarpi and Pallavicini. It is often said that by striking a mean between the opposite statements we arrive at the truth, but it is not so. The actual fact on which the two representations are based can seldom be reproduced exactly, in most cases we can only guess at it. It is a favourable instance when, after Sarpi stating that there was an actual treaty with France, and Pallavicini positively denying it, we find the fact to have been that there was a verbal agreement concluded. Sarpi's history has always been a favourite one in England, and we rather wonder at its not having been lately republished. Sarpi was so hostile to the Curia Romana (being a sort of "Old Catholic") that he could hardly venture to print his book in Italy. It was consequently first published in England by Antonio di Dominis, the famous archbishop of Spalatro (about whom we hear so much in James I.'s reign), under the patronage of Archbishop Abbot, who also induced Nathanael Brent, the warden of Merton College, to translate it, and the translation was published in 1620. Sarpi, who was born 1552, eleven years before the close of the Council, wrote soon after it, while it was still fresh in men's memory, and many who had been present were still alive, and he had the advantage of consulting many manuscript accounts. He says himself that he had searched in "the writings of the prelates and others who were present in the Council, the records which they left behind them, and the suffrages or opinions delivered in public, preserved by the authors themselves or by others, and the letters of advice written from that city, whereby I have had the favour to see even a whole register of notes and letters of those persons who had a great part in those negociations." He quotes, for instance (near the beginning of book ii.), "the register of the letters of the Cardinal of Monte." Pallavicini (*b.* 1607, *d.* 1667), on the other hand, wrote half a century later, and published his book 1664, when not a few of Sarpi's documents were no longer accessible. He had, however, the full use of the Vatican archives, and gives indispensable information, though sometimes omitting, and sometimes discrediting, genuine documents, *e. g.* the letters of Paul III. to the Emperor. On the whole, the papers published by Sickel confirm Sarpi in several of the disputed points, though a few of his dates appear to be wrong. (Even Pallavicini's dates are not always right.) A dozen years ago Sickel saw at Vienna a bundle of documents, containing, among other things, the preliminary rough draft of the "Articles of Reform" which the Emperor Ferdinand I. proposed to the Council, for the discovery of which Ranke, in his *History of the Popes*, expressed an earnest wish. At that time, however, the papers about the Council preserved at Vienna were purposely withheld from historical enquirers; now, under von Arneth's liberal management of the Record Office, things are very different, and Sickel has been enabled to treat the German documents on the plan which Dupuy adopted for those of France. His scheme combines an account of the proceedings relative to the Council with those relative to the whole intercourse between Pius IV. and Ferdinand I., though the materials have so grown on him that this volume only takes us down to the close of the Council in 1563. The discoveries at Vienna led him on to Innspruck and Trent itself, where he found Professor Friedrich, of Munich, also engaged on making a catalogue of the materials for the history of the Council. Thence he went to Arco, in the Tyrol, where the correspondence of Prospero d'Arco is preserved, who was ambassador at Rome for Ferdinand I. and Maximilian II. from 1560 to 1572. Besides the original letters of the emperors and archdukes, there are many news-letters and some of "Pasquin's" satires from Rome (Sickel prints two of these as specimens). As his object is in the main to give only inedited matter, the editor has omitted all that is already printed in the great collection of Le Plat, in Döllinger's *Beiträge*, in Mendham's book, &c. (he does not mention the translation of some of Vargas' letters by Dr. Geddes). But the excellent notes often contain an abstract of these as well as of many inedited documents not worth giving *in extenso*. The book begins with July 1559, when the death of Paul IV. was expected. That pope had been a bitter enemy of the whole house of Austria; and, in fact, the quarrel between the papacy and the imperial power had contributed, perhaps more than any other external cause, to the establishment of Protestantism in Germany. The German ambassador had been even forced to leave Rome, and now the Emperor sends a despatch to his ambassador at Venice, ordering him to go to Rome the moment the news of Paul's death should arrive, and enclosing credentials for the Conclave and several friendly cardinals, one of whom, Morone, the statesman who afterwards successfully concluded the Council, had been actually imprisoned in St. Angelo. Paul died August 18, and the news reached Ferdinand at Munich by the 25th, but it had already reached the ambassador at Venice at four o'clock in the night of Sunday the 20th, and by the "24th hour of that day" he was on

shipboard for Rome, which he reached on the 28th. It is worth noting that the north post went out of Rome every Saturday, but special couriers were often despatched by the ambassadors. Once a letter reached Vienna in nine days, but usually it took a fortnight. Sometimes duplicate letters were sent by Venice and by Trent. The return post was much slower, and Arco is always complaining of it. The Emperor's letter of July 25 only reached him on August 22. At last the King of Poland established a post between Cracow and Venice, which rather improved matters for Vienna. Once Arco received nothing from the 28th of November 1560 to 28th January 1561, and then a whole bundle of despatches reached him together. The same difficulty of correspondence occurs between Spain and the Netherlands, and is not always enough allowed for by historians, *e.g.* as to the Spanish Armada. The Conclave of Cardinals received the ambassador gladly, and gave him his proper title and place, though Paul had up to his death refused to ratify the Emperor's election, on the ground of his consenting to the Peace of Passau, though it was rendered necessary owing to the defeat of Charles V. by Maurice of Saxony. Pius V., the new pope, was better disposed, and was even inclined to think the two concessions to the Protestants advised by the Emperor, viz. giving the cup to the laity, and the marriage of priests, which were not forbidden by God's law, but merely *juris positivi*, might be made. During the conclave itself the Cardinal of Augsburg was surprised at hearing him say so, and appeal to the concessions made to the Greek Church, and to those made by the Council of Constance to the Bohemians, and to Paul III.'s instructions to his legates in 1548. As to the question in dispute between Sarpi's and Pallavicini's accounts, whether it was the princes or the pope who first pressed for the assembly of a council, the documents do not quite settle the question. It is clear that Pius was urged on by the fear that Germany and France would summon national councils and perhaps settle the matter without him, as they threatened to do; but he was also himself anxious for a considerable reform, and behind both pope and princes there was the still greater power of the advancing tide of Catholic public opinion, which was rapidly hastening the counter-reformation. The Pope carried his point that it should not be a new council, but a resumption of the two previous meetings of the "Council of Trent," in 1545 and 1551, and this finally made a reconciliation with the Protestants hopeless. He also secured his legates the right of initiating measures, though Germans, French, and Spaniards, were united in opposition, but they were outvoted by the mass of Italian bishops, many of whom, being very poor, were partly maintained by the Pope. The whole details supply curious parallels to late events. Sickel gives a valuable note on the means employed to raise new taxes at this time in the Roman States, and the fruitless opposition of the municipal authorities. At last the Emperor despaired of gaining concessions for the Protestants from the Council, and the Great Powers consented to its close. It practically abandoned the claim of superiority to the papacy, put forth at the Council of Constance, and even asked Pius to make its decrees valid by ratifying them. The old view, however, survived in the Gallican Church, and the speech of the French envoy before the Council was very bold indeed. The Cardinal of Lorraine however was gained over, and Pius in general abandoning any open assertion of the old papal claims to rule over kings aimed rather at forming a close union with them, and especially with Philip of Spain. The speech of Lainez, the general of the Jesuits (reported p. 547), on the absolute power of the Pope and the uselessness of their discussions, gave excessive offence; but it showed practically how things were going. It is questionable if a reconciliation with the Protestants was ever possible after Contarini's failure at Ratisbon, and the conduct of Paul III. and Paul IV. had allowed them time to strengthen themselves; but the Emperor was still powerful enough to maintain the religious peace in Germany, and was seconded in this by the Duke of Bavaria, though at Rome some were reviving the memory of Innocent III. and pressing for war, and the Pope would have liked to destroy "the sink of heresy at Geneva." The Thirty Years' War was not possible till Ferdinand II. of Austria and Maximilian of Bavaria succeeded, and through them the Jesuit influence became supreme. The germ of all these later events is to be traced in the documents before us, and there is a sense of reality in the vivid impressions of each moment as they are rapidly written down (the Emperor sometimes sent two or three successive letters the same day), which brings it all home to us far more than the best modern account, even that of Ranke, can do. And this is why the study of history cannot be profitably carried on without the use of original documents, since nothing else can reproduce for us the actual living men as they thought and spoke and lived, and surround us as it were with the atmosphere of the time. Pius IV. is especially well described to us as the pope of the transition. If there had been a pope of Hildebrand's ability, with the power to see that it was time to resign the dictatorship so long entrusted by Europe to the Italian see, the hopes attached to the assembly of a General Council which should be "free and oecumenical" might have been realised; but the system based on the false decretals was perhaps developed too thoroughly to admit of change; as in so many cases its past history determined its permanent course in one direction. There are a number of striking despatches given at length, such as Ferdinand's answer to the charges of Paul IV., his proposals of reform, two which describe the state of Bohemia, one on the state of Catholic Germany. The Emperor laments the want of able and moderate German theologians; the best were now on the side of the Protestants; there was no name to show like that of Melanchthon. Canisius and Staphylus were of some service, and Gienger wrote a series of theological notes for the Emperor. Bavaria, too, sent Paumgartner to the Council. On all these there are excellent notices given. Some interesting despatches from Rome are sent by Cusano to Maximilian, who was then trying to secure his election as King of the Romans, but was suspected at Rome of being inclined to the Lutherans. Cusano sends all the gossip and the reports current in society, and Ferdinand is sometimes annoyed that his son hears of things before he does. So Arco finds it necessary to make his reports longer and give all the news, though often obliged to state its untrustworthy character. The ambassadors at Trent gradually began to see that their task was hopeless, and they and the Emperor became tired of the work. They complain (and the complaint occurs often enough in the contemporary despatches of English ambassadors) that their salaries were not paid, and at last they were so much in debt as to be almost unable to leave Trent. They repeatedly notice the objection of the bishops and wealthy clergy to have residence enforced, for then, as at a later time in England, non-residence was most common in the case of the rich livings, two or more of which were held by some influential person who did not reside on either. But the rising Catholic spirit proved too strong for them, and the disciplinary decrees of the Council enabled Cardinal Carlo Borromeo (Pius IV.'s nephew) and others to carry out the reform. There was great need to begin with the cardinals themselves, as Pius IV. showed by executing for his crimes Paul IV.'s nephew, Cardinal Caraffa. One leading complaint was that they were appointed too

young. Leo X. was made cardinal at fourteen, and men despaired of reform from Paul III. after they saw him appoint his two grandchildren—the one at the age of fourteen, the other sixteen—to the cardinalate. Pius IV. broke up the old Nepotism; and when it revived afterwards, it was in another form.

We cannot close the book without expressing our satisfaction with the almost perfect way in which it is edited. The notes and illustrations are everything that could be wished, and such as we should expect from the editor of the *Carolingian Charters*. Sickel has also published *Die Geschäftsordnung des Concil von Trient, aus einer Handschrift des vaticanischen Archives*, by the secretary of the Council, A. Massarelli, Bishop of Telesia. Nor can we omit a word of praise for the beautiful printing of the Roman type, both large and small, which some German publishers are now substituting for the old black letter which other nations have given up long ago. Of English affairs there is naturally only slight mention in the book. Ferdinand advised against the excommunication of Elizabeth, and interceded with her for the Catholic bishops: there is mention of a petition signed by the Bishop of St. Asaph. Of Russia there are several notices. The Pope wished to invite the Duke of Russia ("Moschus") and the Prince of Transylvania to the Council. The Emperor objected to both, the latter being a rebel and allied with the Turks against him in Hungary, while the former was ravaging Livonia and oppressing the German inhabitants there. It is curious that the Germans in Livonia are at this very time complaining of Russian oppression and appealing to the Fatherland—an appeal in which some see the germ of the next great European war. The whole book abounds with interesting matter. We trust that Sickel may be soon able to publish the remaining documents to the close of Ferdinand's reign and show us the first results of the decrees of the Great Council. C. W. Boase.

Reports on the Discovery of Peru.—I. Report of Francisco de Xeres, Secretary to Francisco Pizarro; II. Report of Miguel de Astete on the Expedition to Pachacamac; III. Letter of Hernando Pizarro to the Royal Audience of Santo Domingo; IV. Report of Pedro Sancho on the Partition of the Ransom of Atahuallpa. Translated and edited with Notes and an Introduction by Clements R. Markham, C.B. London: printed for the Hakluyt Society.

Of the three (or four) reports contained in this volume, the more developed and interesting is certainly Xeres' narrative. Francisco de Xeres, the secretary of Pizarro, wrote his work in 1534, when sent in Spain to convey the first load of gold and silver that ever went from newly discovered Peru into the land of the conquerors.

As was very natural in a man suddenly thrown into an entirely new country, and understanding nothing or little of its native tongue, Xeres frequently commits blunders when speaking of things he did not know by eyesight, but only from hearsay. I am not astonished very much at minor improprieties of words, such as calling the Peruvian temples *mosques*, in which error Hernando Pizarro also concurs; their doing so was insomuch the more obvious that, as Mr. Markham justly observes, "the fathers of the Spanish conquerors had served in the campaign of Granada, and their minds were full of the things relating to the Moorish infidels." But there are mistakes of a more serious nature. Speaking of Atahuallpa and Huascar, Xeres gives of their origin the most extraordinary account. He begins by calling their common father old Cuzco, Huascar being named all through young Cuzco, for distinction sake; and, in order that no one may consider that as a mere slip of the memory and doubt his "mistaking the Piroeos for a man," he affirms that old Cuzco, our Huayna-Kapak,

"was a native of a province called Quito; but as he found the land where he was encamped to be pleasant, fertile, and rich, he settled there, and gave the name to a great city, where he lived, which was called the city of Cuzco. . . . . It is eight years since he died, and he left as his heir a son of the same name as his own. He was a son of his legitimate wife. They call the principal wife, who is most loved by her husband, legitimate. This son was older than Atabaliba. The old Cuzco separated the province of Quito from the rest of the kingdom and left it to Atabaliba. The body of the Cuzco is in the province of Quito, where he died, and his head was conveyed to the city of Cuzco, where they hold it in great veneration, adorning it with gold and silver."

Now, there are almost as many blunders as there are phrases in this passage. Huayna-Kapak was not born at Quito, but conquered it, and took to his illegitimate wife the daughter of the Quiteño king, into whom he begat Atahuallpa. The legitimate wife was not that whom her husband loved better, but must be the sister, or, at least, the first cousin, of the Ynca, of pure Ynca blood. As for Huayna-Kapak's dying at Quito and being mutilated after his death, in order that his head could be sent to Cuzco, the fact is that he died at Tumipampa, and was thence taken to Cuzco, where his body was discovered by the licentiate Polo in the year 1559.

Due allowance being made for these deficiencies, Xeres' narrative of the conquest is exceedingly interesting. Although it relate briefly Pizarro's early adventures and first tentative to conquer Peru, it really begins in the year 1530, when the author joined the decisive expedition, and became a witness with his eyes to the deeds he narrates so well:—

"Some portions of the story, here and there, are told in more detail by Herrera and other compilers, but in reading their versions we miss the feeling that the author was an actor in the deeds he narrates; and thus in Xeres there is a freshness and reality which no other published account of the conquest can impart."

The tale of Atahuallpa's judgment and death will show to the reader the fitness of this appreciation, at the same time giving a good specimen of Mr. Markham's manner of translating.

"Then the governor, with the concurrence of the officers of his Majesty, and of the captains and persons of experience, sentenced Atabaliba to death. His sentence was that, for the treason he had committed, he should die by burning, unless he became a Christian; and this execution was for the security of the Christians, the good of the whole land, and to secure its conquest and pacification. For on the death of Atabaliba all his troops would presently disperse, and would not have the courage to attack us or to obey his orders.

"They brought out Atabaliba to execution; and when he came into the square, he said he would become a Christian. The governor was informed, and ordered him to be baptized. The ceremony was performed by the very reverend father Friar Vicente de Valverde. The governor then ordered that he should not be burnt, but that he should be fastened to a pole in the open space and strangled. This was done, and the body was left until the morning of the next day, when the monks, with the governor and other Spaniards, conveyed it into the church, where he was interred with much solemnity, and with all the honours that could be shown it. Such was the end of this man who had been so cruel. He died with great fortitude, and without showing any feeling, saying that he entrusted his children to the governor. When they took his body to be buried, there was loud mourning among the women and servants of his household. He died on Saturday, at the same hour that he was taken prisoner and defeated. Some said that it was for his sins that he died on the day and hour that he was seized. Thus he was punished for the great evils and cruelties that he had inflicted upon his vassals; for all, with one voice, declare that he was the greatest and most cruel butcher that had been seen among men; that for a very slight cause he would destroy a village, such as some trivial fault committed by a single man; and that he killed ten thousand persons, and held all the country by tyranny, so that he was heartily detested by all the inhabitants. . . . .

"Now I wish to mention a notable thing. It is that twenty days before that happened, and before there were any tidings of the army that Atabaliba had ordered to be assembled, it happened that Atabaliba was one night very cheerful with some Spaniards with whom he

was conversing. Suddenly there appeared a sign in the heavens, in the direction of Cuzco, like a fiery comet, which lasted during the greater part of the night. When Atabaliba saw this sign, he said that a great lord would very soon have to die in this land."

Xeres had embodied in his work Miguel Estete's report of "The Journey made by el Señor Captain Hernando Pizarro, by order of the Governor, his Brother, from the City of Caxamalca to Parcama, and thence to Xauxa." Don Miguel Estete, or Astete, de Santiago, the inspector, was the man who pulled the *llautu* from the head of Atahuallpa when he was dragged out of his litter. His narrative is precious especially when compared with the letter directed by Hernando Pizarro himself "To the Magnificent Lords, the Judges of the Royal Audience of His Majesty, who reside in the City of Santo Domingo." It was in Caxamalca, a few days after Atahuallpa's capture, that Pizarro's brother "received permission from the governor to go to a *mosque* of which he had intelligence, which was a hundred leagues away on the sea-coast in a town called Pachacamá." Pizarro's expedition had no less an object than the famous temple of Pachacamac, described afterwards by Cieza de Leon and Garcilasso de la Vega. In his appreciation of the Pachacamac worship, Mr. Markham differs entirely from the commonly received opinion. He sees no adequate authority for such theories as make Pachacamac, "Creator of the World," a divinity older than the time of the Yncas, and whose worship the Peruvians of Cuzco adopted from another people.

"The inhabitants of the Peruvian coast called *Yuncas* by their Ynca conquerors were an entirely distinct race from the people of the Andes, with a language differing both in its vocabulary and grammatical construction. . . . . Their gods were made to give out oracles, and the shrines became rich and important in proportion to the credit they attained in forecasting events. Thus, there was a famous oracle in the valley, thence called *Rimac*, or "The Speaker," by the Ynca conquerors; and a still more renowned one was the fish-god in the city, afterwards called by the Yncas *Pachacamac*, to which pilgrims resorted from all parts of the coast. But this fish-god was not Pachacamac, nor was the word Pachacamac known to the people of the coast before they were conquered by the Yncas. It is an Ynca word, and is wholly foreign to, and unconnected with, the coast language. . . . . The conclusions I have formed are that the worship of Pachacamac, the Creator of the World, was a part of the Ynca religious belief, and that it was wholly unconnected with the coast Indians; that there never was any temple to Pachacamac at the place on the coast to which the Yncas gave that name, for some reason now forgotten; that the natives worshipped a fish-god there under a name now lost, which became famous as an oracle and attracted pilgrims; and that, when the Yncas conquered the place, they raised a temple to the sun on the summit of the hill commanding the city of the fish-god, whence the glorious luminary could be seen to descend behind the distant horizon, and bathe the ocean in floods of light."

The fourth document in the volume is a mere piece of comptability, being a "Report on the Distribution of the Ransom of Atahuallpa, certified by the Notary Pedro Sancho." It had been printed already in the *Vidas de Españoles célebres, por Don Miguel José Quintana;* but the notes Mr. Markham has appended to his translation give it a vast amount of interest. It has the nominal list of all the conquerors present in the town of Caxamalca on the 18th of June of the year of 1533, with the gold and silver that each one received, in different columns, beginning with the "Church, 90 marks of silver, 2220 *pesos* of gold; and the Lord Governor, for his person, his interpreters, and horse, 2350 marks of silver, 57,220 *pesos* of gold," down to Cristobal de Sosa, who got only 135 marks of silver and 3330 *pesos* of gold. Mr. Markham has tried to show what became of the men named in the document, and has succeeded in tracing the fortunes of some of them to the moment of their death. They were killed for the most part during the civil wars which broke soon over the newly conquered kingdom and troubled its early days so much.

G. Maspero.

Intelligence.

The death is announced of M. Roget, Baron de Belloguet, author of an *Ethnogénie gauloise*, which we shall soon review. Born in the year 1796, in the department of Haut-Rhin, M. de Belloguet was the son of a cavalry officer who became general under the first Napoleon; and he himself made, as a volunteer, the campaign of France (1815), during which he was, for his gallant behaviour, made Chevalier of the Legion of Honour, being only nineteen years of age. He remained in the army until 1834, when he retired from military service with the rank of chef d'escadron, to devote himself entirely to historical studies. His first works treated of some obscure points in the provincial history of Burgundy, and gold medals were awarded to them by the French Institute. In his later years M. de Belloguet directed his researches to the vexed question of Gaulish origins, and the result was his *Ethnogénie gauloise*, to which the "grand prix Gobert" was awarded by the Académie des Inscriptions et Belles-Lettres. M. de Belloguet died at Nice, the 3rd of August.

Clermont-Ganneau communicates to the Académie des Inscriptions three inscriptions, found at Jerusalem, of the Legio X Fretensis, famous for the share it took in Titus' siege, the last of which is ingeniously restored, but he makes a forced application of it to illustrate the dispute as to the site of the Holy Sepulchre. He would correct the text of the *Notitia Dignitatum*, which speaks of "Praefectus Legionis decimae Fretensis *Ailae*" (= Elath, on the Red Sea) by reading *Aeliae*, *i.e.* Jerusalem, then called by the Romans *Aelia Capitolina*.

K. Klüpfel's *Geschichte der deutschen Einheitsbestrebungen bis zu ihrer Erfüllung*, 1848–1871 (erster Band; Berlin, 1872), is an excellent continuation of a very good book by the same author: *Die deutschen Einheitsbestrebungen in ihrem geschichtlichen Zusammenhang* (Leipzig, 1853). The author, who, in his South German position, has been for many years a staunch and faithful supporter of German unity, hails the present fulfilment of the ideal of his youth from the bottom of his heart. He has taken up the work once more with the year 1848, being able to give a much fuller and riper account of the exploded, yet nevertheless fruitful, endeavours of that stormy period of German politics. Klüpfel is a master of lucid arrangement and sober judgment, disdaining all unnecessary trammels and matters of minor importance in a book chiefly destined for political instruction. His work proves again how much a sound and honest literature in favour of an indivisible German government has obtained the upper hand over the scared defenders of the sovereignty of the single states and their lame and loose confederation. Foreigners who wish to inform themselves in the history of the national mind within the last twenty or thirty years will not easily meet with a better guide.

The newest volume of Ranke's Collected Works, viz. vol. xxiv., offers the first instalment of dissertations and essays, either originally written for a periodical, which the author edited for a short time about forty years ago, or read in the Royal Academy at Berlin. The greater portion of these essays deal with Prussian history, the memoirs of Baron de Pöllnitz, and the Marchioness Wilhelmina of Bayreuth, with one of the historical works and the correspondence of Frederic the Great with William IV., Prince of Orange, and his wife, a daughter of George II. Two essays, however, are of a more general bearing, especially the first, treating about the great powers, France, England, Austria, Russia, and Prussia, in their relation to the French revolution—a consummate and highly finished sketch by a master hand. The second discusses the chief political theories of modern ages, those of the Jesuits as well as the doctrine of absolute sovereignty of temporal government. In the appendix is found a clever speech in Latin: "De historiae et politices cognatione atque discrimine Oratio," delivered by Ranke in 1836, when taking possession of his chair in the university of Berlin.

At the annual meeting of the historical commission at Munich progress was reported of several of the society's publications. The most important of them for the ensuing year will be the beginning of a *Biographia Germanica*, a biographical cyclopaedia for Germany, of which a couple of volumes, containing letters A and B, are ready for the press, thanks to their indefatigable editor, Dr. von Liliencron, to whom the great collection of the historical poems of Germany had been entrusted by the commission some years ago.

New Publications.

Bayer, Dr. Vict. De Historia Friderici III. Imperatoris d. Enea Silvio de' Piccolomini. Eine kritische Studie zur Geschichte Kaiser Friedrichs III. Prag: Tempsky.

Bonitz, Herm. Zur Erinnerung an Friedrich Adolf Trendelenburg. (Academy Reprint.) Berlin: Dümmler.

Droysen, Joh. Gust. Ueber eine Flugschrift von 1743. (Academy Reprint.) Berlin: Dümmler.

Fontes Rerum Bohemicarum. Tom. I. Vitae Sanctorum. Fasc. 3. Prag: Grégr u. Dattel.

Freeman, E. A. General Sketch of European History. Macmillan.

Frind, Canon. Ant. Die Kirchengeschichte Böhmens im Allgemeinen u. m. besond. Beziehg. auf die jetzige Leitmeritzer Diöcese. Nach den verlässigsten Quellen bearb. 3. Bd. Die Kirchengeschichte Böhmens in der Husitenzeit. Mit e. Copie der Karte Böhmens v. Nic. Claudianus. Prag: Tempsky.

Gädeke, A. Das Tagebuch d. Grafen Ferd. Bonaventura v. Harrach während seines Aufenthaltes am spanischen Hofe in den Jahren 1697-1698. Wien: Gerold's Sohn.

Hutzelmann, Dr. Christ. Angriffe Frankreichs auf Elsass u. Lothringen. Ein Beitrag zur Geschichte dieser beiden Reichslande. Nürnberg: J. L. Schmid.

Lechler, G. V. Johann Wiclif und die Urgeschichte der Reformation. Leipzig: Fleischer.

Regesta Diplomatica nec non Epistolaria Bohemiae et Moraviae. Pars II. Ann. 1253-1310. Opera Ph. D. Josephi Emler. Vol. I. Prag: Grégr u. Dattel.

Reliquiae Tabb. Terrae Regni Bohemiae anno MDXLI igne consumpt. Ed. J. Joseph. Emler. Tom. II. Prag: Grégr u. Dattel.

Wieseler, F. Commentatio de vario usu tridentis apud Populos vett. imprimis ap. Graecos et Romanos. Göttingen: Dietrich.

Philology.

Dr. Volkmann's Greek and Roman Rhetoric. [*Die Rhetorik der Griechen und Römer.* In systematischer Uebersicht dargestellt von Dr. Richard Volkmann, Gymnasial-Director in Jauer.] Berlin: H. Ebeling and C. Plahn.

The very importance of Technical Rhetoric for the ancients has in one way interfered with modern appreciation of their work in that field. For at least six centuries after Aristotle the theory of Rhetoric went on being elaborated or refined. Its place in a liberal education and its bearing on practical life not only drew to it a host of special students, but led men who took all knowledge for their province to feel at least a condescending interest in its development. "It is base to be silent, and let Isokrates talk." A few leading principles of Rhetoric were early seen, and the ground-plan of an art was laid down; but, when this had been done, an enormous amount of ingenuity and acuteness continued to be spent in stating and re-stating these principles from new points of view, in dividing and subdividing the ground according to new schemes, in devising new and more subtle terminologies. "The ancient Rhetoric," says Dr. Volkmann, "is no capricious medley of unmeaning, pedantic rules, but a system in the highest degree simple and convenient, . . . clear, and easy to survey." This is true in the sense that a few general conceptions may be traced in different forms through all the technical writings, and that (as Dr. Volkmann's book proves) it is possible to give the net result of these writings in a compact shape. But on the other hand it can hardly be denied that the principles of ancient Rhetoric came to be overlaid by a mass of rules and technicalities which may fairly be called pedantic—the result of ingenuity accumulated where exactness was impossible. Ernesti's lexicons, books on special periods such as Spengel's Συναγωγὴ Τεχνῶν, or commentaries on individual technicists, have hitherto been the chief helps for students of the subject. Following up his work published in 1865, *Hermagoras; or the Elements of Rhetoric*, Dr. Volkmann gives in his present book a complete digest of Greek and Roman Rhetoric. He has not brought into special prominence any one authority or group of authorities, or any one period, but has sought to reduce under certain heads the entire lore of the subject. He takes like account (for instance) of Anaximenes and Aristotle in the earlier age, of Cicero and Quintilian in the middle, of Hermogenes and Apsines in the later. His book is a handbook, serving two purposes—the interpretation of the technicists and the illustration of the orators.

The difficulty of such an attempt consists first of all in this, that the systems of different writers vary not merely in details but also in the manner of viewing or applying principles and in the partition of the whole field of Rhetoric. For instance, Aristotle made the provinces of Rhetoric to be Invention, Expression, and Arrangement. Theophrastus added Delivery (ὑπόκρισις). Mnemonics come in as a fifth part in later systems. The doctrine of the στάσεις is limited by some writers to "causes" (ὑποθέσεις), extended by others to theses; the general topics of the enthymeme are classified on several radically different plans. Dr. Volmann's method in such cases is to give a prefatory notice of the various different arrangements, and then to take for closer treatment and illustration the arrangement which he thinks best. His book, then, is much more than a compilation: it is an effort to bring out of systems differing in more or less important respects the ground-ideas common to all; to set these in the clearest light; and to illustrate them by examples. He disposes his materials under five heads: 1. Invention; 2. Arrangement; 3. Expression; 4. Memory; 5. Delivery—the province of Invention being subdivided as it concerns Forensic, Deliberative, or Epideictic speaking.

The first special point to be noticed in Dr. Volkmann's book is his explanation and analysis of the στάσεις (pp. 23–63). His original and peculiar merit here consists in the clearness with which he points out the one great source of confusions and discrepancies in the technical writers on this subject. The elements of the στάσις, the *constitutio* or *status causae*, are an affirmation and a denial: the στάσις is the question at issue as it arises on the first conflict of opposite assumptions. Hence it is only a forensic speech which can properly be said to have a *status*, and this *status* is always determined by the accused, never by the accuser. A deliberative or epideictic speech cannot properly be said to have a *status*, since there is no need to "constitute" at the outset the question under discussion. Most of the ancient writers on Rhetoric missed this distinction. Cicero and Quintilian give a *status* to every *quaestio civilis*, deliberative or epideictic as well as forensic, and so Hermogenes to his πολιτικὰ ζητήματα. Again, Dr. Volkmann shows very well how the classification of στάσεις is not a barren pedantry, but has a direct practical use for the criticism of oratory. By way of example, he defines the στάσις στοχαστική in the speech of Demosthenes *De Falsa Legatione;* and then, applying this definition, estimates the comparative merits of the speech as an argument and as a work of art.

His account of the rhetorical syllogism and of the technical terms connected with it is another instance of clear and concise statement. "Enthymeme," as he says, was originally the general name for the rhetorical syllogism, whether formally complete (*i.e.* consisting of three propositions) or incomplete; but as the rhetorical syllogism is *often* incomplete, the enthymeme came, after Aristotle's time, to be defined simply as a shortened syllogism (*e.g.* Quint. v. 10, § 3); and then "epicheireme" became the term for the complete, as opposed to the incomplete, rhetorical syllogism. It might have been worth while, in illustration of this, to have referred to Aristotle's statement (*Rhet.* i. 2) that the enthymeme is a syllogism ἐξ ὀλίγων τε καὶ πολλάκις ἐξ ἐλατ-

τόνων ἢ ἐξ ὧν ὁ πρῶτος συλλογισμός. The πολλάκις here seems often to have puzzled commentators who had in mind the *later* definition of the enthymeme as a shortened syllogism. This may be seen by looking at a note on the passage in Parsons' commentary (Oxford, 1836), where it is suggested that ἐλαττόνων possibly refers to the *number of words* in which the enthymeme is stated.

In the second division of his book, Dr. Volkmann notices the comparative neglect of Arrangement by the technicists. Invention or Expression were at first the only recognised provinces; and even Aristotle, though professing to treat Arrangement separately (*Rh.* iii. cc. 13–19), virtually leaves the province of Invention only in one part of c. 17. Dr. Volkmann takes the οἰκονομία of Dionysius as the basis of this part of his work, and examines it under its three subdivisions — (*a*) τάξις proper — general rules about the marshalling of arguments; (*b*) διαίρεσις, — a minute analysis of the varieties of each *status causae;* (*c*) ἐξεργασία—the elaboration of proofs, for which Dr. Volkmann refers back to the sections on the ἔντεχνοι πίστεις (pp. 207, f.).

In the third division of the book—that relating to Expression—Dr. Volkmann has achieved the formidable task of defining and illustrating the principal tropes and figures known to ancient Rhetoric; and has stated clearly the essential difference, often overlooked, between τρόπος and σχῆμα: the trope is concerned with particular words used in an abnormal sense; the figure is concerned with groups of words used in their normal sense for the artificial expression of a thought: so that—according to a neat saying quoted by Dr. Volkmann from one of the late rhetoricians—a trope is to a figure as a barbarism to a solecism.

The special difficulty of Dr. Volkmann's task lay in its first part, the topic of Invention: it is here that his grasp of the whole subject is best seen, and that the help which he gives is worth most. But the other parts have been worked out with no less care and thoroughness. The book is what it aims at being, and what did not exist before—a complete handbook of Greek and Roman Rhetoric.

R. C. Jebb.

Conington's Persius. [*Persius*; with a Translation and Commentary by Conington.] Edited by H. Nettleship. Oxford: Clarendon Press Series.

In some respects this posthumous volume is even more delightful than the great edition of Vergil. The charm of that was the way in which the anxious delicacy of the editor reflected one whole side of Vergil which had never been adequately brought out before. But Vergil and the Vergilian literature are too extensive a subject to be presented as a whole at the present day, especially by a scholar so scrupulously thorough as Mr. Conington, who could never leave a line of investigation without exhausting it. Persius is not too vast to be studied on all sides, and Mr. Conington had enough in common with him to appreciate him, while his uniform suavity and sanity form a complementary contrast to the terse obscurities and the abrupt refinements of the poet of Volaterrae.

The introductory lecture on the life and writings of Persius brings together very pleasantly what is known of the satirist, with many ingenious *aperçus* on the origin and development of Roman satire. It may be a question whether, as Persius always writes in the tone of a man perfectly at ease under the imperial system, it was worth while to repeat *à propos* of Persius' stoicism the usual unsifted commonplaces about the antagonism of the porch to the empire; and—though it is undeniably plausible and suggestive to compare Roman satire as an advance upon Greek comedy with the great progress achieved in general literature when prose detached itself from poetry—we could have wished the suggestion accompanied by an explicit acknowledgment that there are no grounds aesthetic or historical for placing Roman satire, or any other satire, on a level with Greek comedy; that the greater richness of content in comedy always must outweigh anything that has been gained in force in satire. Still the point is an interesting one, and Latin literature is so generally depreciated that it may have been better not to encumber the suggestion with reserves. Another suggestion which we hope to see carried further is that Persius was a deliberate and direct imitator not only of Horace, but of Lucilius.

The translation is simply admirable. Mr. Conington has kept all Persius' point and condensation, all his dry humour and his chastened geniality. He is sufficiently like him to give a triumphant answer to the question whether he is worth reading apart from his difficulties; and where he is unlike him, it is because he improves upon him, and attains to the uniform level of poignant refinement which Persius pursued through so much quaintness and affectation. Of course neither the translation nor the commentary are to be taken as representing the final views of the author, though the first thoughts of Professor Conington were riper than the third thoughts of many men. Perhaps the most ingenious new interpretations are on i. 85, which is connected with Hor. i. s. 10, 28, as follows: "Even the eloquence of the bar, to which Horace would point as a genuine unaffected thing, has caught the taint; even our Pediases talk like schoolboys and pedants;" and vi. 11: "So says Ennius' brain when he had been roused from dreaming himself Maeonides Quintus developed out of Pythagoras' peacock," as if Ennius called himself Homer in addition to his own name Quintus; as Mr. Conington points out, if the traditional explanation that Ennius was five transmigrations off the peacock were correct, we ought to have had *ab* instead of *ex*. The comment on i. 124, *Pallere Eupolidem*, which is explained as "pallere pallorem Eupolideum," is certainly ingenious; but we hardly see why the analogy of *sabbata palles*, v. 184, should have been so emphatically rejected. Nor is the difficult passage, ii. 18–20, quite satisfactorily treated. The traditional reading and explanation were quite satisfactory from a literary point of view. "What is your view of Jupiter? Should you care now to put him above anybody?"—"Above whom?"—"Well, above Staius; why bear you any doubt about it? which of them is the most desirable judge, and the fittest guardian for a lot of orphan boys?" If this is rejected on the grounds that there is more MS. authority for "*cuinam?*"—"*Cuinam?*" than for "*cuiquam?*"—"*Cuinam*," and that no Roman poet could have used "*quis*" with a comparative for "which of the two;" it would surely be better to give v. 20 to the interlocutor that the connection might be, "Can you hesitate about putting Jupiter first?"—"Why, Staius is a most respectable man; who more so?"—"Well, then, if you have much confidence in him, go and tell him what you've just told Jupiter." On iii. 25, it is at least a question worth discussing whether *purum et sine labe salinum* is not to be compared with Juvenal, x. 19, *Pauca licet portes argenti vascula puri*, so that the sense would be, "You've a tidy little stock of corn and a tidy little salt-cellar, no chasing on it and no stain either." v. 33, *jam candidus umbo*, is translated, "the *yet* unsullied shield of my gown;" of course the *yet* is a license, not an oversight, but as the translation was in prose, it is to be wished that the commentary had indicated the fact for the benefit of tyros. vi. 64, *minui mihi* is not quite clearly explained in the commentary, and over-explained in the translation; the

sense surely is not, "I have robbed myself for myself," but, "the diminution only affects me"—[not you, who never possessed the undiminished total]. It is curious that none of the commentators have quoted from Aeschylus, Fr. 371, οἵ τε στέναγμοι τῶν πόνων ἐρείσματα, which is almost certainly directly or indirectly the original of i. 78, *Antiopa aerumnis cor luctificabile fulta.*

It may seem ungracious to criticise what has evidently been a labour of love, but it is to be wished that in a second edition some errors of the press may be corrected, and one or two obvious incompletenesses either supplied or removed; *e. g.* vi. 11, we have the following: "Homer's revelations, however, turned on the doctrine of metempsychosis, he having been a peacock at one stage of the process (note on Prol. 3)"; where there is not a word about peacocks. Is it barely possible that Mr. Conington suspected an allusion to the fable of the daw and peacock at Prol. 13?

G. A. Simcox.

Vocabulary and Handbook of the Chinese Language. Romanised in the Mandarin Dialect. In Two Volumes. By Rev. Justus Doolittle. Vol. I. Foochow.

If the frequent appearance of Chinese dictionaries, vocabularies, and grammars be a proof of an increasing interest among European students in the language of China, it is certain that the taste must be fast developing. A few years ago the number of Chinese-English or Chinese-French dictionaries in existence might have been counted on the fingers of one hand; now as many are published each year. Some of these, as may be supposed, might, for all the practical good they are likely to be to students, as well have remained unpublished, but from most there is something new to be learned, and these will at least form valuable aids to the future compiler of the dictionary which will be to the students of the future what Morrison's great work has been to the past generation of learners. The work before us is undoubtedly entitled to a place in the latter category. The information it contains is considerable, and though exception might be taken to the somewhat loose style in which the materials are put together in its pages, it will doubtless prove itself to be of valuable assistance to beginners in Chinese. Its author has availed himself of the results of the labours of former workers in the same field, and has been able to supplement the matter furnished by them by a careful personal study of the language extending over many years. Mr. Doolittle divides his work into three parts. The first, the only one which is now before us, consists of the vocabulary proper, and is complete in itself. Its author tells us that it contains more than 175,000 Chinese characters in over 66,000 expressions from which all local phrases have been strictly excluded. The second part contains a number of clauses and phrases alphabetically arranged, relating to a large variety of subjects, among which are to be found many popular proverbial and classical expressions. And in the third part are collected lists and tables of terms and phrases contributed in answer to the invitation of the author by members of the consular and customs services, and missionaries, resident in China. Of this last part we can speak only from the information conveyed to us in the preface to his present volume, and if the plan there proposed be carefully carried out, the result will doubtless prove a great gain to students of the language. One great stumbling-block in the way of every learner of Chinese is the difficulty of acquiring a knowledge of the numerous varieties of style and expressions peculiar to the different branches of the literature. For instance, a student who had devoted his attention entirely to the Buddhist works of China would be sorely puzzled were he asked to translate a passage from the writings of a classical author, and in like manner one conversant only with the latter style would be quite unqualified to render, at the moment, the meaning of a document written in the modern epistolary style. The advantage therefore of having a vocabulary which shall embrace terms and phrases variously common to the different styles is obvious.

The nature of the contents of this part of Mr. Doolittle's work will of necessity preserve it from one fault which, were we inclined to carp, we should find with the present volume; we mean the extreme redundancy of the common Chinese equivalents of the English words. For instance, under the heading "Day" and "Days," he gives us no fewer than twenty-two phrases, most of which might have been left to the intelligence of students enlightened by other pages of the vocabulary. This fault, however, is one of which beginners are not likely to complain.

Robert K. Douglas.

Intelligence.

University College, London, has recently set an example which certain venerable but inert institutions in this country would do well to follow. The brochure (of 17 pages) before us contains three "Professorial Dissertations for 1871–72," written on the model of the German "Programmes," to which all serious students are so deeply indebted. The mathematical contribution of Professor Henrici, "On the Construction of Cardboard Models of Surfaces of the Second Order," cannot be more than mentioned here. Professor Robinson Ellis examines sundry passages in Propertius, and criticizes at some length the couplet ii. 2, 11–12: "Mercurio *satis* fertur Boebeidos undis Virgineum Brimo conposuisse latus"—where he pronounces the reading *sais* both metrically and historically defensible, though the harshness of the asyndeton leads him to conjecture *satius*. Professor Key's discussion "On Latin Words commencing with an *F*, especially *ferrumen*, *ferruminare*, as standing in Lexicons," involves the interesting result that *ferumen* (for this seems to be the true orthography) is immediately related to *fermentum*, as *tegumen* is to *tegmen*; and that the word was first used of the effervescent mass seen in the slaking of lime for the purpose of making mortar, and so came eventually to signify mortar. Let us add that some valuable remarks on Plautus are incidentally introduced.

In a meeting held some time ago by the leading Greeks of London under the presidency of Sir Peter Armeni Braila, the Greek ambassador, a considerable sum was subscribed towards the realisation of a plan highly honourable to the Greek nation. Committees have been formed at Marseilles and Paris for the purpose of conveying the remains of Adamantios Koraës, the founder of the present literary dialect of Greece, from Paris to the native soil of Hellas, and of reprinting and distributing his editions and works (which have now become very scarce). We consider the first part of this plan as an act of piety deserving of the greatest praise, but are even more rejoiced at the second part, which will be a benefit to the nation at large. We, however, wish that the committee should appoint a number of scholars, qualified to superintend the reprints of Koraës' editions, and that the results of modern criticism should be made available for these reprints. It would be an illusion to assume that the Koraës' editions of Isocrates, Strabo, and Plutarch, were absolutely perfect; nay, admirable as the notes are, the texts of these editions leave very much to be desired. It would not be wise to put into the hands of young studious Greeks *antiquated* texts of some of their best writers. The text of Koraës' original editions might be kept, but the deviations of the best critical editions of our time should be added in foot-notes, and brief discussions might elucidate the reasons and different merits of each reading. We hope that the committee will take this point into consideration, otherwise they will not be acting in the spirit of Koraës himself, who was a true scholar and critic, and who, could he return to the ἄνω νεκροί (as Aristophanes has it), would not claim for his works the halo of infallibility.

Mr. E. Legrand has recently added to his *Monuments pour servir à l'Étude de la Langue néohellénique* the "editio princeps" of the curious poem, περὶ τοῦ γέροντος τοῦ φρονίμου Μουτζοκουρεμένου, in 384 trochaic lines, with a beginning in politic lines. The notes are excellent, and contain some valuable contributions by that excellent scholar Mr. George Wyndham, to whom we owe also a learned commentary on M. Legrand's second edition of the Ἱστορία Ταγιαπιέρα.

M. C. Sathas' Μεσαιωνικὴ Βιβλιοθήκη has now progressed to the third volume. It will also contain a large mediaeval epic poem recently discovered at Trapezunt, and of which the poem entitled Ἡ Ἀναγνώρισις

(Wagner's *Mediaeval Texts*, i. p. xxii, *sqq.*) turns out to be merely a fragment. The new discovery promises to be very important, the poem amounting to something like 3000 lines. M. Büdinger's conjecture as to the hero of the poem Ἡ Ἀναγνώρισις, can be shown to be quite unfounded.

Sanskrit Manuscripts.—Dr. G. Bühler has issued, for the Bombay Government, the second and third fasciculi of his *Catalogue of Sanskrit MSS.* from the private libraries of Gujarât, the former including 1339, the later 728, separate MSS. Of those of No. 2, 214 belong to the *Purâṇas*, among which appear the following new names: *Âditya*, *Auṣanasa*, *Kalki*, *Kâpila*, *Chaṇḍîṣa*, *Durvâsasa*, *Pârâṣara*, *Purushottama*, *Mânava*, *Mâheśvara*, *Varuṇa*, *Sarasvatî*, *Sâmba* and *Saura Purâṇas*. Next come 238 MSS. belonging to 78 different *Mâhâtmyas*, many of which Dr. Bühler thinks will be useful for the student of the geography of Gujarât. The heading, "*Râmâyaṇa* and *Mahâbhârata*," includes 137 MSS.; "Artificial Poems," 252 MSS. The last-mentioned division includes many works made known for the first time by this list; though Dr. Bühler doubts whether any of the new discoveries will prove to be of any great importance, as they seem worthy to belong to the modern sectarian and court poets of Gujarât and the adjacent provinces. The chief value of the list, he thinks, will consist in the numerous old and very good MSS. of the great classical works, and of their commentaries. A complete exploration of the Jaina libraries may perhaps furnish some of the older poetical works which are now only known by name. A recovery of this kind was that of Bâṇa's *Chaṇḍikâśataka*, noticed by Dr. Bühler in the *Indian Antiquary* of April last. The next division, "Dramatic Poetry," contains 125 MSS. of 36 different works; that of "Fables and Tales" includes 10 works in 39 MSS. Finally, there are 29 MSS. under the heading "Historical Poems and Pieces," among which Bâṇa's *Śrîharshacharita* is important. The MS. breaks off in the eighth or last canto of the poem. The third part contains, on grammar, 139 MSS., including copies on most of the standard works, several works on *paribhâshâs*, Hemachandra's *Dhâtupârâyana*, &c.; 49 MSS. of *koshas* and their commentaries; 89 MSS. on rhetoric; 32 MSS. on metrics; and finally, 419 MSS. on Hindu law. We hope that the plan of more detailed notices of these MSS. to be published as soon as the survey is concluded, has not been abandoned by the Bombay authorities.

Bâbû Râjendralâla Mitra has likewise printed, for the Bengal Government, a new number, the fourth, of his *Notices of Sanskrit MSS.* Of *Vaidic* works, it includes accounts of MSS. of the *Mâṣaka Kalpa Sûtra* of the *Sâmaveda* (No. 654), with the greater part of a comment by *Varadarâja* (No. 664); a commentary, by Anartiya, on the *Sânkhâyana Kalpa Sûtra* (No. 665); the *Baudhâyana* and *Apastamba Śulvasûtras* (Nos. 655 and 657), the former with a gloss by Dvârkanâtha (No. 656); Kâtyâyana's *Gṛihyasûtra* (No. 658), and an *Âpastambîya Gârhyakarmaprayoga* (No. 662);—on rhetoric, Jayadeva's *Chandrâloka* (No. 605), and Nyâyavâgîśa's *Kâvyachandrikâ* (No. 639);—further, a MS. of the *Râjâvalî* (No. 559), and an incomplete one of a *Prâkrit Grammar* (No. 551), different from those hitherto known;—also Kamalâkarabhaṭṭa's *Śûdradharmatattva* (No. 607), and Halâyudha's *Brâhmaṇasarvasva* (No 652).

Mr. Childers supplements his review of M. Fausböll's *Ten Jâtakas* (*supra*, pp. 381-383) with the following philological remarks:—Some of M. Fausböll's notes are, I think, open to criticism. Thus he seems to have misunderstood the phrase *chandâdivasena agantvâ* (see p. 88), which as it stands is correct and offers no difficulty. By *chhandâdi* are meant the four *agati*'s, *chhanda*, *dosa*, *moha*, *bhaya*; and *chhandâdivasena agantvâ* merely means, "not walking under the influence of the four evil passions, desire, anger, error, and fear." M. Fausböll finds fault with my identification of *aṭṭa*, "a lawsuit," with अर्थ: he observes that अर्थ usually becomes *attha*, and asks why the aspiration has been dropped. But there is really nothing singular in this: अर्थ becomes *attha* when it means "thing" or "cause," and *aṭṭa* when it means "lawsuit;" just in the same way that वर्तते becomes *vattati* when it means "to be," and *vaṭṭati* when it means "to behove," or that अन्यत्र becomes *aññattha* when it means "elsewhere," and *aññatra* when it means "except." As to the loss of the aspirate, it has numerous analogies, as, for instance, *nandî* = नन्द्री, *lodda* = लोध्र, *majjhatto* = मध्यस्थ. My explanation of *bhaṇe* (p. 100) does not admit of any doubt, and so far from being in any way equivalent to *bhante*, it is a familiar expression generally used by a superior to an inferior. The only possible objection to my identification of *chhâta* with स्नात (p. 96) is the difference of meaning, and this has little weight when we consider the innumerable cases in which a word has a different meaning in Sanskrit and in Pali. M. Fausböll would refer *chhâta* to क्षा; and in an elaborate note he denies the identity of क्षायति with *jhâyati*, "to waste away, to be consumed, to burn," and traces *jhâyati* and *jhâpeti* to दह्; through the supposed causative forms *d(a)hyayati* and *d(a)hyâpayati*. But, in the first place, the Pali *jhâyati* is not a causative, since it means "to be consumed;" secondly, *dhyayati*, as M. Fausböll admits, does not account for the long *â*; and, thirdly, the fact that *jhâma* = क्षाम is the participle of the perfect passive from *jhâyati* conclusively proves that Bollensen is right in referring *jhâyati* to क्षा. The causative *jhâpeti* is clearly identical with the Sanskrit क्षापयति, from क्षा or क्षि. The objection that it would be the only instance of क्ष becoming *jh* in Pali is not really a serious one, for we know that an initial श always becomes *s* in Pali except in the two words शव and शाव, which become *chhava* and *chhâpa* respectively. Finally, I may observe that the pres. pass. दह्यते is in common use in Pali under the form *ḍayhati*, and that the original meaning of *jhâyati* is "to waste away," as will be seen from *Dhammapada*, verse 155. The note on *tappeti*, "to scorch" (p. 94), is interesting, and the explanation I believe to be correct: parallel instances are found in the coexistence of the forms *jânu* and *jannu*, *kapâla* and *kapalla*, &c. The form *ninnâda* = निनाद (p. 94) is explained by the fact that the prepositions नि and निस् are to a certain extent interchangeable in Pali: compare *nibbuddha* = निर्युद्ध. *Naṅguṭṭha* (p. 99) undoubtedly represents the Sanskrit लाङ्गुल, but with a termination स्थ instead of ल: compare अङ्गुल with अङ्गुष्ठ. *Sindhava* (p. 106) is certainly सैन्धव; in Pali vṛiddhi is frequently omitted before a double consonant: compare *maṇḍabba* = माण्डव्य, *suttika* = सौत्रिक, *buddha* = बौद्ध, *muggarika* = मौद्गरिक.

Sig. Lasinio, of Pisa, is bringing out an accurate edition of the "middle comment" of Averroes on the *Poetics* of Aristotle. The Hebrew translation, by Tôdrôs Tôdrôsâ (fourteenth century), forming the second part, has already appeared. The first part is to contain the Arabic original; the third, the general introduction, the two Latin translations, and an Italian one by the editor. It seems that the quotations from the Hebrew given by Eichhorn in his *Bibliothek*, vol. vii., were full of inaccuracies.

Contents of the Journals.

The Indian Antiquary, part vii. (July).—Popular Tamil Poetry; by R. C. Caldwell. Second paper. [Kamban's version of the *Râmâyaṇa*, which Beschi so successfully imitated in his *Tembâvani*, is perhaps the most popular poem with Tamilians, although, when sung to a crowd in bazaars by wandering minstrels, it requires a running commentary to explain the meaning of the verses as they are recited. The works of the great poetess Auveiyar (probably in the tenth century) contain perhaps the oldest specimens of Tamil popular poetry extant, and they are written in clear pure Tamil. She is chiefly noted for her unrivalled collection of brief moral aphorisms. Another poem, the *Mudurei*, occupies a foremost place in Tamil literature. It has been assigned to Auveiyar but for one, may be spurious, stanza, in which the turkey is mentioned, a bird introduced into India by the Portuguese about three hundred years ago. Some of Pattanattu Pillai's writings rise to the level of Sivavakkiyar, but as a whole they are characterized more by melodious verbiage than striking thought. The *Sittar* (Siddha) school, the poetical quietists of the Tamil country, have furnished some pretty poems. Another favourite poem, especially with women, is the *Viveha Chintâmani*, a comparatively modern production.]—On the Gauli Raj in Khandesh and the Central Provinces; by W. F. Sinclair. [The writer conjectures that Gauli was the surname of a family of princes (and not of a nation) of Aryan race, who established themselves in the valleys of the Tapti and Narmadâ during the great migration southward, which ended in the colonization of the Dekhan by the Aryan Marathas.]—An Inscription at Sâlotgi in the Kalâdgi District, dated Śaka 867, or A.D. 945, with Remarks; by Shankar Pandurang Pandit. [This inscription, of which a facsimile is given, is in Devanâgarî, engraved on three sides of a stone pillar. Beneath the Sanskrit inscription there is another independent inscription in the Hale Canarese, likewise recording a grant of land by a Mahâmaṇḍaleśvara. The village lies south of the Bhîmâ and Solapur. The grant was issued during the reign of the Râshṭrakûṭa king Krishṇarâja, surnamed Akâlavarsha, son of Amoghavarsha, residing at Mânyakheṭa. The writer identifies

this king with the twelfth king in the list recorded on the Kardâ plate, and refutes Wilson's suggestion as to there having been two collateral branches of the Râshṭrakûṭa Yâdavas] — Folklore of Orissa; by J. Beames. [Continued. A spell for snakes.]—Legend of the Origin of the Tungabhadra River; by V. N. N. [From the *Bhavishyottara Purâna*].—The Sacred Fire of the Pârsîs at Udwâḍâ; by W. Ramsay. [Account of the old Dastur or chief priest of the place as to how the sacred flame was first set up by the Pârsîs after their flight from their country to the Konkan. Also a translation of sixteen Sanskrit ślokas, in which their Mobeds are said to have explained their religion to the Râjâ when they landed in the kingdom of Sanjân, in the early part of the eighth century.]—Notes on the Rasakalloḷa, an ancient Oriya poem; by J. Beames. [This poem, the most popular in Orissa, was composed by Din Krishṇa Dâs, a Vaishṇava at the great temple of Jagannâth at Puri, who probably lived in the latter part of the fifteenth century. The poem consists of 32 cantos, or about 4000 lines, each beginning with the letter *k*, and treats of Krishṇa's life and adventures.]—Bengali Folklore; by G. H. Damant. [Continued. Legends from Dinajpur.]—Rock Inscription in Ganjam District. [From the *Proceedings* of the Madras Government, with a note by R. G. Bhandarkar.]—Asiatic Societies.—Review (favourable) of the Rev. A. Bouteloup's *Philosophia Indica Expositio*, Bangalori, 1868.—Miscellanea, &c. [Tipera and Chittagong Kukis.—The Trivyar Festival.—Note on the root "tap"; by J. Beames.—Derivation of "elephant" from Dravidian *âne* or *âle*, the elephant, and Sanskrit *airâvata*; by F. Kittel.]——Part viii. (August).—The Oldest known South Indian Alphabet; by A. C. Burnell. [The alphabet referred to is that used in three Tamil-Malayalam copper inscriptions in possession of the Jews and Syrians at Cochin. The two oldest are those by which these two communities were originally established. That of the Syrians Mr. Burnell supposes to be engraved in A.D. 774; none of the three being probably later than the early part of the ninth century. This alphabet is said to have once been used throughout the Tamil and Malayalam country, but chiefly in the extreme south. Mr. Burnell derives it from Egypt through the Phoenicians, and maintains the Pâli alphabet of Aṣoka's edicts to be nothing more than an extension of this alphabet.]—Sketches of Mathurâ; by F. S. Growse. [Continued. Account of Gobardhan, a famous place of Hindu pilgrimage, fifteen miles to the west of Mathurâ.]—On the Dravidian Element in Sanskrit Dictionaries; by the Rev. F. Kittel. [List of supposed Dravidian words that occur in Sanskrit dictionaries under the letters *a* and *â*.]—On the *Râmâyaṇa;* translated, from the German of A. Weber, by the Rev. D. C. Boyd. [Continued. The essay endeavours to show that the plot underlying the *Iliad* was known to the author of the Sanskrit epic.]—Archaeology in Bombay Presidency; extract from the Administration Report for 1870–71.—Asiatic Societies.—Correspondence. [Age of Indian Caves and Temples.—Note on the Gauli Râj.—The Khajuna language.]

Journal of the American Oriental Society, vol. x. No. 1.—Vocabulary of the Ponape Dialect, Ponape-English and English-Ponape, with a Grammatical Sketch; by Rev. L. H. Gulick. [Ponape, also called Ascension Island, is one of the Caroline or West Micronesian Islands. Its population in 1856 was supposed to be about 5000, and is divided into five tribes: Metalanim, Kiti, Wanega, Nut, and Jekoij. The language is said to have decided affinities with those of islands to the west.]—Thirteen Inedited Letters from Sir William Jones to Mr. (afterwards Sir) Charles Wilkins; communicated by F. Hall.—Brief Grammar and Vocabulary of the Kurdish Language of the Hakari District; by the late Rev. S. A. Rhea. [Rhea arrived in Kurdistan as missionary in 1851, and established himself among the Nestorians of the Kurdish mountains at Memikan, a village of the mountain-plain of Gawar, where he remained till April 1859, when ill-health drove him home. On his return to the Nestorian country in October 1860, he remained at Orûmiah, where he died in September 1865. The dialect here treated is that of Hakari, or of the tribes which formed the late principality of Julemerk, the southern portion of the present pashalik of Van. The Kurds of this district may number about 200,000, and are divided into a variety of tribes. Besides, nearly all the Nestorians know the language. The Harput dialect being the western, and the Senna the south-eastern, that of Hakari is the central and probably the one least adulterated with foreign elements.]—Collation of a Second MS. of the *Atharva-veda Prâtiśâkhya;* by W. D. Whitney. [This important work was published by Professor Whitney in 1862, from a single somewhat defective and very incorrect MS. The new MS. now collated has recently been acquired for the Bombay Government by Dr. G. Bühler.]—On a Karen Inscription Plate; by Rev. A. Bunker. [The writer visited Karenee from Toungoo, accompanied by the Rev. J. B. Vinton, of the Rangoon mission, in 1868, especially for the purpose of seeing, and, if possible, copying, the famous plate. This feat they accomplished, though the plate was anxiously guarded by the chief, and even worshipped by the people. As they were not allowed to take wax impressions, they copied it each for himself. A lithographed copy is here given. The writer has not been able to decipher the inscription.]—The Pâli Language from a Burmese point of view; by Rev. F. Mason. [Endeavours to prove that, for a correct knowledge of Pâli and especially the spelling of Pâli words, Burmese MSS. are no less, perhaps even more, valuable than Singalese. Though Pâli is studied by the scholars of Ceylon almost as their native tongue, still Ceylon has been dependent for the last two centuries on Burmah for the best Pâli MSS., as is proved by Ceylonese scholars themselves, and several important works which were not to be found in Ceylon have been rescued from Burmese MSS.]—Traces of Glacial Action on the Flank of Mount Lebanon; by Rev. W. M. Thomson.—On the Comparative Antiquity of the Sinaitic and Vatican MSS. of the Greek Bible; by E. Abbot (see *Academy*, vol. iii. p. 351).—Proceedings.

Zeitschrift der deutsch. morgenländ. Gesellschaft (vol. xxvi. Nos. 1 and 2.—The Assyrio-Babylonian Cuneiform Inscriptions; by E. Schrader. [Contains not only an elaborate summary and justification of the method and results of Assyriology, but a short grammar of the language.]—New Moabitish discoveries and enigmas; by K. Schlottmann. [A description of the curious clay-vessels, &c., said to have been found in Moab, on the authority of the sketches and copies of Herr Weser, pastor at Jerusalem, with discussion of the inscriptions. Schlottmann inclines to believe in their authenticity.]

Gött. gel. Anz., No. 33.—Enting's *Punic Stories;* rev. by Nöldeke. ——No. 37.—Driver's edition of Ben Shésheth on Jeremiah and Ezekiel; by H. E.——No. 40.—Transactions of the Society of Biblical Archaeology; by H. E. [Draws especial attention to the valuable papers of Dr. Birch on a hieroglyphic tablet of Alexander, son of Alexander the Great, and of Messrs. Lang and Smith on Cypriote inscriptions.]

Zeitschr. f. Völkerpsychologie und Sprachwissenschaft, vol. vii. No. 4.—Recent History of the Science of Language; by G. Lefmann. [I. Leibnitz. II. Dutch and German schools of philologists. III. The question of the origin of language.]—Syntactic Gleanings from the Classical Old Indian; by F. Misteli.—The Dual in Semitic; by Th. Nöldeke. [The Hebrew use of the dual, to denote things which go in pairs, more original than the Arabic.]—On *bona fides*, according to the Roman and Prussian law of land; by Baron.—Reviews: Gerber's *Die Sprache als Kunst;* by Tobler.—Lübbert's *Die Syntax von quom;* by Holzmann. [The best part of the book, the examination of the temporal clauses in Plautus.]—Zschokke's *Arabic Grammar;* by Wetzstein. [A favourable review, with many facts of interest to the student of dialects.]—Brücke's *On the Physiological Basis of the Modern High-German Verse;* by Steinthal.—Steub's *Die oberdeutschen Familiennamen;* by Steinthal.

New Publications.

Burckhardt, F. Der Gothische Conjunctiv verglichen mit den entsprechenden Modis des neutestamentlichen Griechisch. Zschopau: Raschke.

Chwolson, D. Die Semitischen Völker. Versuch einer Characteristik. Berlin: F. Duncker.

Faidherbe, Le Général. Inscriptions numidiques. Réponse à Dr. Judas. Lille: Imp. Danel.

Finzi, Fel. Ricerche per lo studio dell' antichità assira. Turin: Loescher.

Geiger, L. Ursprung u. Entwicklung der menschl. Sprache u. Vernunft. Bd. 2. Stuttgart: Cotta.

Lane, E. Arabic-English Lexicon. Book I. Part IV. (Reprinted.) Williams and Norgate.

Martin, E. Examen critique des MSS. du Roman de Renart. Bâle: Schweighauser.

Pentateuchus Samaritanus ed. et varias lect. adscripsit H. Petermann. Fasc. 1: Genesis. Berlin: Möser.

Stoll, Prof. H. W. Die Götter u. Heroen d. classischen Alterthums. Populäre Mythologie der Griechen und Römer. 2 Bände. 4. Aufl. Leipzig: Teubner.

Westphal, R. Methodische Grammatik der Griechischen Sprache. 2. Thl. 1. Abth. Mauke: Jena.

Wrampelmeyer, H. Codex Wolfenbuttelanus No. 205 olim Helmstadiensis No. 304 primum ad complures quas continet Ciceronis orationes collatus. Pars I. Hannover: Schmorl u. von Seefeld.

Wuttke, H. Geschichte der Schrift und des Schriftthums. Bd. 1. Leipzig: Fleischer.

ERRATA IN No. 57.

Page 365, col. 2, line 4, for "discourse" read "discourses."
" 368, *Intelligence*, line 1, for "Palestine" read "Sinai."
" " col. 2, line 6, after "Rönsch," read "and the *Historische Zeitschrift*."
" " " lines 24, 25, for "connected" read "corrected."
" " " line 42, for "Title" read "Tiele."
" " " line 17 from foot, for "Deighton, Bell, and Co." read "Williams and Norgate."
" 377, *New Publications*, for "Plauta" read "Planta."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 59.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Friday, November 15, *and Advertisements should be sent in by November* 11.

General Literature.

Memoir of Count de Montalembert. By Mrs. Oliphant. Two Volumes. Blackwood and Sons.

The Romantic movement had many sides; but perhaps its permanent significance is best expressed by saying that it was the idealisation of the growing-pains of a single generation. The young men who entered life when the storms of the revolutionary wars were clearing away had some excuse for believing, what all young men wish to believe, that the tiresome routine of existence was come to an end at last, that, after the world had passed through such an astounding series of crises, it never could settle down into the old ruts again, and jog along at the old humdrum rate. As the appalling fact became plain that life was going to be much the same as it always had been, as they found the world was too heavy to be lifted up to ideal heights on their shoulders, they had really no alternative (unless they would submit to be commonplace themselves) except to cry for the moon and the middle ages. *Le mal de René* became a fashionable complaint for the same reasons that René had become a fashionable hero. Society was weaker than in the eighteenth century, when it was still strong enough to turn at least one cold shoulder to Rousseau, and it was only the weakness of a corrupt society that made it possible for Rousseau, with his diseased craving for emotions, to become a power at all. The society of the restoration was purer than the society of the *ancien régime*, but this was not enough to compensate for the strength of traditions still unbroken; and there was another source of weakness which perhaps has not been sufficiently noticed. Napoleon, with all his hatred of *idéologues*, had rendered them an inestimable service by organizing all the higher education of France upon an uniform, systematic, compendious plan. A person who has been through such a course of instruction feels that he has exhausted the world as it is when he is still upon the threshold of actual life. He has had a summary of everything, and has nothing to wait for before making up his mind whether he will despair of it all or undertake to regenerate it upon any principle which happens to commend itself to him. Montalembert elected to regenerate the world instead of despairing of it; he was free from the diseased personality which coloured the pessimism of Rousseau, and in a lesser degree of Chateaubriand and Lamartine. His career might be taken as a model of healthy romanticism, or, if healthy romanticism is a contradiction in terms, it must be admitted that he lived a life of wholesome and deserved prosperity, though he tried men and things by a standard which no generation could have attained, and though his own generation came short of any standard by which an honourable man could consent to try his contemporaries or to be tried himself.

His early life was passed in England under the care of his maternal grandfather, who consoled his declining years by expanding his Oriental memoirs into many folio volumes for the future edification of the young Montalembert, who seems to have been a model boy of the Miss Edgeworth type, with a very exalted estimate of the value of knowledge and a strong desire to reward his elders for their benefits by deserving their approbation. He seems to have been less comfortable when reclaimed by his own father, who interrupted his studies to take him to all manner of sights and ceremonies, of which his precocious gravity exaggerated the inanity. At the age of twelve he made his brother, aged ten, swear everlasting fidelity to the charter of poor Louis XVIII.; one year later he gravely observed in his journal that the heroic fortitude of that monarch under his painful and lingering illness was worthy of the august author of the *Charte constitutionnelle*. At the Lycée of Sainte-Barbe, at the age of fifteen, he recorded his conviction, finally determined by the perusal of a work upon law, that England was the first country in the world; at seventeen, he and his friend, Cornudet, solemnly pledged themselves to one another to devote their lives thenceforward to God and their country. Montalembert was already exercised by the problem how he was to reconcile his ardent faith with his equally ardent patriotism. He left the *lycée* to his regret without a prize, apparently he had read too much and too widely to be able to produce anything empty enough to be finished. Immediately afterwards he had to join his father, who was ambassador in Sweden, and to enter into the gaieties, such as they were, of the society of Stockholm. His experience was not favourable. He concluded that society could only be amusing to those who were famous. A lady of his circle pronounced him *altier et pédant*, and it is probable that at least one-half the charge was not ill-founded. At this period he imagined that his serious mission in life, which these vexatious frivolities so unaccountably delayed, was to sit at the feet of O'Connell, the solitary Catholic patriot of the period, and write an immortal work upon Ireland. These plans were interrupted by the necessity of escorting his sister to a warmer climate, but to his great remorse she died upon the journey. On his return to Paris he published two articles on Sweden and Ireland; he seems never quite to have forgiven M. Guizot, then editor of the *Revue française*, for mutilating the former after he had consented to abridge it, though perhaps editors may sympathize with a *confrère* who shrank from publishing a sarcastic account of a king, by the son of an ambassador resident at his court.

Montalembert set off on the Irish expedition just in time to miss the fighting in July; he hurried back at once to serve his country; but his father felt that such enthusiasm was rather likely to compromise the family, and sent him back to complete his tour. He was enchanted with the Irish peasantry, and did poetical justice to the charms of Irish scenery; the only drawbacks to his enjoyment were that he could not settle which of Lord Donoughmore's daughters to fall in love with, and that he was disappointed in the Liberator, who, instead of fooling the young enthusiast to the top of his bent, turned him into a miscellaneous drawing-room to find his level and, as he naturally supposed, enjoy himself.

Mrs. Oliphant is probably right in supposing that in spite of this disenchantment the visit to Ireland determined Montalembert's career. The discovery that priests could act as demagogues among a fervently Catholic population seemed the entire solution of all difficulties as to how ardent Catholicism was to be reconciled with ardent patriotism. The solution might have been less satisfactory

if Montalembert had understood the harangues of the tribunes whom he venerated, and if his own patriotism had not been as aimless as it was ardent. He seems to have been sincerely under the impression that the principles of 1789 provided for all the legitimate needs of humanity, that the charter of 1814 was an adequate, though perhaps perfectible, embodiment of those principles (whence it followed that any infringement of the charter was to be regarded from a very transcendental point of view), that the consent of Parisian newspapers and *à fortiori* a successful insurrection in the streets of Paris were unmistakable declarations of the will of France, and that any government which a few resolute and dexterous men could manage to impose upon the insurgents was consecrated by the national choice. Perhaps one reason why parliamentary government has succeeded better in England than in France is that in England the series of fictions on which it reposes have been assumed without being stated, while in France those fictions have formed the favourite topics of parliamentary amplification and the favourite arena of parliamentary contests. Montalembert attempted to account for the difference in another way; he imagined that public men in France had only to imitate their neighbours and practise the parliamentary virtues for two or three centuries: and imagined that this would compensate in the long run for the disadvantage of France in not possessing a secure and respected aristocracy. The fact is that in England the majority of the people have never been in such a bad condition as the majority of the French before 1789: the material relief, with its legal conditions, which the people then gained partly through the fears of the government and the privileged classes and partly through their own violence was the one permanent result of the revolution. This is the reason why the majority of English electors are credulous and excitable and loyal, while the majority of French electors are jealous, sceptical, and apathetic, and the section which is not apathetic keeps the rest of society in a constant alarm by the irrepressible pretension to have the revolution established *en permanence* till it shall have accomplished as much for the floating population of the towns as for the settled population of the country. With the passions of this section Montalembert had not the slightest sympathy. He was quite sincere in his enthusiasm for liberty, partly because he liked to be left alone, partly because he had a haughty dislike for the seamy side of politics, for all the shabby and arbitrary things which it is necessary for a government to do that wishes to be strong in France, and, perhaps, in other countries. He was too generous not to exult in the abolition of all the tangible privileges which had once been so oppressively felt; but he was neither too logical nor too imaginative to be surprised that anybody should find it difficult to accept the social inequalities which were the effects of those privileges, and had simply survived their causes, as a natural, not to say a beneficent, arrangement. Liberty and liberalism are large words; and Montalembert was not alone in supposing that the particular side of a complex movement which aroused his individual enthusiasm was the side which ought to triumph; and that nothing but blindness and prejudice could keep intelligent contemporaries from seeing the necessity of recognising this side as a preliminary to successfully repressing or suppressing the rest. It may be doubted, indeed, though he loved both liberalism and Catholicism ardently, whether he loved either quite disinterestedly as an end in itself; whether both with him were not means and conditions of his ideal life. He was sufficiently attached to the liberty of the press to defend it when it menaced a dynasty, but he called for measures of repression when it had begun to threaten property. He desired a liberty both of action and of teaching for the Catholic clergy which was utterly incompatible with the doctrinaire traditions of centralised administration; but he never seems to have realised that the triumph of Catholicism implies the suppression of liberty of opinion; he would sooner have seen other religions coexist for ever with his own than have exposed any respectable religionist to the slightest pressure of the secular arm. He never repented of the fundamental mistake of the *Avenir*, which was to suppose that Catholicism could ever unite itself to any system of temporal politics, and thereby give up the right of trading upon all in turn according to its own discretion and its own preferences.

When the *Avenir* was condemned, he submitted to the extent of believing, or at least of acting as if he believed, that its propaganda had been so rash as to be mischievous; but his personal attachment to Lamennais, which Lacordaire seems not to have shared, made it difficult for him to disentangle himself from the last struggles of that imperious thinker, who at bottom disliked Catholicism too much to accept it himself when he could no longer impose it upon others by his own dialectic. The years that followed this collapse were pleasantly and fruitfully occupied, partly by his marriage and settlement at La Roche-en-Brény, partly by some amusingly eager protests against the vandalism which was destroying the ancient monuments which the revolution had spared, and partly by the romantic *Histoire de Sainte-Élisabeth.* This last is delightful in its fresh picturesque fervour, and has none of the unsatisfactory compromises with commonsense which we find in the *Monks of the West*, where the writer seems afraid of hazarding his personal belief beyond the point up to which it is required in the interests of his narrative. It is unnecessary to add that even from the author's theological standpoint the *History of St. Elizabeth* is at least as uncritical as the old chronicles of which the headings of the chapters indicate an ineffectual ambition to assimilate the form. On his return to public life he distinguished himself by impressive and impassioned pleadings on behalf of Poland, the Sonderbund (whose untimely extinction he attributed to the intrigues of Lord Palmerston), and by a persistent and ingenious agitation against the monopoly of the university in the higher education. He was never able to convince the majority of his own supporters of the importance of his subject; and it may be doubted whether he did not fall to some extent into the mistake of confounding symptoms with causes. The teaching of religion at Oxford, forty years ago, was as perfunctory as it can have been in French *lycées*, but a young man's faith incurred no peril whatever by his passing through an university education, for the consent of educated opinion was still orthodox. Educated opinion in France has never really been reconverted since the days of Voltaire, himself a pupil of the Jesuits. Of course the claim to be educated outside the main current of educated opinion was perfectly legitimate, as such opinion did not claim to be infallible. Of course, also, the monopoly of the university helped to confine thought to a series of sterile oscillations between Condillac and Descartes. It is doubtful, however, whether much was really gained for Catholicism by disqualifying some hundreds or some thousands of young men for entering with sympathy into any profession but that of Papal Zouaves, or by passing as many Parisian *gamins* as possible through the hands of religious congregations, with no very perceptible effect in diminishing the ranks of the Commune.

After the revolution Montalembert occupied a position of considerable practical importance in the two reactionary assemblies which the peasantry sent up to punish Paris for

surprising them into a republic. He voted for all the repressive measures that were carried, and for some, like the proposal to establish a second chamber, which were not; towards the close of the republic he lost the confidence of his own party by showing a desire to conciliate rather than humiliate the doctrinaire section of the conservatives in the settlement of the education question. It is possible that M. Veuillot may have been wrong in his estimate of Montalembert's policy; but his polemical instinct did not betray him in his estimate of the temper of the fellow-labourer he disowned. Perhaps the irresponsible isolation into which Montalembert was thrown by the settlement of the question to which he had devoted himself may have had something to do with the naïve pertinacity with which he clung, even after the *coup d'état*, to the belief that the prince-president was the tool of the party of order, and had no desire to make the party of order his tool. When he was finally undeceived by the confiscation of the Orleans property, he naturally became the most bitter and disdainful of the anti-imperialists; and he had a magnificent opportunity of insulting the government in a dignified way when it made the mistake of prosecuting him for his exaggerated panegyric on our method of managing Indian affairs. After this he appeared twice in public: once as the advocate of Poland, and once at Malines to inculcate the fascinating and unmeaning formula of a "Free Church in a Free State." But the greater part of his later years were spent in carrying on his colossal work on Monasticism, amid increasing physical infirmities. The preparations for the Vatican Council alarmed and disgusted him as well as other Catholics, who had hoped too much from their schemes of reforming the world on Catholic principles, to be quite ready to sacrifice this world to the next; but it appears, from some naïve expressions in his last illness, which Mrs. Oliphant has recorded, that, when the definition came, he would have made the same half-submission as he did in the case of the *Avenir*, and with the same boyish good faith.

Mrs. Oliphant has been too anxious to explain her hero to exhibit him quite so fully as might be wished; we cannot help thinking that even at some expense to his dignity, in the earlier part of the life, he might have been allowed to speak more for himself, and regretting that the time has not yet come for biographers to speak of the idyll of his marriage. Still, with these drawbacks, she has given a fairly complete and highly interesting picture of a high-souled and accomplished gentleman, whose eloquence, earnestness, and unselfishness, gave him a much higher rank in his own country than they would have given him in ours, which he envied and admired so much.

G. A. Simcox.

Wergeland's Selected Works. [*Udvalgte Skrifter af Henrik Wergeland.* Udgivne af H. Lassen.] Copenhagen: Gad.

Mr. Lassen deserves the thanks of all Norwegian students for this convenient selection in one compact volume. Hitherto Wergeland has only been accessible in the great standard edition of his poetical and dramatic works, nine ponderous tomes, and his prose writings have never been collected at all. Of the present work the first 350 pages are occupied with the poet's best verses, and it is only with these that we care to deal. Wergeland's pamphlets and histories, novels and biographies, can scarcely be read out of Christiania. This man combined in himself the characteristics of a divine poet and a local stump orator, and his achievements in the latter line were apt to be deplorable.

The book begins with an ode, *Til Norges Frihed* ("To Norway's Freedom"), in very bad sapphics, published, when the writer was sixteen, in the omnivorous journal *Morgenbladet*, now a most respectable and even venerable newspaper, but in those days, 1826, still very young and silly. "Norway's Freedom" itself was very young, and Christiania had not yet settled into a capital of Europe at all decidedly. "The wonder was not yet quite gone" from her so long provincial eyes, albeit her day had counted as ten years. It was so new, so strange to be the centre of an independent kingdom; who can doubt that Dublin would receive metropolitan honours with long-continuing agitation? and Christiania had been the Dublin of the Danish dominions. Everybody went mad over the new liberty, and the journalism of the first fifteen years of independence is quite a curiosity of literature. A new kind of poetry was invented to form a safety-valve for so much excitement, *Syttendemaipoesi*, or poetry for the 17th of May, the anniversary of the crowning of King Christian by the Storthing, and Wergeland's ode is a beautiful specimen of this sort of composition. Hardly anything so tawdry, so wearisome, so unreal, has ever been foisted on human attention as the pamphlets and poems of Norwegian independence. A sketch of this literature would form a curious chapter for Dr. Forbes Winslow's celebrated work on the *Obscure Diseases of the Brain.*

Wergeland was an emanation from the very centre of this society. Born in 1808, he was six years old when his father went to Eidsvold to be a member of the infant Storthing, and he must have fed upon brochures, as other baby-poets feed on fairy-tales and folk-songs. In him the *Syttendemaipoesi* culminated, and, before his death, decayed and disappeared. It is impossible to help thinking that Mr. Hartvig Lassen might have given us less of this rubbish; there are a great many verses in the earlier part of the volume that have nothing but their fine versification to put forward as a claim to immortality. The best of them are those which have reference to republican leaders and dogmas in foreign countries, to Liberty in England and France. Perhaps the very best is an ode, dated 1836, on the death of Rouget de l'Isle, who embraced the virginal muse but once, and begat a god. The sonorous march of the verse in this elegy is worthy of the men who went singing through the land that they might die for Liberty. But most of the political poems of Wergeland are turbid and shallow, and his ideas reach no farther than Rousseau; he wrote in 1840 like a Girondin of 1792; his whole life was an anachronism.

Wergeland was a much better poet than Southey; he was a much worse poet than Shelley, but he combined several characteristics of these two men. He surpassed the former in copiousness, if that be possible, and he had the same fondness for strange and unwieldy themes; he was consumed, too, with the desire of writing epics. On the Shelleyan side of his genius, he was a fantastic and original lyrist, republican, unpractical, unworldly, desirous of solving the world's enigma in choral dramas. He had the same love for ghastly objects, the same rather morbid fondness for the horrible, that Shelley had. There is a poem in this volume, *Pigen paa Anatomikammeret*, ("The Girl in the Dissecting-room"), that would have delighted the author of the last part of the *Sensitive Plant.* But Shelley in his happier moments was as etherial, as white as the translucent air of morning, while Wergeland, even where he shows most power, is always lurid and distorted, and of the colour of a thunder-cloud. He is the most English of all Scandinavian poets; not only does he exhibit, in a hundred places, a fondness for English thoughts and habits that amounts to Anglomania, but his style and the character of his writing is more allied to our own than that of any other Northern poet. The Scandinavian scalds eschew metaphysics, but Wergeland

constantly weaves together profound thoughts in his own wild way; instead, too, of the limpid flow of fancy that the Norwegians are accustomed to, this poet festoons his poems with rich and redundant imagery, like an Italian or an Englishman of the more florid order.

When he was twenty-two, Wergeland wrote a drama that covered 700 pages with closely printed verse. This production he designed to be "an epic of the human race and a Bible to republicans." It takes the same place in his literary history that *Queen Mab* does in Shelley's. In a late work by the editor of this selection, *H. Wergeland og hans Samtid* ("Wergeland and his Contemporaries"), we have some curious letters and thoughts belonging to this period, that show how completely uncritical and unsound the author's views on poetry were. There must be something very wrong with a poet's mind when he writes an epic of the human race in 20,000 verses; and had not Wergeland by singular good-fortune met with a sharp and unshrinking volley of criticism, it seems very doubtful whether he would have left anything worth reading behind him. However, in his contemporary, the poet Welhaven, he met with an antagonistic critic, whose words were like rapier-thrusts, sharply dividing the good from the bad. The story of their long quarrel and controversy is among the most amusing episodes of Northern literary history, but it chiefly concerns us here to notice the beneficial effect on Wergeland of Welhaven's polished taste and artistic instinct. Conscious that his absurdities would be ridiculed, he set himself to be absurd no longer, and the last five years of his life (he died young, in 1845) are represented by noble works, full of power and melody, and displaying a greater reticence and a more chastened taste. Mr. Lassen has very wisely given his four greatest works in full, rightly considering that they are too excellent to be mutilated by selection. Two of these, *Jan van Huysum's Blomsterstykke* ("J. v. Huysum's Flower-piece") and *Svalen* ("The Swallow"), are lyrical romances, or rhapsodies, exquisite in fancy and sentiment and splendid in execution; another, *Jöden* ("The Jew"), is a protest, nobly worded, against the expulsion of the Jews from Norway, a remnant of barbarism since exploded; the last, *Den engelske Lods* ("The English Pilot"), is the latest and most finished of his writings, and, though surpassed, perhaps, in parts by the magnificent strophes of *Svalen*, is, on the whole, the finest work he left behind him.

Den engelske Lods begins with a description of the longing after land, the straining of the eyes that watch the horizon towards the end of a long voyage. The poem is written in short, irregularly rhyming trochees, with songs here and there. Presently the white cliffs of Dover glimmer on the horizon, and the sailors join in a Wergelandesque song to England, as the home of freedom:—

> "What a glory
> For a man
> Here to live and love and labour!
> What a glory
> To live safe
> In the old oak's shelter!"

We are then taken along the southern coast of our island; everything is minutely and vividly described, scenery and inhabitants, ships and towns, till we reach Portsmouth, where the pilot is introduced. He is the hero of the poem, and in the eighth canto he begins to tell his story, and in the end comes with the whole party back to Norway, to settle there with his old love, Mary Ann. The last two cantos, describing the scenery and life in Hardanger, where they come to live, have especial beauty and tenderness.

A strange quiet gathers round the record of a very stormy life. Remembering how completely his many-sided public reputation has all slipped from him since his death, leaving him only a poet, into what a silentness all the thundering noises that sounded in his ears have fallen, how different the Christiania of to-day is from the city as he knew it, one recalls his own words sung over the grave of the poet Bjerregaard (I am forced to sacrifice rhyme in translation that I may preserve the order of the words and rhythm):—

> "Bring your laurel-garlands here,
> Now the poet's brows are heavy,
> Cold and white!
> Golden rain from leaves of laurel
> Now no more can drop down poison!
> On his grave
> Pour them, till its sombre edges
> Vanish, hidden by green leaves."

The versification of Wergeland is original and happy. He especially delighted in adapting his thought to the measure of old songs. It is strange that our poets have not availed themselves of the metrical discoveries of the Scandinavians. Mr. O'Shaughnessy seems to have borrowed something of the liquid numbers of the Swedes, but no other recognised English writer has availed himself of these, or of the bolder Danish metres. Edmund W. Gosse.

Septimius: a Romance of Immortality. By Nathaniel Hawthorne. Henry King and Co.

A posthumous publication is always a trial to the reputation of the author concerned, and it might have been thought that the polish and elaboration of Hawthorne's style would make the ordeal peculiarly severe. But, on the other hand, the weirdly paradoxical effects at which he aimed may sometimes be almost as successfully produced by an unfinished outline, in which the salient points are hinted at and the rest left to imagination, as in a picture with every detail complete, so that it is impossible to ignore the incongruities which make, and yet are always on the point of marring, the fascination of the whole. Of all Hawthorne's works, *Septimius* has most in common with his greatest, *Transformation*. The common realities of earth are made to mingle, in about the same proportion, with the story of a spiritual life, passed partly under altogether unearthly conditions. The actual is not opposed to the ideal, for Hawthorne, with true artistic reticence, never set his characters to carry out his own schemes of excellence; and this was fortunate, for, after all, his ideas were commonplace and circumscribed within the limits common to well-intentioned citizens of his age and country. It is opposed to, or rather artfully intermingled with, the imaginary: a world of visions of what might have been, of things morally possible though physically untrue. He persuades us to half believe the wonders he half asserts, because he never tires our credulity nor exhausts his own credit by an unnecessary demand or a quite unqualified fiction. After his wildest flights of fancy a sudden touch of realism will bring us down to modern American earth, and by these intermittent glimpses of the soberest sanity, he tempts us to reflect for a moment seriously whether perhaps there may not be some sense, spiritual or material, in which his legends may be understood to convey a truth. And this is all the triumph he aims at, for a brief shock to the normal scepticism of his intelligent contemporaries bears stronger testimony to the power of his imagination than the blind inconvenient faith of an enthusiastic mystic, who after accepting everything would wish to know what next. It is his want of purpose that constitutes Hawthorne's great superiority to the fantastic romance of Germany and to the romantic illuminism which at one time spread also into France and England, in which the mysteriousness was of incident, not of character, and

was always more or less explained away at last by a system of trap-doors and secret societies.

In *Transformation* the author's work seemed to be half done for him by the atmosphere of Rome, laden, in historical truth, with the inherited conflicting mysteries of innumerable ages. In *Septimius* there is no such accidental help, in fact the age and country in which Hawthorne has placed his hero seem chosen on purpose to bring the unreality of his quest into the stronger relief. A New England youth during the War of Independence slays a British officer of his own age, and remote common descent, from whom he receives an obscure ancient recipe for preparing the elixir of life; there is Indian blood in his veins, and he has already heard of the legend of an Indian ancestor of his who possessed such a secret; also, like other unpractical dreamers, who, because they do not know how to extract from life the pleasures it is said to afford, blame life rather than their own dull or misdirected senses, Septimius crowns his unreasoning complaints by settling that only the shortness of life is in fault, not its emptiness. The pursuit in which he sacrifices happiness and almost life is described with Hawthorne's usual skill, and it may be that he refrained from using the obvious mediaeval *cadre* because he distrusted his power of giving it all the reality necessary for the kind of illusion he desired. The only other reason for the choice is that it is part of the plot for Septimius to kill his relation, in all innocence, as a preliminary to profiting by his bequest, and that this can best be managed by a war between different branches of the same race. In the first half of the romance as it now stands, Septimius is the lover of a good and pretty girl, from whom he is gradually withdrawn by his absorbing pursuit and its chilling, hardening effect on his character; in the second half Rose is turned into his sister, and is peaceably betrothed to Robert Hagburn, the Werner of the tale, a rustic who volunteers for the war like a man, and, according to the first scheme, was the rival who would have consoled Rose for Septimius' infidelity. It is not clear what substitute could have been made for the passages where Septimius is gradually alienated from his betrothed, but the character of Sybil Dacy, which was evidently meant to be second in importance to that of Septimius, is very imperfectly worked out, and the author may have intended to transfer the account of his struggles between love and a diseased ambition to the earlier part of his intercourse with and passion for Sybil. We are not sure that anything is really lost by the story being thus cut into two halves which do not fit on to each other exactly, for each half is evidently written so as to do most justice to its leading motive, and something would have had to be sacrificed before complete structural unity could be attained. Besides this, Sybil is almost too artificial to be interesting; Septimius is at least half real, but she is invented for the plot's sake, and the features which are indicated in the work as we have it suggest that the author might not have avoided the danger of mannerism in completing them. On the other hand, the memoranda of ideas and fancies to be worked out, which are very rightly reproduced in the printed edition, seem to show that Hawthorne meant to develop in detail some of the more perplexing experiences to which a modern wandering Jew might be exposed, such as the natural antagonism between the mortal and the immortal, and the tediousness of infinite leisure, which proposes to spend a century upon every experiment of a new mode of life; there was to be a long conversation between Sybil and Septimius on this subject before they drank the magic draught which, the latter fancied, would make them immortal together. Septimius hesitatingly suggests after a good many philanthropic and ambitious schemes that for one hundred years he would try what being wicked was like, and his embarrassment when Sybil unhesitatingly replies, "And I too," is humorously conceived. The catastrophe is more effective as a situation than the end of *Transformation*, but the melodramatic element in it rather interferes with the tranquil manifestation of the spiritual truths of the conclusion. The material future of Miriam and Donatello is scarcely indicated, but we know that as long as they lived their penance must have been tempered by the consciousness of a union of soul the more perfect in proportion as it was dearly bought. Sybil, on the contrary, has to be violently removed from the scene on which she only appeared to execute a mysterious vengeance, and Septimius, we feel, is disappointed rather than disillusioned. The elixir of life is left to rank as an unattainable possibility, and though this is just how Hawthorne wishes to persuade his readers to regard it—for an hour or two—it does not seem fitting that an actor in the romance should be brought to exactly the same standing-point as the spectators. On the whole, in *Septimius* Hawthorne is sometimes at his best, and never betrays anything that can be confidently taken for a sign of failing powers, and for this reason it is doubly welcome to us; it is pleasant that the last words of a writer whom it is impossible not to esteem, and easy to admire, should be worthy of himself, and the Note-books and Journals which were so abundantly bestowed upon the public were distinctly not worthy. They seemed to represent the childish docility of the man of original invention and creative fancy in the passive hours when he was living for himself, not for the world, and having brought back from the land of dreams no prejudices in favour of one way of living rather than another, he tried with good-natured indolence to live the life and think the thoughts of the many. Or, perhaps, a better explanation of how he could write so like a schoolboy, about scenes and paintings from which his fancy is proved to have derived much wholesome nourishment, is to be found in the peculiarity of his intellect, which was powerful and ingenious enough while only applied to objects of his own invention, but had so little sympathy with unadulterated reality that its judgments had to be either conventional or false; and of the two alternatives his modesty preferred the first.

H. Lawrenny.

LITERARY NOTES.

"An Admirer of Keats" writes to the *Athenaeum* to give a version of his sonnet "To Sleep," which differs considerably from the one published by Lord Houghton in his *Life and Letters*. It is apparently a first draft, and was found written in the margin of a copy of Milton which had been lent to the poet. After the third line it continues, instead of "Enshaded in forgetfulness divine"—

> "*As wearisome as darkness is divine;*
> O soothest Sleep! if so it please thee, close
> *Mine willing eyes in midst of this thine hymn,*
> Or wait the amen, ere thy poppy throws
> *Its sweet-dark-dews o'er every pulse and limb;*
> *Then shut the hushed casket of my soul,*
> *And turn the key round in the oiled wards,*
> *And let it rest until the morn.*"

The next line contains various corrections, and the end of the sonnet is wanting. The writer also quotes a few of Keats' prose annotations in the same volume, which was in the possession of the late Mr. Dilke: they are different in some respects from those reprinted by Lord Houghton from the American *Dial*.

A new book by David Strauss is announced, *The Old and the New Faith: a Confession*. It is in four sections, headed—I. Are we still Christians? II. Have we any Religion? III. How do we conceive the World? IV. How do we direct our lives? Two supplements, "Concerning our Great Poets," and "Con-

cerning our Great Musicians," would seem to contain the gleanings of the author's critical commonplace books.

The Royal Bavarian Academy of Sciences has just received the report of the Historical Commission on its thirteenth general meeting; most of the works announced are in continuation of previous undertakings, but it is said that the *Universal German Biography*, begun at Ranke's suggestion, will have one volume, containing the letter A, ready for publication by the new year. More than 200 contributors, including all the principal German historians, are mentioned as interested in the work.

Le Royaume d'Yvetot, which in most people's minds stands on a level with *le pays de Cocagne*, has just received the honours of an historical monograph. The rights and privileges of the king of Yvetot were quite real. Louis XI. and Henri IV. treated the miniature sovereigns with respect, and though a legend which dates the independence of the fief from Clovis is untrustworthy, a *roi d'Yvetot* seems to have reigned as early as the twelfth century. The kingdom was sold—like the Roman empire or the principality of Monaco—in the fifteenth century, and fetched 1400 gold crowns.

Mr. Fr. Frommann, of Jena, has in the press another Greek comedy by Professor Julius Richter, called *Chelidones* ("The Swallows"), in which, with Aristophanic humour, he characterises the Ultramontanes and Communists as bad citizens of one and the same species.

M. Luzel has just published, in a pamphlet form (*De l'Authenticité des Chants du Barzaz-Breiz de M. de la Villemarqué;* Paris: Franck), the lecture he delivered at Saint-Brieuc, last July (cf. *Academy*, vol. iii. p.2 60, where, by the bye, the name of M. Mowat has been misprinted Morvat). His subject was the authenticity, or rather the want of authenticity, of the would-be popular Breton ballads published by M. de la Villemarqué under the name of *Barzaz-Breiz* (lit. "The Bardism of Brittany"). M. de la Villemarqué had given his name to deliver a lecture at the "Congrès" on some archaeological question, but when he heard of the intended lecture of M. Luzel, he deliberately declined to go. No objections were made to M. Luzel when he had done reading; but friends of M. de la Villemarqué were not ashamed to ask that, contrary to the custom, no mention would be made of M. Luzel's lecture in the *procès-verbaux* of the day; such exception, said they, was made necessary by the personal question introduced into the debate. And M. de la Villemarqué had been purposely absent! That suggestion, however, was objected to by eminent members of the "Congrès," amongst whom was one of the patrons of Breton literature, the worthy bishop of Saint-Brieuc, Mgr. David. Such impediments in the research of historical truth make M. Luzel's merits greater. The question treated by him had already been the subject of several articles, here and there, by M. d'Arbois de Jubainville, by M. Liebrecht, by M. Le Men, and by M. Luzel himself, and had ceased to raise doubts in the minds of scholars; but the matter is altogether settled by this last pamphlet of M. Luzel, the candid and careful collector of Breton lays, legends, and tales, who has a special competence in the question. It is to be regretted that M. de la Villemarqué so obstinately gives, as actually sung by the people, ballads which are either arranged and embellished or altogether forged. Would he candidly confess that, when he published his *Barzaz-Breiz* for the first time (nearly forty years ago), criticism was not very strict with editors of popular poetry, and that he thought himself permitted, by the example of Walter Scott and others, to arrange popular materials, or even to make fictitious ballads, every one would readily forgive him that, and remember only the real services he has conferred on Breton literature by his various publications. But by unwisely pleading "not guilty," when the evidence brought against him is so strong, he has succeeded only in making his case worse.

Théophile Gautier, the patriarch of the second generation of Romanticists, died at Paris on Wednesday, the 23rd ult. We hope to speak more fully of the place he filled and the blank he leaves in an early number.

The Drama and Art.

PARISIAN THEATRES.

Most of the theatres are now open for the winter season: and some have already mounted new pieces. At the Français *Le Cid* of Corneille is being given, in order to enable M. Mounet-Sully to appear in the part of Rodrigue. The play is performed, almost for the first time, as Corneille wrote it, without the usual omission of the part of the Infanta. Appropriate scenery and dresses have been provided, so that the masterpiece of the older drama is presented to the public with due magnificence and care. But the actors? Let us take Mounet-Sully first. The part of Rodrigue is a very arduous one for any actor, and for a novice in his art almost impossible. It is all in one key. Called upon by his own father, Don Diègue, to avenge an insult inflicted on him by Chimène's father, Don Gormas, he has to choose at once between his father and his mistress. It is the old conflict of love and duty. He kills Don Gormas, and for the rest of the piece has to deplore his sufferings from the implacable enmity of Chimène. This series of lamentations is interrupted only by one splendid burst of eloquence—the speech in which he recounts the surprise and defeat of the Moorish army in a night-attack on Seville. The first qualities Rodrigue should possess are dignity and repose. It can scarcely be said that Mounet-Sully possesses either. He is violent and passionate: his gestures are extravagant, and want variety. There is no light and shade in his performance. He chants the verses in one key, as if they were the utterances of another person, and not the expression of his own thoughts and feelings. He is at his best in the delivery of the stanzas at the end of the first act, when he determines to challenge Don Gormas: but his whole conception of the part is so uncertain and inartistic as to destroy almost entirely that hope of future excellence to which his Orestes in *Andromaque* had given rise. On the other hand, nothing could be better than the Don Diègue of Maubant. His distress when his sword falls from his enfeebled hand, his passionate appeal to his son, "Rodrigue, as-tu du coeur?" and his pride in his success, are alike admirable. Mlle Rousseil, too, did her best with the thankless part of Chimène; and certainly delivered the famous line, when she appeals to Rodrigue to defeat her champion,

> "Sors vainqueur d'un combat dont Chimène est le prix,"

with a passionate intensity that went to the heart of the audience. The rest of the actors speak the lines allotted to them with correctness and propriety. They have nothing else to do.

A new piece has been brought out at this theatre under the title of *Les Enfants*, by M. George Richard. It might be called in English, "What's to be done with the Children?" and deals with the oft-debated question of the position of those young people whose parents have declined to submit to the ceremony of marriage. But though, as I heard one gentleman say to another after the piece was over, "C'est une belle thèse"; M. Richard has done little towards the solution of the problem he proposes. The play is admirably acted, but is too slight to have a long existence. The best thing in it is a wonderfully graceful game of romps between the two children, impersonated by M. Boucher and Mlle Reichemberg.

At the Vaudeville, *L'Arlesienne*, by Alphonse Daudet, has not met with the success that was expected. The author is a man of letters and a poet, but has never been successful as a dramatist. His present play is a prose idyll rather than a drama; and taken as such is extremely beautiful. Each act shows a true picture of peasant life in Provence, made more exquisitely real by lovely scenery: but despite these attractions, and the simple poetic language, and the magnificent impersonation of a mother by Mlle Fargueil, the fatal defect of want of action wearies the audience and ruins the piece.

The Odéon has reopened with a so-called "comedy" by Édouard Plouvier, a writer of great repute, to which he has given the odd title *La Salamandre*. It deals with the fortunes of a young lady, who, placed by no fault of her own in a position that compromises her, comes out of the ordeal with unblemished reputation. The idea is ingenious, and might possibly, in abler hands, have been made the groundwork of a really fine play: but, as it stands, the great situation is repulsive, and the characters, when not contemptibly weak, are odiously disagreeable.

The Châtelet has just reproduced *Patrie*, with a very good cast and splendid appointments.—The Ambigu is about to play a new drama, *Le Centenaire*, with the veteran Lafont in the principal part.—The Gymnase has reproduced that evergreen *Le Fils de Famille*, surely as graceful a piece of witty and harmless badinage as was ever played on any stage. How charming, too, is the music! and how delightful nowadays to have the opportunity of enjoying a piece in which the songs form a part of the dialogue, instead of a tiresome interruption to it. London playgoers may recollect it years ago, under the title of *The Lancers; or, The Gentleman's Son.*

The Français—after certain *reprises* of well-known plays—proposes to bring out the *Helène* of Pailleron, author of *Les Faux Ménages*. After this *Marion Delorme* is promised, with Mounet-Sully as Didier: an announcement that would be rather depressing, were it not that an antidote is provided in the fact that all the best actors will appear in the other parts.

J. W. Clark.

ART NOTES.

English art has had a heavy loss in the death of Mr. George Mason, Associate of the Royal Academy. Mr. Mason's health had for years been such as to cause anxious apprehension to his friends; he suffered very severely in the course of last winter, and has died on the approach of this (October 22, *aet.* 54). Since Gainsborough there has not been a more poetical and refined painter of English landscape and country figures than Mr. Mason. His place among contemporaries was rather by the side of the French pastoral painters, M. F. J. Millet or M. Jules Breton, than by that of any of his fellow-countrymen. A singular elevation and harmony, a singular and pathetic sweetness of feeling, have given to all his later work a charm and dignity which are very rare in the English painting of the hour. Mr. Mason's instincts were equally fine and true in colour and design; although, in both, his work might occasionally show a little of the hesitation and incompleteness of amateurship—for it was late in life that he began the professional practice of art—as well as of ill health. Mr. Mason was resident in Italy from 1844 to 1858, and a few of his pictures represent Italian scenes. But the great bulk of his contributions to the Royal Academy, for the last dozen years, have been small compositions of English midland landscape with village figures and field labour, in quiet colour and of an exquisite grace and tenderness. There are only three of his pictures, the "Evening Hymn," the "Girls Dancing," and the "Harvest Moon," of this year, which his physical powers enabled him to complete on a scale sufficient to do full justice to his original, harmonious, and delightful genius. (For some more particular observations, see *Portfolio*, August, 1871; *Athenaeum*, October 26, and *Pall Mall Gazette*, October 28, 1872.)

In addressing the Cortes concerning the fire which took place at the Escurial on the night of October 1, the minister of finance, Ruiz Gomez, said, "Not a book has been burnt, nor a paper lost. It is a question of time and money, that is all." The area burnt is large, including the whole of the upper floors of the Colegio and the two towers known as the Colegio Tower and the Tower of Lucerne. The *Times* correspondent, writing on October 7, gives a vivid description of the ravages of the fire, but confirms substantially the reassuring words of the minister; he differs from him, indeed, as to the amount of damage done to the edifice; which he estimates as likely to come to twice the amount (40,000*l.*) officially stated as the probable cost of reparation. Besides the Hebrew and Arabic MSS., of which catalogues exist, and other valuable MSS. and books, amounting in all to 14,661, the library contained original sketch-books by Michel Angelo, Raphael, Titian, Albrecht Dürer, and other great masters. Great fears were entertained for the ceiling, which is one of the most magnificent pieces of decorative work in the whole building, but the rubbish which had fallen on it from the floors consumed above having been carefully removed, it has been found to have sustained none but trifling and easily reparable injuries. The heroic exertions of the inhabitants, and the fact that the architect of the enormous pile employed no wood in its construction where he could possibly use stone, prevented the conflagration from spreading to the palace or church, and confined its ravages entirely to the Colegio end.

Fresh fruits are reported from various excavations on the classical sites of Asia Minor. Mr. Wood has just discovered several more fragments of sculpture in relief at the temple of Diana of Ephesus. Of these he writes that the most remarkable is a portion of the same frieze in vigorous projection of which a corner-piece, representing an Amazonomachia, is set up (labelled "Pilaster?") in the Mausoleum room at the British Museum.—The undertaking of Dr. Henry Schliemann is a less known and even a more colossal one than that of Mr. Wood (see *Academy*, vol. iii. pp. 26, 68). Dr. Schliemann is an archaeologist entertaining some eccentric views, but deserving the utmost credit for the zeal which has led him to spend time and fortune in searching for the ruins of ancient Troy. It would seem that Dr. Schliemann has really hit upon the Lysimachian temple of Athene at Ilium Novum. He has courteously promised to the British Museum the cast of a sculptured metope, complete between two triglyphs, from this building. This, judging by the photograph, must be a fragment of a very high value indeed. It represents Helios (with the radiating crown as on the coins of Rhodes) driving a *quadriga*, and is in the highest finish. The horses are extremely vigorous in design and action, and the flying draperies of the figure have a remarkable resemblance to those of the well-known "Niobid" of the Chiaramonti gallery in the Vatican. Generally it is an animated and picturesque style, recalling that of other sculptures belonging to the end of the fourth century B.C. Dr. Schliemann announces the publication of the fragment, together with an inscription found on the same site, in the Berlin *Archaeologische Zeitung*.—In addition to these discoveries, Dr. Schliemann, clearing the circumjacent ground to the depth of 50 feet, with a gang of workmen 150 strong, has disclosed a prodigious structure of masonry sloping at an angle of 30°, which he would have to be part of the substructure of the Trojan Palladium itself. But the publication of Dr. Schliemann's projected *Prachtwerk* on Troy must be awaited before any exact judgment can be formed as to these latter discoveries.

The commission named, half by the Italian government and half by the municipality of Florence, for the conservation of the "David" of Michel Angelo has determined on the plan to be recommended. A pavilion is to be erected in the Academy of Arts to receive the colossus at the cost of about 72,000 lire; the cost of transport is reckoned at about 20,000 lire, and the removal is to be accomplished by means of an ingenious invention of Signor Francisco Porra.

We learn from Paris that the cabinet of medals and antiques in the National Library was reopened to the public on October 1. Monday, Wednesday, and Friday are to be held sacred to students; Saturday is reserved for the work of the catalogue, and Tuesday remains for visitors. The new gallery of sculpture which is being arranged in the Louvre, between the pavilions Mollien and Daru, is to receive the statues from the various imperial châteaux, and those already in the Louvre which have been judged the most important. At the end of the gallery is to stand the statue by Michel Angelo, which has remained for years forgotten at Chenonceaux. This new gallery is to be called the *Salle Michel-Ange*, and will be opened to the public as soon as the decorative paintings which ornament it are finished. This work has been entrusted to M. Birouin.

In the course of the present year the South Kensington Museum has restored to the people of Bayeux the morsel missing from the celebrated tapestry preserved in that town. The thief was no other than the wife of Stothard the artist, who went to Bayeux in 1830 in order to execute his well-known copy of the work in question. Mrs. Stothard profited by the courteous facilities granted to her husband for the purposes of his painting to cut with her scissors a piece about as big as a hand from one of the sides of the embroidered cloth. At the death of Mrs. Stothard, some years back, the museum of South Kensington became possessed of the stolen piece, together with an account written by Mr. Stothard, of the circumstances under which his wife committed the disgraceful theft. The directors of the South

Kensington Museum, when sending over this summer some artists to photograph the tapestry, announced their coming in a letter containing the relic, which has been gratefully received, and found to agree thread for thread with the original.

The *Nordische Presse* reports with reservations a rumour current to the effect that amongst the art treasures at St. Petersburg, purchased by the empress Catherine II., a piece of sculpture from the hand of Raphael has been recently discovered. The subject is a Child resting on a Dolphin. The same authority adds that the original of this work was known to exist in Paris up to 1770, and that there are many reproductions of the design both in plaster and engraved. The rumour is perfectly correct. This group, attributed to Raphael both by Förster and Passavant, has been recently exhibited to the public in the Hermitage palace. It was acquired by M. de Berteuil in Rome in 1768, and afterwards lost sight of. M. Guédéonoff, the active director for the Fine Arts at St. Petersburg, has found in an inventory of the time of Catherine II. proofs of the acquisition of the group.

A magnificent collection of etchings by Dutch painters was sold by auction, on the 5th of October, by Lepke, at Berlin. They were brought together by Baron Heinrich von Mecklenburg, who died in 1862. The catalogue was written by Herr Amsler, and it is hardly possible to cite any examples, as, out of the entire number, not one middling impression was to be found. —On the 14th of October, Boerner brought to the hammer at Leipzig the collection of Ferdinand Kern, the fruit of sixty-six years of diligent search. The principal gems were the numerous and rare engravings by Italian masters of the sixteenth century. —But on the 24th of October, a collection, surpassing, perhaps, in peculiar interest, either of the two above mentioned, was sold at Munich, viz. the very remarkable collection of the works of the so-called *petits maîtres* and goldsmiths which belonged to Dr. Posonyi, of Vienna.

The death of Count Schlieck took place recently at Paris, where he had resided for some time past. He enjoyed a great reputation especially in the Northern courts of Europe, acquired by his designs for sumptuous articles of plate, and his general elegance of taste in ornamental design. He lived at one time in Pompeii directing excavations, making casts from objects found, and copies from the frescoes in tempera. He has been lately engaged in the arrangement of his collections, which were very considerable, intending to sell them *en masse*. It is said that he leaves no heirs, and in that case the whole of his art-treasures will go to the state of Denmark, of which he was a native.

In the *Times* of October 9, Mr. Stuart A. Moore draws attention to the fact that exact calculations based on the entries of the Fabric Rolls of Exeter Cathedral (made in the year 1317–18, when the Lady Chapel appears to have been re-decorated and the four side windows glazed) show that even in the Lady Chapel, where glass is generally supposed to be the richest, the proportion of coloured to white glass was only a little over one-fourth. Thus, he says, in no case did the glass resemble the gorgeously stained abominations of the modern school.

Herr Jordan gives in *Im Neuen Reich* a particular account of the statue to Lionardo da Vinci which was unveiled at Milan on September 4. Signor Pietro Magni is the sculptor, and in spite of certain grave defects, Herr Jordan pronounces that he has on the whole achieved a work of distinguished monumental character. The figure stands sunk in meditation, and is very simply treated; at the corners are placed statues of his principal scholars, Cesare da Sesto, Marco d' Oggiono, Beltraffio, and Andrea Solario. These figures are well worked out; a little stiff indeed, but the serious matter is that they do not incorporate well with the whole. The high octagonal pedestal is very well designed. The loan exhibition in the Brera afforded a rare and magnificent opportunity of seeing the works of the great master; something like three hundred paintings by his hand had been collected from the palaces of the nobles in which they are usually hidden from public gaze. As to the modern paintings, Herr Jordan remarks the triumph of "fare da se," but confesses that as to technic it had not yet come to the shamelessness of Paris. He concludes his paper by drawing attention to the desirability of at once printing and so securing to posterity the wealth of MSS. which Lionardo left behind him. The principal part of the treasure was removed in 1796 from the Brera to Paris, and with the exception of a stray paper or two the commissaries of 1815 left it undisturbed. A few papers are in England. Herr Jordan proposes that a society should be formed for the publication of the whole.

New Publications.

Assing, Ludmilla. Fürst Hermann von Pückler-Muskau: eine Biographie.—Briefwechsel und Tagebücher des Fürsten Hermann von Pückler-Muskau. Hamburg: Hoffmann und Campe.

Bronte, Charlotte. Jane Eyre. Illustrated edition. Smith, Elder, and Co.

Crowe and Cavalcaselle. Lives of Flemish Painters. Murray.

Hare, A. J. C. Memorials of a Quiet Life. Strahan and Co.

Montaiglon, Anatole de. Recueil général et complet des Fabliaux des xiiie et xive siècles. Paris: Librairie des Bibliophiles.

Nichol, J. Hannibal: a Historical Drama. Glasgow: Maclehose.

Richter, J. P. Christliche Architectur und Plastik in Rom vor Constantin dem Grossen. Jena: Frommann.

Sand, George. Francia. Paris: Michel Lévy.

Strauss, D. Der alte und der neue Glaube. Leipzig: Hirzel.

Trollope, A. The Eustace Diamonds. Chapman and Hall.

Vetter, F. Zum Muspilli und zur germanischen Alliterationspoesie. Wien: Gerold's Sohn.

Werner, Carl. Nile Sketches; with Descriptive Text by Dr. Brehm and Dr. Dumicken. Part II. Sampson Low.

Physical Science.

The Beginnings of Life. By H. Charlton Bastian, M.A., M.D., F.R.S. Macmillan and Co.

This book of Dr. Bastian's may be regarded as representing the final result of his long series of experiments and observations which have already partly been published in his well-known papers in *Nature* and in his smaller work on the *Origin of Lowest Organisms*.

The present work is divided into three parts: I. The Nature and Source of the Vital Forces and of Organizable Matter; II. Archebiosis; III. Heterogenesis.

Part i. is intended, according to the preface, "to show the general reader more especially that the logical consequences of the now commonly accepted doctrines concerning conservation of energy and the correlation of the vital and physical forces are wholly favourable to the possibility of the independent origin of living matter." That the evolution of organic matter by the action of physical forces took place in the remote past follows of necessity from the general hypothesis of evolution, but Dr. Bastian fails to see how it can be that this evolution of organic matter, having once taken place, should not constantly have recurred and indeed be continually occurring at the present time. But that such an opinion may logically be maintained by those who hold the theory of evolution will be seen from the following considerations.

Complex organic compounds are formed by the chemist in the laboratory by a gradual process. Thus by exposing certain inorganic substances to suitable conditions, a comparatively simple organic body, A, is obtained; A exposed to different conditions yields a more complex body, B; B yields C, and so on. Now this is the only method, as far as is known, by which complex organic bodies are formed apart from the influence of living matter, and thus it is conceived that the original evolution of organic matter took place in a like manner by a series of steps. The chemist has not nearly attained to the formation of bodies so complex as the protein-compounds which are the invariable concomitants of the exhibition of the phenomena of life, but it may well be concluded that, if ever the synthesis of such bodies

be attained, it will be by a long series of steps, say A–Z. As the organic bodies forming the successive steps are more or less unstable, it is necessary that the conditions requisite to raise each body one step should occur before disturbing influences, which would change the constitution of that body, have come into operation. Thus, in nature, compounds A, B, C might often be formed without leading at all to the formation of Z. Further, at the remote period in the earth's history at which the evolution in question is supposed to have taken place, the conditions of atmosphere, temperature, &c. were very different from what they now are. So that it would appear that, if it be admitted that the evolution of organic matter must necessarily be a gradual process such as that described, it may quite logically be held that the process, having occurred once, is not likely ever to recur, and the case is paralleled by that of certain minerals which are extremely local in their occurrence, and the conditions for the formation of which must have been brought together on very rare occasions. The Latin language was formed by a process of evolution, but it is almost inconceivable that the complex conditions requisite for its production should recur. At all events, the hypothesis that organic matter was thus evolved by a series of gradations brought about by a succession of complex conditions is in accordance with known chemical processes, and is therefore an explanation of the phenomenon; whilst the rapid formation of such matter in saline solutions which Dr. Bastian's experiments would seem to show is entirely unparalleled in the laboratory.

Another argument in favour of an *à priori* probability of the occurrence of the formation of living things at the present time brought forward by Dr. Bastian is that, unless this is the case, it is impossible to account for the present existence of such low organisms as the Monera, which are mere (and apparently homogeneous) masses of protoplasm, since these bodies must necessarily have become modified and have reached a higher state of organization during the lapse of ages. Professor Haeckel (*Biologische Studien*, p. 182) lays considerable stress on this point, and concludes that the moneron Bathybius at least is constantly coming into being *de novo* at the present day. Surely, however, Bathybius, inhabiting as it does the bottom of the deepest oceans, must exist under circumstances almost invariable, and, in the absence of any inherent tendency to take on a higher form, which tendency the evolution theory cannot admit, but which Dr. Bastian, in order to account for his results, is obliged to postulate, may have so existed from the very earliest times. From time to time some portion of the region inhabited by this Moneron may have been elevated, and being thus brought under the influence of varying conditions in shallow water, Bathybius may have become differentiated on the confines of the area occupied by it, may have formed a constant source of the Monera of seashores and fresh water, whilst the main bulk of its simple protoplasm may have always occupied the deepest seas and there reproduced itself unchanged. Surely this may well be considered a possible case of survival, and is no more difficult to explain than, *e.g.*, the survival of savages at the present day.

The latter portion of part i. is occupied by some account of the nature of low organisms. Amongst these are described Professor Haeckel's Monera, which, as before explained, are mere minute masses of structureless protoplasm, the lowest of them having no definite form at any period of its existence, but one which is constantly undergoing change. Now it is bodies such as these which, according to Professor Haeckel and Mr. Herbert Spencer, must have been originally evolved from inorganic matter, and have been the source of all higher organisms, and their forms are such as protein-compounds may readily be conceived to have taken under the action of their known physical properties and the influence of immediate surrounding conditions. Hence the discovery of the Monera was regarded as of the utmost importance to the evolutionary theory as supplying a lost link between the lowest organic beings until then known and matter not living, and it was considered that, if by experimental means the evolution of living from not living matters could be brought about, the first form which they would be expected to assume would resemble that of the simplest Moneron. The living things obtained, however, by Dr. Bastian in his experiments are not found to have the indefinite form of the Moneron, but are bodies which have very definite shapes, in many cases obviously adapted to their special mode of existence or progression, and more or less heterogeneity of structure, some of them very considerable heterogeneity. The forms are Bacteria, Vibriones, Torulae, Moulds, &c.

Part ii. contains the pith of the evidence derived from observation and experiment which Dr. Bastian has to offer in favour of archebiosis, as he terms the origin of life *de novo*. The observations consist in the investigation with a high power of the microscope of the visible changes which take place in solutions in which the development of living things is proceeding. There seems very little doubt that Bacteria develop in solutions in which no particles whatever can be observed with the microscope. This is Professor Burdon Sanderson's conclusion, and according to his observations these bodies first make their appearance as indefinitely minute spheroidal particles which subsequently develop into Bacteria, and it is possible that other low forms of life, though certainly not fungus spores, may appear in the same manner. To suppose that these forms spring from invisible germs is to make an hypothesis which is in harmony with our knowledge concerning the origin of other living things. There is no reason why the germs of Bacteria should be visible; and, as Dr. Burdon Sanderson remarks, "there is an immense preponderance of evidence that microzymes do not spring into existence of themselves in the media where they grow."* There is, moreover, no inconsistency in postulating the existence of invisible germs in the case of living things, and not postulating invisible crystalline germs in the very different case of the appearance of crystals in solutions where the facts necessitate a different explanation.

The experimental methods employed to determine whether living things arise *de novo* are all more or less alike. A fluid known to be capable of supporting the life of low organisms is put into a glass vessel. The vessel is then heated, the fluid is boiled, and the mouth of the vessel hermetically sealed, plugged with wool, or twisted up and down with the intention of the prevention of the access of germs to the fluid. It is admitted now on all hands that prolonged exposure to the action of boiling water destroys all life in solutions; hence, if undoubtedly living things be found in solutions treated as above, from which germs have certainly been excluded, the only possible explanation of the phenomena is that the living things have been evolved *de novo*. Pasteur's experiments made in this manner are well known, and his results were confirmed by Professor Lister and others. Pasteur showed that in a large number of solutions capable of supporting life, when these had been boiled, and proper precautions had been taken to prevent the access of germs, no living things whatever developed themselves. Pasteur attributed the development of all forms of life observed in ordinary exposed solutions to germs almost universally

* "Second Report of Researches concerning the Intimate Pathology of Contagion," reprinted in *Quart. Journal of Microscop. Science*, No. xliv. p. 315.

present in the air; but Dr. Burdon Sanderson has recently shown that in the case of Bacteria this view can no longer be maintained. His experiments prove that the germs of Bacteria can only be conveyed by water. A solution eminently adapted to the support of Bacteria may remain exposed to the air for any length of time and yet not a single Bacterium will develop in it, whereas the addition of the smallest drop of water will produce Bacteria in abundance. It is very probable that the germs of other low organisms which have hitherto been supposed to reach solutions by means of the air may be found to be communicable like Bacteria only in the wet state. This discovery of Professor Sanderson's is certainly the most important one in this line of research which has been made of late years. Fungi, on the other hand, Professor Sanderson shows, develop in these solutions in quantities directly proportionate to the amount of their exposure to the air, and from these and other considerations concludes that the developmental connection supposed to exist between Bacteria and Fungi, and which, it will be remembered, was maintained by Professor Huxley, can no longer be upheld.

M. Pasteur's well-known experiment of catching the germs from the air on cotton wool, sowing them in solutions devoid of life, and thus causing these solutions to teem with living things, is explained by Dr. Bastian by means of an all-pervading ferment in the air capable of setting up chemical changes in boiled solutions which lead to the development of organisms *de novo*. Dr. Burdon Sanderson's experiments, it would appear from a note (vol. ii. p. 14), are to be similarly explained by an hypothetically all-pervading ferment in water. An all-pervading germ hypothesis is undoubtedly much better than this, and indeed in the case of Dr. Sanderson's experiments the ferment hypothesis will not apply, for the ferment would not be destroyed by mere desiccation without heat. Further experiments of Dr. Sanderson resembling those of Pasteur showed that the development of living things *de novo* does not take place in serum of blood, white of egg, or Pasteur's solution, after they have been heated sufficiently to destroy germs, and also that diminution of atmospheric pressure does not affect the result. There is thus abundance of evidence that living things do not develop in a large number of solutions which are well adapted to their support, and are such as they might therefore be expected to develop in *de novo*, if that event were probable at all; but Dr. Bastian assures us that he obtains the same results with these same solutions, or that in those instances in which his results are different that difference is caused by a modification in the conditions of the experiment, that is to say, a diminution of atmospheric pressure, which Dr. Bastian alleges to be necessary for the production of living things *de novo* in some solutions, while he considers it *favourable* to the attainment of that result in all. Dr. Bastian seals the flasks with which he is experimenting during ebullition of the contained fluid, and by this means, when the apparatus has become cool, a partial vacuum is formed in the vessel. Experiments were made in this manner with hay and turnip infusions, in which every possible precaution appears to have been taken to exclude or destroy germs. In nearly all cases after the lapse of some time the solutions became turbid, or exhibited a scum, and microscopic examination showed the existence of organic bodies in the fluids, and in some cases of Bacteria in active motion.

Now the only possible answer to be made to experiments such as these is that the turbidity or scum in the solutions was not caused by a development of organisms, but by some coagulation or similar alteration in the fluid, and that the bodies seen in the solutions were not living, but dead, and had been there all the time. It must be noted that it is not stated how long the solutions were kept after filtration before being made use of, and that samples of the solutions do not appear to have been carefully examined beforehand. Other experiments were made with saline solutions, such as ammonic tartrate with sodic phosphate, in some instances heated after enclosure in the tubes up to 295°–307° F., and maintained at that temperature for four hours.

It is obvious that only experiments with saline solutions bear directly on the question of the original evolution of life. In one such experiment (Expt. *g*, p. 464) the tube was opened in Professor Sharpey's presence. There was found in it a body, of which a drawing is given, resembling a tuft of Penicillium, and a quantity of similar fungus matter, "in which the remains of the filaments were seen in the form of more or less irregular rows of brownish granules." The disintegration and browning are attributed here to decomposition, but it seems far more probable that they were due to the action of heat. It is further to be noted that tufts of Penicillium spores, such as that here depicted, are believed by botanists to be developed only in the air on the surface of liquids or matrices, whereas this is supposed to have been developed *de novo* entirely beneath the surface of the liquid; and the only authority which Dr. Bastian can give us for the submerged growth of such bodies is M. Pouchet. Moreover, from Dr. Bastian's own observations, it is almost certain that the crystals of ammonic tartrate employed to make the solution here experimented with contained plenty of fungus matter just like that which was observed (vol. ii. Appendix B, p. xviii), and that therefore such bodies must almost certainly have been originally present in the solution. Further, the filament attached to the tuft of spores has, according to the drawing, its contents coagulated into irregular masses, as if by heat. In a comparative experiment, in which a similar fungus was similarly treated, the plant, though disintegrated, had still sufficient structure remaining in it to allow the easy recognition of mycelium and spores. Most probably, had the experiment been repeated, less alteration in structure might have been observed. There is little doubt that all the Fungi obtained in saline solutions were derived from the crystals employed. Some of the Fungi figured appear to show the action of heat more plainly than in the one we have just considered (*e.g.* fig. 29, *c*, vol. i.).

It might easily have been determined whether the spores in the experiment were alive or no by placing the mass under the microscope in a suitable fluid, fixing in the field of view one particular spore, which undoubtedly belonged to the mass, and observing whether this spore developed or not. Such an observation would have been crucial; but it was not made in any case. The only attempt made to determine whether the organisms observed in the solutions were living or not was in the case of Expt. 4, vol i. p. 368. Here Torulae obtained from a solution were mounted in glycerine and carbolic acid, and are said to have been found increased in size and number after the lapse of two weeks. But the fluid here employed most probably contained plenty of living Torulae, and the whole increase observed may have been due to the multiplication of these. Such is the nature of the evidence which Dr. Bastian thinks it worth while to offer in a work of such pretensions as the present.

The simple faith with which Dr. Bastian looks forward to the conversion of Mr. Herbert Spencer (vol. ii. p. 603) to archebiosis and heterogenesis (this latter in Dr. Bastian's sense), and to the general revolution in science to be brought about by his work, cannot but impress the reader with the firm belief which the author has in his own results. But the absurd statements concerning heterogenesis which

are made in the third part of the book under consideration must tend to render the faith of biologists in Dr. Bastian's powers as an observer extremely small. Three great authorities, Professor Huxley, Dr. Sharpey, and Mr. Berkeley, have been shown by Dr. Bastian the result of some of his experiments. That Professor Huxley was not convinced, but believed that none of the bodies exhibited to him were alive, is well known to all. The opinion of Dr. Sharpey and Mr. Berkeley has unfortunately not been published, but surely, if it were favourable to Dr. Bastian's view, he would not fail to say so. The fact that Dr. Burdon Sanderson gets a negative result in experiments with blood serum, whereas, under the same conditions, Dr. Bastian gets a positive result with solution of beef, an extremely similar substance, cannot fail to generate scepticism concerning Dr. Bastian's operations with other solutions. At all events, in a question of such importance as the present, judgment must be withheld until Dr. Bastian's results are tested by some observer whose name will carry weight with it. This might appear likely to be a long and arduous undertaking, since (significant fact) Dr. Bastian tells us that nothing is easier than to get negative results; but fortunately there is one solution which gives, in 999 cases out of 1000, positive results. And Dr. Bastian appears to be willing to stake the question of archebiosis on this one experiment. The solution is a strong infusion of turnip with a fragment of cheese in it under diminished pressure. It is to be hoped that some one will try this experiment, following Dr. Bastian's methods exactly, with, perhaps, it may be suggested, the further precautions that the flasks employed should be strongly heated just before they are used, and that the observer should, as a preliminary measure, make himself thoroughly acquainted with the appearances presented under the microscope by a fresh strong solution of turnip, in which cheese has been boiled.

It is very difficult to believe that a diminution in atmospheric pressure can have much influence on the formation of organic matter in solutions, and considering, on the one hand, the *à priori* improbability of the formation of Bacteria, &c. *de novo* with the great weight and high value of the evidence already adduced against its occurrence, and estimating, on the other, the value of the evidence here put forth, it seems very unlikely that Dr. Bastian's results will be confirmed.

Part iii. treats of heterogenesis, which term is defined to mean a process whereby the matter of already existing living things gives birth to other living units wholly different from themselves, and having no tendency to revert to the paternal type. That is to say, the spore of an alga can, instead of giving birth to a similar alga, produce a worm. This very process Dr. Bastian affirms actually to occur. It is needless to say that statements such as this are opposed to all the accepted facts and theories of biological science, which are grounded on the laborious investigations of a long series of trustworthy observers, and will not lightly be overthrown on such utterly inconclusive evidence as that here brought forward. That the spores of Algae do not develop into Worms or Rotifers or Tardigrades, but in a very different manner, is the conclusion of botanists who have spent their lives in watching the development and studying the habits of these plants. The supposition of heterogenesis is no new one; it has been raised several times by superficial observers without ever having gained the least ground; but there will probably always be found persons ready to rake it up just as there is always some one to be found ready to square the circle, prove that the earth is flat, deny the persistence of energy, or maintain the existence of psychic force, and to accuse critics of immorality (vol. ii. p. 435) because they refuse to renounce the fundamental inductions of their respective sciences. There is not space here to notice more than one of Dr. Bastian's observations described as demonstrating the occurrence of heterogenesis. The whole of the evidence brought forward which bears on what would, if proved to occur, be cases of real heterogenesis, for heterogenesis (mixed up in a hopeless manner by the author with alternation of generations) rests on evidence derived from the supposed existence of every gradation between one form and another, than which nothing is more misleading. The case of the supposed development of a Nematoid worm from a resting spore of Vancheria, a fresh-water alga, is as follows. Dr. Bastian had a specimen of Vancheria growing in a saucer full of water outside his window. The saucer stayed there some time, and small portions of the plant were repeatedly examined without any Nematoids being seen. The saucer was then taken into a warm room. After four days a number of young Nematoids were found in the water, probably developed from a number of ova present in the water originally, but easily escaping detection from their resemblance to spores, and only hatched on the access of warmth. When further examination was made with the microscope, forms were observed more or less gradational between the resting spores of the Vancheria and bodies exactly resembling the ova of Nematoids, which bodies developed into Nematoids in the ordinary manner. In such a case as this apparent gradations prove nothing, and this is a typical instance of the way in which mistakes of this kind occur. Why, if Dr. Bastian observed this process of heterogenesis going on to the enormous extent described, did he not fix on individual undoubted Vancheria spores, and carefully watch their development? He would then have seen his error; but crucial observations such as these lie outside the province of heterogeny.

Dr. Bastian says that the ova produced by his young Nematoids were much smaller than those within which his young Nematoids were seen to be enclosed, but it may well be that considerable variation in size may exist in the ova produced under various conditions by individuals of the same species.

In conclusion, it should be stated that Dr. Bastian, in order to account for his results, imagines that living matter is endowed with a tendency to develop into certain forms. The wonderful Foraminifera of geological times and the present day, which resemble one another so exactly, were formed originally by archebiosis combined with heterogenesis, and are formed in the same manner now. There is no genetic connection between the two series. Archebiosis and heterogenesis are mere expressions for certain modes of action of the inherent tendency. A number of other terms, also ending in "sis," express other modes of this tendency, many of them being recognised physiological processes known in science by other names. The supposed formation of fungus spores, &c. *de novo* is the result of this "inherent tendency," as is also the development of Nematoids out of Vancheria spores. As far as Dr. Bastian's idea can be gathered, it is this: living matter is formed *de novo* in solutions by the action of chemical forces. At the instant of its formation, it is endowed with an inherent tendency to develop, and in virtue of that tendency takes the form of spores, *e.g.* capable of at once developing into perfect Fungi. Or, living matter, having taken a Vancheria form, is, in virtue of the "inherent tendency," capable of taking the form of a Nematoid. Now it is obvious that the supposition of a tendency such as this would afford no more explanation of the phenomena, were they really existent, than that of a steam-engine principle would of the motion of the steam-engine. A tendency so complex as to be capable of bringing about the

off-hand formation of a structure so elaborate as that of a Nematoid worm has absolutely no parallel amongst crystalline or other forms of physical force. It is of no avail to call such a tendency organic polarity. It could merely be called vital force. It is this same hypothetical tendency in a rather different shape which it is the chief merit of Mr. Herbert Spencer's philosophy to have been able to dispense with, and with which Mr. Darwin will have nothing to do.

H. N. Moseley.

WOOD IN THE LIAS.

TO THE EDITOR OF *THE ACADEMY.*

Broomfield, Sheffield, October 16, 1872.

Sir,—Professor Thiselton Dyer, in his review of Professor Balfour's recent work on *Palaeontological Botany*, alludes to my paper on the occurrence of non-gymnospermous wood in the Lias. As I pointed out in the paper itself, there was some doubt as to the fact of the specimen having come from the Lias; since I did not find it myself, or obtain it from a source on which implicit reliance could be placed. I still continue to look on its origin as a matter of doubt, and until further evidence in proof of such wood occurring in the Lias has been discovered, I should be sorry if any one were to attribute greater weight to the facts described in my paper than I did and do myself.

H. C. Sorby.

Notes of Scientific Work.

Geology.

The Cretaceous Flora of North Greenland.—Among the interesting collections which the Swedish polar expedition of 1870 brought to Europe was a fine suite of fossil plants, collected at the desire of Dr. O. Heer, in Zürich, who in his *Flora Fossilis Arctica* proved that certain black shales at Kome, north of the peninsula Noursoak, belonged to the Cretaceous series. This is now conclusively proved. The specimens brought from Kome are 43 in number, among which Dr. Heer recognises *Filices*, *Rhizocarpeae*, *Equisetaceae*, *Cycadeae*, *Coniferae*, *Monocotyledones*, and *Dicotyledones*. The Ferns are very numerous, *Gleichenia* being peculiarly abundant. The *Cycadeae* and *Coniferae* are also represented by many species, among which *Podozamites Hoheneggeri* is notable, as likewise occurring in the Wernsdorf beds of the Northern Carpathians. Monocotyledons are rare, and only exist as fragments in the collection, while the Dicotyledons also are only represented by a few fragments of leaves, most probably belonging to *Populus*. Such a flora, with a preponderance of *Coniferae*, *Cycadeae*, and *Filices*, and *Gleichenia*, *Marattiaceae*, *Dictophyllum*, and *Cycadeae* in abundance, must be counted a subtropical one. To judge from the presence of *Podozamites Hoheneggeri* and *Eolirion primigenium*, the deposit probably represents the Wernsdorf beds belonging to the Urgonien. This flora has a different climatic character from the Miocene flora of Greenland, in which respect it agrees with the Lower Cretaceous flora of Central Germany. Similar black shales have also been found at the south side of the Noursoak peninsula, near Atane, and at about 800 feet below the well-known Miocene bed. Here also the shales contain plants belonging to a higher horizon of the Cretaceous series. There are 45 species known; among them being *Filices*, *Cycadeae*, *Coniferae*, *Monocotyledones*, and *Dicotyledones*. *Coniferae* are again numerous, but Ferns are rare. Of *Monocotyledones* only a *Bambusium* and two other species are known. The difference between the Atane beds and those of Kome chiefly consists in the great preponderance of *Dicotyledones* in the latter, which, as in the Upper Cretaceous of Germany, are presented by great variety of types. A point of great interest is the discovery in these beds of a beautiful species of fig-tree with leaves and fruit attached. In Central Europe *Dicotyledones* make their first appearance in the Cenomanien, and are very abundant in the Senonien near Aix-la-Chapelle. It is curious that both in Greenland and in Central Europe the *Dicotyledones* display a great variety of types in the Upper Cretaceous series, but are nearly wanting in the Lower Cretaceous. It seems to point to a great change having taken place in the flora between our latitude and 71° N. after the deposition of the Gault. (*Zeitschrift der deutschen geologischen Gesellschaft*, part i. 155.)

The Geology of the Province of Moscow.—Under this title H. Trautschold has published in the *Zeitschrift der deutschen geologischen Gesellschaft*, part ii. 361, an important report on his geological survey of this province, undertaken by the request of the Mineralogical Society of St. Petersburg; a more detailed report in the Russian language is to appear hereafter. The mountain limestone of this district is highly fossiliferous, and chiefly consists of grey limestones alternating with clayey beds; it is usually exposed by rivers, and rarely forms hills; and though usually horizontal, near Sserpuchof and Kalomna shows an easterly and south-easterly dip: over the mountain limestone lie Oolitic strata. The author explains the absence of Permian, Triassic, and Liassic strata by supposing that during the time of their deposition this region was dry land, and expresses his belief that during the Middle Oolitic period the upheaval of the Ural Mountains caused a depression of Central Russia and its overflow by the sea. The Cretaceous beds of the province are also the most northern deposits of this age in Russia; they are only in part marine, and these are found in the north-eastern portion of the province, the freshwater deposits being confined to the north-western division. They belong to three members of the Cretaceous series, the Gault, Upper Greensand, and Lower White Chalk.

Austrian Geology.—The director of the Austrian Geological Survey, Franz Ritter von Hauer, has printed in the *Jahrbuch der k. k. geologischen Reichsanstalt*, part ii. p. 1, a complete index of all the names of the different rocks, formations, zones, beds, and strata in use in geological surveying, or applied by others to Austrian stratigraphy. By giving the date of the first application of each name, with its author, and an ample description of the stratum or rock bearing it, he has provided a very valuable and handy list of reference for geologists, both Austrian and foreign.

Lower Silurian in Thuringia.—In the *Zeitschrift der deutschen geologischen Gesellschaft*, part i. p. 72, R. Richter gives a detailed description of a group of strata, evidently belonging to the Lower Silurian. Its base is formed by dark slates, which have as yet only yielded Trilobites, two species of the genera *Calymene* and *Asaphus*; large quantities of red haematite occur in these slates. Quartzite forms the roof of this stratum, and bears on its upper side thin beds entirely composed of Brachiopoda shells. The quartzite is covered by further slates, the fossils of which, however, are confined to the accompanying iron ore. In this he found Brachiopoda, amongst which only *Discinae* were discernible. The upper portion of this horizon again is formed of quartzites, in which a species of *Beyrichia* occurs.

The Geology of the Czipka Balkan.—F. Schröckenstein contributes a short paper to the *Jahrbuch der k. k. geologischen Reichsanstalt*, 1872, No. 2, p. 235, on two sections which he has made through the Czipka Balkan, in which he met with the Carboniferous formation, Dyas beds, and Cretaceous strata. The Carboniferous formation, resting on Palaeozoic beds, which, in turn, overlie crystalline rocks, is formed of quartzites, limestones, and shales, and Coal-bearing sandstone and shales, the latter of which immediately accompany the coal-seams. The Dyas formation overlies the Coal-measures in patches, and consists of light-coloured dolomite, red and yellow sandstone, which likewise contains beds of coal. He considers these to represent the Middle Dyas; a mass of grey marls and quartzites, with dark dolomites and limestone, takes the place of the Zechstein. This group of strata then stands between the German Dyas and Russian Permian, and near the Upper division of the former.

On Pteraspis.—In his work on Fossil Fishes, Agassiz pronounced some fossil remains from the Devonian of England to be those of three new species of *Cephalaspis*. In 1847 Kner examined similar fossils from the Upper Silurian of Gallicia, which, like two of Agassiz' new species, he considered to be the inner shells of Cephalopods, for which he proposed the generic name of *Pteraspis*. F. Römer, in 1856, named a similar form, from the Eifel, *Palaeotheutis Dunensis*. Mr. Salter, Prof. Huxley, and Sir Philip Egerton afterwards added to our knowledge of these doubtful remains, and they all arrived at the conclusion that they belonged to fossil fish; while Dr. Lankester subsequently described them as such, in a monograph published by the Palaeontographical Society of London. He divides the *Cephalaspidae* into two orders: the *Osteostraci*, with *Cephalaspis Lyelli*, and *Heterostraci*, with *Pteraspis*, basing his distinction on a difference in the nature of the shells. The *Heterostraci* he has divided into *Scaphaspis*, *Cyathaspis*, and *Pteraspis*. A. Kunth now describes, in *Zeitschrift der deutschen geologischen Gesellsch.* part ii. p. 1, a new species of Pteraspis occurring in the hard Graptolite limestone boulders of the diluvium of Berlin. The specimen possesses a head shield that in every respect corresponds with that of *Cyathaspis Banksii*. The other side is formed by what Lankester calls *Scaphaspis truncatus*. Connecting these two parts, he found a number of plates representing segments. It appears, then, that this is a specimen not of a fish, but a crustacean. Kunth calls this remarkable new species *Cyathaspis* (*Pteraspis*) *integer*.

The Trias of the South Bakonyer Wald.—The Trias of the Bakonyer Wald, the eastern continuation of the Alps, consists, according to T. Böckh, of the following strata:—1. *Rhaetic Formation*: *a.* Dachstein limestone, with *Megalodus triqueter*, &c. 2. *The Upper Trias*, consisting of: *a.* Central dolomite, with *Megalodus complanatus*, *Turbo solitarius*, &c.; *b.* The Upper Marl group, comprising: *α.* Bed with *Avicula aspera*, *Waldheimia Stoppani*, &c.; *β.* Bed with *Trachyceras Attila*, *Trachyceras Bakonicum*, &c.; *c.* Fureder limestone, with *Halobia Lommeli*, &c.; *d.* Horizon of *Arcestes Tridentinus*; *e.* Horizon of *Ceratites Reitzii*, and non-fossiliferous quartzites. 3. *The Lower Trias*, consisting of: *a.* Muschelkalk, comprising: *α.* Horizon of *Arcestes*

Studeri; β. Horizon of *Rhynchonella decurdata*, &c.; γ. Forrashegy yellow, bituminous, dolomitic marls; δ. Megyehegy dolomite, with *Amm. Balatonicus*, &c.; ε. Laminated limestone, with Myophoriae, &c.; and *b*. Bunter sandstone, made up of: α. Porous Rauchwacke and dolomite; β. Thinly laminated shales, sandstones, and marls, with *Myophoria costata*, &c.; and γ. Red sandstone with conglomerate. (*A. magyar Kiraly földtani int. évkönyviböl*, vol. ii. part 2.)

Anthropology.

The Different Periods of the Bronze Age.—Among the papers read at the Archaeological Congress at Bologna, and published in the French journal *Matériaux pour l'Histoire primitive et naturelle de l'Homme*, 8th year, 2nd series, several are directed to the determination of the various stages of development observable in the remains of the so-called Bronze age found in Sweden. These remains had been separated by MM. Nilsson and Worsaae into three classes, each corresponding with some notable peculiarity in the tombs in which they were found: those of the first class, for instance, being found in large stone cists containing one or more skeletons, those of the third class in small cinerary urns, and those of the intermediate class in large stone cists containing calcined bones. The object of the first paper to which we would refer (p. 174) is to illustrate these three varieties of bronze work. The first variety, says M. Oscar Montelius, the author of the paper under notice, is ornamented with linear and spiral patterns, drawn on the mould from which the object is cast. The second variety is less elegant, and ornamented chiefly with concentric circles, which are worked upon the bronze by a tool, not on the mould. The different character of the tombs in which the objects of this class are found suggests the idea of their being the result of some external influence. The third variety corresponds in type with the first, but the two classes are only exceptionally found side by side: celts, for instance, which are very common in this last variety, being unknown in the first. While most of the objects of the third variety are undoubtedly the product of native Swedish industry, there is one, a buckler, or perhaps the lid of a cista, which M. Montelius regards as of Italian workmanship, supposing it to have found its way to Sweden in the course of trade between the north and south of Europe. He must have been led to this conjecture, we imagine, by the border composed of very rude figures of swans, which forms the principal ornament of the buckler, and certainly presents a striking contrast to the ornaments consisting of mere linear patterns which prevail among the northern remains of the Bronze age. It is also true that bronze utensils of various kinds, with similar patterns composed of exceedingly rude figures of animals and even of men, have been found in Etruscan tombs (p. 184; compare *Archaeologia*, xli. pl. 4, 7, 9). It may be as he conjectures, but it is difficult to believe that an object so rude could ever be prized by people familiar with work of such nicety and good taste as may be seen in fig. 1 of the illustrations of this paper. On the other hand, there would be no difficulty in accepting his conjecture if archaeologists would permit us to reverse the order of progress which they have laid down in these matters as commencing with mere linear patterns and going on to figures of animals and men. Figures of animals are to be seen rudely scratched on bones found in cave-dwellings, but no linear patterns or ornaments, so far as we remember. It should also be observed that among the Etruscan tombs which have yielded bronze utensils ornamented with rude figures of animals and men, those of Praeneste are regarded as examples of the very earliest Italian tombs. One of the objects found at Praeneste is now in the British Museum, and whether for the purpose to which it was applied, or the ornaments upon it, is equally the subject of surmise. The vases found in excavations at the Campo Santo at Bologna, and engraved at p. 184, give a correct notion of the style of work in question.—A second paper, read at the same congress by M. Hildebrandt, and reported as above (p. 172), is devoted to a comparison of the ancient bronze fibulae of the north of Europe with those of the south, the result being so marked a difference in an artistic point of view that the one cannot be supposed to have originated through any influence of the other. This being the case, M. Hildebrandt proposes that we should look to Asia Minor for a prototype which would harmonize with both.

The Primitive Inhabitants of Italy.—A third paper (reported as above, p. 94), by the learned Count Conestabile, deals with the primitive inhabitants of Italy, commencing with a description of the four successive immigrations of branches of the Aryan race into Europe from their primitive settlements in Bactria and Sogdiana. 1. The Celtic branch, taking a direction south and west of the Caspian Sea, occupying first the regions of the Caucasus, and afterwards advancing along the Danube towards the centre and west of Europe. 2. The Germanic branch, taking a more northerly route, passing through Scythia and Sarmatia, reaching ultimately the shores of the Baltic, and penetrating into Scandinavia. 3. The Slavic race, passing through Sarmatia, taking the route of the Volga, and settling in Russia, Lithuania, Bohemia, Illyria, and Servia. 4. The Aryan-Pelasgic race, leaving the common settlement a little after the Celtic branch, passing along the south of the Caspian, and advancing into Asia Minor and on to the Hellespont, across which bodies of them passed on two occasions, and spread, on the first, in Thrace, Northern Greece, Illyria, and the north of Italy, while, on the second, they descended into Italy, driving the previous inhabitants to the extreme south. The next immigration of the Aryan-Pelasgic race into Italy took place by sea, the points of landing being Calabria in the south and the mouth of the Po in the north. The last immigrants were the Pelasgo-Tyrrhenian or Etruscan colonists, who came direct from Asia. Between the first incursions of the Aryans into Europe, which are stated to have taken place about the thirtieth century B.C., and the arrival of the Etruscan colonists, a period of about fifteen centuries elapsed. That the Etruscans had attained a considerable influence in Europe by the fourteenth century B.C. may be gathered from the evidence of the hieroglyphic inscription at Carnac, in which a victory is recorded to have been gained at that date by the king of Egypt, over certain confederate enemies "from the islands and regions of the sea," among whose names occurs that of the *Turscha*, which, when we consider that the other allies are spoken of as Lycians, Achaeans, Siculians, &c., there is no difficulty in recognising to be identical with the archaic forms *Tursce*, *Turschen*, *Tusce*. The Turscha took the chief part in the expedition. The advent into Italy of colonists familiar, as the Etruscans were, with many forms of industry, and much addicted to commerce, gave no doubt a great impulse to industry throughout Europe. At the same time it is not correct to trace the introduction of working in bronze into northern Europe to the Etruscans alone. For contemporary with them, and rivals in skill in working metals, as well as in commercial enterprise, were the Phoenicians, whose visits to the west of Europe are matters of historical fact.

The fourth volume of the *Transactions and Proceedings of the New Zealand Institute*, conducted by Dr. Hector, has just reached us. The most important papers are as follow:—1. "Ethnographical Considerations on the Whence of the Maoris;" by J. T. Thomson. Mr. Thomson, after incidentally mentioning that native tradition has pointed out the Navigators' Islands as the earlier home of the Maoris, proceeds to base his conclusions on the evidence afforded by physical form, customs, and language. He illustrates his subject by vocabularies of words and numbers and by maps, and arrives at the following results: 1st. That Hindostan as well as the Indian Archipelago contained at one time a Negro population. 2nd. That waves of migration issued from the South Peninsula, or Barata, in both an eastern and western direction. 3rd. That no western emigration ever proceeded out of Tamasak, or the south part of the peninsula of Malacca, or Sumatra, so as to affect Madagascar. 4th. That the progress of the Barata is traceable eastward by language as far as the Moluccas, of which Ternati is the principal settlement. 5th. That the race was modified in colour and physiognomy, but not in language, by the incursions of the Mangians and Anamese. 6th. With the Moluccas as a basis, a stream of the mixed races flowed eastwards, from island to island, over Polynesia—one branch finding its way to New Zealand, via Tongataboo. 7th. Barata, or South India, was, therefore, the Whence of the Maori.—2. "Moas and Moa Hunters;" by Dr. Haast; with notes by the Rev. J. W. Stack. Dr. Haast illustrates his paper with a map of the moa hunters' encampment at the mouth of the Rakaia river, and a plate of implements of obsidian and of chipped stone found in association with moa remains in that locality. The author discusses the evidence of the antiquity of the *Dinornis* at great length, and arrives at the following conclusions: 1st. The different species of the *Dinornis*, or moa, began to appear and flourish in New Zealand in post-Pliocene times. 2nd. They have been extinct for so long a time that no trustworthy traditions respecting their existence have been handed down to us. 3rd. A race of *Autochthones*, probably of Polynesian origin, was contemporaneous with the moa, by whom the huge wingless birds were hunted and exterminated. 4th. A species of wild dog was contemporaneous with them, which was likewise killed and eaten by the moa hunters. 5th. They did not possess a domesticated dog. 6th. They were low in civilisation, only using rudely chipped stone implements; the Maoris, their descendants, on the other hand, had, when the earliest Europeans arrived in New Zealand, attained the art of manufacturing finely polished stone implements and weapons. 7th. The moa hunters cooked their food in the same manner as the Maoris of the present day, but they were not cannibals. 8th. The moa hunters had access to the Northern Island, whence they procured obsidian. 9th. They also travelled far into the interior of the island to obtain flint, of which some of their stone implements were made. 10th. They did not possess implements of nephrite or greenstone. 11th. The art of polishing stone implements is of considerable antiquity in New Zealand, and as they only possessed chipped stone implements, this furnishes an additional proof of the long extinction of the moa.

The Occurrence of Face-Urns in Brazil.—Professor C. F. Hartt has published a drawing and description, in the *American Naturalist* for October, of a well-preserved urn of this kind, from a cave on the Rio Maracá, a little river in the province of Pará. The awkward turning forward of the elbows of the figure—a male one—is remarkable. The urn contains part of a human skeleton, which shows no traces of having been burnt. On the floor of the grotto where this urn was found

fragments of other urns have since been met with; some had a similar shape, others had the bodies of armadillos and tortoises, with human faces. The author has quite recently restored from fragments a female face-urn from the Ilha do Pacoval, in Lake Arary Marajó, the upper part of which is rounded to represent a head with human features, and possesses pieces of another urn which has two faces.

At the third general meeting of the *Deutsche anthropologische Gesellschaft*, held at Stuttgart, Professor Virchow read a paper combating the view pronounced by M. Quatrefages in the *Revue des deux Mondes*, and in a more recent lecture, that the present Prussian people had sprung from a race of Finns. He further endeavoured to show that they received civilisation from the French who emigrated after the revocation of the Edict of Nantes, and that they are anthropologically different from the people of South Germany. A condensed report of Professor Virchow's comments is given in *Ausland*, No. 42, 997. He finds that Quatrefages bases this theory on too scanty material and altogether insufficient grounds. The hypothesis, at one time so universally held, says Virchow, that all longheaded skulls were Celtic, may now be taken as an example of how easy it is to overstep the mark, and of the caution that should be exercised in anthropological enquiries. Any conclusions that may be drawn from the forms of skulls of early times are quite open to question. The influence of culture has hitherto been too little considered. Schaffhausen has observed that the growth of the skull continues to a later period than was formerly supposed, and that it increases in breadth in old age. This explains how it happens that so many more of the long and narrow skulls have been traced to earlier times, and that the proportion of the broader ones increases in the quaternary epoch. In the case of the broad skulls the brain has usually attained fuller development, while the most remarkable long and narrow skulls are to be met with among lower races. For this reason, then, peculiarities of races become obliterated in time.—*Die anthropologische Gesellschaft*, which now numbers 1358 members, will hold its next annual meeting at Wiesbaden.

The *Bulletin de Académie royale des Sciences de Belgique*, No. 7, contains a note by G. Dewalque, announcing the discovery of wheat in a bone-cave in Namur. An exploration of this cave, which is near Jemelle, was made by Professor Cousin, of Louvain, who found some bone implements, together with numbers of human bones. During a later visit more human bones, and a somewhat abundant quantity of wheat, were discovered in a stratum of angular flints. The wheat appeared to have been charred, and though it is decidedly smaller in size than our ordinary grain, the author does not hesitate to affirm that the material he has found is cultivated wheat.

Since our notice (*Academy*, vol. iii. p. 320) of the reports from Zürich of university and medical education for women, a little book has been published giving an account of the legal and professional aspect of the same question at Edinburgh. The writer, Miss Jex-Blake, is one of several ladies who were allowed to matriculate as medical students at that university in October 1869, but the full importance of the concession was not apparently understood by the authorities at the time, and their attempts to withdraw it without legal cause have given rise to litigation which is scarcely likely to end in their favour. The statutes of the university make no mention of the sex of students, and the governing body is consequently free to receive women on the same terms as boys *if it pleases*, but the practice of centuries is held to have barred the right of women to claim admission if it is refused. Once matriculated, the ladies are entitled to all necessary facilities for study and—which is the point in dispute—have a claim to be enabled to fulfil whatever formal conditions are imposed upon students desirous to graduate in medicine or any other faculty they have selected. The importance of the question being tried at Edinburgh appears from Miss Jex-Blake's book to be that, if that university breaks faith with its *alumnae*, English women intending to study medicine will have to do so either in America, France, Switzerland, or Italy, and as no foreign degrees are legally recognised in this country, and a Paris graduate is placed on the same footing with the most unscrupulous female charlatan, it is to be feared that the actual demand for lady-doctors will tempt unqualified practitioners into the unprotected or unregulated half of the medical profession. The book is worth consulting as a clear and temperate summary of the past history and present state of a controversy that is likely to last some time, and was embittered, as appeared from the newspapers a year or two ago, by the discovery that some of the ladies could compete successfully for open endowments.

New Publications.

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Credner, H. Elemente der Geologie. Leipzig: Engelmann.

De Fonvielle, W. La Physique des Miracles. Paris: Dentu.

Dühring, E. Kritische Geschichte der allgemeinen Principien der Mechanik. Berlin: Grieben.

Eiben, C. E. Beiträge zur physikologischen Characteristik der ostfriesischen Inseln und Küste. Emden: Haynel.

Erdmann, E. Beskrifning öfver Skånes stenkolsförande Formation. Stockholm: Bonnier.

Hensel, R. Beiträge zur Kenntniss der Säugethiere Süd-Brasiliens. Berlin: Dümmler.

Houzeau, J. C. Études sur les Facultés mentales des animaux comparées à celle de l'homme. Bruxelles: Muquardt.

Ludwig, A. Agglutination oder Adaptation? Eine sprachwissenschaftliche Streitfrage. Prag: Calve.

Mach, E. Optisch-akustische Versuche. Prag: Calve.

Magnus, H. Ophthalmoscopischer Atlas. Leipzig: Engelmann.

Mailly, E. Tableau de l'Astronomie dans l'hémisphère australe et dans l'Inde. Bruxelles: Hayez.

Mailly, E. De l'Astronomie dans l'Académie royale de Belgique. Rapport séculaire (1772–1872). Bruxelles: Hayez.

Manzi, P. M. A. Studio psicologico sulla Vita umana. Lodi: Wilmant.

Mer, E. De l'Action physiologique de la Gelée sur les Végétaux. Paris.

Milne-Edwards, H. et A. Recherches pour servir à l'histoire naturelle des Mammifères. Livr. 12 et 13. Paris.

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Rehmann, A. Einige Notizen über die Vegetation der nördlichen Gestade des Schwarzen Meeres. Berlin: Friedländer.

Ricard, C. J. E. Études de Calcul différentiel. Paris.

Ritthausen, H. Die Eiweisskörper der Getreidearten, Hülsenfrüchte und Oelsamen. Bonn: Cohen und Sohn.

Schlegel, V. System der Raumlehre. Leipzig: Teubner.

Smith, W., and Grove, G. An Historical Atlas of Ancient Geography, Biblical and Classical. Part I. Murray.

Steur, C. Ethnographie des Peuples de l'Europe avant Jésus-Christ. Bruxelles: Muquardt.

Trevithick, F. Life of Richard Trevithick. Spon.

Zenker, W. Ueber die physikalischen Verhältnisse und die Entwickelung der Cometen. Berlin: Hempel.

History.

Gustavus Adolphus in Germany, and other Lectures on the Thirty Years' War. By R. C. Trench, Archbishop of Dublin. Second Edition. Macmillan.

This is practically a new work, though two of the lectures were published seven years ago. We have of late had so little that is worth reading in English on the subject (except Mr. Ward's *House of Austria in the Thirty Years' War*) that this account of the general and social aspects and results of the great religious struggle of the seventeenth century is peculiarly welcome. And yet few foreign events were ever watched in England and Scotland with more interest. The old book called *The Swedish Intelligencer*, published in numbers from time to time, was a remarkable one for that age, and Lockhart's account in the Harleian Miscellany, as well as Monro's, shows how many volunteers from this island were serving in the Swedish ranks. The character of Gustavus has been assailed of late years by some writers on the ground that he was not fighting for religion so much as "for his own hand," and was in fact a self-seeking robber who did much to break up the unity of the Empire. It is true that he had been long alarmed at the Austrian conquests, and still more at their plan of getting a firm footing on the Baltic with a view to rooting out Protestantism from the North. But it is the happiest of all causes when in defending his own nation such a leader is defending also great and universal interests. Such was Elizabeth's war against Spain, and such Gustavus' campaign against Tilly and Wallenstein. It must be remembered that Richelieu,

whose ultimate policy was to humble the house of Hapsburg, had enough on his hands at the moment owing to his unfortunate resolution to destroy the local independence of the Protestants in France, and make the monarchy absolute, when probably conciliation would have given him the command of a splendid force of sailors from Rochelle and the west coast and not inconsiderable help by land. It was at this moment when the cause of North Germany seemed lost that Gustavus Adolphus landed at the mouth of the Oder, with something of the feelings of one of the old heroes raised up to deliver the chosen people from bondage. The Elector of Brandenburg was a miserable incapable—one of the few such whom the house of Hohenzollern has produced; the Elector of Saxony was, if possible, worse; Christian of Denmark had failed, not being supported properly by his nephew, our Charles I., who was now involving himself hopelessly in the contest with his own subjects; Gustavus was the sole remaining hope. Archbishop Trench has not gone at length into the military events, as his main object has been to show the social results of the war of religion on the country. The Jesuits, by influencing Ferdinand II. of Austria and Maximilian of Bavaria to this war, brought on Germany a destruction like that which Innocent III. brought on South France by the Albigensian crusade. We must refer to the Archbishop's book for the details, which he has excellently illustrated from the popular poems of the time, and from the fortunes of the clergy and of the universities, drawing his materials from Opel and Cohn's *Historische Lieder aus dem dreissigjährigen Kriege*, and from Tholuck and others. The list of works given in the preface shows how much has been lately done in Germany for the history; we may expect soon Mr. Motley's book on the war, which will form the third part of his great work. Meanwhile we would recommend the Archbishop's book as containing an admirable series of sketches on the subject. He has illustrated it from his own special line of enquiry by adducing the new words introduced at this period, such as "plunder" and "marauding," and well brought out the influence of France on the German language during the war, which ended in giving Louis XIV. Alsace as his share of the spoil of the dismembered land, a thing Germany has neither forgotten nor forgiven. He quotes on this a *mot*, ascribed to Ranke. "After the capitulation of Sedan and the surrender of the French Emperor, an Englishman, who thought the war should now cease, asked the historian across a table at Berlin, 'But whom are you making war on now?'—'Louis XIV.,' was the reply."

C. W. Boase.

RECENT EDITIONS IN THE ROLLS SERIES.

Registrum *Abbatiae Johannis Whethamstede, Abbatis Monasterii S. Albani, iterum susceptae.* Ed. H. T. Riley.—This is one of the Registers of the Abbots of the fifteenth century, the publication of which will complete the series of St. Alban's Chronicles and Documents for which we are indebted to Mr. Riley. Whethamstede's Register used to be ascribed to Robert Blakeney, a chaplain of the abbey, but he was only the possessor, not the author, of the book, which was at a later period the property of Lord W. Howard, more famous as "Belted Will," who mentions his buying it for twenty shillings in 1589. It is now in the Arundel collection of manuscripts at the College of Arms. It was probably a compilation from various sources made shortly after Whethamstede's death by some now unknown hand. No doubt the abbey registers were used for the work, but the abuse poured on William Walingforde, who was the abbot's right-hand man, shows that it came from an alien pen, and it was probably composed just before 1476. The point is important because inferences have been drawn from Whethamstede's supposed authorship. Hallam, for instance, does so towards the close of the eighth chapter of his *Middle Ages;* and so on the vexed question of the murder of Humphrey, the "good" duke of Gloucester, "Whethamstede" has been quoted as saying that he died of grief and sickness, the abbot being a warm friend of Gloucester. The register contains the account of the first and second battles of St. Albans, 1455 and 1461, in which the abbey suffered so much. This changes the registrar from a violent Lancastrian into a Yorkist. "His change of party is quite sudden and amusing enough." Mr. Riley, however, means to bring these matters under our notice more at length in the introduction to the succeeding volume. We trust the completion of his St. Albans series will be only the middle point of the services which he has rendered to the history of old London and its neighbourhood.

Calendar of the State Papers relating to Ireland of the Reign of James I., 1603-6. Edited by the Rev. C. W. Russell and J. P. Prendergast, Esq.—The unfortunate history of Ireland is well represented in the state of the papers from which this Calendar has been compiled. They are scattered far and wide, and the Master of the Rolls has wisely sanctioned a complete account of them all, instead of confining the task of the editors to the comparatively small collection contained in the Record Office. There are only thirty-two Irish entries in Bp. Stapledon's Kalendar formed during Edward II.'s reign (some of which are illustrated in the editor's preface). There is no notice of any Council Book in Ireland prior to Henry VIII., and most of the later ones have been destroyed. The leading statesmen kept possession of state papers much more than was done in England, and hence the importance of the Chichester, Fitzwilliam, and Ormonde documents, of which Carte the historian had the use: the Conway collection supplies much, especially in the docquets (or summaries) of letters, and of course Sir Robert Cotton, our great antiquary—perhaps not very careful in returning what he had borrowed, as was the way with antiquaries—had added much interesting Irish material to his stores. Of all these, as well as of the Carte and Carew papers, the editors give a very interesting sketch. Some volumes got as far as Philadelphia, and were generously restored by the directors to the English national archives in 1867. The most interesting part of the reign is not yet reached, that of the plantation of Ulster by the new English and Scotch colonies, to illustrate which there were a series of maps of the six escheated counties; two of which, Derry and Donegal, have unfortunately not yet been found. Those of Armagh, Cavan, Fermanagh, and Tyrone, have been reproduced by photo-zincography and coloured. And we cannot but approve of the editor's plan, to give full details of all lists of names of persons and places, and, in fact, a somewhat fuller analysis of the papers than is given in the English calendars, where it is often provoking to find one person or place mentioned, with an "&c." or "and others" following, when the historical importance of the entry depends on the lists of names concerned with public affairs, conspiracies, and the like. Mr. Prendergast, in especial, has made the subject of the English settlements in Ireland his own, so that we look for considerable historical help from the forthcoming volumes. James tried to pacify the Scotch borders by transplanting the Grahams and other inhabitants of Leven, Esk, and Sark into Ireland, and a subscription was made throughout Cumberland and Westmoreland to procure them convenient farms. It is these details of the social condition of the country which are unfortunately omitted in the ordinary histories of James's reign, while the doings of the favourites Carr and Villiers are chronicled at length. Some day we may have a history of the kingdom as well as one of the king.

Memoriale Fratris Walteri de Coventria. Ed. W. Stubbs, Regius Professor of Modern History in the University of Oxford. Vol. I.—The historical collections of Walter of Coventry having been praised by Leland, our German friends have been constantly urging its publication. Unfortunately the book is a mere compilation, and we already possess what it has to tell us in other forms. It was right to publish it however, for it completes the series of works connected with Benedict of Peterborough and Roger Hoveden, and supplies an interesting instance of that process of abridgment and adaptation by which the successive mediaeval chroniclers provided for the historical wants of their own time, and gives some help towards disentangling the com-

plicated relations between their several works. It also helps us to correct the text of previous authors, *e.g.* Walter had a better copy of Florence of Worcester before him than our present printed editions supply. It was written, and Walter of Coventry lived, between 1293 and the end of the reign of Edward I.; he probably wrote in the diocese of York (as the local indications seem to show), and used some previous compilation, such as the Harleian MS. 3860, while the coincidences in expression with the extracts from the ancient chronicles published by Edward I. in the great roll (*Foedera*, i. 769) seem to point to the conclusion that the two compositions were drawn up in concert, or the one abridged from the other. Professor Stubbs gives an amusing account of the conjectural way in which Bale and Pits and later bibliographers have evolved a biography of Walter, of whom they knew nothing whatever beyond his name. Modern biographers more ingeniously write a "life and times" of their authors, where "the times" play nearly the whole part. The historical illustration of the period is reserved by the editor for the preface to the second volume, on the appearance of which we hope to return to the subject.

Calendar of the Clarendon State Papers, preserved in the Bodleian Library. Vol. I., to January 1649. Ed. by O. Ogle and W. H. Bliss.—This has been drawn up on the pattern of the Calendars of State Papers in the Rolls Series. The most important of the documents collected by the great English historian were published in three volumes folio, but this calendar supplies many details and some corrections, not only to the published volumes, but to Clarendon's own history. A further acquisition to the collection was made so lately as 1860, when other papers, enclosed in boxes and in Lord Clarendon's private writing chest, were sent by the trustees of the bequest made to the university by the third earl in 1753. "It may be worth observing that in this escritoire are the writing materials used by Lord Clarendon himself—pens, silk, wax, pounce-box, and scissors—just as he left them." The many letters of the king and queen form a valuable part of the collection. Above 300 letters of state, addressed by Queen Elizabeth to foreign princes in the early years of her reign, are calendared as addenda. There are many interesting notices of Hyde himself, and of the preparations he made for his history, which he called "A Book of Martyrs"; the documents show even more than the history the amount of discord among the king's generals, especially in the West. One note states "how odious Lord Culpeper, *Sir Edward Hyde*, and Lord Hopton are to the commissioners, gentry, and county of Devon generally." On the other hand, there are complaints against Lord Goring for misapplying and embezzling contributions, and Hyde says of him, "he does nothing but drink and play." There are curious details of the money levied in different parts of the country; in fact, we much want a budget of both sides during the war, the levies of men and money are not at all explained in the common histories; the lists are also of value as showing the relative importance of different parts of the country, which of course differed much from what it is at present. Some of the early entries show Charles' love for art—he procures pictures from Spain, and desires plaster moulds "of the marble heads of Julius Caesar, Marcus Marcellus, and Hannibal, at Aranjuez"; and "Velasquez, the king's painter, certifies that the heads sent are correct, that of Hannibal only being doubtful, there being so few statues of him existing." Now and then we have a note by the editors, such as the following—"Reference is made to this letter in *Hist. Rebell.* book ix. p. 544, but the words and tone are *entirely different* from those quoted there."

C. W. Boase.

Intelligence.

It was to be expected that the success of the new Imperial University at Strassburg during its first summer term would not be very great. The lectures were attended by no more than 212 students, of whom about 130 came from various parts of Germany, the rest being natives of Elsass. There is hardly a doubt that most of those belonging to the first category will not return for the winter, as they felt rather uncomfortable in the midst of a sulky population, and did not meet that kind of social accommodation to which the academical youth of Germany is accustomed elsewhere. Their successors will probably be better able to accommodate themselves. A short time ago there appeared a similar feeling of discouragement among the professors, though most of them had accepted their new chairs with rather a superabundance of enthusiasm. This reaction, as it appeared, was chiefly owing to the fact that Professor A. Springer, the eloquent historian of art, exchanged Strassburg so very soon for a more secure and lucrative chair in the University of Leipzig, whilst Professor Brunner accepted a place in the faculty of law at Berlin. These, however, are occurrences which happen more or less continually in all the other German universities. And it is scarcely just or generous, after a six months' experiment, to give utterance to the suggestion that that of Strassburg may after all prove a failure. It will be time to arrive at an opinion on this point in five or, say, ten years hence, when plenty of evidence will have been collected, whether or no a distinguished corporation, for the most part carefully composed of the best men in the various academical disciplines and richly endowed, has spread its attractions both over cis- and trans-Rhenane Germany. It may not be amiss to remind the Strassburg professors and scholars that the University of Berlin, at the time of its foundation in 1810–11, was attended by 256 and after the War of Liberation in 1817 even by no more than 198 students. Fortunately, with the beginning of the winter term, a second batch of professors will join those who have already entered upon their duties at Strassburg. Prominent among these are: in the faculty of divinity, Dr. Schulz, from Basel, and Dr. Zoepffel, from Göttingen, the author of the excellent book on the history and ceremonies of papal election, which we reviewed a short time ago. Dr. Geffcken, from Hamburg, formerly Hanseatic chargé d'affaires in London and Berlin, has accepted a chair for public law; and Dr. R. Sohm, from Freiburg, will lecture on German and canon law. Among the new arrivals we are moreover glad to notice Dr. G. Schmoller, from Halle, a leading representative of the younger school of political economists in Germany; Dr. A. Michaelis, the author of the great work on the Parthenon, which has lately been so favourably received by English critics; Dr. W. Scheer, of Vienna, and Dr. E. Boehmer, of Halle, the one a rising authority in the history of German, the other in the Romance languages and literatures.

G. Droysen, junior, the author of a very substantial life of Gustavus Adolphus, hitherto professor extraordinary in Göttingen, has been advanced to an ordinary chair of history in the University of Halle, in the place of H. Leo, the well known and eccentric historian and linguist, who is retiring on account of old age.

The faculty at Tübingen was very anxious to fill its vacant professorship of history by calling Dr. Max Büdinger, of Zürich, most favourably known as a first-rate teacher, and learned in almost every branch of ancient and modern history; but the people at Vienna were quicker and decidedly more liberal in their offers than the Suabian authorities, and have succeeded in securing his services. This failure is owing not only to the ignorance, but chiefly to the intolerance, of the timid and irresolute Würtemberg government: Büdinger, with all his sound Christian learning, being unfortunately a Jew.

Contents of the Journals.

Hermes (vol. vii. part 1) has articles on Diogenes, who did service in freeing Athens after the death of Demetrius, B.C. 229; the Roman Senate's days of meeting under the later republic; the inscriptions found by our countryman Wood at Ephesus; the Greek proper names on coins; the family of T. Flavius Alkibiades (among the later Athenian Archons); and an Argive inscription interesting for the dialect and for the account of money contributions reckoned by two standards, Aeginetan and Attic.

Bullettino dell' Instituto (September and October) describes the excavations in the Forum, which were interrupted by so many water-springs (one remembers the fountain of Juturna and the Curtian Lake) that it became necessary to discover the course of the old Cloaca Maxima and clear part of it to let the water run off. The progress of the works has now settled the question as to the limits of the Forum Romanum (Regio VIII.).—An inscription of Smyrna, containing a decree of the Ionian Confederacy, and some at Athens, marking the boundary of the Cerameicus, are also given.

Revue des deux Mondes (October 15) contains good articles on the political and educational views of Rabelais, and Sixtus V.'s church policy in France.—An article on Jerome Bonaparte's kingdom of Westphalia shows how Napoleon destroyed his own work by the monstrous levies of men and money required of his subject kingdoms.

Preussische Jahrbücher (October) describes the political importance of the upper valley of the Rhine in the time of the Emperor Frederick II. At Trifels was the treasury of the empire, close by the Scharfenburg, where Richard Coeur de Lion was imprisoned.—There is a good account of the origin of the Zollverein, which, by bringing about commercial unity, gave a firm basis to schemes of political union.

British Quarterly Review, October, contains an article, by a well-known and unmistakable writer, on "The Goths at Ravenna," describing the historical greatness of the city, and the existing monuments which are the records of that greatness—in the age when the Roman and the Teutonic elements of the modern world stood side by side, and neither had as yet absorbed the other.

New Publications.

CHABAS, F. Études sur l'Antiquité historique d'après les sources égyptiennes et les monuments réputés préhist. Paris : Maisonneuve.
DE NERVO, Le Baron. Histoire d'Espagne depuis ses origines. Deux Tomes. Paris : Michel Lévy.
GIESEBRECHT, Wilhelm v. Geschichte der deutschen Kaiserzeit. 4. Band. Staufen und Welfen. 1. Abth. Braunschweig : Schwetschke.

Philology.

The Study of Philology. [*Wie studirt man Philologie?* Eine Hodegetik für Jünger dieser Wissenschaft. Von Wilhelm Freund.] Leipzig : Wilhelm Violet.

Τῆς δ' ἀρετῆς ἱδρῶτα. Instead of the whole verse, Herr Freund has placed this fragment as a motto at the head of his book, which it characterizes more aptly than he can have himself intended. A little of everything, but of some things too much in proportion to their importance, of others equally necessary too little, "almost nothing," sometimes indeed "nothing at all." In the introductory "Letter to a Young Friend," it is explained that the book owes its origin to the intercourse between the author and a number of diligent young disciples, brought about by a book published some years ago and advertised on the cover of his present work, an "asses' bridge," as they say in my country, for the matriculation examination, called *Prima*. The enquiries which he had to answer respecting the nature, the character, the extent, or the methods of philological study, suggested to him the desirability of reducing his ideas "upon the best way of turning the all too short three years' course of study to the best account in mastering the abundant subject-matter of philology, into a lucid *Hodegetik*, by the help of which the future philologist, even before the sanctuary of his science opens its gates to him, may yet, while, as it were, in the outer courts of the temple, acquaint himself with its ample chambers and rich treasure-hoards." It cannot be denied that such a book might prove of use to beginners, and, apart from national and local differences, the assistance intended for the young German student might be acceptable to the English one as well. But in the aphoristic and desultory manner in which this introduction is composed, there is nothing satisfactory or complete, unless we except some matters of detail which scarcely belong to the subject, and some general hints which show a just appreciation of the task of contemporary philology. A partial analysis of the contents of the book will make this apparent.

The work is divided into five parts. Of these the first discusses the name, the conception, and the compass of philology (pp. 3–33). It begins with a review of the use of the word φιλολογία by the ancients, to which is appended a very cursory survey of the history of philological studies amongst them and amongst the moderns since Petrarch. There is just as little reason for the omission of the name of Zenodotus before those of Kallimachus, Eratosthenes, Aristophanes, and Aristarchus, as for the fact that amongst the literary notices the πίνακες are referred to in connection with Krates of Mallus, the head of the Pergamite school, and not *à propos* of the Alexandrines. It is not a historical certainty that Varro composed 74 different works (pp. 8 and 96), but only an inference from Ritschl's calculation, though, no doubt, an inference which approximates very closely to the truth, and the same may be said of the total (620) given for the number of volumes in which these works were contained; in fact, the latter statement requires qualification, as a fresh revision of the MS. catalogue of Varro's writings shows the *imagines* to have comprised only 15 instead of 51 books. The subject also of several of the last books of the *libri disciplinarum* of Varro is only determined with approximate accuracy in Ritschl's admirable researches. But in a book destined to serve as an introduction to the temple of scientific truth, none but certain and uncontested information should be conveyed, except with the qualification of a "perhaps;" a "query (?)" in this case would have been enough, but it was also indispensable; and the same may be said of the date ("about 470 A.D.") assigned to "Marcianus," or, as it is usually written after the best authorities, Martianus, Capella. This summary, from the revival of the study by Petrarch down to F. A. Wolf, occupies little more than three pages. Of the latter, as the founder of the science of antiquity as a united whole, a more detailed account is given, and, as befits the purpose of this work, chiefly in the form of extracts from his exposition of the Science of Antiquity, from which the author's fundamental principles are derived (pp. 14–28). With disproportionate brevity, in less than two pages, and without even a reference to other sources of information, the author alludes to the modifications which the Wolfian system has undergone in the hands of Boeckh, O. Müller, and Ritschl, without making the slightest reference to the approaching publication of Boeckh's *Lectures on the Encyclopaedia of Philology:* this is followed by a similar skeleton excerpt from Fr. Haase's excellent article, "Philologie," in Ersch and Gruber's *Encyklopädie*, which is also to be reprinted shortly in the proposed edition of Haase's *Kleine Schriften*, where it will be more easily accessible to the general run of readers. The second part of the work is intended to supplement this summary view from the systematic side (the separate branches of philology, pp. 33–56), and the fifth part completes the historical side of the subject, "the masters of philological science in ancient and modern times" (pp. 89–139). As to the former, it must be acknowledged that the author assigns their just importance to the advances which have been made in the study of language; he gives due emphasis to the want of a standing-point from whence the general results of comparative philology can be embraced; he recommends the study of Sanskrit, and he refers to the Italian dialects: but here this section of the subject comes to an end. Not only is the study of the Greek dialects completely disregarded; not a word is said of the cultivation of the special grammar of the two classical languages, in the course of which discussion, besides the general philological standpoint already referred to, the importance of the historical standpoint for the study of grammar ought to have been pointed out, as would have come naturally in the author's way, since he expressly refers to the workers in the field of Roman inscriptions, and the linguistic importance of their labours. Here too we miss all reference to the corresponding researches relating to Greek inscriptions, while a special supplement (II.) actually contains some of the oldest Latin inscriptions, certainly the last place in which we should naturally look for them. Appendix I. gives an extract from F. A. Wolf's *Life of Körte* about Wolf's inscription as "studiosus philologiae" at Göttingen; III. Wolf's sketch for the proclamation of the opening of the philological seminary; IV. The most important parts of Niebuhr's well-known *Letters to a Young Philologist;* all three are more in place here than the above-mentioned second supplement. In the like sporadic, fragmentary, altogether unsystematic manner, there follows a hasty review of the remaining departments of the study, which are, according to the fancy of the moment, either superficially sketched in, or merely alluded to, or sometimes left out altogether; for instance, the author omits altogether to characterize the scientific problem to be solved by the history of literature, and dwells instead on the importance of studying the fragments and in general all the works of the classical authors.

A short sketch of Greek chronology is given, which, again, seems somewhat out of place, while that of Rome is omitted on the ground that the most important points are supposed to be already known. The recommendation not to neglect the study of archaeology commands assent, but what is said upon the subject is more than meagre. In conclusion, hermeneutics and criticism are disposed of in a couple of pages, the so-called "higher criticism" being in fact altogether left out of consideration, and, finally, though archaeological hermeneutics are noticed, archaeological criticism is not.

It would lead us too far to criticize the other two parts of the essay in as much detail as this section. The second contains (pp. 56–62) a "division of the philology student's work amongst six (half-yearly) terms." The value of this section, apart from every other consideration, must necessarily be very uncertain, because, as the author himself admits, the local circumstances of different universities must interfere with the realisation of all the practical advice he gives. Indeed, it may be doubted whether there is a single university in Germany where a student who, as the author rightly requires, extends his interest to the study of language in general, to Sanskrit, and archaeology, could go through a complete course in the time proposed. A fourth section, "the library of the philology student," is well suited to the plan and purpose of the work, giving a succinct account of the most important editions and other aids to philological study. But here too the most necessary works are sometimes omitted (as under the first heading, "Encyclopädisches," the one comprehensive *Encyclopaedia* of philology by Bernhardy is left unnoticed), obsolete ones are quoted, *e.g.* Moebius's edition of the fragments of Anacreon, and the Bipontine of Macrobius, whilst more recent editions are overlooked. In such a choice the subjectivity of the chooser naturally asserts its rights, but we may be prepared to allow this, and yet feel some surprise at finding only the so-called "great" Buttmann mentioned amongst Greek grammarians; amongst works on the history of Roman literature, only Bernhardy and Teuffel, without Bähr or the compendious *Outline* of Hübner, which is so peculiarly adapted to the use of students attending lectures; amongst editions of Sophocles, Schneidewin-Nauck and even Wunder, but not Wolff; the Sophocles lexicon of Dindorf, and not that of Ellendt-Genthe, not the most recent corrections of the text of Euripides by Kirchhoff and Nauck, and for Aristophanes only Bergk, but not Meineke. In like manner we miss the most recently revised texts of Catullus, Pomponius Mela, Censorinus, Macrobius, of whom, as has been observed, only the Bipontine edition is mentioned; we miss the *Juvenal* of Jahn, though, besides Heinrich and Ribbek (*sic*), Ruperti and Weber are noticed; we miss the *Livy* of Madvig-Ussing, which should have been named along with Weissenborn's and my text, &c.: to say nothing of many other inaccuracies, the most laughable of which, "Magni Aurelii Cassiodori Opera, cum notis Rothomagi, 2 vols. Venet. 1729," we would willingly attribute to the printer (τριητηρίς and ὀκταηρίς for τριετηρίς and ὀκταετηρίς, p. 49, may perhaps be laid to his charge), were it not traceable to F. W. Wagner's *Outline of Classical Bibliography*, a careless article of which has been thoughtlessly copied. On the whole, then, the book, in its present form, in spite of some just views and some useful, if not always well-timed, information, in spite of occasional hints well worth laying to heart, yet cannot, all things considered, be characterized except as a failure. After such a precursor, we look with redoubled anxiety for the appearance of Boeckh's *Encyclopaedia*, but there would be room by the side of that for a shorter introductory outline calculated for the practical requirements of students if such a work were at once less unequally and more solidly executed than the one addressed to Herr Freund's "young friend."

Martin Herz.

The Irish MS. of St. Gall. [*Reliquie celtiche*, raccolte da Costantino Nigra. I. Il Manoscritto irlandese di S. Gallo. Firenze; Torino; Roma.]

This first part of M. Nigra's work has been got up in the best Italian fashion, and consists of 52 pages quarto, exclusive of some corrections, and four photolithographic plates illustrative of the various handwritings contained in the MS. The text of the latter comprises a little more than sixteen books of Priscian's *Latin Grammar*, copied by Irishmen some time in the course of the earlier part of the ninth century. The importance of the MS. attaches, however, not to Priscian's work, but to the numerous glosses, both marginal and interlinear, with which it is interspersed: some of these are in Latin, but the greater number in old Irish. In the introductory chapter M. Nigra discusses at length the date of the codex and other matters connected with its history, quoting, among others of its miscellaneous contents, a Latin hymn in praise of Guntarius, elected archbishop of Cologne in the year 850, as well as eight ogmic inscriptions, of which the first is in Latin. M. Nigra reads it, *feria Cai hodie;* nor is the second less Christian: it reads, *fel martain* (= *feria Martini*), erroneously deciphered by Zeuss as *fel martaen. A propos* of Zeuss, the foot-notes throughout teem with indications of his misreadings; the most serious of these was perhaps his having overlooked the difference between *n* and *m* in contractions.

Next come the glosses themselves and the author's notes on them. He tells us that he has only made a selection from the glosses; and it is to be regretted that he has not been able to publish them all. This part of the work seems to have been executed with his usual clearness and ability, though Irish scholars may possibly not agree with him on every point. To this we may add, that, in the course of the glosses, and his remarks on them, a good many points of considerable interest to the student of comparative philology are brought into relief. Among them we may mention the close relation between the Celtic languages and those of Italy and Greece, as shown in the word *ingen* (*cróa ingen* gl. ungula), Welsh *ewin* (probably for **inguin*), as compared with *unguis* and *ungula*. As to the question of *c* versus *p*, it is well known that Celtic *qu* gives in Irish *c*, and *p* in Welsh, which some less accurately state by saying that Welsh changes *c* into *p;* and it is seldom kept in mind that the deviation has not always taken place on the Welsh side, though the change in Irish of *p* into *c* is demonstrated by the words *caille*, *caisc*, *clúm*, *cruimther*, *corcra*, *cuithe*, from *pallium*, *pascha*, *pluma*, *presbyter*, *purpura*, *putens*, respectively. To these data the St. Gall MS. adds (p. 34) one more item, hi *claidi* (gl. in *planta*). Page 22 offers, in the words, "*is gann in memr. et a scribend* (est difficilis membrana et ejus scriptura)," an instance of a curious borrowing from Latin, common in a few cases to Welsh and Irish; thus *scribend* is identical with Welsh *yscrifen*, both from *scribend*um; so *legend*um gives Irish *legend*, Welsh *lleen;* and Irish *oifrend*, Welsh *offeren*, "mass," comes from *offerend*um. To these we may add Welsh *cystrawen*, "syntax," from *construend*um. Of special interest to Welsh philology is the author's deriving *tachtad* (gl. angens)—one of the many Celtic instances which we could wish Johannes Schmidt to have had ready to hand when he wrote his contribution *Zur Geschichte des indogermanischen Vocalismus*—from the "rad. *ang*, orig. AGH." On Irish ground the intitial *t* is acknowledged as representing the prefix *do* in such cases: thus *do-achtad* probably became successively **dohachtad*, **d'hachtad*, *tachtad*. Now in

Welsh *tach*tad is *tag*-u, "to choke;" but hitherto the possibility of *do-* becoming *t-* in Welsh has perhaps never been thought of, though it is not very uncommon to find *dh* making *t* in Welsh—as, for example, in *parotoi*, "to prepare," from *parodhau*; *pyscota*, "to fish," from *pyscodha*, and *Betws* from old English *bedehus*, "a bead-house." On page 43 we have a still more convincing instance in *tocad* (gl. fors), as compared with *agad* (gl. fors), and with the Welsh *tynghed*, "fortune" or "destiny." It would have been satisfactory to know what the author makes of the *d*, instead of the more usual *th*, in such passive forms as *gainedar* (nascitur), p. 43; *arasisedar* (annititur), p. 49; and others which occur in these glosses: in the *Gram. Celtica* such forms have been stowed away among those with *th* without any apology. Of course it may be that the old Irish, like the old Welsh, sometimes wrote *d* for *th*; on the other hand it may be that the *d* is of old standing in the words referred to. The latter view would facilitate the equation of Welsh passives with those of the Irish: thus the derivation of Welsh *genir* (nascetur) would be **genidir*, **genidr*, *genir*, the elision of the *d* having been effected as in *cader*, "a chair," from *cathedra*, or of *g*, as in *pèrerin*, "a pilgrim," from *peregrinus*. J. Rhŷs.

INDIAN MANUSCRIPTS.

TO THE EDITOR OF *THE ACADEMY.*

Mangalore, S. Canara, Madras Presidency,
September 12, 1872.

Sir,—Since I last wrote to you from Tanjore, the Government has transferred me to another part of the Presidency, South Canara. This province is interesting to a philologist, as here the Neo-Aryan and Dravidian languages meet, and the numerous dialects well deserve attention. I have no leisure for this myself, but have begun to print a series of specimens consisting of translations of Matthew xiii. verses 1–35. They will be done by natives, if possible, and will be quite trustworthy. The first (already printed) is in the southern dialect of *Koṅkaṇī*, spoken by the Catholic Christians of S. Canara; it is by a native priest, and is in the Canarese character, and also in the modification of the Portuguese alphabet, introduced before 1600 by the Goa Jesuits. The succeeding parts will give specimens of the *Māppila-Malayālam*, *Coorg* language, *Baḍaga* (on the Nilagiris) and other dialects as yet quite neglected. The Catholics and Muhammedans are very numerous on this coast, and I prefer their idiom to that of the Brahmans, as the latter by introducing pure Sanskrit words in great number completely destroy the character of these dialects. Each specimen will be transcribed in Lepsius' Standard Alphabet. The Basel missionaries very kindly assist, so I hope to be able to print an interesting series of these specimens.

I am seldom able to leave Mangalore, but during the Easter holidays I made an excursion with the Rev. J. Hesse to Mūdabiddri, a great Jain town in this district, and the residence of a famous *ācārya*, who received us with much civility in his convent (*maṭha*). He had sent for a Brahman, to speak Sanskrit with me, as I do not speak Canarese, and he himself (he said), being upwards of forty years of age when he became an *ācārya*, had no time to learn Sanskrit. He showed us all his MSS., about 100 in number, all old and very correct, but unfortunately written in the now almost forgotten *Hala-kaṇṇaḍa* character, and so it is necessary to train a copyist to transcribe them. My friend devoted himself to the Canarese MSS. and found nearly all the poems of Hampa, one of the oldest Jain poets who wrote in Canarese (before the eleventh century), and as yet only known by quotatious; they include a *Bhārata* and a history of Rāma! I looked over the Sanskrit MSS. and found a very good and complete copy of Yaxavarman's commentary on Çākatāyana's grammar; also Candrasūri's *Prakriyāsangraha* to the same. The Southern Jains are *Digambaras*, and their books are almost exclusively in Sanskrit. I found, however, a very interesting MS. in Prākrit, the *Aṭṭha-pāhuḍaka* (i.e. *prābhṛitaka*), consisting of *Gāthās* with a Hindī commentary. I find by this that the *Nirgranthas* (mentioned by the Chinese travellers) were Jains and not Brahmins. The stifling heat, however, soon compelled us to leave the *maṭha*, and we then visited the sixteen *vastis* (Jain temples) in the town. I heard that in one of these an immense number of MSS. had been walled up during the troubles caused by the Muhammedan invasions in the last century, and had not since been taken out. The managers of the temple at first denied, but at last admitted, this report was true. I have only quite recently been able to get them to break down the wall and take the MSS. out. When this was done, more than 200 were found reduced to dust, but a number still remained uninjured. I have a list of more than 100 MSS., and among these are some treatises on *Nyāya* and grammar, and a commentary on the *Kātantra*, which appears to be by a Jain.

The managers also have sent me word that there are many other MSS. relating to the Jain and to the *Rasa* doctrine (which must be the *rasesvara* system of the *Sarvadarçanasaṅgraha*, p. 97, &c.), but that it was not fit that the names of these books should be written down, or the books shown to anyone except myself, and that I might see them if I would go there again. This I intend doing shortly.

The *Çṛiṅgēri-maṭha* founded by a Çaṅkarācārya is at a distance of a few days' journey from here, but above the ghats. Sanskritists are not aware that the great commentator on the *Vedas*, Sāyaṇa (more correctly Sāyaṇṇa), was one of the *gurus* of this *maṭha* by the name of Vidyāraṇyasvāmin. This last name occurs in the list given by Wilson (*Collected Works*, edited by Rost, i. p. 201, note), and in another list that I have recently procured he is described as "the great saint and *guru*, the founder of Vijayanagara, author of the commentary on the *Vedas* and other [books]." The present "*guru* of the world" will not show himself to Europeans, but I hope, nevertheless, to be able to find out if there are any autograph MSS. of Sāyaṇṇa at Çṛiṅgēri. It would be of much use if I could learn even what character he used to write his works. Inscriptions show that at this time only two characters were in use in the Vijayanagara kingdom: the old Canarese (which he probably used) and the Nandināgarī, now peculiar to parts of Mysore.

I have lately made a discovery that the lists of *gurus* of the numerous *maṭhas* can be made the foundation of a real chronology of the later Sanskrit philosophical literature. These *maṭhas* are numerous in the South of India, but I have found that all belonging to any one sect are branches of one or two original foundations, and owe their origin to the peculiar rule of succession which is followed by the *gurus*. This rule is that there is only one *guru* at a time, and that when he supposes his death is at hand, he must appoint a successor (of course, a nephew or relation) by communicating to him the *mantra*; if, however, after doing so he recovers, the recently initiated *guru* has to leave and establish another *maṭha*. As lists of *gurus* are preserved in every *maṭha*, a comparison of these shows at once the date of the foundation, for all the lists go back to the first *guru* of the original foundation, and agree up to the date of the division. Most of the later philosophical treatises are by such *gurus*, and, as the author always mentions his predecessor's name, it is easy to find where and when he lived.

The Rev. J. Kittel has recently published a critical edition of the *Çabdamaṇidarpaṇa*, a Canarese grammar, of about the tenth century. The author (Keçava) uses some technical words from the *prātiçākhyas*, and mentions many Canarese and Sanskrit works, among others a collection of Vedic roots by one Bhīma. Mr. Kittel is also much occupied with Canarese lexicography. Dr. Caldwell is engaged upon a new edition of his excellent *Comparative Grammar of the Dravidian Languages*. A. Burnell.

CONINGTON'S PERSIUS.

TO THE EDITOR OF *THE ACADEMY.*

Harrow, October 17, 1872.

Sir,—Mr. Simcox says at the end of his review of Conington's *Persius* (*Academy*, vol. iii. p. 398), "it is to be wished that in a second edition some errors of the press may be corrected, and one or two obvious incompletenesses either supplied or removed; *e.g.* vi. 11, we have the following: 'Homer's revelations, however, turned on the doctrine of metempsychosis, he having been a peacock at one stage of the process (note on Prol. 3)'; where there is not a word about peacocks. Is it barely possible that Mr. Conington suspected an allusion to the fable of the daw and the peacock at Prol. 13?"

The oversight is less serious than Mr. Simcox supposes; the only error being that the note on Prol. 3 is referred to instead of that on Prol. 2, where the supposed words of Homer, "memini me fiere pavum," are quoted and illustrated. H. Nettleship.

Intelligence.

E. Osenbrüggen's edition of Cicero's speech *Pro Milone*, which originally appeared in 1841, has been revised by Dr. Hans Wirz, whose commentary may be pronounced to be the most accurate now extant on this speech. The edition in its new shape may be especially recommended to young philologists and to masters at public schools. It is published at Hamburg, by W. Mauke.

The style and diction of Apuleius have been carefully investigated in an elaborate work by Professor H. Koziol (Vienna, Gerold's Sohn). It contains the most painstaking account of African Latinity we have yet seen. We are sorry to add that from the author's investigations it appears that Dr. Eyssenhardt cannot always be trusted in his collation of the Florentine MS. In the same way the edition of Ammianus Marcellinus by the same scholar has been attacked by several scholars of great authority, especially by Th. Mommsen and A. Kiessling. A new edition of this important writer is in preparation by V. Gardthausen, of which we may augur well from the dissertation containing *Coniectanea Ammianea Codice adhibito Vaticano* (Kiel, 1869) and recent papers in Fleckeisen's *Jahrbücher*.

The first part of an edition of Cicero's *De Finibus*, with German notes by Dr. D. Böckel, has been published by Messrs. Weidmann, another edition of the same work by Dr. Holstein being advertised by Messrs. Teubner. A new edition of the *Tusculans* by Dr. Meissner (Leipzig, Richter und Harrassowitz) has also just appeared. We can only say that both paper and printing of this edition are even worse than they generally are in German books. Is it indeed impossible that German publishers should learn to get up their books decently?

Dr. E. Hiller's monograph on the fragments of the poems of Eratosthenes has just been published by Messrs. Teubner. The editor appears to be a genuine pupil of O. Jahn. He has succeeded in filling above nine sheets with discussions on three pages of fragments.

In the *Library of the Earliest Monuments of German Literature*, now publishing at Paderborn (F. Schöningh), Dr. E. Sievers has just edited Tatian's *Synopsis of the Gospels* in the Latin and the German text with an elaborate glossary.

Professor Jac. Bernays, of Bonn, has just published a German translation, with explanatory additions, of the first three books of Aristotle's *Politics*. His book may be considered both an elegant translation and an excellent commentary on the Greek original.

Professor O. Ribbeck, the editor of Virgil (against whom some of the last papers of the late Professor Conington were directed), has now left Kiel, and will this winter begin to lecture at Heidelberg.

A very interesting and important discovery has recently been made at Paris of the correspondence of a Greek called Stamaty, containing most minute and graphic accounts of the events of the French revolution, addressed to Prince Michael Soutsos of Roumania. This voluminous correspondence has been placed by General Trochu in the hands of M. Jules Loir and M. E. Legrand, who have just published a first specimen, *Documents inédits sur l'Histoire de la Révolution française* (Paris, Maisonneuve). Stamaty's letters, written in January 1793, alone fill fifty-five pages. An appendix contains letters written by other agents of Prince Soutsos at Vienna, Berlin, Warsaw, and Constantinople, which are likewise in General Trochu's possession. It is to be hoped that the whole of these interesting letters, which enable us to follow the course of events day by day, will be given to the world in a French translation. We are not particularly anxious to see the Greek originals printed, as they are written in the worst slang of the Phanári, and as these valuable documents would still remain comparatively unknown and unappreciated, were they only published in a language unintelligible to many. M. Legrand has, however, proved in the specimen now before us that he knows how to turn Stamaty's Greek into delightful French.

Professor Möbius' brochure, *Ueber die altnordische Sprache* (Halle, Buchhandlung des Waisenhauses) — originally read before the 28th Congress of Philologists at Leipzig—which treats of the history of the Scandinavian languages, their relations to each other and the Germanic languages generally, their literary monuments, and the various principles followed in editing these monuments, is of great value to all students of these languages, giving, as it does, a clear, brief, and comprehensive summary of the latest results of Scandinavian philology, and references to all the more important works (often little known out of Scandinavia) on the subject.

The last number of the *Transactions of the American Philological Association* for 1871 contains two important criticisms on Mr. Ellis' *Early English Pronunciation*. Professor March considers the evidence of the Old-English stave-rime, in which *hl*, *hn*, *hr*, *hw* alliterate with single *h*, and *wl*, *wr* with single *w*, as conclusive against Mr. Ellis' assumption of a single sound (*lh*, *hw*, &c.) for all these digraphs. Mr. C. A. Bristed accepts the general results of Mr. Ellis' investigations, but regards "palaeotype" as somewhat cumbrous and overdone, and criticizes many details, giving incidentally a good deal of valuable information, especially on modern Spanish, with its remarkable dropping of final consonants. In many of his criticisms Mr. Bristed has fallen into the common error of assuming that the pronunciation of a given language is something that can be fixed absolutely, instead of being, as it really is, subject to indefinite variations. In some cases also we cannot help thinking that his phonetic analysis is either inadequate or positively incorrect.

The *Grammar of the Sindhi Language*, compared with the Sanskrit, Prakrit, and the Cognate Indian Vernaculars, by the Rev. Dr. Ernest Trumpp, has been printed by order of Her Majesty's Indian Government, who have secured the valuable services of Dr. Trumpp for the translation of the Sikh Granth.

Dr. Hermann Grassmann's *Wörterbuch zum Rig-Veda* is now rapidly passing through the press, and will consist of about fifty sheets, to be completed in eighteen months.—*Trübner's Record.*

Dr. C. Fr. Koch, the author of the *Historische Grammatik der englischen Sprache*, died of typhus, at Eisenach, on the 5th September. Dr. Koch has left rich materials, which will remain useless, as his repeated requests to be pensioned, so that he might devote his remaining years to the completion of his important labours, were not heeded.

A new classical and philological review (*Rivista di Filologia e d'Istruzione classica*) has been founded at Turin; it is conducted by MM. Pezzi and Müller, and the first two numbers seem to augur well for the revival of interest in such studies where they should certainly be most at home.

Contents of the Journals.

Grätz's Monatsschrift (Jewish), August and September.—Perles' papers on Rabbinic language and antiquities (conclusion).—The 58th Psalm explained; by the editor. [Ingenious emendations.] — The Targum on the Psalms; by W. Bacher.

The Phoenix, April to August.—Linguistic articles:—Extract from a Japanese Historical Romance, in Roman letters; with translation.—Practical Lessons in Japanese; by the editor (Rev. J. Summers).—Bibliographical Notes on Chinese Books; by W. F. Mayers.—On the Aborigines of the Himalaya, with comparative vocabulary; by B. H. Hodgson.—Notes on the Chias or Ilkyens (collected in the district to the W. of the Irrawaddy), with vocabulary; by R. F. St. A. St. John.—Mongol and Turkish Vocabulary (from the great Russian work of Pallas).—The important series of papers on Buddhistic Philosophy, by B. H. Hodgson, is now reprinted in full, and will soon be published separately.

Journal Asiatique, No. 72.—M. Renan's Annual Report. [A survey of Oriental literature in France, interspersed with excellent suggestions of criticism. It concludes with a warning against those "scientific Pharisees" "qui . . . n'accordent le bénéfice de la solidité qu'à la science qui s'étale avec ostentation."]

Hermes, vii. pt. 2.—C. Curtius gives a revised text of a long inscription from Sestos, with an elaborate commentary. This inscription is in the collection of Mr. Calvert, American consul at Constantinople, and has been several times edited, a copy of it having been privately circulated by Mr. Greaves in 1866. It is in honour of one Menas, and belongs to the second century B.C.—U. Willamowitz-Möllendorf has some good criticisms on twelve passages from Attic comedy.—U. Köhler (secretary to the Prussian embassy at Athens) edits two more Attic decrees, one of which is interesting as bearing upon the δίκαι ἀπὸ συμβόλων.—Th. Mommsen discusses the relation between the Vatican MS. of Ammianus and the text of Accursius (1533).—M. Haupt continues his *Conjectanea*.—H. Jordan discusses various vulgar forms and expressions found in Latin inscriptions which relate to the builder's art.—W. Dittenberger endeavours to prove a point of importance to Attic chronology, viz. the date of the "First Visit" of the Emperor Hadrian to Athens, which was adopted as an era.—R. Schöll brings a heavy charge against the good faith of M. F. Lenormant, as having forged a number of Attic funeral inscriptions. Certainly they have much in them to awaken the suspicions of one accustomed to such documents; and the learned Prof. Kumanudes, of Athens, has already expressed his doubts (Ἀττικῆς ἐπιγραφαὶ ἐπιτύμβιοι, p. ιβ and 446, reviewed a short time ago in the *Academy*—vol. iii. pp. 158, 159).

New Publications.

Benicken, H. K. Das elfte Lied vom Zorne des Achilleus nach Karl Lachmann aus dem 12ten Buche der Ilias. Barmen: Steinhaus.

Berliner, A. Pletath Soferim; Beiträge zur jüd. Schriftauslegung im Mittelalter u. s. w., aus handschriftl. Quellen. Breslau: Schletter.

Luzzatto, S. D. Grammatik der biblisch-chaldäischen Sprache u. des Idioms des Thalmud Babli. Mit Anmerkungen von Dr. M. S. Krüger. Breslau: Schletter.

Meunier, F. Études de Grammaire comparée. Paris: Maisonneuve.

ERRATA IN No. 58.

Page 388, col. 1, line 5 from bottom, for "Houdog's" read "Houdoy's."
,, 399, ,, 2, ,, 30, for "Tôdrôsâ" read "Tôdrôsi."

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 60.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Monday, December 2, and Advertisements should be sent in by November 27.

General Literature and Art.

Translations from the Popular Literature of the Turkish Races in Siberia and the Steppes. [*Die Sprachen der türkischen Stämme Südsibiriens und der dsungarischen Steppe.* Von Dr. W. Radloff. 1. Abtheilung. Proben der Volkslitteratur. Uebersetzung. 4. Bde. (Also, with the separate title: *Proben der Volkslitteratur der türkischen Stämme Südsibiriens.* Gesammelt und übersetzt von Dr. W. Radloff.)] St. Petersburg: 1866–72. Buchdruckerei der kaiserlichen Akademie der Wissenschaften.

One of the chief merits of the Imperial Academy of St. Petersburg is that it occasions the publication of learned works which might never see the light without its assistance, or might, at any rate, be lost to science for an indefinite time. Not to mention any other branches, our knowledge of the north of Central Asia is almost entirely due to the learned societies of Russia, and especially to this academy. The careful researches that have been made into the language and literature of the tribes of that region, which is for the most part subject to the Russian crown, were either undertaken at their suggestion or else the works bearing on the subject were published at their expense, and in many instances both was the case. Without leaving the present subject, I may instance the attractive and instructive *Heldensagen der Minussinschen Tataren*, which were collected by Castrén and Titow, done into metre by the distinguished linguist, Anton Schiefner, and published under the direction of the St. Petersburg Academy in 1859. This translation, like Radloff's work, is in German, in which, as well as in French, a considerable number of the academy's publications are composed. Schiefner's work may serve as a very welcome introduction and commentary to that part of Radloff's which deals with the epic poetry of the Turco-Tartars, though the remainder includes as well tales, legends, fables, historical ballads, songs, proverbs, in fact everything that is designated by the general term Folk-lore. As to the ground covered by the four volumes before us, I have to observe that the first two include the literary productions of those inhabitants of the Altai and the adjoining eastern districts, who still adhere to Shamanism, the Tartar tribes about Minusinsk being included under the latter head; while the third and fourth volumes contain the popular literature of those Turco-Tartar tribes which live west of the Altai, and now profess the faith of Islam, that is to say, the Kirghiz hordes together with the tribes dwelling on the river systems of the Tom, the Irtish, and the Tobol, who are known by the general name "Siberian Tartars." While the Shamanite Tartars consist of the remnants of various tribes who live mixed together, and have quite lost the feeling of nationality, so that they call themselves either by the name of the clan or after the mountains and rivers by which they live, the inhabitants of the wide Steppes (reaching from the Altai to the river Ural, from Omsk to the mountains on the northern boundary of the valley of the Serafshan, who call themselves *Kasak*, and by the Russians and other Europeans are wrongly called Kirghiz, or even Kirghiz-Kaisaki) are members of a single race, or rather nation. Of its origin little is known. Their tribal names seem to show that the Kirghiz hordes consist of the most various elements, as, for instance, the names Kyptschak, Argyn, and Naiman (which is incontestably of Mongol origin); but the amalgamation in this case seems to have been completed long since, as the Chinese began to speak of the Ha-sa-ki many centuries ago. Now they certainly form a closely welded whole, exhibiting every token that belongs to national unity. As for their religion, the Mahometanism of the greater mass consists merely in external observances; thus it is strictly enjoined to cut the hair and wear a covering on the head, and it is thought proper, especially for old people, to make use of pious expressions borrowed from the Koran, yet a thorough or familiar knowledge of the faith is rare. But a strong national spirit distinguishes them from the other Turkish tribes; their manners, language, dress, and usages, are as much one as the wide steppe, with its unvarying character, which they inhabit. They themselves divide their literary productions into two classes, the words of the people and book-songs. The people's words (*Kapa cöc*) are songs and narratives preserved by oral tradition, and therefore the work of that portion of the population least affected by Islam. They are only known to the unlettered, for the Moullah, that is, "he who knows how to write," looks down on them with disdain, in consequence of which they are never to be met with in writing. The book-songs are so called because the bard generally reads them out of a book instead of repeating them by heart. The same rivalry between booklearning and the mind of the people is observable amongst the Siberian Tartars, only there the latter is under the influence of the priesthood and the fanaticism it encourages. The fairy tales and ancestral legends preserved by tradition have now no place of refuge but the hearts of the aged, to whom they recall the memory of an age that has passed away, for the present generation only knows Moslem poems, of which Radloff also gives a few samples.

After acquainting ourselves with the territory occupied by the Turkish tribes of South Siberia, as well as with their general features, we may begin to consider their intellectual productions more nearly. The most characteristic of these are undoubtedly the epic poems, of which the leading features are described in Schiefner's introduction. I have already pointed out elsewhere (*Gött. gel. Anz.* 1866, pp. 1331, 1332) that these songs, in spite of much diversity, still have many elements in common with those of other nations, and the same is true of the tales, as appears from the following example:—"A poor youth, Salamja by name, possessed a fox which he had reared. The fox repaired to a neighbouring khan, and, seeking his daughter in marriage for Salamja, received a promise of consent. Thereupon he borrowed, still in his master's name, the khan's silver-weights and returned them with some pieces of silver which he had stolen sticking in a crack, and he did the same with the gold-weights, so that the khan thought his future son-in-law was very rich, and began to make preparations for the wedding. Then the fox made a ship and luggage and soldiers out of straw, and put the soldiers and the bridegroom on the ship, and made it sail toward the city of the khan; he himself hastened forward by land and persuaded the khan to come out and meet Salamja. As soon as he was in sight, the fox, who was a magician, raised a great storm and wind,

so that the ship sank with all hands, and only Salamja was washed ashore naked; so the khan gave him rich clothing in which he was married. After this Salamja set out to return to his own country, with many slaves and great riches as his wife's dowry; but the fox ran on before, and by false pretences persuaded the keepers of great herds of horses, cows, and sheep, which he met on the three following days, to tell Salamja's slaves that they belonged to him instead of to their real owner, Jilbegän with seven heads. When the fox came to the house of Jilbegän himself, he persuaded him in the same way to hide himself from Salamja's army in a well, and to let the fox cover up the mouth of the well with a heavy stone, so that when Salamja arrived he took undisturbed possession of Jilbegän's wide lands and inexhaustible treasures. But the fox went on his way." In this tale, which, like many others in the collection, is told in different ways, the reader will immediately recognise "Puss in Boots," though the cat is turned into a fox, and the boots have disappeared, a variation common to most other Western versions of the tale. This Turco-Tartar version is the only one that has yet been met with in the East, and it is remarkable that in the form of the story given in the fourth volume (not in that given in the first volume) the fox appears as the magician who can summon up winds and storms; so far as I am aware, this power is nowhere else ascribed to the fox, an animal with whom few mythological ideas are associated. The cat, on the other hand, not infrequently appears as a sorceress who conjures up storms of wind and rain (Grimm, *Deutsche Myth.* pp. 151, 282; Kelly, *Indo-European Tradition and Folk-lore*, pp. 236, 237), and one is tempted to conjecture that the latter animal originally filled the place of hero in this cycle of tales. But it would lead us too far to examine thoroughly this question, so I will content myself with pointing out the relationship of some of the other tales in the work before us to those already known; one parallel, however, must suffice in each case, as an exhaustive notice would occupy too much space. Thus "Tschälmäsch" (i. 302, No. 12) is the equivalent of "The Three Widows" in Campbell's *Popular Tales of the Western Highlands*; "Der Arme" (i. 313, No. 13) = Grimm, *Kindermärchen*, No. 19, "Der Fischer un sine Fru;" "Kosy Korpösch" (iii. 281, strophes 147–198) = Grimm, No. 136, "Der wilde Mann" (Eisenhans), to which cycle the legend of Robert le Diable also belongs, as I have shown in the *Gött. gel. Anz.* 1869, pp. 976–979; "Hämra" (iii. 518) = Grimm, No. 57, "Der goldene Vogel;" "Kosum Khan" (iv. 11), "Khüzüm Khan" (*ib.* p. 139), and "Jermak" (*ib.* p. 179), three versions of the legend of Dido's Cow-hide; "Der Dieb" (iv. 193) = the legend of King Rhampsinitus' Treasury; "Der Hahn" (iv. 260) = La Fontaine's "La Laitière et le Pot au lait;" "Die Waise" (iv. 373) = Grimm, No. 126, "Ferenand getrü un Ferenand ungetrü;" "Die Almosenspenderin" (iv. 408) = Grimm, No. 31, "Das Mädchen ohne Hände." These are a few examples of those Turco-Tartar tales which are also known in Europe, though many of them are met with too in other parts of Asia; some, again, are only to be found in Oriental works, such as the Arabian Nights, Persian Tales, the Kalmuck Ssidi-kür, the Mongol Ardschi Bordschi, &c. Besides whole narratives, there are a great number of isolated traits which we have met with elsewhere, such as the scattering gold in the way of the army, to delay the pursuing enemy (i. 210—Schydar Ubang: see *Academy*, vol. iii. p. 23); the smelling blood (i. 307): "Uf, Uf, I smell the smell of men!" = "Fee, fo, fum, I smell the blood of an English man." "Die Verwandlung eines Mädchens in ein Hermelin" (ii. 201, vv. 842–845) belongs, like the preceding trait, to a widely disseminated cycle. The ermine (Lat. *Mus Ponti*, or *Mus Ponticus*) is very like the weasel, for which reason the latter is called by the modern Greeks ποντικονυφίτζα, or sometimes merely νυφίτζα. But the latter name is a diminutive of νύφη (νύμφη), and means accordingly young woman, maid, or little bride, and corresponds to the Italian *donnola* (dimin. of *donna*), to the German *Jüngferchen*, *Fräulein*, the Bavarian *Müemelein* (little cousin), *Schönthierle* (pretty little creature), the Spanish *comadreja* (godmother), the Danish *brud* (a bride) or *den kjönne* (the fine one), and the Basque *andereigerra*, from *andrea* (woman or lass). The connection of all these epithets with a mythical origin is rendered increasingly probable by the old English and Cornish name for the weasel, "fairy," on which I have commented elsewhere. Aelian is certainly alluding to similar myths in his *Hist. Anim.* 12, 5 and 15, 11; in the latter passage particularly he says that the weasel was once a woman, skilled in magic and very licentious, whom Hecate had turned into that animal as a punishment. "Die versteckte Seele" (iv. 88) may be compared with "The Young King of Esaidh Ruadh" in Campbell's *Popular Tales*, and there are many other analogous traits which I omit.

But apart from the history of popular fiction, Radloff's work is important in other respects, as, for instance, with reference to ethnography and the history of civilisation. Thus in an Altaian tale (i. 69) a raven and a swan are sent to lead the way across the sea, which reminds us how before the use of the magnet the ancient Norsemen used to let a raven fly from their ships, to ascertain whether they were near land, by seeing whether the bird returned to the ship or not; and again of a passage in Pliny (*H. N.* 6, 24), according to which the inhabitants of Taprobane (Ceylon) used, in their voyages to India, to steer their course, not by the stars, but by the flight of the birds they took on board and then released. From another passage (iii. 13) we learn that usage forbids women under any circumstances to pass by the elder relations of their husbands, or in youth to uncover their faces before them, and they are not allowed to pronounce the name of their elder relations, and if the name chances to be the same as that of any other common object, they are not allowed to mention the latter, but have to describe it by a circumlocution; and in the same way, a newly married woman is not allowed to come towards her stepfather, nor to address him first. We see here traces of a widely spread custom, which reappears amongst the natives of other continents, to be observed by certain relations by marriage (Tylor's *Early History of Mankind*, 2nd ed. pp. 290–293). The notion which leads the Kirghiz to personify every illness, so that fever is "an old spirit" (iii. 64), which nevertheless appears in the shape of a young girl, is met with in various forms elsewhere (cf. Grimm, *Myth.* pp. 1106, 1107). On the mode of divination from the shoulder blades, especially of sheep, practised by the Kirghiz and Kalmucks, as well as elsewhere, see Tylor's *Primitive Culture*, i. 112. Grimm's *D. M.*, p. 1233, also mentions the Circassians. The Flemish settlers in Wales used the same kind of divination, which they must have brought with them from their former homes (Girald. Cambren. *Itin. Cambriae*, i. 11). It seems to have been equally well known to the Afghans, for in one of their poets we read: "When, with the mind, I examined the *shoulder-bone of prediction*, I saw that," &c. (*Selections of the Poetry of the Afghans, &c.*, by Captain H. G. Raverty; London, 1862). In a tale of the Schors (Radloff, i. 390) it is related that Ai Mögö drew the top of nine larch-trees together, and laid the bones of Kysyl-Tas there. Just so in Schiefner's *Heldensagen der Minussinschen Tataren*, p. 207: "Katai Chan, being near to death, said to his son: 'When I die, bury me not in the lap of earth, but bind the tops of

nine larch-trees together and place the coffin thereupon.'" An exactly similar usage prevails on Vancouver Island: "Among some tribes it is the practice to place their dead in boxes upon the branches of trees" (*Travels in British Columbia, &c.*, by Captain C. E. Barrett-Lennard; London, 1862). For the rest I have no doubt that the custom, which may very probably exist elsewhere as well, is connected with the belief, common to almost all races, that the souls of the departed like to revisit their earthly dwelling-places, so that it was natural that their bodies should be laid there after death; and these dwelling-places, we know, in the earliest times were often situated on or in trees and bushes, such as those which still form the habitations of some more or less uncivilised tribes. For a detailed discussion of this subject and the kindred superstitions relating to the residence of spirits or ghostly beings in trees and thickets, the reader can refer to my papers in the *Gött. gel. Anz.* (1864, pp. 1424, *sqq.*), and in the *Heidelb. Jahrbücher* (1866, pp. 867, *sqq.*; 1868, pp. 93, *sqq.*). Amongst the Tümenian Tartars (Radloff, iv. 441) a very singular custom formerly prevailed, and perhaps still continues, as we gather from the following historical narrative: "Once on a time a Lama was sick, and when it became evident that he was going to die, they gathered the people together and came back to the Lama; but on coming in, they found the Lama supported on one knee and one foot, though he was already dead. 'Who will throw him down?' they asked. Then said some: 'One who was born in the year of the monkey* must throw him down.' Now it was found that the son of the Lama was born in the year of the monkey. So they said to him, 'Throw down thy father thyself;' and he did so with a stick. Then they brought the corpse into the open air, and they took off his coat and rubbed the body with mutton fat. When the fat had got cold upon it, they lighted a fire upon the body and burnt it. Then they gathered the bones together and pounded them fine like meal, out of which they kneaded dough, and of this they made images of all the beasts in the world. They fastened these images in a row upon a board, and brought the board to running water and cast it in. 'This is a great saint,' said they, and accompanied him with their thumbs thrust in their ears. Then they returned home." Besides all the rest, it is noticeable that the dead Lama was found half standing, and the question arises whether that attitude was intentionally assumed at the moment of death, and why. On this point, perhaps, a Mahometan legend of King Solomon is not irrelevant, which tells how, when his time was come to die, the angel of death led him into a room of which the walls were made of crystal. Then he prayed, and supporting himself upon a staff, he begged the angel of death to receive his soul while he remained erect. It was done accordingly, and so his death was concealed from the Djinn for a whole year, until the temple was finished; and they only discovered it when the worm-eaten staff gave way under him (Weil, *Biblische Legenden der Muselmänner*, p. 279). In an old French chronicle a somewhat similar story is told of Virgil (the sorcerer Virgilius of the middle ages), who had so arranged that for many years after his death he was believed to be only sitting on his chair absorbed in study (*Ly Myreur des Histors. Chron. de Jean d'Outremeuse*, i. 277; Acad. royale de Belgique).

I have already mentioned that various historical songs are met with amongst the Turco-Tartars, some, for instance, upon Genghis Khan, Yermak Timofeyef, the first discoverer of Siberia, &c. There is also a very elaborate satire on the Kirghiz, which contains many allusions to their manners, customs, and mode of life. As a matter of course, love-songs are forthcoming, of which the following stanzas may serve as a sample. Amongst the Kysyl Tartars the girl sings: "While I live in my mother's hand, I am ever thinking of marriage; while I live in my father's hand, I think ever of going to the priest." The young man sings: "Wilt thou fly with me, O maiden? see the horse is here fastened to the gate-post; wilt thou fly with me? see the horse is standing ready." In conclusion I will quote a few of the proverbs of the Altaians and Teleutians. "Let it be thine own house, however poor; thine own groats, though the gruel be meagre" = "Home is home, be it ever so homely;" "Follow the high-road, though it winds" = "Compendium, dispendium," or, as a Cornish tale puts it: "Take care how you leave an old way to choose a new one;" "Not as reason thinks, but as God determines" = "Man proposes, God disposes;" "If the father goes wrong, the son is good for nothing; if the mother, the daughter" = "Like sire, like son." "In the heart of a woman there is a radiant mail-clad man; in the heart of a man, a fiery steed ready saddled." "He who shoots much is no shot; he who talks much is no orator;" &c. &c. Riddles, and some of them very original and characteristic ones, are also given, but I need not dwell upon these, as what I have already said will be sufficient to show the importance and interest which the work possesses in so many respects. The preface to the fourth volume does not state whether the series of literary specimens is to be regarded as already completed; in any case there is still to follow a dictionary and grammar of the different Turco-Tartar dialects, examples of which are offered by the four volumes of the original text that accompanies Radloff's translation, and gives his work a prominent linguistic value in addition to its other merits. FELIX LIEBRECHT.

* The monkey-year is the ninth year in the 60-year cycle of the Mongolian reckoning of time.

Gareth and Lynette, &c. By Alfred Tennyson, D.C.L., Poet Laureate. Strahan and Co.

THE present volume, in spite of its miscellaneous title, consists of two idylls only, *Gareth and Lynette*, and *The Last Tournament*, of which we spoke when it appeared in the *Contemporary Review*.* *Gareth and Lynette* has one peculiarity: it is the only poem of the series, except the *Passing of Arthur*, in which the story is told straightforwardly from beginning to end. Perhaps the subject is hardly fortunate; the story is in itself rather thin and hackneyed; it has no organic connection with the Arthurian cycle, into which it enters in various forms, and always in an advanced stage of decomposition. The female Cinderella is generally a victim; but her male relations, though occasionally snubbed, more commonly disguise their accomplishments for no better reason than to make people stare when the time comes to display them, unless indeed we think, as is not unlikely, that those forms of the legend are the oldest in which the hero is really foolish or effeminate till opportunity makes a man of him. In two of the minor legends of *Lancelot*, he himself as the Knight of the Cart and the Ill-shapen Knight appears as the "ironical" hero; Mallory gives us an unfinished repetition of Gareth and Lynette in La Cotte Mal Taillee and La Damoselle Maledisaunt, whom Lancelot christens La Damoselle Bien Pensaunt, because she alleges that she only insulted her champion in order to prevent his exposing himself to danger; but this is plainly an afterthought, and she is really the sister of the ill-favoured dame whose taunts in Wolfram von Eschenbach are the principal element in the education of Parzival.

* See *Academy*, vol. ii. p. 554.

The only changes Mr. Tennyson has made in the main framework of the story are that Millisent releases her son from his disguise as scullion in Arthur's kitchen at the end of one month, instead of holding him to his promise for the conventional twelvemonth and a day, and that Lynette betrays her feelings in songs (which the interpolated insults make more incongruous and unsatisfactory than the lyrics of any of the previous idylls), and, last and least, that Gareth marries Lynette instead of Lyonors. Nor is the obvious effort to make the humiliation of Gareth by Sir Kay and Lynette edifying particularly interesting or successful. The real charm of the poem lies partly in the unfailing richness and grace of the style (though there are unfinished phrases like these: "Kay Fell shoulder-slipt;" "Through helping back the dislocated Kay;" and "Slicing a life-bubbling way Through twenty folds of twisted dragon"), and chiefly in the romantic symbolism, the picturesque mysticism which the author has "added of his wit" to a somewhat threadbare and conventional legend. The old man who meets Gareth and his companions at the gate of Camelot may be somewhat commonplace in his moralising over Arthur's vows, but the description of the gate itself is what no other poet could have written, and even the morality is redeemed by the following lines, which are in Mr. Tennyson's deepest vein:—

> "For, as ye heard a music, like
> They are building still, seeing the city is built
> To music, therefore never built at all,
> And therefore built for ever."

Again the hermit's allegory of the Morning, Noon, and Evening of Life hunting the Soul of Man is not too ingenious to be frigid; and if we suppose the different fortunes of the suitors of Lyonors, who masquerade in imitation of them to typify the fortunes of the enemies who multiply upon Arthur, the parallel is hardly thrilling, but the description of Death is undeniably impressive:—

> "When the Prince
> Three times had blown—after long hush—at last—
> The huge pavilion slowly yielded up,
> Thro' those black foldings, that which housed therein.
> High on a night-black horse, in night-black arms
> With white breast-bone, and barren ribs of Death,
> And crown'd with fleshless laughter—some ten steps—
> In the half light—thro' the dim dawn—advanced
> The monster, and then paused, and spoke no word.
> But Gareth spake and all indignantly,
> 'Fool, for thou hast, men say, the strength of ten,
> Canst thou not trust the limbs thy God hath given,
> But must, to make the terror of thee more,
> Trick thyself out in ghastly imageries
> Of that which Life hath done with, and the clod,
> Less dull than thou, wilt hide with mantling flowers
> As if for pity?' But he spake no word;
> Which set the horror higher: a maiden swooned;
> The Lady Lyonors wrung her hands and wept,
> As doomed to be the bride of Night and Death;
> Sir Gareth's head prickled beneath his helm;
> And ev'n Sir Lancelot thro' his warm blood felt
> Ice strike, and all that mark'd him were aghast."

And this solemnity gives additional value to the blithe *dénoûment*, in which Death turns out to be an innocent boy, rather younger than Gareth, who accordingly proceeds with great dignity to patronise him.

Continuations are proverbially perilous, but the risk in Mr. Tennyson's case is only for his contemporaries. We read *Gareth and Lynette* after *Elaine* and *Guinevere*, and it is only natural that it should not produce the effect of a climax; our descendants, who will read it between the *Coming of Arthur* and *Enid*, will have a better chance of doing justice to what, after all, is a beautiful and delightful poem.

G. A. Simcox.

NOTES ON LITERATURE AND ART.

In Westermann's *Illustrirte Monatshefte* for August there is an interesting account by von Maltzan of a "Six-fingered dynasty" which has reigned for about 150 years in South Arabia, partly by help of the unusual courage and energy displayed by the sultans and partly through the prestige which attaches through the East to persons gifted with supernumerary members, like the Philistine in 2 Sam. xxi. 20. The Fodli dynasty are of Himyaritic race, black, ugly, and in the elder branch, where purity of blood is scrupulously insisted on, six-fingered and six-toed. The sixth finger is only rudimentary, a perfectly useless stump, but highly valued as a proof of breeding, and the peculiarity is common, though not universal, amongst the remoter princes of the blood.

The birthday of Muratori (21st October, 1672) has just been celebrated in his native place of Vignola. Dr. A. Dove (*Im Neuen Reich*, October 18) writes *à propos* on "Muratori's significance," hailing him as the precursor and almost the father of German historical research: the great collection of *Monumenta Germaniae* is only a repetition of his *Annals* under, of course, changed conditions and with a clearer critical standard in view. The *Gazzetta ufficiale* contains in several numbers a study, by Professor Contini, which enumerates his works at length, and gives some interesting biographical details. A tradition says that his father was too poor to allow him to learn Latin, so he used to listen at the keyhole while the schoolmaster was giving his lessons, till he was caught in the act and allowed free entrance. He used to work twelve hours a day till he was seventy-seven, and lost his sight three months before his death. His memory was of course stupendous; but nothing can make the statement, that he composed the first nine volumes of his *Annali d'Italia* in ten months, anything but incomprehensible. He was a stern foe to mendicancy, which he is said to have banished from his parish, and he founded a charitable company bearing a very strong resemblance to the "Society for the Organization of Charitable Relief," now at work in London.

Mr. Frederick Harrison, in the *Fortnightly Review* (November), "On the Supposed Necessity of certain Metaphysical Problems," denies the existence of such problems, or at least that the same problems are always necessary. The four common problems, God, the Soul, Creation, and a Future State, do not trouble savages or the Chinese, and were not conceived by the ancient Greeks or the Hindoos in the same way as by moderns. He instances as a problem of as much interest the nature and existence of Protoplasm, and urges that no one now cares to discuss the freedom of the will or the origin of evil (cf. however Mr. Greg's *Enigmas of Life*). It might be thought that the problem of protoplasm owes its interest to the fact that it is one way of solving the problem of the soul or the nature of the vital principle.

In the *Theological Review* (October) Miss Cobbe has a paper in favour of the immortality of the soul of man.—An article in the *Quarterly Review*, attributed to the same writer, inclines to extend the same privilege to dogs.

"A Bad Five Minutes in the Alps" (*Fraser*, November) is a rather well-written description of the emotions of a nineteenth-century *Weltkind* in view of approaching death; but it is rather too long, and passes into an account of the reflections common to the same character when *not* in danger of death, and these are naturally less interesting.

An association for the encouragement of Greek studies in France was founded some years ago by a pretty numerous group of men of learning, men of letters, and artists. The object of the society, which holds its meetings in the École des Beaux-Arts, is to support and, if possible, extend the share allotted in the ordinary liberal education (so called) to the study of Greek culture. Struck by the comparative want of interest in the *chefs-d'oeuvre* of Greek art, this society has resolved to add to the critical and philosophical dissertations which it now publishes in its transactions the reproduction of such consider-

able works of Greek art as have not yet been made public. These reproductions are printed separately in quarto, with accompanying explanatory text, and are published in numbers, under the title of *Monuments grecs*. This year's subject is a Greek vase, of singular size and beauty, recently acquired by the department for antiquities of the Louvre Museum. On the inside the design represents Theseus borne by Triton into the deep, and receiving, in the presence of Minerva, a crown from the hands of Amphitrite. The reverse represents four labours of the same hero. The style is still archaic, but large and full of charm. The vase is signed Euphronios. The reproduction has been drawn and engraved by M. Sulpis; the archaeological commentary is by M. de Witte.

A short time back a portrait of the Marchese di Mirabella, attributed to Van Dyck, was sent to the Pinakothek at Munich from Schleissheim. The attribution was much discussed at the time, but in spite of adverse criticism, Dr. Wilhelm Schmidt steadily maintained its correctness. He has lately contributed to the *Allgemeine Zeitung* a short notice of the painting in question, and of the grounds for believing it to be a genuine work by Van Dyck. Dr. Schmidt does not forget the portrait of the same nobleman, also attributed to the same painter, which is in the possession of the Earl of Warwick. The Munich picture is considerably the larger of the two, which looks in favour of its authenticity. Waagen noticed in the Warwick Castle example a "golden tone," from which he suspected it to have been painted by Van Dyck at Venice, under the influence of Titian. But this is not very striking; and except for the unusual care of finish, Lord Warwick's fine picture has no smack of the copy about it. Perhaps it is a repetition?

The casts from the antique in the Berlin Museum are arranged according to subject. This arrangement, which forms a special exception to the chronological method which is strictly followed in the other departments, has been attacked by Professor Conze in the last number of the *Preussische Jahrbücher*. Professor Conze's article has drawn forth a reply from Dr. Bötticher, who is the person responsible for this state of things. Professor Conze justly maintains that the whole question of scientific arrangement for the purposes of scientific study is here at stake. To which Bötticher has some difficulty in replying. The arguments by which he supports his position amount in the rough to this—the chronology of ancient sculpture is as yet very uncertain, and there are many points still in dispute amongst archaeologists themselves; therefore to attempt historical arrangement would be to keep the collection in a perpetual state of disturbance. This defence, which is manifestly a very weak one, has been efficiently criticized by Reinhard Ketulé in *Im Neuen Reich* (October). Archaeologists do not require a complete order carried out in every small detail, for that would be to demand the impossible. What they ask for is an arrangement which shall take account of the assured results of historical research. And as far as concerns the relative grouping of the principal epochs of ancient sculpture, a great deal more has been exactly ascertained than Dr. Bötticher (who touches here on a province not familiar to him) appears to be aware of.

The town of Brussels has acquired the fine collection of drawings sold this year at Ghent representing the details of the ceremony of the inauguration of the Emperor Charles VI. as Duke of Brabant in 1715. The drawings are executed by the court architect Baurscheidt. The town has also purchased the original design for the pulpit of the church of SS. Michel and Gudule; a photographic reproduction of the Grimani breviary; and an example of the magnificent medal struck in 1708, to commemorate the raising of the siege of Brussels by the French-Spanish army.

The approaching publication of a work by M. Émile Ollivier has been announced, entitled, *Une Visite à la Chapelle des Médicis: dialogue sur Michel-Ange et Raphaël.*

The well-known collection of works of art possessed by M. Mancel, formerly a bookseller and publisher at Caen, has been by him bequeathed to the town of Caen, subject to the fulfilment of certain rather onerous conditions. If Caen declines the bequest, it is to be offered, still on the same terms, to Rouen; should both Rouen and Caen refuse, the collection falls to the State. The books to be deposited in the National Library; the engravings in the print-room of the same establishment; the paintings and drawings in the galleries of the Louvre; the other works of art in the Cluny Museum. M. Mancel was the purchaser of the whole collection of engravings, amounting to 50,000 in number, left by Cardinal Fesch.

Dr. Messmer contributes to the *Allgemeine Zeitung* for October 28 a useful little review of the literature of Christian art. He begins with a string of brief notices of recent works—Lübke's *Deutsche Renaissance;* Dr. Franz Kraus' *Die christliche Kunst in ihren frühesten Anfängen;* Desbassyns de Richemont's *Études sur les Catacombes romaines;* Neumann's *Drei Dombaumeister Roritzer;* Bucher's *Die Kunst im Handwerk; Quellenschriften für Kunstgeschichte und Kunsttechnik;* Hotho's *Geschichte der christlichen Malerei bis zum Ende des* 15. *Jahrhunderts;* &c. To these he appends a short review of the principal books published in Italy, France, Germany, and England, since Vasari in 1550 inaugurated this branch of research. As might be anticipated, the German list is by far the most complete, the English list is very poor, and there are considerable omissions in the French.

A "Black and White" exhibition is to be held at New York the beginning of next year, and contributions are invited from the artists of all countries. The details of the conditions and arrangement have not as yet been made public.

Many new particulars of the life of Overbeck are contained in *Brevi Notizie intorno alla Vita e alle Opere di Giov. Federico Overbeck* (Naples). The pamphlet in question is the work of Giulio Borgia Mandolini, who has taken much pains to gather together information from those best qualified to give it. Overbeck's last work, the designs for the "Seven Sacraments," still remains unsold in Rome. A correspondent of the *Allgemeine Zeitung* pronounces them to be, in his opinion, the most beautiful and perfect of all Overbeck's works, and expresses the hope that Germany will not allow them to be carried off by any other country. The same correspondent, who writes from Rome, announces that the famous Villa Albani, now called Torlonia, is to be sold, together with all the works of art which it contains, amongst which an important painting of Perugino's, and Giulio Romano's designs for the "Marriage of Cupid and Psyche," completely carried out in oil, are mentioned.

The *Gazette des Beaux-Arts* for September 1 commences with an interesting contribution to Raphael literature from the pen of the Marquis Giuseppe Campori. The archives of Mantua have furnished many important documents to the historians of Raphael, but their treasures are not yet exhausted. Two letters of Elizabeth Gonzaga, wife of the Duke of Urbino, now published by the marquis, contain curious indications of two works by the hand of Giovanni Santi, which are now supposed to have perished. A letter of Stazio Gadio, the agent at Rome of the Marquis of Mantua, has also been brought to light, which furnishes proof of the existence of a portrait by Raphael of Frederick, the young son of the marquis, detained in Rome by Julius II. as a hostage for his father's loyalty. The existence of such a work had been suspected by Passavant and others, but never proved. The Marquis Campori gives us the agent's letter recounting how Frederick was dressed for the sitting, "armé avec un sayon de V. Exc." &c. The article contains a great variety of similar new details, some of which may prove to be of consequence to future investigators.—M. Lechevallier-Chevignard notices "Quelques Portraits de Henri IV"; and at p. 371, l. 22, we find a misprint: "Brunel le peintre de la petite galerie," &c., should be "Bunel." The person in question is evidently Bunel, a Huguenot artist, who, employed at the Escurial by Philip II., was called to Paris by Henri IV. to work under Dubreuil at the interior decoration of the Louvre.—M. Havard has a third article on the Amsterdam exhibition.—M. Lecoy de la Marche concludes his publication of the letters of the directors of the Academy of France at Rome.—M. Ménard

contributes the remaining portion of his valuable and suggestive paper on the Symbolism of Desire.—M. Champfleury writes a notice of the Ceramic of the north of France, *à propos* of the Retrospective Exhibition at Valenciennes.—The illustrations to M. Ménard's paper are very choice, and the number contains an excellent etching by Veyrassat from his painting of "A Village Smithy."

The *Allgemeine Zeitung* for October 8 contains a report as to the present state of the Loggie of the Vatican, which is very satisfactory, especially as regards the restorations which were completed in 1870 by Mantovani and Consoni. The writer states that Signor Consoni, to whom the reparation of the subject frescoes was entrusted, has in no case painted over even a trace of original work; he has confined himself wholly to filling in destroyed places. In another letter the same correspondent speaks enthusiastically of the success of Signor Botti's (of Pisa) method of restoring faded frescoes. The undertaking of transferring the frescoes of the Campo Santo from the wall to canvas has been committed to his care, and his first successful attempts have been made on some by Benozzo Gozzoli. He refixes the fresco in its place by means of a liquid—the composition of which he keeps secret, as he does also the ingredients of the wash by which he refreshes the colours. The method would seem to resemble that of Abbate Malvezzi (see *Academy*, vol. ii. p. 558), which has been recognised by the Academy of Milan and employed on the frescoes of Gaudenzio Ferrari at Varallo with great success. Signor Botti has, it is said, also restored, satisfactorily, "The Last Judgment," by Giotto, and several of his minor works in the Scrovegni chapel at Padua. Regarding this last-mentioned chapel, we learn from another source (*Kölnische Zeitung*) that the long pending litigation concerning it between the government and Count Gradenigo has at last terminated in favour of the latter. The government had claimed it as church property under the law of confiscation.

A correspondent writes to us to mention, in connection with Mr. Colvin's article on the *Hypnerotomachia* (October 15), the fact that, in addition to the notices there cited, the book is mentioned slightingly by D'Israeli in his chapter on "Literary Follies" in the *Curiosities of Literature*. He sees nothing in it but an inflated love-tale and "amatorial meditations."

We understand that Dr. C. M. Ingleby has at press a work entitled *Shakespeare's Prayse Sung by the Poets of a Centurie*, being a complete catena of song allusions to our great bard.

New Publications.

Cibo S. Frenfanelli, Niccolò Alunno e la scuola umbra di. Torino: Loescher.

Comparetti, D. Virgilio nel Medio Evo. 2 vols. Torino: Loescher.

Deutsche Dichtungen des Mittelalters. Herausgegeben von K. Bartsch. Leipzig: Brockhaus.

Friederichs. Nachtrag zu Berlins antiken Bildwerken im neuen Museum. 1. Band. Düsseldorf: Buddeus.

Hassler, K. D. Ulm's Kunstgeschichte im Mittelalter. Stuttgart: Ebner und Seubert.

Hüttemann, F. Die Poesie der Orestessage. 2. Thl. Braunsberg: Martens.

Justi, C. Winckelmann. Sein Leben, seine Werke und seine Zeitgenossen. 2. Bd. 1. Abth. Leipzig: Vogel.

Kekulé, R. Das akademische Kunstmuseum zu Bonn. Bonn: Weber.

Mamroth, F. Geoffrey Chaucer, seine Zeit und seine Abhängigkeit von Boccaccio. Berlin: Mayer und Müller.

Marlitt, E. Das Haideprinzesschen. Roman. 2 Bände. Leipzig: Keil.

Rossi, A. I Pittori di Foligno . . . testimonianze autentiche. Torino: Loescher.

Rossi, G. B. di. Musaici cristiani e Saggi dei Pavimenti delle Chiese di Roma anteriori al secolo xv. Parts 1 and 2. Roma: Spithoever.

Santangelo, G. Saggio sulla Vita e sulle Opere di N. Macchiavelli. Napoli: Detken.

Sophokles Elektra übersetzt u. ästhetisch erläutert v. A. Westermayer. Erlangen: Deichert.

Zschokke, E. Der heilige Graal. Romantisches Gedicht. Aarau: Sauerländer.

Theology.

History of Jesus. [*Geschichte Jesu von Nazara* in ihrer Verkettung mit dem Gesammtleben seines Volkes, frei untersucht und ausführlich erzählt von Dr. Theodor Keim. Vol. II. Part II.: Das galiläische Lehrjahr. 1871. Vol. III.: Parts I. and II.: Das jerusalemische Todesostern. 1871 and 1872.] Zürich: Orell, Füssli, and Co.

[Third Notice.]

The completion of a work of such magnitude and importance as Dr. Keim's is a matter for most sincere congratulation. The courage to plan and undertake such a work is not often found; and when it is, the author will feel it as part at least of his reward that he should have been permitted to bring it to so happy a conclusion. Let critics differ as they may upon the value either of particular conclusions or of the total result of Dr. Keim's work, there can be no doubt that he has added a new classic to the library of theology.

There are many who would say that the task which Dr. Keim has set for himself was condemned to failure from the outset. They would content themselves with repeating a sentence quoted by Mr. M. Arnold *à propos* of recent attempts to recast the Gospel history generally: "Quiconque s'imagine la pouvoir mieux écrire ne l'entend pas." But Dr. Keim has virtually escaped the danger of such an attempt. When we say that his book amounts (at a rough guess) to about fifteen times the bulk of the Gospels themselves, we think we shall have said enough to show that it is not intended to enter into competition with them as a biography. It is rather an introduction, on the largest and most complete scale, to the study of the Gospels, or an encyclopaedia, biographically arranged, of the Gospel history.

Regarding it in this light, and looking back over the whole work as now complete, we may say that it contains: (i.) a criticism of the documents; (ii.) a criticism of the history; (iii.) a construction of dogma or philosophy founded upon these.

(i.) It is chiefly into the second and third of these parts that Dr. Keim has thrown his strength. And though the ability which characterizes the whole work comes out also in the preliminary treatment of the documents, still we think that this is the part in which Dr. Keim will be thought to have been comparatively least successful. His scepticism as to the result of previous enquiries perhaps may be justified; but the documentary criticism of the Gospels is too large a subject, and needs too special and detailed investigation of its own, to be incorporated merely as a branch in a book of historical criticism. We have said enough, perhaps, upon this part of the work already (*Academy*, vol. ii. p. 352.)

(ii.) But much of the peculiar thoroughness of Dr. Keim's treatment consists in this, that he does not let himself be carried away by any single hypothesis. He regards each single question as it arises from every possible point of view; and if we think there is traceable a certain prejudice arising from an undue preference for the first Gospel, and an undue suspicion of the fourth, still this will be found to detract less from the value of the enquiry than might be supposed. The statements of the fourth Gospel are discussed as ably and as fully as those of the Synoptists; and even where we feel disposed to differ from Dr. Keim, it is impossible to deny that he has fairly argued his case. Indeed, it is but justice to say that from first to last nothing of importance has been omitted.

Dr. Keim pursues, in regard to miracles, the principles which had been laid down in the earlier part of his work (see *Academy*, vol. ii. p. 353). The earlier storm at sea seems to him to contain a kernel of historical fact, with

colours added from Psalms cvi. and cvii. and the passage of the Red Sea. The second storm, with the walking upon the water, is more decidedly unhistorical, though it has perhaps grown out of some actual saying, and typifies the helplessness and deliverance of the Church. The record of the miracle which precedes this last (the feeding of the 5000) has its ground in a distorted version of the precept, "Give to him that asketh of thee." The multitude is fed with spiritual food, and in their enthusiasm the pilgrims on their way to the Passover divide their own scanty provision among their hungry neighbours. There is also, Dr. Keim thinks, an admixture of Old Testament elements derived from the feeding of Elijah (2 Kings iv. 42) and that of the Israelites in the wilderness (Ex. xvi. 1, ff.). The raising of the widow's son at Nain is a legendary construction on the model of Elijah's miracle upon the son of the widow of Sarepta. The miracle at Bethany is explained partly out of the exigencies of the Johannean narrative, partly as an ideal or allegorical representation of the work to which it forms the concluding scene.

It will not be expected that we should enter into the discussion of these theories. This remark, however, we must make, that in spite of the care and elaboration which are bestowed upon them they rest in secondary degree upon documentary criticism. Dr. Keim does not seem to assign a constant value to his documents. Why, for instance, should the history of the issue of blood and of Jairus' daughter be accepted almost as they stand, while that of the feeding of the 5000 and of the storm at sea is resolved practically into a myth? Obviously the reason is *à priori:* because the one admits of being rationalised, and the other does not. Yet both are clearly from the same document—a document to which Dr. Keim himself allows a high value (vol. ii. pp. 490, 495). And the great difficulty, as it seems to us, in the way of any attempt at the wholesale elimination of the miraculous from the Gospels is, that a different and unequal measure has to be applied to portions of the record that possess the same documentary value. The record of the miracles derives a reflected authority from that of the discourses; and the originality and accuracy of the discourses are vouched for, not only by their form, but also by a singular convergence and unity of testimony running through the whole of the documents and traditions embodied in our present Gospels. It will be noticed that one at least of the instances which we took as crucial in our earlier article (the Syro-Phoenician woman; see *Academy*, vol. ii. p. 353) is treated by Dr. Keim with singularly disproportionate brevity; as a miracle, indeed, it is hardly treated at all. Dr. Keim himself takes, as a crucial instance, the healing of the Gadarene demoniacs. And we may remark by the way that the passage in which this is done (vol. ii. p. 464) would have lost nothing in force if it had been expressed with a little more delicacy. It is one of the blots upon this noble work that it errs too often on the side of a coarse and ungainly rhetoric, which is apt to repel the reader from doing full justice to its real ability, and which is particularly unfortunate in dealing with such a subject.

Two characteristic instances of Dr. Keim's mode of treatment occur in the later portion of the work. As to the day and date of the Crucifixion, Dr. Keim, as we may suppose, naturally follows the Synoptists. He fixes upon Nisan 15th (= with a little straining of the astronomical premises April 15th), in the year 36. This is not however done by ignoring the difficulties which stand in the way. Dr. Keim treats very fairly and with great archaeological knowledge the argument (which is now, however, seldom pressed) from the improbability of a criminal process and execution taking place on the "great day of the feast." He thinks that there was a kind of "stormy zealot rising" in which the forms of law were set at nought, and that the Crucifixion itself had in the eyes of its authors a certain expiatory religious character. He admits the attractiveness and seeming advantages of the Johannean narrative, but he refuses to quit the ground which seems to be established by the coincidence of the forms of the Last Supper with those of the Paschal Meal. Perhaps he is right in so doing, but this does not remove, it only suppresses, the strong case which had just been admitted in favour of St. John; and the question may fairly be raised whether our ignorance does not leave room for a reconciliation of both narratives which should not be inconsistent with the substantial authenticity of each of them separately. With regard to the date 35 A.D., Dr. Keim reiterates the arguments of his introductory volume, but we do not think adds very much to their strength. He rests his case mainly on the necessity for the "closest possible juxtaposition of the death of John the Baptist and the defeat of Herod by Aretas" (vol. iii. p. 498, *n.* 4). But the assumption, that in order to be regarded as a "judgment" this disaster must necessarily have happened immediately after the crime, has no great force in itself, and appears to be contradicted by Old Testament examples: *e.g.* 1 Kings xxi. 19, xxii. 38, compared with xxii. 1 (the death of Ahab), 2 Kings ix. 36 (that of Jezebel), 2 Sam. xvi. 21 (the punishment of David). We have called attention to the arguments which seem to make for a different date. It is to us incredible that John ii. 20 should be merely a calculation based upon Luke iii. 1 (vol. iii. p. 497, *n.* 2).

The questions arising out of the narratives of the Resurrection are treated by Dr. Keim at length. He tries—and succeeds to an extent which speaks well for his honesty of purpose—to hold the balance between the traditional or literal theory and that which resolves the several appearances into "visions." The old Rationalistic alternative of "simulated death" is mentioned only to be dismissed. Taking his stand not so much upon the four Gospels as upon 1 Cor. x., Dr. Keim (like Baur) considers it proved that the Resurrection, if not a fact, was at least believed to be one by the disciples. But the hypothesis of "visions" he cannot accept without reserve. He points to the difference between the earlier appearances and the later, such as those to St. Paul. In the former there is a strange simplicity and seriousness, a certain severity of character, which seem to mark them off from the ordinary products of religious excitement. The difficulty in regard to them, Dr. Keim thinks, is less that they should begin than that they should cease as and when they did. The visions of Montanism lasted over a period of fifty years, and ceased gradually, not abruptly like those in the Gospels. But the most important point is that the vision-hypothesis seems inadequate to account for the great mental and moral revolution wrought in the disciples. It moves in a vicious circle. The revulsion of feeling might perhaps account for the visions; but then how are we to account for the revulsion of feeling? If we are to follow the documents—and if we are not to follow them, how did they come to contain anything so paradoxical?—the disciples were not only not prepared for the Resurrection, but were surprised by it and incredulous of it. Dr. Keim accordingly leaves a certain margin beyond the vision-hypothesis, to be filled perhaps by direct divine agency or by real objective spiritual impressions materialised in the reports into the grosser shape of visions. The vision-hypothesis would make the whole subjective. Dr. Keim would go so far in the direction of the traditional view as to say that there was an objective supernatural cause at work as well; but he regards this cause as incorporeal, and working only in the domain of spirit.

Here the orthodox and the critical theory almost join hands; because it is inherent in the circumstances of the case that the narrative should be coloured by subjective beliefs and impressions, and on the other hand, when once a supernatural element is admitted, the extent of it will remain an unknown quantity.

(iii.) The last forty-six pages of the book are taken up with a dogmatic estimate of Christianity and its Author. Dr. Keim accepts fully the view of those who from Goethe and Hegel to Strauss have seen in Christianity the "absolute" or perfect religion. He speaks eloquently of the perfect balance which it maintains "between philosophy and popularity, between religion and morality, between meek submissiveness and the pride of freedom, between the ideal and the real, between this world and the next, between the inward and the outward (*Innerlichkeit und Gestaltungstrieb*—an untranslatable but expressive phrase), between 'modest stillness' and heroic courage, nay, between the tenderest conservatism and the boldest plans of world-wide reform."

And yet Dr. Keim regards the Personality from which this religion took its rise as strictly human. His premises compel him to do so. And thus he is led to reject, not only the greater half of the Pauline and Johannean theology, but also to cut a line through the Synoptic Gospels themselves, which we venture to say would not be given by an investigation that was purely historical. In the last resort the principles to which Dr. Keim appeals are *à priori*. And this is the one part of his method to which we feel compelled to take exception. If the supernatural is excluded on *à priori* grounds, *i.e.* by philosophy, we may expect that it will also be excluded on *à posteriori* grounds, *i.e.* by documentary and critical investigation. But it is unfair to beg the question and make use of the assumption to determine the direction that such documentary and critical investigation shall take. The two methods should be kept distinct; and we should be quite sure of the result obtained by one or other of them before we allow it to dictate laws out of its proper sphere. Such an abstraction of mind however is difficult—perhaps unattainable—and in default of it we must needs welcome an *ex parte* statement so able, so honest, and so thorough as this of Dr. Keim's, and trust to the collision of opposite opinions to get at the truth as a sort of resultant between them.

We are very glad to see that the *Geschichte Jesu von Nazara* is down for translation in the new series announced by Messrs. Williams and Norgate. We would venture to suggest to the translator that the style will bear to be toned down a degree or two in English. If it has not the wonderful evanescent grace of M. Renan, or the polished incisiveness and dexterity of Sir R. Hanson, it is still bold, vigorous, picturesque, clear, and very varied in expression. The translator has a difficult and laborious task before him, and we heartily wish him success. W. Sanday.

The Desert of the Exodus: Journeys on Foot in the Wilderness of the Forty Years' Wanderings, undertaken in connection with the Ordnance Survey of Sinai and the Palestine Exploration Fund. By E. H. Palmer, M.A., Fellow of St. John's College, Cambridge. With maps and numerous illustrations, &c. Two parts. Cambridge and London: 1871.

Mr. Palmer gives us here a description of two expeditions, which occupied the winters of 1868–69 and 1869–70. Both were "journeys on foot," and accompanied with the privations and perils incident to travel in the desert, and which only a thirst for knowledge could render tolerable. Their object, in short, was to ascertain whether the Bible account of the route of the Israelites was in harmony with geographical facts and the nomenclature still in use among the Arabs. Mr. Palmer's special qualifications were familiarity with the spoken Arabic, and a singularly circumspect method of eliciting correct information from the natives.

The most important results are that the route of the Israelites must have lain through Wady Feirân to Sinai; that the scene of the legislation is not Mount Serbâl (this is quite certain from the description of its site and environs), but the more elevated ridge whose southern part is called Jebel Músa; further, that the important station Haṣeroth can still be recognised in the present 'Ain Hudherah, in the Sinai mountains; and, lastly, the site of the much tried Kadesh is pointed out with absolute certainty in 'Ain Gadish (so spoken and written, instead of Qadish or Ḳadish).

The difficult station Rephidim, the last before the wilderness of Sinai, is placed by Mr. Palmer, with Lepsius, in Wady Feirân. This view must be rejected, in spite of the Arabic tradition brought to light in the present work. For according to Ex. xvii. 6, the water called for by the people in Rephidim was smitten by Moses from the rock "there . . . . in Horeb." But anyone who, like Mr. Palmer, rejects Lepsius' view, that Horeb-Sinai is in Serbal near Wady Feirân, cannot, without unduly extending the name of Horeb, transfer the position of Rephidim to that region. Mr. Palmer indicates as the traditionary spot the rock *Hesy el Khattátin*, which he neither translates nor writes in Arabic, so that only the first word is recognisable. According to Freytag's lexicon, *hesy* is "puteus in arena effossus, cujus fundus haud remotus est"; according to that of Lane, "water which the earth imbibes, where sand is above it," not a very suitable epithet for a rock-spring, much less for the rock itself. Mr. Palmer's answer to the other objection, that from Rephidim to the wilderness of Sinai is only one day's journey according to the Bible, whereas the real distance is much greater, is that the night may be supposed to have been added to the day's journey, according to the modern practice, and that Moses, when arrived on the pass between both valleys, may have looked out for a place to encamp in. The Bible, however, simply says, "and they came to the desert of Sinai" (Ex. xix. 2). One of the principal reasons for throwing the plain of Rephidim so far back is that, in opposition to the traditionary view, the scene of the legislation is placed on the front or northern point of the ridge of Horeb-Sinai, *i.e.* on the rock Sufsafeh. (This spot was also selected by Robinson and Lepsius on purely topographical grounds, because the plain er-Raha, the largest in the district, stretches immediately before it.) If, however, the general tradition be correct, the gathering-places of the people (*i.e.* a large part of the men, who alone belonged to the "congregation," and the elders of the people) must have been in the plain Seba'iyeh, which rises like an amphitheatre to the south of Jebel Músa.

Mr. Palmer's principal objection to this view is (part i. chap. vii.) that (Ex. xix. 23) bounds were ordered to be set round the mount, and he observes that it would be "simply impossible" to do this, "or even to come close up to the foot of Jebel Músa from Wady Seba'iyeh." But, in the first place, the phrase "round about" in Ex. xix. 12 is confined to the people; the mountain is simply to be bounded, verse 23 (see Hebrew), which would be effected by a partition on the side facing the people. And in the second, the implied possibility of touching the mount (Ex. xix. 12) corresponds to the observations of many other travellers, since Jebel Músa descends by a precipice about 2000 feet deep into the plain of Seba'iyeh, as Mr. Palmer in part i. chap. vi. himself admits. Besides, we are not to suppose an enclosure of stakes, for there is no wood, nor ever was there any, in the upper part of Sinai, but a line of stones between the

people and the mount, not insurmountable by nature, but by the threatened penalty of death for disobedience (Ex. xix. 12). Mr. Palmer, too, has recognised that the plain before the mount could only have embraced a part of the people with the elders, the remainder—old men, women, and children—encamping in the wadys of the neighbourhood. But in that case the number of those who found room is not important to the argument, and the claims of Jebel Músa are supported by its considerably greater height, and the universality of the Mohammedan as well as of the long Christian tradition. And it is not clear why this well-attested tradition of centuries should be sacrificed to the beautiful prospect from Sufsafeh and the belief of the Arabs, first discovered by Mr. Palmer, that the rock at Horeb out of which Moses brought water in Rephidim still exists in Wady Feirân. We ought also to consider the great difficulty of ascending the rock Sufsafeh, whereas there are several easier paths leading up Jebel Músa; especially as Moses was then at least eighty years old, and climbed the mount several times in the day.

The identification of Haṣeroth, the second station of the Israelites between Sinai and Haran, with 'Ain Hudherah, found by Mr. Palmer north-east of Sinai, is new and, I think, probable, as name and distance are about the same as in the book of Numbers. A new conjecture, which deserves further examination, is also proposed for the first station, Kibroth hattaabah ("graves of lust"). Mr. Palmer proposes to identify it with the old camp-ground now called Erweiz el-Ebeirig (the name is not explained, nor yet written in Arabic). This spot is said to have many graves, and to be a day's journey to the rear of 'Ain Hudherah; how far it is from Sinai is not stated—according to Num. x. 33 there were three days' journeys, which is perhaps too much. Of the following stations in Num. xxxiii., Rissah (verse 22), Haradah (verse 24), and Tahath (verse 26) are identified, the latter with a place Ettehî. The comparison of the Biblical Haradah (written with *khêth*) with Jebel 'Aradeh is improbable, partly because the first sound of this name is quite different (it is an 'Ain), partly because Jebel 'Aradeh is not far enough to the north of Hudherah to allow space for the six Biblical stations between those two places.

It is to be regretted that the travellers did not take the north-east direction towards Eziongeber (Akabah), on leaving Haṣeroth and the southern edge of the wilderness of Paran. For this was the route of the Israelites (Num. xiii. 1, xxxiii. 18, foll.), who are recorded to have made ten stations between Haradah and Eziongeber, many of which, as Mr. Palmer himself conjectures, might still be traced. Instead of this, the travellers turned straight northwards through the whole south part of et-Tíh, passing by the fortress Nakhl (scarcely a reminiscence of the first part of Nakhal-Miṣraim, although the place lies by the Wady el-'Arish) in the direction of Kadesh.

It is one great merit of Mr. Palmer to have fixed the disputed position of Kadesh or Kadesh Barnea, the most southern frontier town of Palestine. It is the 'Ain Kadesh (Mr. Palmer gives as the present pronunciation 'Ain Gadish) mentioned, but not visited, by Rowlands, and situated a little to the south of the well-known Guderat (Kudeirát). The town of Kadesh must have been near a fountain, for the name in the Old Testament is interchanged with 'En-mishpat ("fountain of judgment"). Water enough is shown to exist at 'Ain Gadish, and a large plain bounded by fine mountains, viz. the desert of Kadesh, of which a beautiful view is given. The new name Gadish is phonetically identical with the old, since the Arabs of Egypt and, according to the present work, those of Sinai and Arabia Petraea, have replaced the hardest *k* of the Semites (Heb. *qof*) by a guttural *g*, so that *shaqq* or *shakk* becomes *shagg* ("crevice," "cleft"); *kusúr*, *gusúr* ("castle"); *kaṭaf*, *gaṭaf* (a herb used for fodder), and *nakb*, *nagb* ("a mountain-pass").

Among the cities of the south, Ṣephát (the Zephath of the English Bible does not represent the Hebrew) was placed by Robinson at the pass of Ṣafáh. If this is thought to lie too much to the east, it must be remembered that the name exactly agrees with that in the Bible, while the modern Sebaita (Rowland's Sepâta), adopted by Mr. Palmer, has much too distant a resemblance to it.* Rehoboth had been already identified with Ruhaibe. But the combination of Shutneh with Siṭnah is new and satisfactory.

Mr. Palmer found the ruins of Beer-sheba' (Arabic Bîr es-Seb'a) in such a dilapidated state that it was impossible to form an idea even of the houses of the town, much less of its streets and walls. Like Robinson, he saw two wells, besides a third which had fallen into decay. Traces were also pointed out of four others, which are most likely productions of Arab fancy, for the existence of seven wells was long ago inferred from the second part of the Arabic form of the name (*seb'a* = seven). The meaning "oath," however, (Gen. xxi. 31; LXX. φρέαρ ὁρκισμοῦ), though antiquated in the literary Hebrew, and of course unknown to the Arabs, is sufficiently established by the two Hebrew names Elî-sheba' and Bath-sheba' (not "daughter of seven," but "daughter of the oath"), and puts out of court the vague Arab tradition related by Mr. Palmer.

Eshkol, whence the Hebrew spies brought clusters of grapes, pomegranates, and figs to Kadesh, has generally been placed in the immediate neighbourhood of Hebron, on account of the vineyards which still flourish there. Mr. Palmer, however, places it much farther south, for the excellent reason that the fruits, particularly the figs, could not have been brought such a great distance fresh and without injury. The name indeed has not been discovered, but its meaning (Nakhal Eshkol = "wady of grape clusters") was of some use as an indication. Mr. Palmer places it not far to the north of Kadesh in Wady Hanein, which, after passing by el-Birein, meets Wady Abyadh, which further on unites with Wady el-'Arish. It is true that agriculture is at an end there, but there are still traces of its former existence, particularly of the cultivation of the vine. These consist of heaps or walls of stone extending in parallel rows, between which vines must have been once trained, for they bear the name *tuleilát el-'enab* ("hills of grape-clusters") and at a short distance off, near the ruins of 'Abdeh, which will be mentioned directly, they are called *rujúm el-kurúm* ("stone-heaps of the vineyards").

On their return journey from Hebron, after a short visit to Jerusalem, the travellers took a more easterly direction through the mountains of Judah by Tell 'Arád and Elmilh to the south. They traversed the mountainous district of Rakhmeh, in which Mr. Palmer not unreasonably suspects the נֶגֶב הַיְרַחְמְאֵלִי (1 Sam. xxvii. 10), comparing the rejection of the Ye- in the modern Rîha for Yeriho; to which may be added Zerîn (for Zerîl) for the ancient Yizreel, and in Hebrew Bil'am and Yible'am, Qabṣeel and Yeqabṣeel, Conyahu and Yechonyahu. In the same connection, a thorough account is given of the various parts of the Negeb or "south country" which occur in the Old Testament.

The road to Edom, described in one of the last sections of the book, led through the mountainous country of the

* Cf. Mr. Palmer's letter in the *Athenaeum*, June 17, 1871, where he observes that, in his opinion, "the two words are as identical as they can well be; the Hebrew (Judges i. 17) being צְפַת, and the Arabic, according to the pronunciation of the Teyâhah and 'Azâzimeh Bedawín, being صباتا."—Ed.

'Azázimeh Arabs, south-east of Beer-sheba' and north-east of Kadesh, a region which is now for the first time explored and fully described. The only material results, however, for the geography of the Holy Land are that an old road from Gaza to Petra and 'Akabah led through those mountains, and that the Roman station of Eboda (according to the Tabula Peutingeriana) has been shown with certainty in the ruins of the modern 'Abdeh, on a hill at the entrance of Wady Marrah, and another called Gypsaria in Wady Gamr, near the valley of el-'Arabah. Mr. Palmer rightly considers the oldest inhabitants of this region to be the Canaanitish 'Avím, who, according to Deut. ii. 23, with which Josh. xiii. 3 agrees, lived in *haṣerîm*, *i. e.* "encampments," or "stone-huts." A number of stone-walls, which served for encampments, were found not only in these parts, but in the more southerly deserts inhabited by the Amalekites.

Passing over the description of Edom and Moab (including the pillar of salt supposed by the Arabs to be Lot's wife), I would particularise Mr. Palmer's account of the primitive stone-buildings found in the deserts of the south as far as Sinai. These consist of circular houses, with a vaulted roof, built of large rough stones; they served partly for dwellings, and partly no doubt for the graves of a pastoral race, which may of course have been Amalekitish, but may also have belonged to an earlier prehistoric population. Mr. Palmer compares similar buildings in other very different parts of the world.

In the description of Sinai, a full discussion is given of numerous remains of the historic period, *e. g.* of the Egyptian copper and turquoise mines, according to Egyptian inscriptions, the date of which can be determined. The so-called Sinaitic inscriptions in the Wady Mokatteb and elsewhere, many of which Mr. Palmer copied, are ascribed to a heathen and commercial people. He attaches little importance to them, but it is to be hoped that he will publish his copies and interpretations, since those of Beer and Tuch may require to be supplemented and corrected. One would also have been glad to see the publication of the sepulchral inscriptions from Petra. FR. DIETRICH.

Intelligence.

Dr. Ginsburg's report on his recent expedition to Moab, read before the geographical section of the British Association, has just reached us through the kindness of the author. It will be in the recollection of most readers that Dr. Ginsburg and his fellow-travellers "fell among thieves," who extorted from them a large part of the sum generously presented by the Association. A scarcely inferior misfortune was the sudden departure of Mr. Klein, the missionary, who was indispensable to the travellers from his knowledge of the language and ways of the Bedouins. But there are points of much interest to Biblical students, which must not be passed over, though we have not space to discuss the correctness of Dr. Ginsburg's conclusions.—In Num. xxi. 14, Vahab in Suphah (Saphia) and the brooks of Arnon are stated to be the southern and northern boundaries of Moab respectively.—From the name of the Wady Korcha (a short distance from the ruins of Um-el-Hashib) it is inferred that Korcha in the inscription of Mesha (lines 3 and 21) is the name of a town. Dr. Ginsburg is convinced that the place where the famous Moabite Stone was found is not the site of the ancient Dibon, but of Korcha. Mesha himself asserts that he erected the pillar at Korcha, and as it was too heavy to have been brought from another place without injury to the inscription, the spot where it was found must be the site of its original erection. There are several old ruins in the neighbourhood, one of which may be Dibon. The Dibân of the Arabs has been produced to order.—Dr. Ginsburg thinks there is no reason for identifying Kerak with Kir Moab or Kir Hareseth.—A place called Mochra, of which extensive ruins remain, is identical with the Mochrath of the inscription of Mesha (line 14).—Ar Moab, which was in the extreme north, is not the same as Rabba, which is almost in the centre of southern Moab.—In conclusion, Dr. Ginsburg observes that the most remarkable part of his experience is the ignorance of the Bedouins as to the nomenclature of the region between Dibân and the Jordan. The reason of this simply is that the law of supply and demand, which has produced such great results in Palestine, has not yet been called into operation in Moab, at least not to the south of the Arnon. To explore the country properly, two or three scholars should go and live on the spot quietly for a few months, without putting any leading questions to the natives, and devote themselves to securing those lapidary records which alone will fix the names of the places wherein they have been buried.

M. d'Eichthal, well known as a quondam social reformer, and also by an unfinished critical work, *Les Évangiles*, has directed his attention to the traditions of the Exodus recorded in the Pentateuch and Manetho. The first instalment of his *Annales mosaïques* has just appeared; it is characterized by Ewald in the *Göttingische gelehrte Anzeigen* (October 23) as combining "German erudition with French elegance," and presenting "extremely sound views and tendencies." It is hard to reconcile the latter statement with the view of the author that the Israelites sojourned 950 years in Egypt.

Mr. Crowfoot has supplemented his useful labours on the Curetonian Syriac fragments by some observations on the relation which they bear to the textual criticism of the Gospels (sold by Williams and Norgate). He still refers for the most part to the Greek text of Scholz, but now and then compares that of Tischendorf. In the introduction he states his grounds for holding that the Curetonian recension was that used by the Syrian church in the third and probably in the second century, and that in the revised Peshito we have an Arianising revision of the date of the fourth century.

Professor Mösinger, of Salzburg, has brought out a brief "supplement" to Cureton's *Corpus Ignatianum* (by Wagner, Innsbruck). The contribution of most importance is the Syriac translation of the Martyrium of St. Ignatius, and of the Epistle to the Romans, only fragments of which were printed by Cureton, from a copy of an old Nestorian MS.

Everyone will rejoice to learn that Dr. Tregelles' great edition of the Greek text of the New Testament is now complete. The Apocalypse has just been edited by Mr. B. W. Newton, formerly Fellow of Exeter College, Oxford, in conformity with Dr. Tregelles' manuscript. The Prolegomena are now in preparation.

Mr. Elzas, a Jewish scholar, has brought out a translation of the Book of Job, with critical and explanatory notes (to be had of Trübner and Co.). Excellent as it is in design, it is not to be compared in execution with the riper scholarship of Mr. Rodwell's version. The latter work, however, is unprovided with a commentary, while Mr. Elzas has managed to compress much useful information, and once and again some acute criticism, into his footnotes. Thus he surmises, independently of Dr. Grätz (*Monatsschrift*, June), that the 28th and part of the 27th chapter form the missing third reply of Zophar. There are also useful references to Jewish interpreters. It is a pity that these are interspersed with notices of second-rate modern critics; a pity too that Mr. Elzas has expressed such an uncritical opinion on the date and authorship of the poem, which he supposes to have been translated by Moses from the Arabic!

Contents of the Journals.

British Quarterly, October.—The Authorship of the Fourth Gospel. [Discusses most of the usual points both of external and internal evidence sensibly and with knowledge, but strangely omits to notice the peculiarities of the Johannean discourses. Renews, without any novelty of argument, the now generally abandoned attempt to show that the fourth Evangelist adopted the Synoptic date for the Crucifixion.]

Theological Review, October.—Prof. Russell Martineau takes occasion from Dr. Kalisch's recent work to review the argument for the late origin of the Levitical legislation. The approval extended to it by the able writer of Ewald's *History of Israel* is significant.

Revue Critique, September 7.—M. St. Guyard reviews a recent brochure in Russian by M. Harkawy on the primitive abode of the Semites, Aryans, and Hamites. [M. Harkawy, who writes from an "orthodox" point of view, identifies Shem, Ham, and Japheth with the mountain-ranges called Sim, Amanus, and Niphates respectively. He observes that Amanus occurs under the form Khamanu in the cuneiform inscriptions. Sim is attested by Moses of Khorene (i. 6, &c.); Niphates is the Armenian Nepat. Each of these branches of the Taurus forms the boundary of one of the groups of nations catalogued in Gen. x.]

Jahrbücher für deutsche Theologie, vol. xvii. No. 3.—Palmer: On the Explanation of Prophecy with reference to Events and Conditions of the Present.—Schmidt: The Resurrection of the Lord, and its Significance for His Person and His Work, with special reference to Keim's *Life of Jesus*.—Heman: Schleiermacher's Idea of the *summum bonum* and the Moral Problem.—Weizsäcker: The Mode of Papal Election from 1059 to 1130.—Notices: J. G. Müller's *The Semites*, &c.; rev. by Diestel. [Attempt to show that the Semites were originally Indo-Germans, whose language was greatly modified by contact with

Hamitic races; while customs and religious peculiarities were preserved in much greater purity.]—Kelle's translation of *Otfried*, and Grein's of the *Heliand*, and other documentary works of historical theology; rev. by Wagenmann.—Jul. Müller's *Dissertations*; rev. by Herrlinger; &c.

Theologisches Literaturblatt (Roman Catholic), September 23.—Kraus: On the Mock-Crucifix of the Palatine, and a newly discovered Graffito; rev. by Reiser. [Disposes effectually of the hypothesis that the ass on the graffito is a symbol of Typhon; but proposes a still stranger one—that there were Christians in the fourth and fifth centuries who were given to *onolatry*. He refers, *inter alia*, to Cod. Justinian. i. tit. ix. 12.]——October 7.—Lipsius, Hilgenfeld, and others, on *Peter in Rome;* rev. by Kraus. [Urges the argument from de Rossi's researches in the catacombs against Lipsius' view.]——October 21.—Ginzel's works on Church History; by Schwab.—History of the Reformation in Holland; Hugo Grotius' return to Catholicism; &c.——November 4.—Works on the Pastoral Epistles; rev. by Langen. [Dr. Langen thinks that the un-Pauline peculiarities indicate a divided editorship.]—Baumstark's *Christian Apologetics*, vol. i.; by Dippel. [The book shows philosophical culture, and a just appreciation of the questions at issue. It treats of man (1) as an intellectual, (2) as an individual, (3) as a religious being.

New Publications.

CYRIL (of Alexandria). The Three Epistles. Revised Text, with English Translation, by P. E. Pusey, M.A. Oxford and London: Parker.

HAUSRATH, A. Der Apostel Paulus. 2. vermehrte Auflage. Heidelberg: Bassermann.

LECHLER, G. v. Johann Wiclif und die Urgeschichte der Reformation. Leipzig.

OVERBECK, F. Ueber den pseudojustin. Brief an Diognet. Programm. Basel.

TREGELLES, S. P. Greek New Testament. Part VI.: Revelation. [To Subscribers.]

TULLOCH, J. Rational Theology in England in the Seventeenth Century. 2 vols. Blackwood.

WEISS, B. Lehrbuch der biblischen Theologie des Neuen Testamentes. 2. vollständig umgearbeitete Auflage. Berlin: Hertz.

Philosophy and Physical Science.

Aristotle. By George Grote. Edited by Alexander Bain, LL.D., and G. Croom Robertson, M.A. Two Volumes. Murray.

IMMEDIATELY after the publication of *Plato and the other Companions of Sokrates*, Mr. Grote turned with characteristic energy to the still more serious task of treating Aristotle in the same large and comprehensive manner. To the sorrow of all who value a high and noble nature, death overtook him in the autumn of last year, before half his work had been accomplished. These volumes, accordingly, are but a fragment; and we miss much to which we had looked forward. We are left to imagine the firm hand with which he would have sketched the theories of the *Politics* and *Ethics;* the interesting light in which he would have known how to exhibit the *Rhetoric;* the excellent results that were to be expected, in another department of the Aristotelian encyclopaedia, from the patient and accomplished author of the monograph on the *Timaeus*. And our regrets for what we have not are modified by a very limited satisfaction with what we have. Although the book traverses well-worn ground, it cannot be said to popularise an erudite subject, nor yet does it present any great or definite contribution to knowledge. We must bear in mind, too, that it suffers from appearing as a posthumous work, incomplete and unrevised by the author himself; and that a severe sense of editorial duty seems to have deterred Mr. Grote's literary executors from amending it with the freedom requisite to make it worthy of so eminent a name; the consequence being that it is disfigured by most perplexing modes of expression and by the retention, not only of material defects, but also, in some instances,* of the obvious slips and oversights unavoidable in a first draft.

The introductory "Life of Aristotle" is from the nature of the case the most successful, as well as the most readable, part of the book. It gives us a vigorous picture of Aristotle as a man, living at a moment the like of which the world has not seen since, and personally influenced by not a few of the great social and political causes then in operation. Here Mr. Grote's power of seizing the historical situation comes into play with admirable effect. Take, for example, his remarks on the epithet "half-Greek," more than once applied to Aristotle in recent times. After reminding us that in point of fact Aristotle's ancestry was on both sides Hellenic, that Stageira was a Greek colony, and that the epithet is not literally accurate unless we choose to regard all the Hellenic colonies as half-Greek, Mr. Grote proceeds:—

> "But it is true of him, in the same metaphorical sense in which it is true of Phokion. Aristotle was semi-Macedonian in his sympathies. He had no attachment to Hellas as an organized system autonomous, self-acting, with an Hellenic city as president: which attachment would have been considered, by Perikles, Archidamus, and Epameinondas, as one among the constituents indispensable to Hellenic patriotism."
> (I. p. 14.)

This is well and opportunely said. It has a worth, even if W. von Humboldt had another order of facts in view in the observations which have suggested the epithet. Humboldt, indeed, we must remember, was speaking of the *Poetics*, and he found it hard to imagine how a Greek of that age could have conceived such a book; rightly or wrongly, he thought he saw something "un-Greek" in the dry light of Aristotle's intellect, in his austere and entire surrender to the pursuit of *wesentliche und nüchterne Wahrheit*. Language such as this, it is clear, was not primarily intended to be tried by an ethnological or political standard of truth.

A chapter on the *Canon* gives us a preliminary argument in favour of the general authenticity of our extant Aristotelian literature. Among the forty-seven works in the printed editions, Mr. Grote believes there are "about forty treatises of authenticity not open to any reasonable suspicion"—a statement which (whether we agree with the numerical estimate or not) implies a noteworthy admission, when we reflect that it comes from one so conservative as Mr. Grote was in all matters of criticism. The intrusion of the seven *pseudepigrapha* is plausibly explained by the hypothesis that the library of Apellicon (on which the first editors are said to have worked) was composite, and that the same was the case with the collection of Neleus, incorporated in that of Apellicon: Andronicus and his fellow-labourers, therefore, had to follow their own judgment in sifting a heterogeneous mass of documents, and distinguishing the works of Aristotle from those of Theophrastus, Eudemus, and others. Mr. Grote, it should be added, accepts the Scepsis story with all its details. We shall not just now express an opinion as to the credibility of Strabo's narrative, but we may as well confess at once to some slight sceptical prejudice whenever we hear of literature hidden away in cellars and emerging into daylight at the time when most wanted. One point in the story, however, involves some grave historical considerations. We are told that the intellectual barrenness of the Peripatetic School after the death of Theophrastus was owing to a removal (to Scepsis) of the more strictly philosophical writings of the founder: during this period of darkness the learned had little more than his "exoteric" works; they knew him "chiefly from the dialogues, the matters [?] of history and legend, some zoological books, and the

* Here are two from the first volume:—P. 30, "Proklus *adv.* Joann. Philoponum;" p. 28, "Four marble animal figures" (as a translation of the Greek given in the notes, ζῷα λίθινα τετραπήχη).

problems"—"it is certain that neither Cicero nor the great Alexandrine *literati* anterior to or contemporary with him knew Aristotle from most of the works which we now possess" (i. p. 57). Setting aside the question how Mr. Grote gets at the above list, and whether the writings specified are to be considered identical with what Strabo understood by the term "exoteric," we cannot but note the singular discrepancy between the present estimate of Cicero's worth as an authority and that so forcibly expressed by Mommsen. Taken at his best, however, Cicero can hardly be deemed the measure of the highest attainments of his time. To infer from him that certain books were difficult of access in his day is like arguing that Bacon must have been as good as forgotten when Lord Macaulay gave his famous Essay to an admiring public; or that Kant is never read out of Germany because some English thinkers exhibit no very intimate acquaintance with his masterpiece. Under any circumstances, Mr. Grote puts his case too strongly. Cicero confessedly knew the outside of the *Topics* and *Nicomachean Ethics*—the latter book being one of which his authorities manifestly possessed a knowledge far from superficial: Philodemus, again, was a reader of the *Economics;* and the older writer from whom Horace borrows in the *Ars Poetica* seems to have been tolerably familiar with the *Poetics*. Here, then, are some highly important Aristotelian works which, notwithstanding the paucity of data, can be *shown* to have been in the hands of Cicero's contemporaries or predecessors; and if they had so much, it is a legitimate induction to say they must have had more also; but it is not equally legitimate to make our ignorance a warrant for definite assertions as to what they had not. The language about the "great Alexandrine *literati*" is unfortunate, since it may tend to encourage an illusory idea that we possess a complete or, at least, a considerable collection of their writings. The truth is that the Alexandrine period of Greek literature is practically almost a blank for us. Of the great works which might have thrown light on our difficulty, some have perished utterly and entirely; others survive, but only in fragments, in the same way as an ancient civilisation does in the mutilated records and monuments in a museum. The data being of this kind, what inference can be drawn where the evidence fails? Nevertheless, such evidence as there is does not bear out Mr. Grote's general view (in M. Heitz we should call it "paradox"). He concedes that the catalogue of Aristotle's writings in Diogenes Laërtius represents the index of Hermippus—a theory advanced by Brandis, and slowly but surely winning its way to universal acceptance. Now, whatever our opinion as to this catalogue, it is clear from it that the Alexandrine Library must have contained our existing Aristotelian literature, or the major portion of it, or a collection of precisely similar character to ours, only of infinitely larger extent. Pergamus, also, was probably not much worse off in this respect. There was thus an ample literature in existence, and it included speculative writings by Aristotle himself, or (at the worst) works undistinguishable, as far as subject and method are concerned, from his: it is incredible, therefore, that the Peripatetic School was reduced to the destitution described by Strabo, or that its barrenness was the result of a not irreparable loss—unless we believe there was a unique and mystic virtue in the handwriting of the founder. If the School was ignorant of his works, it is more consonant with the logic of experience to attribute the fact to indifference than to sanction the hypothesis of a catastrophe. A point commonly overlooked is that marked signs of speculative atrophy did not appear till some time after the death of Theophrastus. The next Scholarch was Strato, a vigorous thinker, and one who perpetuated his teaching in books; so that in his time the torch of science was kept burning, and the rhetoricians after him were without excuse for their apathy and ignorance. Mr. Grote, indeed, in one place, so far ignores Strabo's story as to allow that the entire *Organon* was accessible after the Aristotelian library had become the private property of Neleus:—"as all these disciples," he says, in reference to Theophrastus, Eudemus, and Phanias, "composed treatises of their own on the same or similar topics, amplifying, elucidating, or controverting the views of their master, the Peripatetics immediately succeeding them must have possessed a copious logical literature, in which the six treatises now constituting the *Organon* appeared as portions, but not as a special aggregate in themselves" (i. p. 80). No doubt this literature fell into neglect. The Lyceum gave itself up to rhetoric (as the Academy forgot its Platonism), and the sceptre passed into other hands—a phenomenon not without countless parallels in the history of sects and schools. So much, then, for one integral element in what we venture to term the Legend or Romance of Scepsis. The rest is of minor importance, though not devoid of difficulties. It is perhaps idle to ask, what led Apellicon to the belief that he was the fortunate possessor of the veritable autographs of Aristotle and Theophrastus; whether the discretion of this wealthy *amateur* was as great as his zeal; wherein he differed from the eminent savant in our own days who is said to preserve, among a number of similar treasures, a letter penned by no less a personage than Pontius Pilate! But the question as to the view Andronicus took of his MSS. is more to the point. To judge by results, he had no infallible criterion for his guidance (for he condemned the *De Interpretatione* and accepted the *Categories*); and if his materials were autographs, the only positive indication of their being this was their age or appearance of age.

We pass on to the discussion on the so-called "exoteric" works. Here—agreeing for the most part with the conclusion of M. Thurot, in his excellent *Études sur Aristote*—Mr. Grote argues that "exoteric" has a twofold meaning, and that it denotes "that which lies on the outside of philosophy considered in its special didactic and demonstrative march;" or, "that which is extraneous to philosophy and suitable to an audience not specially taught or prepared for the study"—in other words, the dialectical and rhetorical as distinct from the strictly philosophical treatment of a subject. By "exoteric discourses" (he adds) Aristotle does not of necessity refer to any other writings of his own—nor indeed to any other writings at all: "he *may* allude in some cases to his own lost dialogues, but he may also allude to Platonic and other dialogues, or to colloquies carried on orally by himself with his pupils, or to oral debates on intellectual topics between other active-minded men" (i. p. 70). This very comprehensive interpretation, it will be observed, embraces nearly all the narrower ones that have been proposed; among the rest, that of Bernays, who maintains (very convincingly, we think) that the term designates the dialogues. In the present state of the controversy Mr. Grote's wider view does not seem to satisfy all the conditions of the problem.

What remains is briefly described. It consists chiefly of a sort of paraphrase or abstract of the various treatises of the *Organon*, taken book by book in their canonical order, with an occasional break to introduce a few words of criticism or comment. Some of the treatises, doubtless, lose but little by this mode of exposition. But the case is different with a work like the *Posterior Analytics*, where the subject is organically connected by assumptions, psychological and metaphysical, with a larger whole: for an adequate or even intelligible account of such a book, one seems to require a wider survey and a less literal, less mechanical, treatment of the materials.

What Mr. Grote could do, when he chose to look beyond the letter of the text before him, may be gathered from the following lucid, if slightly fanciful, illustration of the Aristotelian idea of "science":—

"What he means by Demonstrative Science, we may best conceive by taking it as a small τέμενος or specially cultivated enclosure, subdivided into still smaller separate compartments—the extreme antithesis to the vast common land of Dialectic. Between the two lies a large region, neither essentially determinate like the one, nor essentially indeterminate like the other; an intermediate region in which are comprehended the subjects of the treatises forming the very miscellaneous Encyclopaedia of Aristotle. These subjects do not admit of being handled with equal exactness; accordingly, he admonishes us that it is important to know how much exactness is attainable in each, and not to aspire to more." (I. p. 303.)

Perhaps, after all, the most marked feature in this abstract of the *Organon* is to be found in the full and elaborate analysis of the *Topics*—where the Socratic dialectic is systematized by Aristotle into a complete logic of scholastic disputation. The evident sympathy with which Mr. Grote approaches the subject will not surprise the readers of the *Plato*.

The work ends abruptly in the middle of an unfinished chapter on Aristotle's metaphysical and physical speculations. The editors, however, with laudable anxiety that nothing should be lost or withheld, have taken upon themselves the responsibility of annexing, as an additional chapter, an essay on the Aristotelian psychology, originally contributed to Professor Bain's book, *The Senses and the Intellect*—besides bringing together, in an appendix, a variety of memoranda and literary remains more or less directly bearing on the main theme of the work. The final impression left by these volumes is one of disappointment. After all possible allowance is made, the *Aristotle* strikes one as being inferior in value (as it necessarily is in novelty and interest) to its predecessor, the *Plato*. The account of the *Organon* is not a popular exposition of Aristotle's logic for the English reader; nor is it, we imagine, calculated to supplant Zeller, still less Prantl, in the estimation of serious and qualified students. Ungracious as the avowal may seem, we would readily exchange all we have for a single chapter on the *Ethics* or *Politics*, where Mr. Grote would have spoken to us with authority, on a subject which he had confessedly made his own.

I. Bywater.

Notes of Scientific Work.

Chemistry.

Barreswil's Test for Glucose.—It is recorded by E. Feltz (*Comptes rendus*, 21st October, p. 960) that on testing a solution of crystallizable sugar for traces of glucose with the copper solution, he found cane sugar also able to reduce this metallic solution. 10 c.c. of this reagent, prepared by Violette's method, when boiled with 20 c.c. of a solution containing 6 grammes of purified sugar, for 25 minutes, lost its blue colour, all the copper being precipitated. The author calls attention to the fact, that, though different methods have been given for the preparation of this reagent, the essential difference between them consists in the amount of free alkali present. The greater the amount of alkali in the liquid the more clearly and sharply is the presence of glucose indicated by it. For his experiments with cane sugar he prepared two solutions: (*a*) containing 0·632 gramme of free soda in 10 c.c., and (*b*) containing 1·34 gramme of alkali in the same quantity. By boiling 20 c.c. of liquid containing 6 grammes of sugar with 10 c.c. of *a*, the colour disappeared in 25 minutes; when, in place of the latter, 10 c.c. of *b* were used, the colour vanished in 6 minutes. During some further experiments he noticed that 10 c.c. of *b* even lost all colour by being boiled with 0·6 gramme of pure crystallized sugar for 30 minutes.

New Hydrocarbon.—At the Leipzig *Versammlung Deutscher Naturforscher*, Professor Fittig announced the discovery of a hydrocarbon from coal-tar. It melts at 98°–99° C., and has a boiling-point considerably above that of anthracene. By oxidation it yields a dibasic acid,

$$C_{12}H_6\begin{matrix}\text{——COOH}\\ \text{——COOH}\end{matrix},$$

which has led the author to the belief that this new body is very probably phenyl-naphthaline, $C_{10}H_7C_6H_5$.

Seebachite.—This name has been given by M. Bauer (*Zeitschrift der deutschen geologischen Gesellschaft*, xxiv. p. 391) to a new mineral, occurring in the basalt of Richmond, near Melbourne, in association with phillipsite and other minerals, and hitherto regarded as herschelite. Though fully agreeing with the latter mineral in crystallographic characters, seebachite differs from it in chemical composition, notably by a considerable percentage of lime. The empirical formula of seebachite is $R_4Al_2Si_7O_{22}+12H_{12}H_2O$, R being calcium and sodium.—In the same paper the author describes a crystal of calcite, from Andreasberg, exhibiting hemimorphism.

Fermentation.—In a communication made to the *Académie des Sciences* (October 7), M. Pasteur has shown that his celebrated theory of ferments admits of being expressed in a general form which is probably true of *all* living organisms. Every living thing, in fact, or part of one, however small, which, without absolutely ceasing to live, is deprived in whole or in part of oxygen, possesses the character of a ferment for that substance which seizes it partially or completely as a source of heat. If a fermentable fluid be inoculated with a ferment, the surface will speedily be covered with a coat of mould; this absorbs oxygen from the atmosphere, and gives off carbonic acid gas, but produces no alcohol. If the liquid be now agitated so that the coating of mould is submerged, fermentation will speedily commence under the proper conditions, and alcohol will be formed with the evolution of carbonic acid. Ferments are, therefore, organisms which can continue their existence and even grow without the intervention of free oxygen being necessary to burn and render available the materials for their nutrition; they can, in fact, assimilate directly oxidized matters, such as sugar, capable of producing heat by their decomposition. From this point of view fermentation appears to be a particular case of an exceedingly general phenomenon, and it may be said that all living things are ferments under certain conditions, because there are some which cannot momentarily be deprived of free oxygen. Under these circumstances they obtain the heat required for their nutrition or for changes in their tissues from surrounding objects; and it is a characteristic feature of fermentation that the amount decomposed is sensibly greater than the weight of material made use of in effecting the decomposition. Berard has shown that fruits kept in carbonic acid, or any inert gas, evolve carbonic acid, as if by a kind of fermentation. Pasteur made the experiment with plums, which after some days were far less altered in appearance and texture than those exposed to the air, but yielded a distinct amount of alcohol. A rhubarb leaf placed in an atmosphere of carbonic acid, after 48 hours produced, by distillation, small quantities of alcohol. With regard to animal organisms, Pasteur has not yet followed out his theory, but he believes it will throw an altogether new light on putrefaction and gangrene. The production of putrid gases without the intervention of organic ferments will receive, in this case, an explanation as natural as the production of alcohol and carbonic acid in the presence of the cells of yeast.

Mineralogical Notices.—At the last meeting of the Chemical Society, held on the 7th instant, a paper, bearing the above title, and forming a continuation of an earlier one, was read by N. S. Maskelyne and W. Flight, of the British Museum. The authors find by analyses of the original fragment to which Haidinger gave the name, and of several so-called specimens of the mineral from other localities, that isopyre is a mixture of opal with other substances, and can no longer be regarded as a distinct species. The mineral percylite, of which but one specimen, that in the National Collection, has hitherto been known, and the locality assigned to which is Sonora, Mexico, has been found in South Africa associated with anglesite, cerussite, and chlorargyrite. The chemical composition and physical characters fully accord with those of the unique specimen analysed by Dr. Percy.—Among other minerals from the same district in South Africa was found vanadinite in considerable quantity and great purity. The crystals are six-sided prisms, $2\bar{1}\bar{1}$, surmounted by the regular six-faced pyramid $\{100, \bar{1}22\}$; they also carry a scalenohedron $\{20\bar{1}\}$. The question whether the inverse correlative scalenohedral planes are present on these crystals is difficult to determine with certainty through their broken and incomplete character. But that the discalenohedron is not hemisymmetrically developed, in the way characteristic of apatite, seems certain from the position of some adjacent planes that are found on the crystals.—An analysis of a small specimen of impure uranophyllite from the neighbourhood of Redruth, in which the simultaneous presence of arsenic acid and bismuth was observed, is of interest to the mineralogist on account of the very recent discovery of trögerite, zeunerite, and walpurgine in the Weisser Hirsch mine at Neustädtel, and the great probability of the existence of these minerals in Cornwall.—Analyses of pisolitic iron ores from Wales, and a specimen of prasine from Cornwall, occurring occasionally with the so-called white olivenite, are also given in this paper.

Aldol.—The history of this body has already been given in the *Academy* of July 15 (vol. iii. p. 271). Wurtz has since described (*Revue*

scientifique, 26th October, p. 405) some improved methods of obtaining the new substance, and while doing so has protested against the very violent criticism to which Kolbe has subjected him. Kolbe believes that the new body $C_4H_8O_2$ cannot be characterized as aldehyde-alcohol till its nature is better known. Wurtz administers a well-deserved rebuke to the Leipzig professor for passing judgment on his work before it is completed. So far, his experiments justify him in assigning the formula $CH_3-CHOH-CH_2,CHO$ to the new compound.

The Influence of the Food on the Composition of the Urine.—The nature of the change in the composition of the urine brought about by varying the character of the food has recently been carefully investigated by Weiske, of Proskau (*Zeitschrift für Biologie*, p. 246). He selected for the purpose two goats, one of which (I.) was fed on fresh clover and turnip leaves; the other (II.) entirely on milk. The urine in case I. was cloudy, exhibited an alkaline reaction, and effervesced with acid just as the normal urine in Herbivora does. In the other case (II.) the urine was completely clear, showed an acid reaction, contained no carbonic acid, and possessed all the properties of the urine of the Carnivora. 100 cubic cent. contained in each case:—

	I.	II.
Dried substance	11·08 gramme	1·75 gramme.
Nitrogen	1·11 ,,	0·33 ,,
Hippuric acid	0·10 ,,	0·00 ,,
Ash	5·19 ,,	0·57 ,,

It is worthy of note, in the case of the goat fed on milk, that the large amount of nitrogen present in the urine is out of all proportion to the comparatively small degree of concentration.

Professor Tschermak has published a new catalogue of the meteorites in the Vienna collection. At the date of issue (October 1, 1872) the mineralogical museum contained specimens representing 182 falls of meteoric stones and 103 falls of meteoric iron. Letters appended to the name of each aërolite in the list indicate its position in a classification which has been based chiefly on the constituent minerals, certain distinctive physical characters of these minerals also being used in arranging them in subdivisions.

Zoology.

Prehistoric Remains of the Fallow Deer and Dog.—In a treatise on the prehistoric antiquities of Olmütz and the surrounding country, published in the *Mittheilungen der anthropologischen Gesellschaft zu Wien*, Professor L. H. Jeitteles, in his researches respecting the antiquity of certain animals, has arrived at some conclusions of great zoological interest:—1. The fallow deer is not, as generally supposed, a recent importation from Africa, but was distributed all over Europe during the diluvial period, and in still later times. Subfossil remains of this species have been found in the neighbourhood of Rome, in Southern Russia, at Linz in Upper Austria, in Würtemberg, Baden, and at Abbeville; and the author himself has obtained part of a horn at Olmütz. 2. The dog of the Bronze age is a distinct species from that of the Stone age, and is distinguished in being of considerably larger size. Besides the common wolf, Prof. Jeitteles divides the wild dogs into two groups: *a*. The jackal of the Mediterranean fauna (*Canis aureus*), which is the wild ancestor of the domestic dog of the Stone age. *b*. The prairie-wolf of North America, the wolf-dog of North Africa (*Canis lupaster*), the Pyrenean wolf, the prairie-wolves of Eastern Europe, the dingo, F. Cuvier's *Canis anthus mas* from Senegal, and perhaps the wolf of Japan, are varieties of one and the same form which may be termed *Canis lycoides*, and which appears for the first time in a domesticated state in the Bronze age; this domesticated form is named by the author *Canis matris optimae*.

Geschichte der Zoologie bis auf Joh. Müller und C. Darwin. Von J. Victor Carus. München.—Many of our readers will be aware that the Bavarian Academy of Sciences some years ago appointed a commission to prepare and publish a complete history of the natural sciences in Germany. The idea originated with the present king of Bavaria, who has supported the undertaking in a most munificent manner. The entire work, which will be extended over about twenty-four volumes, is arranged in three sections, the third of which comprises technology, mathematics, physics, chemistry, astronomy, geology, medicine, zoology, botany, and mineralogy. The volume before us is devoted to the history of zoology, and since it would have been inadvisable to limit a description of the development of zoological science to that due to Germany alone, the author has extended it to the zoology of all countries and times down to the death of Joh. Müller, and the first promulgation of Darwin's doctrines in 1858–59. We fully recognise the great difficulties of the task undertaken by Professor Carus, especially when we consider that this is almost the first attempt of the kind; we feel sure, however, that the author, who has been engaged in bibliography for so many years, would, with more time at his disposal, have executed the work in a much more satisfactory and uniform manner. In its present form, fully two-thirds of the work are devoted to the history of the ante-Linnean period—the easier portion, as its details have been previously elucidated by numerous and profound researches. It was highly desirable, however, that a connected account of this period should be given, and the reader is well repaid by the mass of information he will find here. The space allotted to the post-Linnean period is out of all proportion too small, provided the author intended to give it the detailed consideration he has in some instances attempted. A dry enumeration of authors and their productions neither instructs the zoologist (who, by the way, will miss many a familiar name, like those of Dampier, Mitchill, Cantor, Reinhardt, &c.) nor interests the general reader. The whole work is arranged under three divisions: A. The Zoological Knowledge of the Ancients; B. The Zoology of the Middle Ages; and C. The Zoology of the more Recent Times. The last division is again subdivided into three periods: 1. Period of the Encyclopaedic Accounts (Gesner, Jonston, &c.); 2. Period of Systematic Attempts (Linnean period); and 3. Period of Morphology (Cuvier, Müller).

The Thanatophidia of India: being a Description of the Venomous Snakes of the Indian Peninsula; with an Account of the Influence of their Poison on Life, and a Series of Experiments. By J. Fayrer, M.D. London. With 31 coloured plates.—This work is divided into five sections. In the first a descriptive account is given of the venomous snakes of India; and as the author informs us that he has compiled this portion from the researches of other herpetologists, we may at once pass to section 2, containing statistical returns of the deaths by snake-bite that have occurred in the Bengal presidency. The author shows that the total number of such deaths recorded from the year 1869 alone amounts to 11,416 in an area presenting a population of 121,000,000 souls; and he thinks that this number, large as it is, cannot represent the real mortality in those provinces, on account of the incomplete reports received from some parts of the country. Were perfect information available and collected from the whole of India, Dr. Fayrer believes we should find that more than 20,000 persons die annually from snake-bite alone. After the author has thus opened our eyes in respect to this terrible destruction of human life, it is to be regretted that he is obliged to leave the question of the treatment of snake-bite, discussed in the third section of the work, exactly as it was. If the immediate endeavours to prevent absorption of the poison into the system are unsuccessful, as unfortunately is but too frequently the case, reliance is placed on alcoholic, ammoniacal, or ethereal stimulants for supporting the strength, and consecutive disorders of constitutional or local character are treated with such remedies as the peculiar symptoms may suggest. In section 4 the circumstances of a number of cases of snake-bite are narrated, and in section 5 a great number of experiments on the influence of snake-poison on animals described. While most of the conclusions arrived at were previously known, the following deserve particular attention, either because they are not quite in accordance with the views generally held by herpetologists, or in that they confirm previous isolated observations. 1. Differences have been noticed in the symptoms produced by the bites of different species, though none of them are of any great physiological or pathological importance; they are more of degree than of kind. In certain cases convulsions are more marked, and in others death is preceded by a more decided appearance of lethargy: in some local symptoms are peculiarly severe, in others less so. 2. After death from poisoning by a colubrine snake, the blood nearly always firmly coagulates on removal from the body; after death by viperine poison, however, it remains permanently fluid. 3. The power to resist the action of the poison varies generally, though not altogether, with the size of the animal bitten; it has been noted that cats resist the influence of the poison almost as long as dogs three or four times their size. 4. The poisonous snakes are not affected by their own poison: a cobra may bite itself or another cobra with impunity. It is probable that they are not entirely without effect on each other, though it is infinitely less than that produced on other animals. 5. Snake-poison is absorbed through delicate membranes; its action is fatal if it be applied to a mucous or serous membrane, to the stomach or the conjunctiva. The belief that it is only capable of absorption by direct injection into the blood is erroneous. 6. Bodies of animals which have been poisoned by snakes are eaten with impunity by man and animals. 7. The blood of an animal killed by snake-poison is itself poisonous; if injected into another animal, it destroys life. The long series of experiments on which Dr. Fayrer has been engaged could not have been conducted without great risk to those concerned in them. On two occasions only was there any cause for anxiety, and by the immediate application of remedies no injurious results happened. The work is illustrated by thirty-one coloured plates, which, highly creditable to the artists who prepared them, have been drawn at the School of Art in Calcutta. They fully answer the purpose of the work, which is more of a practical than scientific character.

The Birds of New Zealand.—In the *Academy* of May 15 (vol. iii. pp. 189, 190) we recorded the first appearance of Dr. Buller's work, *A History of the Birds of New Zealand*. We have now the pleasure of announcing the more recent publication of a second part, comprising pp. 73–140 and seven plates. The standard of excellency of the first part is maintained in the second, both as regards text and illustrations.

The Cabbage Butterfly in the United States.—According to Dr. Uhler, of Baltimore, the European cabbage butterfly (*Pontia brassicae*), in its invasion of the United States, has at length reached Baltimore. It has been found for some years farther eastward, and has been slowly creeping onwards until it bids fair to ravage the whole country. (*Annual Record of Science*, 1872, p. 270.)

The tenth part of the *Anales del Museo Público de Buenos Aires* (Buenos Ayres) contains the conclusion of Professor Burmeister's monograph of the Glyptodont Mammalia (see *Academy*, vol. iii. p. 73). In this part the author gives a comparative description of the subgenera *Glyptodon* and *Schistopleurum*, illustrated by six beautifully executed lithographic plates.

New Publications.

ACHIARDI, D. A. Mineralogia della Toscana. Vol. I. Pisa.
BACHMANN, P. Die Lehre von der Kreistheilung und ihre Beziehung zur Zahlentheorie. Leipzig : Teubner.
BAUMHAUER, H. Die sogenannten allgemeinen Eigenschaften der Körper nach ihrem Zusammenhange entwickelt. Hildesheim : Gerstenberg.
BRACCIFORTI, A. Dello Studio delle Scienze fisiche e naturali. Piacenza : Marchesotti.
BRUNS, H. De Proprietate quadam Functionis Potentialis Corporum Homo Geneorum. Berolini.
DARWIN, C. The Expression of the Emotions in Man and Animals. Murray.
DU BOIS-RAYMOND, E. Ueber die Grenzen des Naturerkennens. (Vortrag.) Leipzig : Veit.
DUHAMEL, J. M. C. Des Méthodes dans les Sciences de Raisonnement. 5e partie. Paris : Gauthier-Villars.
DU MONCEL, T. Exposé des Applications de l'Électricité. Paris : Lacroix.
EHRENBERG, C. G. Rede auf A. v. Humboldt. Berlin : Oppenheim.
FELDNER, A. Die Ansichten Sebastian Franck's v. Woerd, nach ihrem Ursprunge und Zusammenhange. Berlin : Calvary.
GAYAT, J. Étude sur les Corps étrangers de la Conjonctive et de la Cornée. Paris.
KJERULF, T. Om Skuringmaerker Glacialformationen og Terrasser. Christiania.
MEYER, L. Die modernen Theorien der Chemie und ihre Bedeutung für die chemische Statik. 2. Auflage. 1. Hälfte. Breslau : Maruschke und Berendt.
OFTERDINGER, L. F. Ein Manuscript Keplers. Tübingen : Fries.
SALET, G. Sur les Spectres des Métalloïdes. Paris : Gauthier-Villars.
SCHEINS, M. De Electro Veterum Metallico. Berolini.
STOPPANI, A. Corso di Geologia. Milano.
ULRICH, W. Internationales Wörterbuch der Pflanzennamen in lateinischer, deutscher, englischer und französischer Sprache. Leipzig : Schmidt.
WEBER, A. Kritik der Psychologie von Beneke. Weimar : Böhlau.
WIIK, F. J. Om Skifferformationen i Tavastehus Län. Helsingfors.
WOHLWILL, E. Der Inquisitionsprozess des Galileo Galilei. Berlin : Oppenheim.

History.

Calendar of the Clarendon State Papers preserved in the Bodleian Library. Vol. I. To January 1649. Edited by the Rev. O. Ogle, M.A., and W. H. Bliss, B.C.L., under the direction of the Rev. H. O. Coxe, M.A.

FULLER's well-known definition of an index as "a necessary implement," failing which the student wanders in a threadless maze, is eminently appropriate in this useful and laborious *Calendar*, the first volume of which is now before us. The masses of political and social history for which the whole work will supply the clue form the famous collection gathered by the royalist chronicler of the Great Rebellion as materials for that *History*. This collection has arrived in several instalments and at various dates to its final repository; the first portion reaching the Bodleian Library in 1759, while the last—a large and highly important body of documents, bequeathed by Henry Hyde, Earl of Clarendon, in 1753—was only received at Oxford in 1866. Consequently, the three folios published in 1786 by the University, comprising a very large selection from the Clarendon State Papers up to that time in its possession, include no portion of its latest acquisition. The folio selection has, moreover, been now long out of print, so that on all hands the student will be grateful to Messrs. Ogle and Bliss for their *compte rendu* of documents throwing the fullest light on so important a period of English history. Of the three thousand papers here calendared, those employed by Hyde for his *History*, with letters both public and private addressed to himself, are endorsed by his own hand. Copies of his own letters and the correspondence of his secretary Edgeman form another important part of the collection, which also includes many holograph drafts and letters of Charles and his queen. The papers, which cover the whole period of Charles' reign up to his execution in January 1649, are chronologically arranged, and to the outline of most documents now in print is affixed a reference to the full text.

So far as an opinion can be formed from abstracts, we should say that, while the broad facts both of the progress of the Civil War and the personal history of its chief actors have been long before the world, abundant matter rich in details of more or less importance still lies in manuscript. This point may be fairly illustrated in reference to the historical masterpiece which was the growth and outcome of all the gathered material. Clarendon has in his *Life* himself sketched out for us his tranquil and studious existence in Jersey, from the spring of 1645 to that of 1648, the time which saw that work planned and its first four books written, but the accessories of the picture remain to be filled in from his correspondence during that season of retreat. Writing to Lord Witherington in August 1646, Hyde first announces that he has "prevailed with himself to endeavour the compiling a plain faithful narrative of the proceedings of these ill years." On November 15, in the same year, he writes to Secretary Nicholas for information of all kinds for the *History*, of which he has now written about sixty sheets, which, if printed, "would exceed what Daniell hath written of twelve kings; to what a Book of Martyrs will the whole volume swell!" The whole tenor of the Jersey correspondence goes to show that the chronicler of the royalist martyrs had no mind to swell their number in his own person, presenting at the same time, we think, a noteworthy example of that proverbial absorption of mind induced by literary pursuits. It is pretty clear that while Hyde, in his own "wonderful contentment," dresses the facts and paints the characters of his narrative, the disasters of his country, the ruin of his friends and cause, even the deadly peril of his master, these things fall naturally into the background of his mind. Take, for instance, Hyde's correspondence after the opening of 1647, when the series of news-letters marks the progress of events as hurrying on towards the scaffold before Whitehall, and the king's despatches Nos. 2400, 2411, 2461, breathe the language of despair. How entirely out of keeping with the stern realities of the time is the chancellor's gossip over his studies varied by reading "ill-books, such as Lilburne's, Prynne's, and Mr. Milton on Wedlock," No. 2488, his liberal information touching the progress of his *History*, and eager quest for materials from all quarters, mixed up with parenthetical forecasts of "fine days after the dismal storm," No. 2658. Goethe polishing his verses at Weimar while French troops harried Germany hardly affords a more striking spectacle of philosophic equanimity. Indications are not wanting that Hyde's friends, themselves out in the storm, were at issue with him as to his own line of conduct. They unreasonably refused to accept that personal view of it which, formulated into the motto, *Bene vixit qui bene latuit*, stood blazoned over his doorway in Castle Elizabeth. Most of

them, the king included, judged the chancellor's retirement as a secession from the important trust committed to his charge in the person of the Prince of Wales, and he seems to have been repeatedly reproached for not following him to St.-Germain. Now here we find copies of Hyde's answers to the king and others vindicating his conduct; but how comes it that the letters of blame themselves have all vanished? We note this fact as highly characteristic of the man, and also because a more striking illustration of the way in which the chancellor sifted his papers for the eye of posterity occurs at an earlier date. No part of Hyde's narrative has cast graver doubts upon his truthfulness as an historian than the account of his personal action in the Long Parliament between the introduction of the bill of attainder against Strafford and the passing of the Grand Remonstrance—April–November 1641. It is strongly suspected that Hyde, though in the *History* he labours to create the contrary impression, was a party both to the attainder of Strafford and to the existence of the parliament independently of the king; he also stands charged with having falsified the circumstances under which the Grand Remonstrance was passed. Now among the despatches of those months, not a single document throwing light upon these important questions survives to be calendared. We offer no comment upon their conspicuous absence. The fact that Strafford's famous letter from the Tower, May 4 (No. 1527), appears endorsed by Clarendon's own hand is, as Mr. Ogle remarks, a strong piece of evidence in favour of its genuineness.

Among the various series of papers worthy of special attention, those upon foreign affairs running over the years 1637–40 present, with some exceptions, fresh matter. They mark the utter weakness of English intervention in the affair of the Palatinate, showing that England under Charles had in the eyes of foreign nations sunk down to the same level of insignificance to which fifty years later Spain had fallen. Among new materials illustrative of negotiations in behalf of the royal cause carried on in Ireland, the most important are letters from Charles to Ormond, written in 1645–6, which seem likely, if fully examined, to throw additional light on the secret dealings with the Council of Kilkenny, entrusted by the king to Glamorgan. To the same date belong despatches, mostly not yet printed, detailing the movements of the army of the West, and amply illustrating the disorganization, rapine, and confusion upon which the royalist historian dwells with mournful emphasis. As specimens of single documents deserving particular notice, Nos. 1764, 2887, 2978 may be cited. The first of these, in the same handwriting as a paper endorsed by Hyde, "Sir Hugh Cholmeley's Memorials," gives a minute account of the battle of Marston Moor; the second, partly printed in the Clarendon State Papers, is Lord Byron's history of his proceedings in Cheshire and Anglesea, February–September 1648. Judging from the abstract, Byron's narrative is important enough to raise surprise at the very slight use of it made in the *History*. The main point of interest in the outline given by Mr. Bliss lies in reiterated charges of active disloyalty brought by the royalist general against Williams, Archbishop of York. Everything tending to throw light upon the character of that able but unscrupulous prelate deserves to be made public. But the charge is entirely passed over by Clarendon; did he himself disbelieve Byron's statements, or was he unwilling to tarnish an archiepiscopal reputation? No. 2978 is a narrative of the surprise of Pomfret Castle in 1648, and the subsequent action of the royalist garrison up to the retaking of the castle by Cromwell after his return from Scotland. This paper, drawn up after the king's death "by one of those concerned in the despatch of Rainsborough," is noted by Mr. Bliss as differing in many particulars from Hyde's version of this episode of the war; the abstract is, however, too meagre for purposes of comparison. And lastly, we should much like to see in print the full text of the letters of intelligence, a most valuable series, during the years 1647–8.

Calendared as addenda are above three hundred copies of letters addressed by Queen Elizabeth to foreign princes during the early years of her reign. These despatches, which have not been used by Mr. Froude, will doubtless well repay examination. Elizabeth's letter to Gustavus of Sweden, declining marriage with his son on the score that "God has filled her heart with the joys of celibacy;" those to Italian princes pressing for payment of moneys due; a warning to Mac 'Art More that, "next to the service of God, nothing is of more consequence than obedience to the prince;" her resolution, expressed to Lutheran sovereigns, that, "in spite of the devil," the creed of her Anglican Church shall be conformed to the Augsburg Confession—may be quoted as characteristic of the daughter of Henry VIII. Lastly, the appendices contain despatches touching the marriage of Charles I. and the love-letters which passed between him and Henrietta Maria, the latter printed in full. Mere stereotype complaisances of royal courtship, these holographs owe their chief interest to the dramatic contrast they oppose to the correspondence of the wedded pair during the last years of the king's life—letters where the wife shows herself a dangerous partner in the losing game, and the husband lays bare without stint those deep defects of character for which he paid forfeit with both crown and life.

George Waring.

History of Old Rhaetia. [*Das alte Raetien*, staatlich und kulturhistorisch dargestellt von Dr. P. C. Planta. (Hierzu zwei Tafeln.)] Berlin: Weidmann.

This work has been a labour of love to Dr. Planta, who dedicates it to the Swiss cantons of the Grisons and St. Gall, as being parts of the ancient Rhaetia. He collects all that is known of Rhaetia from the pre-Roman times, down to the occupation of the country by the Germans, its civil division into *Gaus*, and its ecclesiastical organization as connected with the bishopric of Chur. The appendices contain an excellent map, together with the necessary extracts from the Peutinger table (of which a facsimile is given), the Antonine Itinerary, and the *Notitia Dignitatum;* Bishop Tello's will (A.D. 766); a diploma of Charlemagne, appointing Bishop Constantius "Rector of Rhaetia," and so his successors "ex nostro permisso et volontate cum electione plebis"; Bishop Remedius' Penal Code; the *Lex Romana Curiensis;* a diploma of Louis the Pious in 831, exempting the possessions of the church of Chur from civil jurisdiction or taxation; and a Rent-roll of the church in the eleventh century. The latter part of the book is satisfactory, the materials being more abundant. Of the early history of Rhaetia, however, it is needless to say that we know next to nothing, and our author has to fill up his sketch as he can. Thus, as he thinks the northern slopes of the Alps were occupied by Kelts, he gives an account of Keltic customs and religion in general, as being presumably true of the Rhaetian Kelts also. We have no objection to the account, except that it has no peculiar application to Rhaetia. The description of the Etruscan inhabitants in the southern valleys has to be filled up in a similar manner. As to the name Rhaeti, which occurs first in Polybius as Ῥαιτοί, our author acquiesces in the derivation given by Theodoric, the Gothic king, that it comes from the Latin word "retia" (nets), because the country is composed of a network of

valleys, which "contra feras et agrestissimas gentes velut quaedam plagarum obstacula disponuntur." But with all our respect for King Theodoric, as tribes generally give names to countries, and not *vice versa*, we can hardly derive the name of an Etruscan or Keltic tribe from a metaphorical use of a Latin word, not to mention other obvious difficulties. Our information as to the various Rhaetian clans really depends on Augustus' triumphal inscription at Turbia, near Nice (Pliny, iii. 30, enumerates the names of the Alpine tribes in accordance with it), which gives a list of them from east to west. Some of the names still survive, *e.g.* the Camuni must have lived in the Val Camonica. Strabo and Ptolemy supply some help, and there was fortunately found in the South Tyrol in 1869 a bronze tablet containing an edict of the Emperor Claudius in A.D. 46, relating to four Rhaetian communities, two of which are the Anauni (in the Nonthal), and the Bergalei, whose name survives in a valley opening out towards Chiavenna. In fact, inscriptions are our main resource for provincial history under the Empire, as may be at once seen from the fifth volume of the Berlin *Corpus Inscriptionum*, just published by Mommsen, which contains the inscriptions of Cisalpine Gaul, including those of Trent and other Rhaetian districts on the south of the Alps. Dr. Planta is a little grieved at finding so little mention of his favourite Chur, the original name of which can only be guessed at. The account of the organization of a Roman province is well arranged. Of course the introduction of Christianity is obscure, but Dr. Planta does not like the legend which assigns the foundation of the bishopric of Chur to the famous British king Lucius, who was martyred there A.D. 178, and has a special commemoration in the service-books of the *Ecclesia Curiensis* (the early printed copies of which are rare, but there are several in England). King Lucius' body was stolen from the cathedral in 821 by a Count Roderic, as the Bishop complains in a letter to the Emperor Louis the Pious. The first real historical trace of the bishopric occurs in 452, when the Bishop of Como signed the decrees of the Council of Chalcedon for himself and "for his absent brother Asimo, bishop of Chur." The bishops played an important part even after the German counts took the lead and the *Gau*-constitution had been introduced. The name Vinstgau, in the valley of the Adige, curiously preserves the memory of the early tribe of the Venostes, mentioned in the Turbia inscription, and of the German constitution of Rhaetia in Charlemagne's time. Dr. Planta's book possesses more than a local interest; it gives an excellent account of the process of fusion between the Roman and Teutonic elements of modern Europe.

C. W. Boase.

Origines de l'Allemagne et de l'Empire germanique. Par Jules Zeller, ancien Recteur de Strasbourg. Paris: Didier.

The words, "ancien Recteur de Strasbourg," give the key to this work, which embodies the grief of France at the loss of Lorraine and Alsace. Of course there is a long preface against Bismarck, and the author takes particular delight in quoting passages of ancient authors which describe the Germans as fond of invading and plundering their neighbours, *e.g.* Caesar, iv. 13, "latrocinia nullam infamiam habent quae extra fines civitatis fiunt." The ancient Gauls, it must be inferred, always stayed quietly at home, and did not plunder Italy, Greece, and Asia Minor. The spirit of the book is lamentable, and can only be excused by the soreness of defeat, and by the ungenerous conduct of the German *literati*. Thus during the siege of Paris, Mommsen wrote an account of the siege of Rome by the Goths, describing the cowardly multitude sheltered behind the walls; and how the government offered any amount of money for peace, but vaunted that they would not surrender an inch of territory, and so on. The geographical sketch of Germany, illustrated by a map, is the best part of Zeller's book, which goes down to Charlemagne's time, being only the first volume of an extensive work. We must hope that by the time the second volume appears, the author will have adopted something more of the tone that befits a historian. C. W. Boase.

Contents of the Journals.

Gött. gelehrte Anzeigen, September 18 and 25.—Liebrecht has articles on the Turkish tribes in South Siberia, and the Polynesian tribes in the Pacific, showing what portions of their customs and legends recur elsewhere, and form part of the common stock of the early human race, and so throw light on some customs and legends of Europe. The early religious rites are especially instructive, and may be compared with much in Tylor's book.——October 2.—Geiger reviews Knaake's *Jahrbücher des deutschen Reichs und der deutschen Kirche im Zeitalter der Reformation* unfavourably.—Perlbach calls attention to the real sources of the history of the Teutonic Order.—Bluhme gives an account of the Vatican and Paris MSS. of the Visigothic Law.——October 16.—Ewald reviews Wuttke's excellent *Geschichte der Schrift und des Schriftthums;* and Kraut analyses the contents of the archives of Lüneburg.

New Publications.

Fontes Rerum Bohemicarum. Tom. I. Vitae Sanctorum. Fasc. 3. Prag: Grégr u. Dattel.

Gerlach, F. D. Griechischer Einfluss in Rom im fünften Jahrhundert der Stadt. Basel: Schneider.

Ihne, W. Römische Geschichte. 3. Band: Die äussere Geschichte bis zum Falle von Numantia. Leipzig: Engelmann.

Kayser, F. Ueber das Leben und die Schriften des heiligen Nicetius, Erzbischofs von Trier. Trier: Lintz.

Krebs, J. Christian von Anhalt und die kurpfälzische Politik am Beginn des dreissigjährigen Krieges. Leipzig: Duncker u. Humblot.

Muratori, L. A. Scritti inediti. Milano: Längner.

Puntschart, V. Die Entwicklung des grundgesetzlichen Civilrechts der Römer. 1. Abth. Erlangen: Deichert.

Regesta Diplomatica nec non Epistolaria Bohemiae et Moraviae. Pars II. Annorum 1253–1310. Vol. I. Prag: Grégr u. Dattel.

Rilliet, A. Der Ursprung der schweizerischen Eidgenossenschaft. Geschichte und Sage. Aarau: Sauerländer.

Springer, A. Friedrich Christoph Dahlmann. Leipzig: Hirzel.

Staatsarchiv, Das. Sammlung der officiellen Actenstücke zur Geschichte der Gegenwart. Begründet v. Aegidi u. Klauhold. Hrsg. v. H. von Kremer-Auenrode u. F. Worthmann. 22. Bd. 1. u. 2. Heft. Leipzig: Duncker u. Humblot.

Wailly, N. de. La Conquête de Constantinople par Geoffroi de Ville Hardouin. Paris: Didot.

Philology.

A Critical Enquiry into the Bases of the Decipherment of the Assyrian Inscriptions. [*Die assyrisch-babylonischen Keilinschriften. Kritische Untersuchung der Grundlagen ihrer Entzifferung.*] By Dr. Eberhard Schrader. Leipzig: Brockhaus.

The Cuneiform Inscriptions and the Old Testament. [*Die Keilinschriften und das Alte Testament.*] By the Same. Giessen: Ricker.

While the study of the Assyrian inscriptions has long been attracting a considerable body of workers in France and England, Germany, the home of Grotefend and Lassen, has been more or less content to look on. This, however, can no longer be said to be the case. Professor Schrader, already well known to Assyrian scholars by his papers in the *Zeitschrift der deutschen morgenländischen Gesellschaft*, the *Studien und Kritiken*, and elsewhere, has now offered a valuable contribution to our knowledge of the monuments and their language in the two works before us. The first of these may be called an Apology for Assyrian

decipherment. It is an exhaustive analysis of the method employed, and a critical testing of its results. The first part reviews the several means of assistance which have been at the disposal of the decipherers, beginning with the trilingual inscriptions of Persia, and going on to the variant readings furnished by parallel texts, and the invaluable aid as well as verification afforded by the philological tablets of Assur-banipal. Specimens of these are given, and a syllabary is made out from the native records themselves. The section concludes with the help furnished by the sculptures which accompany the inscriptions, by the tradition of ancient history, and by the philological laws which determine the reading of a word. Next follows a thorough-going exposition of the Assyrian syllabary and ideographs, controlled by reference to the Achaemenian monuments, and the proof and explanation of the polyphony of the characters. This is supplemented by an admirable excursus on the difficult subject of the proper names; and the whole finishes with the bilingual (Assyrian and Phoenician) legends which decisively confirm the decipherment as before set forth.

The second part consists of a full and excellent account of the language (on the basis of the Persian inscriptions), upon its lexical, phonological, and grammatical side; from which its thoroughly Semitic character is made apparent to everyone. The conclusions to be drawn from the preceding portion of the work are well put, and the Assyrian text of the Achaemenian inscriptions with a translation is appended.

The author must be congratulated upon the clearness, pertinency, and exhaustiveness with which he has completed his task. Rational scepticism will henceforth be impossible, while the accuracy and acuteness displayed in the grammatical part of the work will be particularly welcome to the scholar. The section on the numerals must be more especially noted, in which the formation of the decades is admirably explained and compared with the Aethiopic; and the section on the pronouns is equally good. The explanation of the obscure *mala*, "as many as," from מלא is undoubtedly right, in place of the one suggested in my *Grammar;* but the attractive reference of the enclitic *ma* or *va* to the *waw consecutivum* can hardly be maintained in the face of a phrase like *ina sanat-ma siati*, "in this very year" (*W. A. I.* iii. 8, 75). In the verb, Dr. Schrader and myself are at variance as regards the explanation of certain forms, though not as regards their meaning. The double letter of what I hold to be a Kal present is not formative, but merely marks the accent of the preceding vowel, exemplifying one of the obscurities of the Assyrian system of writing. The tense is exactly parallel with the Aethiopic *yĕnágĕr*, and it is difficult to see how Dr. Schrader can overlook the evidence of the syllabary he has printed in pp. 20–24, where the Pael present *yunaccar* answers to the Accadian *in-kurri*, and the Pael aorist *yunaccir* to the Accadian *in-kur*, just as the Kal present *isaccin* answers to *in-garri*, and the Kal aorist *iscun* to *in-gar*. The permansive of Dr. Hincks is the perfect of the cognate dialects, the name being adopted only because that of the perfect had been set apart for another purpose, and I cannot understand how Dr. Schrader can explain such forms as *puputa rabacu*, *acala dabsacu*, "crops I increase, corn I mature" (*W. A. I.* ii. 60, 14), otherwise than as verbs. Indeed he seems himself to admit this in note 3, p. 266.

The second work (already noticed in the *Academy*, vol. iii. p. 380) will be of especial service to the student of the Old Testament. The evidence of the monuments is given in full wherever it elucidates a Biblical passage, and the various historical questions that incidentally arise are discussed at sufficient length. The paragraph on 2 Chr. xxxiv. 11–14 may be particularly recommended. The glossary at the end of the volume will be found useful, and the chronologist will be grateful for the appendix, in which all that we possess at present of the Assyrian canon is given in full. The arguments urged against Dr. Oppert's theory of a break of forty-seven years in the canon leave nothing to be added. Perhaps it would have been better had the author deferred annotating the book of Genesis until we have a more perfect acquaintance with the bilingual tablets and the proto-Chaldaean legends. Some of his combinations in this part of the work are certainly not right. Thus, whatever may be the explanation of *Shinar*, it cannot be compared with *mat curra*, "the land of the east" (like *im curra*, "the east wind," or *mat martu*, "land of the west"), which almost always is preceded by *khar-sak*, "mountain" (as in *W. A. I.* ii. 19, 2, 45), in contradistinction to "the plain" of the Bible, while *mat* (*ma* + *da*) is "country," never "city." I am glad to find that Dr. Schrader has independently come to the opinion that the Biblical compiler in 2 Kings xviii. xix. has confused together two distinct invasions of Judaea, one by Sargon, circa B.C. 710, and one by Sennacherib, in 701. Indeed, this is rendered certain by the reference (xviii. 34, xix. 13) to Samaria, Hamath, and Arpad, the conquest of which was due to Sargon. Isaiah x. belongs, I believe, to the campaign of the latter king (see verses 9, 11); in this way we may explain the representation of the Assyrian expedition as coming from the north-east instead of from Lachish on the south-west. The ideal picture which the prophet has been supposed to be drawing scarcely suits one who was speaking to contemporaries in the midst of a national crisis. Possibly chapter xxii. also refers to the same period, but it may relate to the earlier attack upon Gaza after the capture of Samaria by Sargon. But this, with much else, we may expect to be cleared up by further acquaintance with the inscriptions; and Dr. Schrader deserves thanks for breaking ground in this department of study, and setting the results hitherto obtained before the general reader.

A. H. Sayce.

A. Eberhard's Fabulae Romanenses. Vol. I.: Syntipas et Vitae Aesopi. Lipsiae: Teubner.

The first volume of M. Eberhard's edition of what he calls *Fabulae Romanenses* — containing a reprint (with critical apparatus) of the previously known text of the mediaeval tale of Syntipas (*i.e.* the Greek version of the well-known tale of the *Seven Wise Masters*, for the English versions of which see F. J. Furnivall's work on *Captain Cox, his Ballads and Books*, Ballad Society, 1871, p. lvii, *sq.*), with an earlier text of the same now first edited, and a collection of the amusing Lives of Aesopus composed in the middle ages—will no doubt be welcome to every lover of this kind of literature, and may, we hope, contribute to increase the number of the readers of these attractive compositions. The earlier version of Syntipas, now first published by M. Eberhard, is not quite complete, but much superior to the later text in point of style. But precisely on account of its corrupt diction and macaronic mixture of ancient and modern Greek, we prefer the version in which we first became acquainted with the tale, and which we then knew only in Boissonade's pretty, but now scarce, edition—Paris, 1828. In the earlier version we have met with very few passages still in want of correction; we may, however, mention p. 151, 25, where ἠρεῖτο should no doubt be changed into ἠτεῖτο. In the later version we would suggest, p. 7, 17, ἕλκοντας instead of ἕλκοντες of the MSS. and ἑλκόντων of M. Eberhard; p. 9, 5, ἕως οὗ τὸ ἔργον . . . ἐκπληρώσῃς, instead of ἐκπληρώσεις, which does not suit the grammatical habit of the writer;

cf. p. 36, 15; p. 59, 13, and especially p. 134, 12, where the editor seems to have become aware of this peculiar use of the subjunctive—though somewhat late—at the end of his work. We would here observe (without censuring the editor too severely for this shortcoming) that we can frequently trace his own progress in the course of his work, and watch his familiarity with the diction and style of his author increasing with almost every sheet. This causes in parts the semblance of haste, but does not on the whole injure the solid character of the book. The editor observes on p. 14, 23, "πῶς, *i.e.* ὡς. Corais Στοχ. αὐτοσχ. ante Aelianum ϛθ' n. 2"; but this grammatical note ought to have been made on the very first page, l. 13 (διήγησις . . πῶς τὴν . . διαβολὴν κατεσκεύασεν ἡ μητρυιὰ αὐτοῦ). Boissonade's learned notes might occasionally have been turned to better use: *e.g.* on p. 2, 13, Boissonade properly observes (p. 172 of his ed.) the novel use of χρόνος as "year," which is there very conspicuous on account of the preceding ἔτη; but M. Eberhard passes it over, and not before p. 91, 15, do we find a brief note on this peculiarity. (See also p. xi.) On p. 23, 20, ἄνω καὶ κάτω συστρέψας, the editor observes, "ἄνω καὶ κάτω quoquoversus *e sermone uolgari desumtum uidetur*"; but why does he not simply quote Plato, *Theaet.* 153 D, τὸ λεγόμενον (*i.e.* the proverbial expression) ἄνω κάτω πάντα, "all is topsy-turvy," for which Plato also says, ἄνω καὶ κάτω, and which occurs more than once in Attic writers (*e.g.* Eur. *Bacch.* 752), as the dictionaries may easily show? Beck in his index says, "formulam ἄνω τε καὶ κάτω invenies etiam *Suppl.* 689, *Bacch.* 740 et 752. *Herc. F.* 953, et *Pirith.* fr. vii. 3, et sine copula ἄνω κάτω, *Iph. T.* 282, *Bacch.* 349 et 602, *Herc. F.* 1307 et *El.* 802"; in the same way compare Meineke's index, p. 587, of his first edition of *Menander and Philemon.* Last of all, Coraës (whom M. Eberhard delights in quoting) mentions the popular use of ἄνω κάτω in his commentary on Isocrates, p. 179. See also Krüger's *Grammar*, § 59, 1, 2. We may also compare the Latin *sursum deorsum*, Ter. *Eun.* 278. It would thus appear that even the well-known use of the Latin *videtur* is rather out of place when speaking of a phrase so thoroughly Greek in all periods as ἄνω (καὶ) κάτω. Again, p. 54, 12, οὐδαμῶς γὰρ δύναμαι ἐνθυμηθῆναι, we have ἐνθυμεῖσθαι in the modern sense, "to remember," though the editor passes it *sicco pede.* In the same way we imagine that the peculiar use of ἀκμὴν οὐκ ἐχόρτανα, p. 92, 20, would have been worth a note, confirming as it does Coraës' derivation of the modern ἀκόμη (or ἀκόμι), Πρόδρ. Ἑλλ. Βιβλ. μή': cf. also Lobeck on Phrynichus, p. 123. We should also have thought παρρησιάζεσθαι, p. 130, 16, deserving of a note: see Coraës on Isocrates, p. 122. We might point out other passages in which a note would have been of use, and for which space might easily have been gained by omitting such trivial observations as those on ἀγαποῦσι and other common peculiarities of modern Greek, for which it would have been much wiser to quote Mullach's excellent *Grammar of Vulgar Greek* than to refer to the rare editions of Coraës' books; and likewise numerous readings, which are really of no importance at all, and occur again and again in all late Greek MSS., might have been omitted. But to return to our text, we would further suggest, p. 15, 2, ἀκουτισθεῖσαν (cf. p. 30, 7); p. 34, 26, perhaps τὴν γυναικείαν μορφὴν καρτερήσω, "I will bear a woman's shape;" p. 35, 13, we should certainly read ἐξογκωμένης (cf. ἐγγαστρωμένος, l. 19), or, if the correct form should be preferred, ἐξωγκωμένης; p. 39, 23, perhaps ὃ ἂν αἰτήσῃς μου, as ABV have μοι; p. 55, 24, probably ἀπερχομένων; p. 63, 17, τι ἄλλο seems to be quite correct (the sense is "I shall not dare to give the king a different account [from what his son will no doubt tell him]"); p. 83, 21, doubtless ὅλως instead of ὡς ABV, ἐγὼ Eberhard; 86, 14, certainly συνῳδίας; 105, 5, σμῖξον would be a better accentuation; p. 114, 7, certainly ὅτιπερ (cf. 120, 7; 141, 15); p. 95, 11, M. Eberhard is right in keeping μηνοῦσι of the MSS. in preference to Boissonade's conjecture, μηνύουσι, as the analogous form μηνεῖ occurs in Florios, v. 921 (in my *Med. Greek Texts*). The diction of this work offers many interesting peculiarities: *e.g.* the words πολύξευρος = πολυμήχανος, 100, 12; λουτράριος or λουτράρης, p. 37, which is then replaced by the classic βαλανεύς, 38, 2. In the same manner πορτάρης, 115, 21, *sq.*

The first *Vita Aesopi* has justly been joined to *Syntipas* by the editor, the general character of both compositions being quite identical, and one and the same story even occurring in both. The diction is here as good as may be fairly expected in the thirteenth century, though sometimes we meet with strange expressions; *e.g.* the late word πρόσδομα, 243, 7 (which is not given in Sophocles' *Dictionary of Byzantine Greek*). P. 232, 10, we fancy that we discern a disguised iambic sentence:—

ἀγαθῶν δὲ πλῆρες ἐλπίδων τό γ' εὖ ποιεῖν.

We shall be glad to see M. Eberhard's second volume; and hope that his "Index," to which he refers more than once in the present volume, will contain many such accurate and learned observations as we should expect from the editor of the *Philogelos.* W. Wagner.

Intelligence.

The last number of Messrs. Teubner's *Mittheilungen* contains an elaborate article, by L. Müller, on Quicherat's edition of Nonius, which was also recently reviewed in our columns. From L. Müller's showing it appears that the new edition is by no means "up to the mark," and that very little has been done in it towards settling the numerous questions unfortunately connected with this most foolish of all Latin grammarians, who, however, happens also to be the most important of all in his bearing upon earlier Latin literature and language. We shall be glad to see L. Müller's new edition. Generally speaking, modesty is not the fault of M. Müller, but in the present instance we are fully prepared to accept his statements as corresponding to truth. We are also pleased to learn that his long meditated edition of Lucilius is about to be issued.

The same number of the *Mittheilungen* contains articles on a forthcoming edition of Galenus' work, *De Hippocratis et Platonis Placitis*, by Iwan Müller, of Erlangen; a new critical edition of Euripides' *Medea*, by R. Prinz, in which trustworthy collations of the MSS. will be given for the first time; and on an edition of Juvenal with German notes, by Dr. Weidner. We hope that Mr. Mayor's excellent edition will not remain neglected by Dr. Weidner, though the fact that he overlooked Professor Conington's edition in his commentary on part of the *Aeneid* does not speak highly for his acquaintance with English publications. An etymological dictionary of the Latin language, by Dr. Alois Vaniček, is likewise advertised.

The seventh volume of August Böckh's Minor Writings (containing his critical articles) has just been published. This edition is now complete, with the exception of the fourth volume, which is promised to follow shortly.

The first part of the second volume of the *Acta Societatis Philologae Lipsiensis*, edited by F. Ritschl, contains *Lectiones Stobenses*, by O. Hense; excellent *Quaestiones Onomatologicae*, by O. Sievers; a somewhat lengthy and pretentious, but satisfactory, treatise, *De Actorum in Fabulis Terentianis numero et distributione*, by C. Steffen; and *Quaestiones Eratosthenicae*, by L. Mendelssohn.

We understand that a new and revised edition of Mr. Paley's *Propertius* is about to be published shortly.

Dr. W. Wagner has had the offer of becoming the successor of Professor Dr. Koch at Eisenach, whose death we announced in our last number. Dr. Wagner has, however, decided to stay at Hamburg at present.

The death of Sig. Felice Fenzi, at the early age of 25, has robbed Italy of one of her most promising Orientalists. His work on Assyrian antiquities is highly praised by Ewald in a recent number of the *Göttingische gelehrte Anzeigen.*

M. G. Derenbourg's long-expected edition of the *Opuscula* of Ibn Jannach is announced by Geiger as in the press; that of Saadia's version of the Pentateuch seems to be postponed for the present.

Contents of the Journals.

Journal of the Royal Asiatic Society, vol. vi. part i.—I. The Ishmaelites, and the Arabic Tribes who conquered their Country; by A. Sprenger. [Contests the view of those who consider the Ishmaelites as the ancestors of the Northern Arabians; see *Academy* of July 1 (vol. iii. p. 258).]—II. A Brief Account of Four Arabic Works on the History and Geography of Arabia; by Captain S. B. Miles. [Analysis of four works, manuscripts of which have been discovered, which throw much new light on the history and geography of ancient Arabia, especially the Himyar dynasty of Yemen; viz. the *Iklil fi Ansab* of Hassan bin Ahmed el-Hamdani; the *Kitab el-Jezireh* of the same author; the *Tarikh el-Mostabsir* of Ibn el-Mojawir; and the *Kurrat el-Oyûn* of El-Dubbi.]—III. On the Methods of Disposing of the Dead at Llassa in Tibet; by C. Horne. [The paper is founded on a narrative supplied by a Llama of Llassa. The principal modes described are, exposure to the vultures; cutting the corpse into pieces and feeding the dogs with it; also salting and burning. The statements of classical writers are generally confirmed by this account.]—IV. The *Brihat-Sanhitâ*; or, Complete System of Natural Astrology, of Varâha-mihira. Translated from the Sanskrit into English by H. Kern. [Continued from chapter xxxvi. to chapter li.] V. Notes on Hwen Thsang's Account of the Principalities of Tokháristán, in which some previous Geographical Identifications are reconsidered; by Colonel H. Yule. [Traces the Chinese pilgrim's wanderings from Samarkand to Kapiça, and the return route from Hupián to Yarkand, and proposes a number of new identifications, differently from Vivien de St.-Martin and Cunningham. The *li* in which the pilgrim's estimates are given is not considered to be a scientific road-measure, the expression "one hundred *lis*" expressing "one day's journey," the distance varying according to the nature of the ground traversed.]—VI. The Campaign of Aelius Gallus in Arabia; by A. Sprenger. [Examines the accounts given of Arabia in Juba's *De Expeditione Arabica*, and by Strabo, and proposes a number of identifications; see *Academy* of July 1 (vol. iii. p. 258).]—VII. An Account of Jerusalem, translated from the Persian text of Násir ibn Khusrú's *Safarnámah*, by the late Major A. R. Fuller. [The author was a native of Merv, who visited the Holy Land and Egypt in the eleventh century of our era. He states that he entered Jerusalem on the 5th of Ramazán 438 A.H. There occurs in his narrative a brief description of the Holy Temple. Of the original text of this work, two MSS. exist in England, one of which is in the British Museum, the other belonging to the Nawab Ziaud-dín Khán.]—VIII. The Poetry of Mohamed Rabadan, of Arragon; by the Right Hon. Lord Stanley of Alderley. [The concluding portion of the Morisco poet Mohamed Rabadan's *History of the Prophets*.]—Annual Report on the Progress of Oriental Research during the Past Year, and the State of the Society. Read on June 3 last.

Jüdische Zeitschrift (Geiger), vol. x. No. 3.—David ben Sakkhai against Saadias. [A fragment of a Karaite document.]—Benedetti's *Giuda Levita*, Chenery's *Alcharizi*, and Baer's *Genesis and Isaiah*; reviewed.—Miscellaneous: Frankel on the Targum to the Prophets. [An industrious collection of details, without new results, or recognition of Geiger's researches.]—The Arabic Original of the *Choboth ha-lebaboth* of Bachja.—Extracts from letters.

New Publications.

Acta Societatis Philologae Lipsiensis. Ed. F. Ritschelius. Tom. II. Fasc. 1. Leipzig: Teubner.

Aristoteles Politik. 1.–3. Buch. Mit erklär. Zusätzen ins Deutsche übertragen v. J. Bernays. Berlin: Besser.

Beames, J. A Comparative Grammar of the Modern Aryan Languages of India. Vol. I.: On Sounds. Trübner.

Bekker, J. Homerische Blätter. Bonn: Marcus.

Boeckh's Gesammelte kleine Schriften. 7. Bd. Leipzig: Teubner.

Cassel, P. Esmun. Eine archäologische Untersuchung aus der Geschichte Kenaans u. s. w. Gotha: Schlössmann.

Childers, R. C. A Pali-English Dictionary. Part I. Trübner.

Cicero's Rede für T. Annius Milo. Mit Einltg. u. Comm. v. E. Osenbrüggen. Hamburg: Mauke.

Dietrich, F. De Sanchoniathonis Nomine. Additis Inscriptionum aliquot Citrensium Lectionibus. Marburg: Elwert.

Diez, F. Grammatik der romanischen Sprachen. 3. Theil. 3. neu bearbeitete und vermehrte Auflage. Bonn: Weber.

Eratosthenis Carminum Reliquiae. Disposuit et explicavit E. Hiller. Leipzig: Teubner.

Gubernatis, Angelo de. Mythical Zoology; or, The Legends of Animals. Trübner.

Jahn, O. Sophoclis Electra in usum scholl. Ed. altera cur. ab Ad. Michaelis. Libri Laurentiani specimine photolith. aucta. Bonn: Marcus.

Kamil, The, of El-Mubarrad. Ed. W. Wright. Part IX. Leipzig: Brockhaus' Sort.

Kitâb al-Fihrist. Band 2, die Anmerkungen u. Indices enthaltend. Leipzig: Vogel.

Koch, H. De Articulo Homerico. Leipzig: Hinrichs.

Legge, J. The Chinese Classics. Vol. V. Part I. Trübner.

Maehly, J. Das xxx. Idyll d. Theokrit. Berlin: Ebeling u. Plahn.

Mahâbhâshyam, with the Commentary called Bhâshyapradipa, and a new Commentary by Pandit Rajarama. Trübner.

Sacuntala Câlidâsi. In usum scholarum: textum recensionis Devanagaricae recognovit atq. gloss. sanskritico et pracritico instruxit C. Burkhard. Breslau: Kern.

Schmidt, J. Die Verwandtschaftsverhältnisse der indogerm. Sprachen. Weimar: Böhlau.

Trumpp, E. Grammar of the Sindhi Language. Trübner.

Whitney, W. D. Oriental and Linguistic Studies. Trübner.

Wrobel, J. De Generis, Numeri, Casuum Anacoluthia apud Tragicos Graecos. (Abhandlungen zur Grammatik, Lexikographie u. Literatur der alten Sprachen. 3. Heft.) Berlin: Ebeling u. Plahn.

Zahn, v. Ueber die akustische Analyse der Vocalklänge. Leipzig: Hinrichs.

ERRATA IN No. 59.

In page 411, col. 2, the word "Vaucheria" has been printed "Vancheria."

POSTSCRIPT.

Dr. Brockhaus, the eminent Orientalist, has been appointed Rector of the High School at Leipzig. His inaugural address was on the bearing and importance of Oriental studies.

The eminent mathematician, Alfred Klebsch, has just died at Göttingen, at the early age of 40.

(From the *Athenaeum*.)

MR. VLADIMIR DAHL.

Again we have to announce the death of a distinguished Russian writer. It has too often happened that a literary career in Russia has been prematurely closed in the grave; and within the last twelve months three of the most useful of Russian scholars, Afanasief, Hilferding, and Pekarsky, have died in middle age. But Vladimir Ivanovich Dahl, whose death we have now to record, had attained a good old age, and so was able, before he was called away, to see his work brought to a full and happy conclusion. Born in 1802, of Scandinavian extraction, Vladimir Dahl was educated in the Naval Cadets' Institution at St. Petersburg, and he afterwards served on board the Black Sea fleet. At a later period he held a commission in the Russian army, and served in the Polish campaign of 1831. Having studied medicine at Dorpat, he filled a medical post in one of the Government hospitals at St. Petersburg, and finally he obtained an appointment in the Civil Service. But it was as a student of its popular literature that he made himself most useful to Russia. So diligent was he as a collector of Russian folk-lore that he was in possession of above 4,000 popular tales, besides more than 30,000 proverbs. The latter he published in a separate volume; the former he liberally communicated to other scholars, and many of them now enrich the great collection edited by Afanasief. As an author he gained a considerable reputation by various works, such as the stories he published under the pseudonym of the "Cossack Lugansky." But his great work—that which will render his name truly immortal—is the invaluable *Dictionary of the Living Russian Tongue*, in four large volumes, which was completed in 1866. It is impossible to praise too highly this magnificent work—one to which he devoted, during a great part of his lifetime, what was most truly a labour of love. For the present, it is sufficient to say that to all who wish to study the popular literature of Russia it is an absolute necessity. Without its aid the songs and stories of the Russian people will offer difficulties trying even to a native, to a foreigner insurmountable.

For some time before his death Mr. Dahl suffered much from illness, but he retained to the last his interest in the work he had so long loved. When the writer of this brief notice last saw him, he was, although in evidently ailing health, full of intellectual vigour and enthusiasm. Surrounded by his books, in a home which was more like a country-house than a city residence (it stood in the outskirts of Moscow, near the Zoological Gardens, and was said to be the only building in that quarter of the city which had survived the famous conflagration of 1812), he spent the declining years of his life in tranquillity, having the satisfaction of seeing his literary harvest safely garnered and fully appreciated.

W. R. S. R.

THE ACADEMY.

"Inter silvas Academi quærere verum."

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Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Monday, December 16, and Advertisements should be sent in by December 11.

General Literature.

Shelley's Early Life; from Original Sources. With Curious Incidents, Letters, and Writings, now first published or collected. By Denis Florence Mac Carthy, M.R.I.A. Hotten.

The main object of this volume is to set forth the facts of Shelley's life, as connected with his journey in 1812 to Ireland, where he advocated Catholic emancipation, and more especially repeal of the Union. Mr. Mac Carthy made this subject his own many years ago; and whatever has been said since then by other writers, with some approach to detail or accuracy, has been due very principally to him. He has now carried the investigation much further, enlarged upon the facts, rectified a number of small or less small errors, and shown with some completeness the true bearings of this episode in an illustrious life.

The volume consists of two classes of subject-matter—one which is proper to Mr. Mac Carthy himself, and the other to Shelley. The latter consists of Shelley's various political pamphlets: the *Address to the People of Ireland*, the *Proposals for an Association of Philanthropists* for the benefit of Ireland, the *Declaration of Rights*, the *Proposal for putting Reform to the Vote throughout the Country*, and the *Address to the People on the Death of the Princess Charlotte*. The last two do not exactly belong to Mr. Mac Carthy's theme; but all Shelleyan students will be obliged to him for having added them, and so made the collection of Shelley's strictly political pamphlets complete. They are all rare, if we except the *Declaration of Rights*, which, having been republished in the *Fortnightly Review* by the present writer in 1871, has become accessible to all readers. The Address concerning Princess Charlotte had also been reprinted, and is less scarce than the others, which very few people had ever seen, and which were practically unattainable. By far the best of these is the Reform pamphlet, written in 1817, when Shelley was about twenty-five years of age. The two Irish pamphlets, written in 1812, are tedious and inflated productions, though it cannot be said that they are devoid of sound advice, while, for generosity of spirit and high-souled scorn of oppression, they are naturally conspicuous. The earlier of the two effusions, the *Address*, full of lumbering repetitions, was purposely written down to the capacity of the uninformed classes of Irish people: if it hereby gains in clumsiness, at least it loses somewhat in bombast; but the *Proposals for an Association of Philanthropists* make up for all arrears in this direction. There are two other pamphlets by Shelley which ought to be rescued from oblivion; but, not being of a political character, they could hardly, under any circumstances, have found a place in Mr. Mac Carthy's book. The first of these is the *Refutation of Deism*, published in 1814: Mr. Mac Carthy seems to suppose that no copy of this dialogue is now known to be extant, but there is at least one, in the possession of Sir Percy Shelley. Its precise object (I am told by a gentleman who has looked into it) is to show that there is no tenable medium between Atheism and Christianity, coupled with an ironical championing of the latter. The second of the two tractates referred to is the *Essay on Devils*, never yet published, but existing in manuscript, or perhaps even in print.

The reprint of Shelley's pamphlets in Mr. Mac Carthy's volume occupies 98 pages out of 408. The remaining 310 pages have as their nucleus one fact, which is indeed the chief contribution to Shelley's biography furnished by this book —viz. that the poet, while still at Oxford in 1811, published in London a poem termed *A Poetical Essay on the Existing State of Things*, "sold by B. Crosby and Co., and all other Booksellers." It was advertised as "By a Gentleman of the University of Oxford" (the same phrase as in the title-page to Shelley's novel of *St. Irvyne*), "for assisting to maintain in prison Mr. Peter Finnerty, imprisoned for a libel": its price was two shillings. An advertisement to the foregoing effect appeared in the *Oxford University and City Herald* of 9th March 1811. The evidence that the poem thus advertised was by Shelley is merely inferential, but may nevertheless be regarded as sufficient. It is simply this: that the Dublin *Weekly Messenger* of 7th March 1812, at which time Shelley was in Dublin, contained an article about him, written in all probability by the well-known political agitator John Lawless, wherein occurs the following passage: "Mr. Shelly, commiserating the sufferings of our distinguished countryman Mr. Finerty, whose exertions in the cause of political freedom he much admired, wrote a very beautiful poem, the profits of which, we understand, from undoubted authority, Mr. Shelly remitted to Mr. Finerty: we have heard they amounted to nearly an hundred pounds." Mr. Mac Carthy fairly argues that, as Shelley sent to Godwin this number of the *Weekly Messenger* without in any way controverting the statement which it contained affecting himself, he practically confirmed its truth. Our author therefore made zealous research for anything to explain or verify the allegation in the Dublin paper. At last he traced out the advertisement above referred to in the *Oxford Herald*, and putting the two things together, he comes to the firm and, I think, the safe conclusion that the writer of the *Poetical Essay on the Existing State of Things* was Shelley. Of the poem itself, however, Mr. Mac Carthy has not, after extensive and reiterated enquiry, succeeded in obtaining the least vestige. He tells us who Mr. Finnerty was—an Irish printer and press writer and reporter, who, after suffering the pillory and imprisonment as printer of *The Press* newspaper in Dublin, endured another incarceration of eighteen months in Lincoln Gaol for an alleged libel on Lord Castlereagh. He was undergoing this sentence at the time that Shelley came forward on his behalf: and he died on the 11th of May 1822, only a couple of months before the author of the *Poetical Essay* and of many other less perishable verses.

Mr. Mac Carthy is entitled to the whole credit of ferreting out the *Poetical Essay*, and identifying it with Shelley as author: but he goes a little too far in assuming, as he appears to do throughout his book (and especially on p. 4), that no hint had ever before been given of the publication by Shelley of any poem to which this volume is found to correspond. In the memoir of Shelley (p. xli) which I published in an edition of his works at the beginning of 1870, there is a note which says: "Everything that is known on this subject [the volume named *Original Poetry by Victor and Cazire*, printed in 1810] is due solely to Mr. Garnett:

see his article in *Macmillan's Magazine*, June 1860, *Shelley in Pall Mall.* He has kindly informed me, moreover, that a gentleman connected with the Shelley family says that Percy 'wrote and printed *another* book of verse about the same time. He could not remember the title, but thought a copy might still be in existence.'" This "other book of verse" must, to all appearance, be the *Poetical Essay;* for even the unwearying and minute researches of Mr. Mac Carthy regarding this period of Shelley's life have not brought to light anything else to which the statement could be supposed to apply.

Next to this of the *Poetical Essay*, the most important point brought out in the volume before us is that Shelley's Oxford friend, Mr. Thomas Jefferson Hogg, so far forgot himself as to make love to Harriett Shelley (late Miss H. Westbrook) very soon indeed after being first introduced to her, and consequently very soon after Percy and Harriett had become man and wife; and that this discreditable escapade, which occurred in York in October 1811, caused a total estrangement between Shelley and Hogg for about a year ensuing. Mr. Mac Carthy, it is true, does not state this matter in absolutely plain and unmistakable terms: he does not give the name of Mr. Hogg at the decisive moment (p. 300), but only refers to "one of the earliest chosen and the most boastful of the number" of Shelley's friends. However, putting together this passage and various others in the volume, there can be no mistake as to what Mr. Mac Carthy means. Moreover, I am aware that what he thus intimates is based upon very explicit statements in letters written at the time by Shelley, which I had myself read through before completing my memoir of the poet; and Mr. Mac Carthy best knows what chance he would have had of tracing them out through his own unaided endeavours. The many extracts which he gives from letters addressed by Shelley, and occasionally by Harriett, to Miss Hitchener, and which form perhaps the most valuable and entertaining portion of the present volume, all come from this correspondence. The revelation now made by Mr. Mac Carthy concerning a friend who "attempted to seduce my wife" (to cite the precise expression in Shelley's letter to Miss Hitchener) may explain to the reader of my memoir of Shelley what was meant by a passage, purposely reticent, in a note (p. lxxv): "I have good reason to know that, at an earlier period of his wedded life, his disrespect for the marriage tie was by no means such as to make him tolerant of conduct which he regarded as an interference with its obligations in his own and Harriett's case." Again, the explanation which Mr. Mac Carthy offers (p. 117) of Shelley's Wertherian prose fragment, connecting it with this same affair of Hogg and Harriett, amounts simply to the suggestion which my memoir contains (p. clxxiv): "In this year [1813], or perhaps earlier, he commenced a sort of variation of Göthe's *Werther*, from which Hogg gives an extract. An accomplished Shelleyite has suggested to me that this excerpt (a letter purporting to be written to Werther by the husband of Charlotte) may be less merely Wertherian, and more directly personal to Shelley himself, than Hogg allows the reader to infer. Without adopting this view of the matter, I recognise it as admissible: if it is correct, the fragment probably belongs to the end of 1811, or beginning of 1812." A word should here be added as to the question of Mr. Hogg's real culpability in this matter of love-making to Harriett. As before stated, it is most certain that Shelley charged him with attempting to seduce her, and also with inciting the poet himself to fight a duel, and so salve the wounded honour of both parties: but we are not obliged, nor indeed allowed, to take Shelley's conception of the facts, in all instances, as a true picture of them. Shelley apparently knew nothing of the affair save what Harriett told him, eked out perhaps by not over-friendly confirmatory hints from her sister: he does not seem to have come to any personal explanation on the subject with Hogg, but only to have interchanged letters with him about it: and it is extremely conceivable that Hogg, as soon as he perceived Shelley to be grave or warm on this delicate topic, turned bantering and elusive. If we suppose—what is abundantly probable—that the inexperienced school-girl Harriett exaggerated a little in narrating to Shelley the passages of a flirtation got up by the cynical young man from the University, and—what is practically certain—that Shelley's imagination was not behindhand in making a blaze out of such suitable fuel supplied to it by Harriett, we shall conclude that "attempted seduction" of the latter is not proved against Hogg—although it is difficult to doubt that his conduct was rightly open to animadversion and suspicion.

Two other interesting points which Mr. Mac Carthy has been the first to elicit relate to Shelley's Oxford career. He has found that the pamphlet which led to his expulsion from the University, *The Necessity of Atheism*, was announced for publication and sale—not merely, as had hitherto been supposed, circulated in a semi-private way by himself. The following advertisement appeared in the *Oxford University and City Herald* of 9th February 1811: "Speedily will be published, to be had of the Booksellers of London and Oxford, The Necessity of Atheism. 'Quod clara et perspicua demonstratione caveat pro vero habere mens omnino nequit humanæ.'—*Bacon de Augment. Scient.*" [It is obvious here that "caveat" and "humanæ" are misprints for "careat" and "humana": whether the misprints occur in the advertisement itself, or in Mr. Mac Carthy's reproduction of it, I am unable to say.] Further, Mr. Mac Carthy has found that, about the time of Shelley's stay at the University, and not beyond that time, six pieces of verse, original and translated, appeared in this same paper, *The Oxford Herald*, some of them signed "S." and others "Versificator," and he surmises that these may be by Shelley. He extracts these effusions, and rather strongly pronounces for the Shelleyan authorship of the one original specimen, named *Ode to the Death of Summer:* a conclusion as to which I should take leave to dissent from Mr. Mac Carthy, as the poem does not appear to me to resemble, in any marked degree, those which Shelley had composed up to that date, and still less the immortal products of his maturer years.

Partly perhaps on account of the affair with Harriett Shelley, already referred to, Mr. Mac Carthy exhibits a great dislike of Mr. Hogg, and a total contempt of his *Life of Shelley* as an authority: nor, indeed, has there been any time, since the date of the publication of that most diverting book, when its gross inaccuracy in detail, and its recklessly overcharged portrayal of facts, could be matter of uncertainty. Mr. Mac Carthy is especially severe on the slighting account which Hogg gave of the whole of Shelley's Irish expedition, including the statement that the poet was howled down by Roman Catholics at a public meeting when he urged on their consideration the rightful claims of Protestants. In all this matter Mr. Mac Carthy corrects many details, and elucidates many more, some of them of substantial interest: but, on the other hand, he seems himself a little too much inclined—accepting as he does the various statements favourable to Shelley's oratorical efforts in Dublin, and to his Catholic auditors—to ignore all allegations that tell in the opposite direction, even though these may not involve any real contradiction of the other assertions, but only supplement and modify them. Sometimes the author's antipathy to Mr. Hogg makes him positively unjust to that writer, whose permanent and deep regard for Shelley ought not to

be called in question, whatever may have been the misdemeanours of his youth, or the partly sarcastic (as well as partly enthusiastic) tone of his biography. Mr. Mac Carthy cites the expression of Hogg, "I cannot but confess that the poor fellow [Shelley] had many underhand ways"; and he adds, "The underhand ways here referred to may perhaps mean those opinions on the character and conduct of Mr. Hogg himself which, though unpublished, still exist in the handwriting of Shelley." This is wholly gratuitous, and, were it not probably the result of oversight, must be called most unfair and malicious. The fact is that Hogg has no sooner spoken of Shelley's "underhand ways" than he explains his meaning thus: "I should add that his underhand ways differed in one very important respect from those of other people. The latter were concealed because they were mean, selfish, sordid,—too bad, in one word, to be told: *his* secrets, on the contrary, were hidden through modesty, delicacy, generosity, refinement of soul,—through a dislike to be praised and thanked for noble, disinterested, high-minded deeds, for incredible liberality and self-sacrifice." Thus we see that Mr. Hogg, under an ironical phrase, only paid a very high tribute to his friend's memory in this instance.

The same habit of picking one sentence out of a whole passage, and consequently mis-stating the result, has produced an erroneous charge by Mr. Mac Carthy in my own case. On pp. 338, 339, he refers to the statement of Captain Medwin that Shelley, having left Ireland for the Isle of Man, and sailing thence in November, took a principal part in saving the vessel from a storm. He points out the inconsistencies of this narrative, and then proceeds: "And yet this absurd story and these unfounded statements have been repeated with a sort of parrot-like iteration by every subsequent writer who has undertaken to give us an account of Shelley's life,—except, indeed, Mr. Hogg, who generally commits himself to no one's nonsense but his own. They are adopted without the slightest hesitation by Lady Shelley and Mr. Rossetti." Now, my memoir of Shelley (p. lxvi) speaks of the matter in the following terms: "They experienced a storm near the Isle of Man, when Shelley, in the judgment of the skipper, who would receive no payment from him, saved the ship and its crew of three by his energetic and judicious exertions.". To this very passage is appended the ensuing note: "It is not quite clear *when* this incident happened. Medwin (*Life*, vol. i. p. 177) says it was in November, and after the *first* Dublin sojourn; in the *Shelley Papers* he says it was in 1813 or 1814. If it was really in 1813, it must have been in going to or returning from the *second* Dublin sojourn. It cannot have been in 1814, nor yet in the month of November. Perhaps the whole story is apocryphal." This is a strange specimen of "parrot-like iteration," and of "not the slightest hesitation." The citation of this passage, and of that from Mr. Hogg's book, may perhaps suggest to Mr. Mac Carthy a little more caution in pronouncing other people to be in the wrong: although, as I have already said, he has undoubtedly corrected several errors of detail appearing in preceding accounts of Shelley, mine included—for which I am heartily obliged to him.

The solution offered by Mr. Mac Carthy of the alleged attempted assassination of Shelley at Tanyrallt, in February 1813, appears to me altogether extravagant. He thinks that Miss Hitchener (the schoolmistress from Hurstpierpoint who had recently been an inmate of Shelley's house, and whom he had now parted from, and termed "The Brown Demon"), or Miss Hitchener's father, may have been at the bottom of it. The father, it seems, was a publican near Hurstpierpoint, who had in his earlier years been a smuggler, and whose real surname was Yorke. Shelley engaged to make some pecuniary allowance to Miss Hitchener after she had left his house: but Mr. Mac Carthy *conjectures* that this promise may have remained unfulfilled, and that Miss Hitchener or her father, after expostulations and threats, may have prompted some one to undertake an illegal *coup de main*. Considering the distance between Hurstpierpoint and Tanyrallt, and all the other circumstances of the case, it appears to me that if we term Mr. Mac Carthy's solution of the mystery "not impossible," we treat it liberally. I may take this occasion to mention a fact not apparently known to writers about Miss Hitchener — that she too was a "poetess," though of rather a different class from Percy Bysshe Shelley. In 1822, Messrs. Black, Young, and Young of Covent Garden, published *The Weald of Sussex, a Poem by Miss E. Hitchener*. It has no literary value, though there is a certain display of erudition in the poem and its notes: it shows that by 1822 Miss Hitchener had ceased to profess herself, as in the early days when Shelley so fulsomely and fatuously adored her, a "deist and republican."

Mr. Mac Carthy's book is not very easy for consecutive reading, as there is a good deal of repetition in it, and some scattering of its constituent elements, and a tendency towards making the utmost of every minute point that it raises—and not many of the points are of major importance. It is, however, a laborious and a thoroughly genuine accession to the biographical materials regarding Shelley, and will remain indispensable to all students of this period of his life.

W. M. Rossetti.

RUSSIAN FUNERAL LITERATURE.

Laments of the Northern District. [*Prichitaniya Syevernago Kraya.*] Collected by E. V. Barsof. Vol. I. Moscow.

In the north-east of Russia, especially in the neighbourhood of Lake Onega, the collectors of popular songs and stories have of late years found very much that is interesting and valuable. Thence have been drawn, to a great extent, the ample materials which have rendered so rich the collections of "metrical romances" and other poems due to the patient toil of such explorers as Ruibnikof and Kiréefsky. To the name of a third labourer in the same field, unfortunately, a mournful interest is now attached. Alexander Hilferding, the president of the ethnographical section of the Russian Geographical Society, was on the point of publishing the mass of popular poems which he had secured in that part of the country, when he started, a few months ago, to explore the district a second time. At Kargopol fever struck him down, and before many days had passed, he was laid in an untimely grave.

Of the poems which are current among the unlettered peasantry of this part of Russia, by no means the least interesting are the *prichitaniya*, or "lamentations," which are to be heard on the occasions of deaths, funerals, and festivals held in memory of the dead. Specimens of these have been given at various times, and in Ruibnikof's great work there occur, under the name of *zaplachki*, or "wailings," several of these dramatic dirges or keenings, remarkable for a singular kind of power as well as pathos. But no comparison can be made between any preceding collection of such poems and that for which we are now indebted to M. Barsof. His work is the first which has been entirely devoted to this branch of Russian popular poetry—one of which he has most satisfactorily proved the great importance.

Considerable time and space would be required to give anything like a clear idea of the merits of the poems which

fill 298 pages of this, the first, volume of M. Barsof's work. But it is possible to compress into a small compass some of the remarks which he makes in the excellent introduction which he has prefixed to them, and in the interesting account of funeral customs by which they are followed.

After mentioning some of the countries in which keenings and professional keeners have been and still are in vogue, M. Barsof proceeds to trace in the old chronicles the earliest record of their existence in Russia, proving, on the authority of Nestor, that *plachi*, or "laments," formed in Olga's time an indispensable part of the *trizna*, or "funeral feast," of the old Slavonians; showing how, when Oleg died, "all the people wailed over him with great lament," dwelling upon the "beautiful wail of Yaroslavna" in the celebrated poem, *On Igor's Expedition*, and quoting from the lives of the (Russian) saints and other ancient records several extracts from funeral poems composed many centuries ago, but differing little from the metrical complaints in which the borderers on Lake Onega at the present day express their feelings towards their dead. Then he shows how the church attempted to put a stop to the use of such funeral chants, on account of the heathen sentiments which they breathed, sometimes even branding them with the name of "satanic songs," objurgating them in sermons, and solemnly prohibiting them by the voice of the council held at Moscow in 1551. But neither the influence of the church nor even the power of Peter the Great was sufficient in this matter to bend the will of the people. Beside the bodies or above the graves of their dead relatives and friends the peasants insisted on indulging in their wonted expressions of grief; and so the old songs which had come down to them from the days of their ancestors continued to be sung in at least all the remoter parts of Russia. Of late years, however, they have lost much of their hold upon the affections of the people in general, and in order to hear them in perfection it is necessary to visit such outlying districts as those in which M. Barsof sought and found the materials for his work.

Much is to be learnt from these archaic poems with respect to the views of the old Slavonians about this life and that beyond the grave. In them Death is represented as a foe, who makes her appearance (*Smert* = *Mors* being feminine) in various guises. In vain does man attempt to struggle with her, and rescue from her grasp the beloved victim; at one time as a raven or a hawk, at another as a fair maiden or a crippled beggar, she glides into the doomed dwelling and cuts the thread of life. Vainly also is she beset by expostulations and tempted by promises; utterly inflexible she strikes the fatal blow. Sometimes, indeed, she (or Fate) is represented as enjoying the sufferings of her prey. As in all poems of this class, the action of dying is compared to the setting of the sun, the falling or disappearance of a star, the melting of snow, and the like. The actual moment of dissolution is held specially sacred, and it is the bounden duty of a relative or friend to watch beside "the painful couch," the "weary pillow," to keep guard while "the bright eyes are parting for ever with the white light," the soul is going forth from "the white breast." Bitterly do the wailers grieve over those corpses by which no watchers have sat at the last moment. The departing soul is sometimes described as a breath which is borne away by the winds, or, under the influence of Christian ideas, is received by one of the angelic host; sometimes it is pictured as a butterfly or a bird. The ideas expressed in the poems with reference to the existence of the disembodied spirits are of a twofold nature. Sometimes the soul is supposed to dwell in the grave, and so the carpenters who are constructing the coffin for a corpse are besought to make it a comfortable dwelling-place for its late tenant; at other times it is described as flying together with other spirits among the clouds. But wherever their regular habitations may be, the souls of the dead are believed, and even expected, to appear to the living. Some traces may even be found, M. Barsof thinks, of a family *cultus* of the dead, and he quotes, as an instance, the lament which is sung by the dead man's kinsfolk, when they go through all the house and the outhouses which had belonged to him, as if expecting to find him in some part of his wonted home. So closely is the idea of the house-master connected with that of the Domovoy or house-spirit that, "if you say, 'I have seen the Master' (*Khozyain*), every *Zaonezhanin* (Beyond-Onega-Man) will think you mean that you have seen the Domovoy."

From these poems, says M. Barsof, an interesting picture of the hard life of the North might be constructed. In them may be seen, as in a mirror, the monotonous landscape, the gloomy forest, the dreary swamp, the scanty vegetation; in them also are portrayed the simple folk who have to maintain so constant a struggle with the forces of nature, their picturesque dress, their old-fashioned habits and customs. Of especial interest are the passages which refer to the family relations in the patriarchal mode of life which prevailed when their songs were originally sung, and which, in some respects, has not yet been materially altered. Each degree of relationship demands its own particular wail, and so we find special forms of lamentation, not only for parents and children, or brothers and sisters, but also for uncles, aunts, nephews, nieces, godchildren, first-cousins, first-cousins-once-removed, &c. Very interesting also are the poems which throw light upon the relations of the peasants with their communal authorities, or with the upper classes of officials and the clergy, of which nature are the laments for a *Starosta*, or village chief, or for a "pope," or a doctor, or for a *Mirovoi Posrednik*, or official arbiter. And no less interesting are the laments of a different kind, those devoted to persons who have been drowned, or struck by lightning, or who have committed suicide.

Over M. Barsof's most interesting account of the Olonets funeral customs we must now skim very hastily. Many of them are exceedingly remarkable, such as that of leaving openings, in which glass is sometimes set, in the coffin; that of placing in the coffin cuttings from the hair and the nails of the corpse, and also such things as bread, needles, and so forth; that of using as a remedy against ague the soap with which a dead body has been washed; that of (sometimes) singing wedding songs at the funerals of young girls, and many another of equal interest. His descriptions, also, of the funeral banquet and the memorial feast are most valuable, and so is the comparison he drawns between the memorial festivals of the Olonets Slavonians and those (of a very similar nature) observed by the Ugrian Mordvins.

With an amusing description of the various *Voplenitsas*, or professional wailers, from whom he derived a great part of his valuable materials, and with "a North Russian glossary, together with general remarks on the language of the *Prichitaniya*," M. Barsof concludes the first volume of a work for the execution of which he deserves high praise, and which is of the greatest interest to every student of folk-poetry and of folk-lore. W. R. S. Ralston.

LITERARY NOTES.

Enigmas of Life, by W. R. Greg (Trübner and Co.), is a book which deserves some attention as showing in a convenient compass how much—or how little—can be done in the way of constructive speculation without a foundation of fixed scientific principles. Mr. Greg is a reformer who believes in the perfect-

ibility of the species, while taking a very gloomy view of its actual estate ; and a sceptic who cherishes some articles of faith which he knows to be uncertain. In his first essay, on "Realisable Ideals," he omits to explain whether by "possibilities" he means logical and mechanical, or what may be called historical, possibilities ; and as the latter only can (and certainly will) be realised, his optimistic inferences lose a part of their weight.—Essays II. and III., "Malthus Notwithstanding," and "Non-Survival of the Fittest," discuss two aspects of the population difficulty, and in the interests of the moral and physical perfection of the race argue in favour of adjourning the theory and practice of Malthusianism until the whole of the habitable globe is evenly peopled with scientific farmers.—Essays IV. and V., "On the Limits and Direction of Human Development," and "The Significance of Life," suggest the doubtfulness of everything except the existence of good, which is treated more as an axiom than as an hypothesis, though the surrounding atmosphere is so sceptical as to warrant the assumption that the writer would not assert more than his own power of imagining a world which he himself would think excellent.—"De Profundis" and "Elsewhere" carry this subdued optimism a little farther, and develop the assumptions, which an interesting preface aims at justifying, of the existence of a Creator and a Future Life. Mr. Greg writes for those who look upon both as doubtful, and merely asserts his own belief as a fact, claiming a right to hold it till the negative is proved. He is severe upon the unphilosophic materialism of the Christian doctrine of the resurrection of the body, though it is certainly not from modern science that he acquired the counter conception of a life "elsewhere" for disembodied spirits. His argument is that human bodies are known to decay, and that their elements pass into fresh combinations, so that at the Last Day there might be thousands of claimants for a single particle of matter. But a materialist finds it least impossible to conceive the resurrection of an individual consciousness by supposing all the old material conditions of its activity to be somehow or other re-united, and, given a Providence, surely it might be trusted to arrange that no two men should die in the possession of the very same fragment of flesh. The theory of transmigration is a *via media* which would allow the contending souls to re-occupy their bodies in turn. It would be unfair to complain of vagueness in the conclusions of a book which begins with the admission ". . . . enigmas which, at thirty, I fancied I might be able to solve I find, at sixty, I must be satisfied simply to propound." But asking riddles is endless work unless it is first agreed in which language (faith, reason, or sense) the answer is to be given.—The volume contains an unusual number of printer's errors.

M. Émile Montégut's "Impressions de Voyages et d'Art" (*Revue des deux Mondes*, November 1) continue as readable as ever. At Citeaux the tourist learnt to understand the feud between the *gamay* and the *pinot*, the latter a vine growing on sunny slopes and producing the true *vin de Bourgogne*, the former a common "hypocritical" plant which ruins the fame of the nobler growth. The head of a reformatory for boys on the site of the old monastery assured him that the Parisian *gamins* were the most docile and corrigible. Beaune reminded him of Piron's satirical *Voyage à Beaune*, and Auxerre, which has erected a statue to Davoust, of several unpublished anecdotes which go to prove the marshal to have been more amiable than his reputation.

The *Cornhill* (December 1) contains a very happy appreciation of Nathaniel Hawthorne and the influence of his nationality on his genius. A suggested comparison with Charlotte Bronté illustrates the distance between his weird or airy fancies and the language of real passion or the delineation of intelligible character. A paper in the same number, on "Coincidences and Superstitions," borrows from the history of science some very curious instances of the former.

A new poem is announced by Julius Grosse (well known by *Das Mädchen von Capri* and other poems) under the title *Abul Kazim's Seelenwanderung*. It is supposed to be the narrative of a dervish, who describes his experiences in previous states of existence. The metre is that of Dante.

Art and Archaeology.

Grimm's Life of Raphael. [*Das Leben Raphaels von Urbino.* Italiänischer Text von Vasari. Uebersetzung und Commentar von Herman Grimm. Erster Theil.] Berlin : Dümmler.

Herman Grimm's contribution to Raphaelesque literature is an instalment of a larger work. It comprises Vasari's life of Raphael, turned, we know not why, into modern Italian by Professor Tobler, and the same text conveniently divided into chapters, reprinted in Italic fragments and commented at considerable length. Grimm's purpose seems to be, at some future period, to write a biography of Raphael for which these commentaries shall be a book of reference, enabling him to dispense with notes and tell his story without further interruption. His views and arguments will, he doubtless thinks, have been exhaustively put, and the reader will thus take the benefit of a continuous narrative which—we may surely predict—will have more than the usual attractions of Grimm's manner.

The questions which prominently arise as we read this first volume of commentary are important. Does Grimm exhaust the materials, artistic and literary, at his command, and does he make such use of them as will preclude the necessity of commenting his own commentary?

None who peruse this work with a previous knowledge of the subject will deny the vast reading, the comprehensive grasp of sources, and the subtlety with which conclusions are drawn. It is striking with what clearness problems of perplexing intricacy are treated ; and it may be admitted that there is a natural plausibility even in the solutions from which we feel bound to dissent.

Nothing appears more interesting, in our opinion, than the short but telling essays in which Grimm, with the help of engravings and photographs, sketches the gradual transformation of Raphael's compositions, from their first imperfect conception to their final completion. We note in the course of these excursions a judicious and close criticism enlivened and adorned by sparkling lightness of style.

Guided by a casual observation of the Abbé du Bos which escaped earlier research, Grimm is enabled to name almost all the figures in the "School of Athens" ; and it is probable that he might have gone further had he not been restrained by considerations which have since been ably combated by Scherer.* Sidonius Apollinaris and Marsilio Ficino's *Plato* are the true and only sources from which Raphael's literary friends derived the subject of the "School of Athens" ; and it will be difficult for future writers to contend that this vast and noble composition contains a single figure connecting the philosophers of Greece with the apostles and fathers of the Christian faith. We think, indeed, that here it will be necessary for Grimm to surrender his position as a trimmer between two different schools and to assert a decided and final opinion of his own.

There is much again that commands attention in the parallel, frequently drawn, between Raphael and the heroes of the Tuscan schools of his time, Lionardo, Fra Bartolommeo, and Michael Angelo ; for though here and there something might be brought forward to modify his views and bring his thoughts into a different channel, his opinions might be maintained with very little further expansion or modification.

On one or two questions of moment, it may be necessary to express the belief that Grimm will not be precluded from the necessity of making concessions, and we may be deliberately compelled to assert that it is impossible for a

* W. Scherer's *Ueber Raphael's Schule von Athen* (22 pages, Vienna, 1872) has an important complement to this volume of Grimm s commentaries.

student of Raphael to accept the assumption, ably though it be argued, that Raphael did not visit Florence before 1506.

No doubt it is proper and necessary to contest the accuracy of Vasari when he relates the causes of Raphael's first journey to Florence, and the manner in which he was led to make it; but it is quite another thing to deny that the journey took place. As early as the middle of the fifteenth century the most intimate connection existed between the painters of Perugia and those of Florence. There was not an artist of mark in the first who was not perfectly informed of the commissions entrusted to craftsmen of the second. There was no road better known than the road from Perugia to Florence, which had been frequently travelled by Domenico Veneziano and Fra Filippo Lippi. It had been hinted to Perugino on the very threshold of his career that Florence was the only city in which an artist could rise to fame; and he had been to Florence, where he caused his name to be respected. At the very time of which we are treating he had been induced to revisit the Tuscan capital, where Michael Angelo's "David" lay finished and waiting for a pedestal. Da Vinci, too, had returned to Florence from Milan, and had partially completed the noble cartoon which was copied at a later period by so many students. What more probable than that the causes which induced Perugino to leave Perugia should lead Raphael, his pupil, to quit Sienna?

Vasari says that, when Perugino went to Florence, Raphael left Perugia for Città di Castello, where he painted three pictures, including the Dudley "Crucifixion" and the "Sposalizio" of the Brera. He then proceeded to Sienna, and took service with Pinturicchio, for whom he executed certain drawings. His connection with Pinturicchio was broken off because he had heard of the completion of cartoons by Lionardo and Michael Angelo. It is quite as natural to suppose that Vasari was ill informed of the causes which led Raphael to Florence as it is to conceive that Raphael painted the pictures of Città di Castello at Perugia. We can easily prove that da Vinci's "Battle of Anghiari" was not finished till 1506; and Grimm gives good, though not absolutely convincing, reasons for concluding that Michael Angelo did not allow his cartoon to be seen till 1508. But putting this aside, there may have been reason enough for Raphael's desire to visit Florence, if we only suppose him cognisant of Perugino's presence there. He might have learnt from Perugino himself that Lionardo was composing his grand subject for the public palace; and he might expect facilities for seeing the masterpiece in its unfinished state from a man who was da Vinci's friend, and had been his companion in Verrocchio's shop. He had doubtless heard—as who had not?—of the commotion caused by the question how the "David" of Michael Angelo should be moved from its place in the sculptor's studio to where it was in future to be exhibited, for this was a question which had occupied the mind of every one in Florence; and it is notorious that it led to a general congress of artists in the early part of 1504. Why, then, should he not have gone to Florence?

Perugino was at Florence in 1504. He was there with slight interruptions till 1506. It was then that Lionardo gave up to him the commission which he had accepted from the brethren of the Santissima Annunziata de' Servi to complete the "Crucifixion" unfinished at the death of Filippino. Is there any reason to doubt that Raphael might have been in Florence in 1505, when we know that his predella of the "Madonna of Sant' Antonio" (1505) comprised an improved version of the very group of the Virgin and her succouring women which was introduced by Perugino into the "Crucifixion" of the Servi? But this is not all the evidence which may be adduced to strengthen the belief that Raphael was at Florence in 1505.

It is an error of Grimm to suppose that Raphael furnished the designs for the frescoes executed by Pinturicchio and his assistants in the library at Sienna as early as 1502. There is testimony to prove that the ceiling of the library, in which Raphael had no share, was begun and completed by September of 1503; that the work was suspended on account of the death of Pius III., and resumed at the close of 1504. In 1504, no doubt, Raphael was with Pinturicchio at Sienna, for the names of both painters are connected with one of the most curious incidents which illustrated the public life of those days at Sienna. Julius II. had put Sienna under interdict, and Pandolfo Petrucci dared to deride the pope's authority. A chapel, recently founded in San Francesco of Sienna, had been completed at the expense of the Piccolomini; it was adorned with a Nativity by Pinturicchio, resting on a predella by Raphael. The time was the beginning of November, when all the wealthy citizens had left their summer residences and settled in town for the winter; but the churches were closed; the bells no longer called the faithful to prayer, and an Oriental stillness lay upon the streets and towers. Pandolfo ordered the canons of St. Francis to celebrate the mass at the altar of the Piccolomini; and, on their refusal, he drove the priests by force to the altar. It was probably after the memory of this incident had begun to fade from the minds of the Siennese that Raphael made for Pinturicchio the designs with which he now began to decorate the Piccolomini library. But then Raphael was free to go to Florence; and to Florence we may believe he went; for there is not a single picture of all those which he executed in 1505 which does not prove that he had seen the works of Masaccio, Lionardo, and Fra Bartolommeo.

It is quite in vain that Grimm denies this influence in the "Madonna" of Sant' Antonio, which is not, as he believes, at the Louvre, but in the National Gallery; and it is impossible to disagree with Waagen when he maintains that the free attitudes, the natural breadth of extremities, and the bold sweep of draperies in the foreground figures of St. Peter and St. Paul as conclusively reveal the lessons derived from Fra Bartolommeo as the female saints, Catharine and Rosalia, display the working upon Raphael of Lionardo's style.

Equally vain is the effort to deny the presence of Florentine elements in the wonderfully clear tones and admirably rounded flesh of the principal figures in the Ansidei "Madonna" at Blenheim.

Grimm says he cannot conceive how the "Madonna del Gran Duca" can be registered amongst the pieces which Raphael produced before the Ansidei "Madonna." We may not be able to understand how Grimm can be blind to the Florentine breadth and treatment in the fresco of San Severo; and there may be reasons which it is needless here to state why this splendid work should not be classed amongst Raphael's creations of 1505.

There are minor questions involved in the difference as to the true period of Raphael's first journey to Florence which Grimm naturally seeks to determine in his own favour; but here his endeavours are more of a negative than of a positive kind; and it is clear that, if he should be led to abandon his present theory respecting Raphael's movements from 1502 to 1506, he would have to alter these minor questions to some extent also. Whether he do this or not may be left to Grimm's choice. It is enough for the present purpose to have stated the grounds which exist for rejecting his theory.

One or two points more require but passing observation. Grimm accepts as a genuine Raphael the "Christ on the Mount" of the Maitland collection, which is now acknowledged to be by Spagna. He casually gives expression to

an opinion which is liable to be controverted, that the "Madonna" of Sant' Onofrio at Rome is by Lionardo da Vinci.

J. A. Crowe.

ART NOTES.

The death of Théophile Gautier is a loss not only to Letters but to Art. For many years he contributed to the journals notices of the Salons, and a great variety of essays on artistic subjects. An article treating of his activity in this department is to appear shortly in the *Gazette des Beaux-Arts*. The *Chronique des Arts*, from which we quote, tells us that he was born at Tarbes, April 30, 1811. He came early to Paris, where he received his education in the Collège Charlemagne, after which he entered the atelier of M. Rioult, but, disgusted with the ill-success of his first attempts, he gave himself up to poetry, in which he achieved so brilliant a reputation.

M. Guédéonoff, the director of the Imperial Hermitage, has now printed the paper on the marble group attributed to Raphael, read by him on August 22 to the Academy of Sciences at St. Petersburg. The text is accompanied by two photographs, one from the work in question, the other from the plaster cast by Cavaceppi, existing at Dresden. The subject of the group is the well-known composition by Raphael of a Dead Child borne by a Dolphin (see *Academy*, vol. iii. p. 408). A repetition in marble, which was held for a long while to be the original work, was exhibited at Manchester in 1857, and pronounced by W. Bürger to be of no great beauty. This is smaller than the Dresden cast, and does not show signs of certain injuries which are proved by the cast to have existed in the original. It is not possible within the present limits to give full value to the facts and arguments which go to support the claim of the Hermitage example to priority and authenticity. Suffice it to say that it tallies exactly with the Dresden cast, which was formerly in the collection of Baron Mengs; that every probability is in favour of its having been the work restored and cast by Cavaceppi at Rome in 1768, when it was in the possession of M. de Breteuil; that between 1768 and 1779 it passed into the hands of a certain Mr. Browne (see Dallaway's *Anecdotes of the Arts in England*), who sold his collection of ancient marbles to an agent of the Empress Catherine II. It will be seen that there is a gap of 250 years to be filled up; that we are in nowise in a position to prove that the Hermitage example is the work which the Count Castiglione proposed to buy of Giulio Romano on May 8, 1523. Cavaceppi, in his catalogue of the works cast and restored by him, remarks of this group that it is by Lorenzotto, after a sketch by Raphael. It yet remains to be shown whether much or any credit should be attached to this hypothesis, or whether Raphael did much, or little, or nothing, towards the carrying out of his project.

We learn from the supplement to the *Zeitschrift für bildende Kunst* (October 25) that Signor Rosa's excavations in the Roman Forum have been crowned with the most brilliant success. About the beginning of September a portion of a Roman bas-relief was found at the corner where rises a middle-age tower. At two different portions of this tower (to which they appear to have served as supports hidden by other material) are now disclosed a row of portions of wall occupying from 12 to 15 metres, decked on both sides with costly sculptures, which have apparently served for the decoration of the rostrum. These marble reliefs would display to the eyes of the people standing below a historically arranged series of notable events having relation to the Forum. The position in which they have been found opens a fresh field to topographical conjecture and enquiry, whilst the reliefs are of the greatest importance, not only an account of their historical content, but on account of the brilliant quality of their execution, which appears to belong to the last bright epoch of Greek art in Rome. It is proposed to send the reliefs to the Vienna exhibition.

Amongst more recent publications in this department, the following appear to be worthy of special notice:—*La Colonne Trajane d'après le surmoulage exécuté à Rome* 61–62; this work will be complete in 120 parts, 12 of which have been already published; the text is by M. Froehner, the conservator of the Louvre, and is embellished by numerous vignettes; the plates, 220 in number, are printed in colour from photographs executed by Gustave Arosa.—*Kunstmythologischer Atlas*, by Professor Overbeck; the atlas is to accompany the Professor's *Griechische Kunstmythologie*, of which the first volume, "Zeus," appeared last year; it possesses claims to attention rarely united, for it is not only valuable from a scientific but from an artistic poin of view. A liberal subvention from the Saxon government has enabled the Professor to present his work to the public in its present form. The gigantic size of the plates (3 feet by 2 feet) will, we fear, stand very much in the way of frequent and convenient use.—*Rom und Mittel-Italien* (2 vols.), *Ober-Italien* (1 vol.), by Dr. Gsell-Fels. These are not mere handbooks, but the outcome of zealous and scientific research. They are amply illustrated with plans and maps, and every portion of the text bears traces of individual study.—*Trésor de l'Abbaye de Saint-Maurice d'Agaune;* both the text and illustrations are by M. Édouard Aubert. This Swiss monastery has preserved its treasures intact. M. de Blavignac published a few of the works of art which it contains in his *Histoire de l'Architecture sacrée dans les anciens évêchés de Genève, &c.* The present magnificent work is accompanied by an atlas of 45 plates, engravings or chromolithographs, which reproduce their originals with the greatest exactitude.—*I Pittori di Foligno nel secolo d' oro delle arti italiane;* it is sufficient to say that this book comes from the pen of Professor Adamo Rossi, the great authority on the Umbrian school.

In the *Allgemeine Zeitung* of November 6, under the title of "Der Maierhof und der Augsburger Rathsherr Philipp Hainhofer," will be found a very characteristic picture of the career of one of those artists who flourished from the end of the fifteenth up to the middle of the last century—artists who devoted their best energies to the designing of those objects which are best described by the expressive German word *Kleinkunst*. Hainhofer was born 1578 at Augsburg. There he settled and established his Kunstkammer, which was visited by princes. Amongst his correspondents he counted Henri IV. and the Markgraf Friedrich of Baden. The Maierhof was a costly toy executed for Duke Philipp of Pomerania, on which worked joiners, goldsmiths, watchmakers, stonecutters, modellers, engravers, &c. The design was by Hainhofer, and was intended to depict the life of the nobles, military affairs, and peasant life. The quantity of small objects required to carry out this elaborate piece of child's play was enormous, and its completion occupied five years, at the end of which Hainhofer sets out with it himself to Stettin, accompanied by Baumgartner, who had executed the joiner's work required. At Stettin, Hainhofer, already a rich man, was loaded with gifts, was named "herzoglicher Rath," and dismissed with letters of recommendation to the Bishops of Würzburg and Bamberg. The author of this curious sketch, Franz Trautmann, cannot refrain from drawing attention to the resemblance with a difference which exists between the story of Hainhofer's journey to Stettin and Dürer's journey to the Netherlands. Dürer came home a loser, and for all his noble work got from the Governess Margaret nothing; but the wealthy Hainhofer with his vain toy kindles the delight of princes, and obtains riches and honours.

A. von Zahn concludes in the present number of the *Zeitschrift für bildende Kunst* his notice on Barock, Rococo, and Zopf. Dr. Kinkel reviews Dr. Gsell-Fells Handbooks for Italy. The number contains also a notice of the loan exhibition of ancient objects of industrial art now being held at Berlin, and a notice on the Vienna treasure chamber.

Very various articles are to be seen at the loan exhibition in Berlin mentioned above. The Crown Prince is said to have been active in getting together objects of interest; amongst many, all of which are worthy of notice, may be specially mentioned a fine Italian bronze bust of Sixtus V. which the Prince discovered in the picture gallery at Sanssouci. It is reported to be a masterpiece, and in its forcible expression of natural power forms a remarkable contrast to the delicate spiritualised head of Innocent X. which belongs to Prince Carl, and has been placed in the same room.

The collections in the museums of Paris are gradually assuming their wonted look. The MSS. have returned to the library of the Rue de Richelieu, the armour to the Museum of St.-Thomas d'Aquin, the precious goldsmith's work of the Musée des Souverains has found its way back to the glass-cases of Apollo Gallery. The bronze chair of Dagobert has been returned, together with the gold ornaments from the tomb of Tournay, to the Cabinet de Médailles. But the chalice of Saint-Remi, which was taken from the cabinet by means of a formal order of the Empress, has not been restored. The library since '96 has possessed this chalice without the library (says the *Chronique des Arts*); the chalice would have been melted at the Mint. The directors were careful, when forced to part with it, to make a memorandum in writing that they did so only as a loan: it is now the duty of the French government to see that the ecclesiastics of Rheims make a just restitution.

MM. Colnaghi and Co. have recently published a set of seven etchings by Mr. J. C. Robinson, the former director of the Art Department at South Kensington, whose forced retirement from a position in which his controlling knowledge was so much needed has been and still is so much regretted. Very few will be prepared to find what a high position as an artist must be assigned to the author of these seven plates. The subjects are very various; some of the Spanish ones are perhaps the most remarkable where all is good. "Space and Light" is simply one of the most brilliant things of the kind that has ever been done.

The "Kitchen Interior," by Pieter Aartsens, commonly called Lange Pier, was one of the pictures which attracted most attention at the recent exhibition organized at Amsterdam by the society Arti et Amicitiae. The proud force of this robust and magnificent master was a revelation to the foreign public. We learn that the Brussels Museum has had the good fortune to secure this fine specimen of his work.

The Society of Arts at Lyons will open its annual exhibition on the 10th January 1873, and will close it on or about the 15th March.

MM. Corot and Diaz have been named knights of the order of Leopold, on the occasion of the general Exhibition of the Fine Arts which has just taken place at Brussels.

New Publications.

Gubernatis, Angelo de. Zoological Mythology; or, The Legends of Animals. 2 vols. Trübner.

Garrucci, R. Storia dell' Arte cristiana nei primi otto secoli. Venezia: Münster.

Physical Science.

A Treatise on the Theory of Friction. By J. H. Jellett, B.D.; Senior Fellow of Trinity College, Dublin. Dublin: Hodges, Foster, and Co.

For the experimental determination of the laws of friction between solids, we are mainly indebted to Coulomb. The investigations, also, of M. Morin into the nature and action of this force are of great value. The laws established by them, although only approximations to the truth, have been adopted by mathematicians as the basis of the analytical treatment of the equilibrium and motion of particles and bodies on rough surfaces. The most important of these laws is that of the proportionality of the friction to the pressure. With reference to this law the author states in his preface that "the adoption of a more complicated law would have greatly enhanced the mathematical difficulties of the theory, yet without giving results mathematically coincident with facts." Undoubtedly a more complicated law would have immensely increased the mathematical difficulties, and would probably render any but the most simple problems insoluble; but it is not clear that the results obtained would fail in coincidence with facts. The theory, however, has so far received but little attention; and the space allotted to its development in most treatises on Rational Mechanics (a designation of the mathematical science used by Mr. Jellett) is extremely limited in comparison with that devoted to the solution of mechanical problems on the supposition of perfect smoothness. The consequence has been to cause many students to look upon friction as a force which, to a certain extent, lies without the province of Rational Mechanics, but which has to be taken into consideration whenever it is required to apply results obtained on the supposition of smoothness to practical questions. This neglect, moreover, probably causes a large number of students to regard Rational Mechanics as a matter of pure analysis, and to lose sight of the physical truths which the formulae represent. The author wishes by this treatise to establish the theory of friction in its proper place as a branch of Rational Mechanics, and to obtain for it a more ample discussion than has yet been given it. The work, which well supports the reputation of its learned author as a mathematician, is one well calculated to effect this, both from its logical and scientific arrangement and from the thoroughness with which the theory has been worked out. The treatise is divided into eight chapters, which coincide with the principal divisions of the subject.

In chapter i. are discussed the general principles of the theory—such as the differences between moving and resisting forces, the nature and laws of the force of friction, the differences between statical and dynamical friction. The conception of the cone of resistance, which seems to be due to the late Canon Moseley, and of which considerable use is made throughout the treatise, is clearly stated, and directly deduced from the fundamental law of the proportionality of the friction to the pressure.

Chapters ii. and iii. are devoted to the analysis of the equilibrium of particles and bodies on rough surfaces. In these chapters the great importance of the cone of resistance is fully appreciated, and the light which its employment throws on the causes of the indeterminateness of problems involving friction, as well as on the limiting positions of equilibrium, is most perfect. In the several sections of these chapters numerous examples are worked out which cannot fail to be of great assistance in enabling the student to obtain complete mastery of the general propositions.

Chapters iv. and v. contain the analysis of the motion of particles and bodies on rough surfaces. Here the reader will immediately perceive the effect on the problem of one of the principal distinctions between statical and dynamical friction, viz. that whereas statical friction at any point of a body in contact with a rough surface is equal and opposite to the resultant of all the other forces acting on the body at that point, the dynamical is along the direction of motion of the point, but opposed to the motion, and its magnitude attains the maximum value—that of the pressure multiplied by the dynamical coefficient of friction.

Section 2 of chapter v. relates to the initial motion of a solid body resting on one or more surfaces; and in example 1 we come across the seeming paradox of the possibility of a motion of pure rolling of a cylinder placed with its axis horizontal on a rough vertical plane. For the explanation of this apparent paradox, the reader is referred to the book itself.

Chapter vi. relates to the distinction between possible and necessary equilibrium; and it is shown, by the consideration of the differences between statical and dynamical friction (one of which has just been mentioned, and the other is that the coefficient of the former is greater than that of the latter),

that there are certain positions of a system in which equilibrium *may* exist, and others in which it must exist. The formula which gives these positions is—

$$\Sigma m\,(X\delta x + Y\delta y + Z\delta z) = \text{or} < 0,$$

where X, Y, Z represent the components of all the forces, external, geometrical, and frictional; the other letters and symbols have the ordinary signification. Now X, Y, Z may have such values for the position of rest as to satisfy this condition, whilst the friction is statical; whereas they may cease to satisfy it when the friction has become dynamical by a small motion given to the system. In this case the equilibrium is *possible*, but not *necessary*. If, however, X, Y, Z be such that this condition holds when the friction is dynamical, the position is one of *necessary* equilibrium; inasmuch as any small motion will cause the friction to take its dynamical value, for which the condition holds, and the motion will consequently be immediately destroyed. This chapter is certainly one of the most important, and at the same time the most interesting, in the book, from the clearness with which the differences between statical and dynamical friction are pointed out, and from the able manner in which the effects of these differences are developed.

Chapter vii. treats of the actual value of the acting force of friction, and of the cause of the indeterminateness of the mathematical solution, which lies in the abstraction introduced into the investigation. This abstraction Mr. Jellett considers to be the supposition of the perfect rigidity of the bodies and surfaces. The want of rigidity calls into action forces of elasticity, which produce slight oscillations, a discussion of which will lead to a completely determinate solution. This is illustrated by an example of a heavy body placed on a rough plane inclined to the horizon at an angle (α) greater than the angle of friction, and supported by a string. Only one equation can be obtained for the determination of the tension (T) and the friction (F), viz. $T + F = Mg \sin \alpha$. On taking into consideration, however, the slight extensibility of the string, and the small oscillations which the body will describe when its weight stretches the string, an equation is obtained for determining the tension, and, therefore, the friction can be fully determined.

In chapter viii. are discussed the interesting problems of the Top, Friction-wheels, and Locomotives.

The book is a really valuable addition to the literature of Rational Mechanics, and cannot fail to be of great service to the mathematical student. The general discussion of the force and its effects occupies a considerable space, and is so well developed as to be, to a great extent, available to those students who have not time or mathematical attainments sufficient to enable them to work through the whole of the mathematics. The book is most admirably printed, the diagrams are extremely well done, and the number of misprints observed were few and unimportant. W. J. Lewis.

Notes of Scientific Work.

Geology.

On the Quaternary Formation in the Neighbourhood of Dresden.—In a paper bearing the above title, and recently published at Halle, Dr. C. A. Jentzsch discusses—(1) the extent of the sea during that epoch; (2) the diluvial hills; (3) the Dresden heath; (4) the siliceous deposits of the valley of the Elbe near Dresden; and (5) of the loess. After critically treating the more important of the many theories respecting the nature and origin of loess, the author propounds his own views on the origin of that of the Elbe valley. At one period the Elbe flowed high above its present course, excavating its river-bed gradually, and at the same time underwent lateral dislocations, chiefly due to its smaller tributaries. The river then moved towards the right side, partly, the author thinks, on account of the tributaries, partly on account of the loose sands forming its banks. As the river worked its way through the sand on its right side, the Elbe formed siliceous deposits on its left bank, which lay nearly horizontal in consequence of the river having deepened its bed only very slowly. High floods then occurred as they do at the present time. It is probable, however, considering the different climate of the quaternary epoch, and more especially the influence of larger masses of ice, that they exerted a greater disturbing effect than they do now. These floods, extending far inland, swept into the river large quantities of the land-snails which inhabited its banks then; and the mud, containing numerous land Mollusca, was then deposited on the left banks of the Elbe. (6) Local formations: the marl of Cotta near Dresden, and the freshwater limestone of Robschütz in the Tribisch valley, near Meissen. (7) The fauna of these beds: in the freshwater limestone were found skulls of man, and bones of other portions of the human body, as well as rude pottery, proving the contemporary existence of man with *Elephas primigenius* and *Rhinoceros tichorrhinus*, the remains of which abound. In addition to these, remains of the following Mammalia were discovered in the same deposit:—*Plecotus auritus*, L., *Crocidura leucodon*, *Erinaceus europaeus*, *Mustela martes*, *Mus rattus*, *Sus scrofa*, *Equus Caballus*, *Cervus elaphus*, *C. capreolus*; of Birds, *Ciconia alba*, Bechst.; and of Reptilia, *Tropidonatus natrix* and *Bufo cinereus*; and a numerous and rich fauna of freshwater shells.

Tin Ore in Australia.—According to Mr. F. T. Gregory's report presented to the Geographical Society of London at the meeting held on the 6th November, the district in Queensland in which tin ore has been discovered is situated near the headwaters of the Severn river and its tributaries, and comprises an area of about 550 square miles. The district is an elevated granitic table-land intersected by ranges of hills rising abruptly, some attaining an elevation of about 3000 feet above the sea. The richest deposits are found in the beds of the streams or in alluvial flats on their banks; the aggregate length of these bands is estimated at about 170 miles. Numerous small stanniferous lodes have been discovered, but only two of much importance, one near Ballandeau Head station on the Severn, and another in a reef of red granite rising in the midst of metamorphic slates and sandstones. The lodes run in parallel lines bearing about N. 50° E. The ore, cassiterite, is invariably associated with red granite, the felspar being a pink or red orthoclase, and the mica generally black; when crystals of tin ore are found *in situ*, however, the mica is white. The crystals of tin ore are generally found in or along the margins of quartz, threads, or veins in bands of loosely aggregated granitoid rock, but they are sometimes imbedded in the micaceous portions.—At the same meeting, G. H. F. Ulrich gave some description of the recent discoveries of tin ore in New England, New South Wales, a district almost immediately adjoining the tin region of Queensland. It forms a hilly elevated plateau, nearly 4000 feet above the sea-level. The predominant rocks are granite and basalt, enclosing subordinate areas of metamorphic slates and sandstones; the basalt generally forms the highest crests, and is spread in extensive masses over the country. The granite of the tin district is similar to the Queensland granite, but carries white orthoclase, and is transversed by quartz veins containing cassiterite in fine druses, seams, and scattered crystals, and by dykes of a softer granite, consisting chiefly of mica, and with scarcely any quartz, in which cassiterite is distributed in crystals, nests, and bunches, as well as in irregular veins several inches in thickness.

On the Included Rock Fragments of the Cambridge Upper Greensand.—The occurrence of numerous subangular fragments in the Upper Greensand formation was so far remarkable that it had already attracted the notice of Mr. Bonney and Mr. Seeley, who had both briefly hinted at the agency of ice. Unaware of the suggestions of these gentlemen, Mr. W. Johnson Sollas and Mr. A. J. Jukes-Browne, in a paper read at the meeting of the Geological Society on the 6th November, have expressed themselves in favour of this view. The infallible indications of Upper Greensand origin consisted of incrustations of *Plicatula sigillum*, *Ostrea vesiculosa*, and coprolites, without which the boulders would be undistinguishable from those of the overlying drift. The following generalisations were propounded:—1. The stones are mostly subangular; some consist of friable sandstones and shales, which could not have borne even a brief journey over the ocean-bed. 2. Many are of large size, especially when compared with the fine silt in which they were imbedded; the stones and silt could not have been borne along by the same marine current. 3. The stones have various lithological characters, and may be referred to granitic, schistose, volcanic, and sedimentary rocks, probably of Silurian, Old Red Sandstone, and Carboniferous age. Such strata are not found *in situ* in the neighbourhood, and the blocks must have come from Scotland and Wales. Numerous arguments were adduced in favour of their Scotch origin. The above considerations, that numerous rock fragments, some of which are very friable, have been brought from various localities, and yet retain their angularity, were thought sufficient evidence of their transportation by ice; the majority showed no ice scratches, but the small proportion of scratched stones in the moraine matter borne away on an iceberg and the small percentage of ice-scratched boulders in many deposits of glacial drift show that the absence of these striae is

not inconsistent with the glacial origin of the included fragments. The fauna, so far as it proved anything, suggested a cold climate; though abundant, the species were dwarfed, in striking contrast to those of the Greensand of southern England and the succeeding chalk. The authors concluded that a tongue of land separated the Upper Greensand sea into two basins, the northern of which received icebergs from the Scandinavian chain; the climate of this basin was cold, that of the southern basin being much warmer.

Notice on the Balaenoids of the Vienna Basin.—Up to the present time only five species of three genera have been found in the Tertiary basin of Vienna, and they have been derived partly from the marine, partly from the Sarmatian etage. These are: *Cetotherium priscum*, Eichw.; *C. ambiguum*, Brandt; *Cetotheriopsis linziana*, Brandt; *Pachyacanthus Suessii*, Brandt; *P. trachyspondylus*, Brandt. The genera *Cetotheriopsis* and *Pachyacanthus* are new. A paper by T. F. Brandt on this subject is printed in the *Sitzungsberichte der Akademie der Wissenschaften, Vienna*, p. 3.

The Tertiary Basin of the Lower Rhine.—The large Tertiary basin of the Lower Rhine consists of a central basin with a number of smaller inlets, which are known under the names of the Dürener, Bonner, Düsseldorfer, and Siegburger bays. The deposits are chiefly sand and clay, with numerous lignite beds, all which yield a very abundant flora and fauna. The fauna, in addition to land animals and such as only live in freshwater basins, present an extraordinary number of insects which could only have lived in the forests and on the moors of the lignite period. They furnish a clear proof that during the Middle Oligocene period an extensive land and freshwater formation existed on the Lower Rhine, that had but a very slight elevation above the sea-level, and most probably resembled the present Haffe or the swamps of Florida. As regards the flora, 247 species are described in all, of which 120 have been met with elsewhere. (Dr. A. Gurlt, *Uebersicht über das Tertiarbecken des Niederrheines*, Bonn.)

The Miocene of North Germany.—A. von Koenen describes in the first part of his paper on the Miocene fauna of North Germany, published in the *Schriften der Gesellschaft zur Beförderung der gesammten Naturwissenschaften zu Marburg*, the siphonostomic Gasteropods, in all 142 species of the following genera:—*Murex*, 7; *Trophon*, 1; *Tiphys*, 2; *Tritonium*, 5; *Turbinella*, 2; *Cancellaria*, 15; *Pyrula*, 1; *Spirilla*, 1; *Ficula*, 2; *Fusus*, 18; *Stenomphalus*, 1; *Buccinopsis*, 1; *Terebra*, 7; *Eburna*, 1; *Nassa*, 12; *Phos*, 1; *Purpura*, 1; *Cassis*, 5; *Cassidaria*, 1; *Columbella*, 4; *Oliva*, 1; *Ancillaria*, 2; *Conus*, 3; *Pleurotoma*, 26; *Defrancia*, 4; *Mangelia*, 8; *Borsonia*, 1; *Mitra*, 2; *Voluta*, 2; *Cypraea*, 3; *Erato*, 1; *Marginella*, 1.—The number of newly created species is 16.

The Pliocene Formation of Tuscany.—According to Antonio d'Achiardi, the Pliocene formation of Tuscany consists of bluish clay, covered by fine sands, over which again lie course boulders. He believes the boulders, as well as the sands and the clay, to have been simultaneously deposited from the same ocean, though precipitated to different depths. (*Bollet. geolog.* 35.)

The last part of the *Jahrbuch für Mineralogie und Geologie* contains an interesting obituary notice of the well-known Alpine geologist, Arnold Escher von der Linth, who died recently at Zürich.

Physiology.

The Influence of the Length of a Nerve traversed by a Current of Electricity upon its Excitation.—V. Willy, in a paper published in *Pflüger's Archiv*, states that it is generally allowed that the degree of excitation of a nerve, measured by the extent of contraction of the muscle to which it is distributed, augments with the length of the segment of the nerve through which the current is transmitted after this is closed or before it is opened. According to the author's latest researches, however, this only holds good for the descending current through the nerve, whilst the converse obtains for the ascending current. He arrived at this result by two ways: first, by ascertaining the strength of current, which, when passed through various lengths of the extrapolar portion of the nerve, induced a minimum contraction; and, secondly, by determining the amount of contraction produced by equal excitations passed through extrapolar segments of nerve of various lengths.

The Metamorphosis of Tissue under the Influence of Morphia, Quinine, and Arsenic.—H. v. Boeck has published in the *Zeitschrift für Biologie* (vol. vii. part iv.) the results of his investigations of the action of the above-mentioned substances on a dog. The animal chosen for the purpose weighed 54 lbs., and during the experiment was daily fed with 500 grammes of good meat, containing 17 grammes of nitrogen and 150 grammes of fat, and 150 c.c. of water. In the first experiment morphia was used, and it was found that, when the excretion of nitrogen had remained unaltered for five days, the addition to the food of 1·5 grains of morphia per diem during those days caused a reduction in the amount of nitrogen to the extent of more than 10 grains (0·7 gramme) in that period. The second experiment was made with quinine, and to the above-mentioned quantity of food one gramme (15·44 grains) of quinine was added per diem during three days, when it was found by daily analysis of the excreta that as much as 11·6 grammes (179 grains) less of nitrogen were excreted in eight days. This represented a certain though slight quantity of food and tissue spared by the use of the drug. The third experiment was with arsenic, of which altogether 2·5 grains were given in doses divided over three days. The results of analysis of the excreta again showed that only an inconsiderable amount of food and tissue were spared by the addition of this substance to the food.

On Endogenous Cell Formation.—The question of the endogenous formation of cells, says Professor Bizzozero, in a paper contributed to *Stricker's Jahrbücher* (part ii.), cannot be regarded as finally decided. Buhl thought he had set the matter at rest by his discovery of nucleated cell-containing cells in the exsudate of croupous pneumonia, but Steudener and Volkmann have thrown a doubt upon Buhl's observations, by showing that some cells can be enveloped or invested by others by a kind of invagination process, and consequently that the presence of cells in the interior of others is not conclusive evidence that they were developed in that position. More recently Oser, from his examination of the fluid discharged in artificially produced purulent ophthalmia, has again given support to the doctrine of endogenous cell formation. Bizzozero has recently investigated the cells which accumulate in the anterior chamber of the eye under various morbid conditions, and which frequently contain cells in their interior. Many of the cells are large, irregularly rounded, and contain numerous fat cells in their substance, a nucleus, and several pus corpuscles. The latter, he considers, have been absorbed, and not produced in the position they occupy, for if that were their origin, they should be met with in all stages of development, which is not the case. Moreover, they should occur from the very commencement of the suppuration process, and this is not in accordance with observation, as they are only found when the pus has been for some days in the anterior chamber, and the cells have already lost their contractility. Then, again, blood-corpuscles are not unfrequently found in the large cells, as well as those of pus. Bizzozero has made a series of experiments on animals that support the following conclusions at which he had arrived from his observations on man: 1. That the pus corpuscles in the large cells have the aspect of old and degenerating elements. 2. That the cell-containing cells never appear in the early stages of the inflammation; and 3. That in suppurative inflammation of the anterior chamber of the eye large cell-elements are formed, which, owing to the contractility of their protoplasm, have the power of taking up the surrounding cells. He believes that these large elements proceed from an hypertrophy of the pus-cells, since intermediate forms can be seen, and, according to all observation, the epithelium of the membrane of Descemet does not participate in their formation. What becomes of the large cells after they have ingested all the white and red corpuscles and smaller pus-cells, he has not been able to ascertain.

The Action of Strychnia on the Vaso-Motor System.—In the second part of *Stricker's Medizinische Jahrbücher*, which has just appeared, S. Mayer, of Prague, gives the results of his investigations on the influence of strychnia on the vaso-motor system. He remarks that, though numerous researches have been devoted to the action of this poison, comparatively little is yet known respecting it, through the attention of observers having been exclusively given to its singular power of producing tetanic contraction of the vaso-motor system. Mayer's experiments were conducted on rabbits and dogs by means of an ordinary kymographion. The animals were injected with a solution of nitrate of strychnia in water (the solution containing 0·0008 of a grain in 1 c.c. of water), and being introduced into the jugular or crural vein. In one set of experiments the dogs were stupefied by opium, and artificial respiration was maintained through a canula introduced into the trachea. The manometer giving the tracings was connected with the carotid artery. A plate showing the tracings obtained in this and other cases accompanies the paper. About thirty seconds after the injection of 2 c.c. of the solution the arterial blood pressure was found to undergo an extraordinary increase with a simultaneous great increase in the frequency of the pulse. At the same time the voluntary muscular system became tetanised, the chest being maintained for a long period in a state of maximum inspiration. The great augmentation in the blood pressure was clearly due in part to the well-known mechanical action of the tetanised muscles on the current of venous blood, and partly to the obstacle which such contracted muscles present to the entrance of blood from the arterial side. Other accessory circumstances tending to the same result were the dilatation of the thorax and the accumulation of carbonic acid or the deficiency of oxygen in the blood, which last has been demonstrated to act as a stimulant upon the centres of innervation of the heart and blood-vessels. To eliminate some of these disturbing elements, some animals were subjected to the action of woorara before the injection of strychnia. By this means the effects of the muscular contraction were removed while the respiratory movements were not interfered with. Great elevation of the blood pressure was still observed however; the

number of the cardiac pulsations was not altered. Mayer concludes, then, that the increase in blood pressure following the injection of strychnia into the blood is essentially due to an extraordinarily intense excitation of the vaso-motor centres in the brain, and upon the resulting contraction induced in the small arteries. This view is supported by an examination of the intestines, which become exceedingly pale, as well as by the effects of section of the spiral cord, which severs the vaso-motor nerve, when all increase of blood pressure ceases.

A Certain Sign of Death.—Dr. Hugo Magnus, Assistant Physician to the Hospital at Breslau, suggests, as the best means of determining the presence of lingering traces of life, that a tight ligature be tied round one of the fingers. If life be not extinct, the part beyond the ligature soon becomes red, the depth of the colour increasing to dark red and violet. Just above the ligature the skin remains white. The explanation is sufficiently simple: the ligature prevents the return of venous blood from the part; but the arteries, being deeper seated and more protected, still continue to convey blood to the capillaries. The part of the finger beyond the ligature consequently becomes engorged. This test is of value because it can be applied without difficulty, and has the advantage of being the more available the sooner it is tried after actual death.

The Process of Coagulation.—The last part of *Pflüger's Archiv* (vol vi. parts 8 and 9) is almost wholly taken up with a long paper by Alexander Schmidt, of Dorpat, on the coagulation of fibrin. He discusses successively the mode of obtaining and the characters of the fibrinoplastic substance or paraglobulin, and meets the objections raised by Brücke to its separate existence. It can be thrown down from its saturated alkaline solution by exact neutralisation with acetic acid, provided there is no other neutral alkaline salt present. It can also be precipitated by carbonic acid gas from the diluted serum of blood, chyle, lymph, and pus. It is insoluble in water, but highly soluble in neutral alkaline salts, and in very dilute acids and alkalies. The so-called fibrinogenous substance he obtains from the fluids of the serous cavities by diluting them with several times their volume of water, and precipitating with acetic acid. The presence of these two substances—the fibrinogenous and the fibrinoplastic substance—is a primary condition for coagulation, but in addition there must be, he maintains, a *third* substance, a ferment. This in the living body is not contained, either in the plasma or in the blood corpuscles, but first appears *after* the withdrawal of the blood from the body. It is not clear whether it is generated in the white corpuscles or in the plasma, but it is certain that it is not produced in the red corpuscles.

Botany.

Dr. Pfeiffer has issued a volume of a *Nomenclator botanicus*, which will contain in alphabetical order all the collective names, from sections to classes inclusive, which have been employed in systematic botany from the time of Linnaeus up to 1858, the date to which Dr. Pfeiffer brought his already published *Synonymia botanica*. The present work will really form a skeleton encyclopaedia of systematic botany. Each article will commence with the etymology of the name and the original authority for it, to be followed in chronological sequence by the different views that have been taken of its systematic position, including references to the works of all systematists by whom each particular view has been adopted. The articles will therefore be complete historical digests, the utility of which can only be estimated by those who have had occasion to prepare anything of the kind in connection with their own studies. The present work, when completed, will take its place beside such books as Steudel's *Nomenclator*, Pritzel's *Index Iconum* and *Thesaurus*, Walpers' *Repertorium* and *Annales*, as another of those indispensable aids to study which the laborious students of Germany have given to the botanical world. An especially important feature of the new work is that it includes Cryptogamic as well as Phanerogamic plants. No general view of the genera of the former exists later than that given by Endlicher eighteen years before, and it is often troublesome in consequence to run down a name in this branch of botany. Dr. Pfeiffer reasonably remarks that it was necessary to place some limit to his labours, and if one which is now fourteen years distant seems needlessly remote, he meets the objection by saying that he did not anticipate that it would have required so long a period of time to accomplish his task. It can hardly be doubted that, when the scientific history of our own day comes under review, the value of labours like those of Dr. Pfeiffer, in their influence on the progress of knowledge, will be estimated hardly, if at all, lower than that of actual scientific discovery.

Mimicry in Fungi.—In the *Gardener's Chronicle* for November 16, Mr. Worthington Smith records some very curious instances of "mimetic resemblances" among Fungi. *Agaricus atratus* is a very common and *Cantharellus carbonarius* a very uncommon fungus; the latter is always found in company with the former; and they are so exactly alike externally that it is impossible to distinguish them without gathering them and examining the gills. *Agaricus fascicularis* is one of our commonest fungi; two rare species have lately been added to our flora, *Agaricus alnicola* and *Agaricus conissans*; they invariably grow with the former, and exactly mimic it in both habit and colour, although belonging to quite different subgenera with different-coloured gills and spores. *Agaricus carbonarius* and *Agaricus spumosus* have been found growing together, and so similar that it is impossible for the sharpest eye to distinguish one from the other without examination. One of our very commonest fungi is *Agaricus epipterygius*; quite lately, in the midst of a bundle of this species, Mr. Smith found single specimens of *Hygrophorus meisneriensis*, a species new to this country, and so exactly resembling its commoner brother in slender stem, moist pileus, and peculiar colouring, as to be certain to escape detection unless minutely and carefully examined. These four instances of rare species of fungus possessing the exact habits and colours of very common species might easily be multiplied in number. The only benefit or "protection" which Mr. Smith can suggest to have accrued from this "mimicry" is that in consequence of it the rarer species have hitherto escaped detection and extermination by fungus-collectors!

Development of the Flower of the Hazel.—At the recent meeting at Bordeaux of the French Association for the Advancement of Science, M. Baillon, president of the Linnaean Society of France, read a paper containing some very curious observations on the development of the flower of the common hazel (*Corylus avellana*). At the time when the female flowers are generally considered to be expanded (in the neighbourhood of Paris, as of London, towards the end of January), they consist of nothing but a pair of long styles, crimson and stigmatic at their extremity, united at their base to a small extent in a mass which contains neither ovarian cavity nor ovules. These female flowers are to be first detected about the month of May or June, their development proceeding gradually until it reaches the stage described above about the following January. It is only after this period, which is considered that of flowering, that the depression which exists in the interior of the styles becomes developed into a pit more or less deep, representing a single ovarian cell. Still later, about the month of April, two placentae appear on the walls of this cavity, and in the interval of the branching styles, under the form of vertical slightly prominent bands. Soon the lower portion of these bands, larger and thicker, is divided by a vertical furrow into two lobes, each representing an ovule. The ovary of the hazel is at this time unilocular and quadriovular; but soon, at the same time that the two placentae become more prominent, the development of one or two, rarely three, ovules becomes arrested. The ovules, when they arrive at their full development, have become descending, with the micropyle directed upwards and outwards. By what means they are fertilised by the pollen from the male catkins, which fall in January or February, remains a mystery.

The *Nachrichten* of the Göttingen *Gesellschaft der Wissenschaften*, No. 24, contain a paper by Dr. A. Stern on a hitherto unnoticed letter of Spinoza, and the correspondence of Spinoza and Oldenburg in 1665. In v. Vloten's supplement there is a newly discovered letter of Oldenburg, the answer to which is missing. Dr. Stern thinks he has found a fragment of the latter in Robert Boyle's *Works*, vol. v. p. 339 (Lond. 1744, fol.).

FATHER SECCHI ON SOLAR DISCOVERIES.

TO THE EDITOR OF *THE ACADEMY.*

October 29, 1872.

Sir,—I regret that absence from London has prevented my replying to Father Secchi's letter earlier.

You will be able to inform him that you did not ask me to review the German edition of his book; and I hope that he will measure the regret which I felt in making the strictures I felt myself in duty bound to make by the unwillingness I showed—of which you can assure him—in undertaking the review. Having said this, I may add that I have just risen from a hasty glance at the German edition of which mention has been made, and I am rejoiced to acknowledge that in my opinion it breathes quite a different spirit from the earlier French one; so much so that, if we are not dealing with the work of the German editor, I am certain many scientific men in many lands will hail it as an indication that Father Secchi will probably do them justice in future; that he has not done justice in the past is an opinion I share with every man of science with whom I have spoken on the subject, including many of his own countrymen.

This being so, I do not feel it necessary to enter so freely into a discussion of the points raised as I otherwise should have done. I must however say a few words.

1. With reference to the work of the Kew observers in connection with planetary action, the memoirs referred to by Father Secchi were preceded by one dating as far back as 1863, communicated by Dr. Balfour Stewart to the British Association in that year.

2. Father Secchi does not deny the work of Henry and Rutherfurd (the difference between A's and B's types of stars is not in question); and if that work existed, I hold—and this is all I said—it should have been referred to when subsequent similar work was considered at length.

3. If the two propositions concerning the cause of the formation of solar spots do not exclude one another, why does Father Secchi say that one idea is more probable than the other?

4. With regard to the gases in the interior of the sun, the question of their transparency is not raised, nor shall I raise it now. What I said was, in other words, that Father Secchi seemed to base his proof of what would amount to an *absorption* in a *radiating* gas on the *absorption* of an *absorbing* gas such as the earth's cool atmosphere (p. 106).

J. Norman Lockyer.

New Publications.

Bosi, L. Lezioni di Patologia e Chimica medica. Pisa.

Brunetti, L. Due Casi di Trasposizione laterale completa di tutti i Visceri dell' Uomo. Padova.

Chapman, H. C. Evolution of Life. Philadelphia.

Cohn, F. Beiträge zur Biologie der Pflanzen. 2. Heft. Breslau: Kern.

Dub, J. Die Anwendung des Electromagnetismus, mit besonderer Berücksichtigung der neueren Telegraphie. 2. Aufl. 1. Lief. Berlin: Springer.

Edwards, W. H. The Butterflies of North America. Part 10. Philadelphia.

Fornara, D. Studi esperimentali sopra l' azione dell' Upasantiar e del Veleno del Mospo, fatti nel Museo zoologico della R. Università di Bologna. Genova: Sordo-muti.

Hallowell, B. Geometrical Analysis. Philadelphia.

Koch, F. E., und Wiechmann, C. M. Die Mollusken-Fauna des Sternberger Gesteins in Mecklenburg. Neubrandenburg: Brünslow.

Kötteritzsch, T. Lehrbuch der Electrostatik. Leipzig: Teubner.

Mission scientifique au Mexique et dans l'Amérique centrale. Recherches botaniques publiées sous la direction de J. Decaisne. 1ère partie: Cryptogamie. Par E. Fournier. Paris.

Pérard, A. Catalogue raisonné des Plantes croissantes naturellement ou soumises à la grande culture dans l'arrondissement de Montluçon. Paris: Savy.

Ritzmann, E. Beiträge zur Aetiologie und Pathologie der Erysipels. Schaffhausen: Schoch.

Schering, J. E. Werke von C. F. Gauss. Bd. VII. (Theoria motus corporum coelestium in sectionibus conicis solem ambientium.) Gotha: Perthes.

Solbrig, A. Ueber die feinere Structur der Nervenelemente bei den Gasteropoden. Leipzig: Engelmann.

History.

The Tradition of the Syriac Church of Antioch concerning the Primacy and the Prerogatives of St. Peter, and of his Successors, the Roman Pontiffs. By the Most Rev. Cyril Behnam Benni, Syriac Archbishop of Mossul. Translated under the Direction of the Author by the Rev. Joseph Gagliardi. Burns, Oates, and Co.

Archbishop Benni, a Syrian prelate, who took part in the Vatican Council, has published a collection of extracts from Eastern (chiefly Syriac) documents in behalf of papal authority. His readers are expected to look upon these extracts as exhibiting the primitive tradition of the East, as shown "by a diligent enquiry into the teaching of *its great writers*, who faithfully handed on to their successors those inviolable truths which they had received from their forefathers, in whose ears was still ringing the voice of the Apostles," &c.

If the book were intended for the learned, Archbishop Benni's preface might easily awaken the suspicion of being ironically written, for it is impossible, in fact, to display the nakedness of the land to intelligent eyes more completely than is done by this collection of extracts. But the majority of its readers must necessarily be incompetent critics of the evidence put before them, and if we may judge of them by the list of subscribers, they will have but little hesitation in concluding that the Eastern Church has always taught the dogmas lately defined in the Vatican Council.

The book consists of 228 extracts, of which the first 103 (constituting the most considerable portion of the work, and philologically the most interesting) have reference to St. Peter. The second part (extracts 104–127) is on "the Roman Church," and the third (extracts 128–228) on "the Roman Pontiffs, the successors of St. Peter." The last document of the first part is in Latin, and was printed in Rome. The other documents of this part are in general rhetorical or poetical extracts in honour of St. Peter, but contain nothing whatever favouring doctrine peculiar to Rome. And the compiler would have no difficulty in drawing up similar collections of texts in honour of St. Paul, St. James, or St. John.

The rest of the work is more important for the compiler's purpose. But even here a very large number of the texts quoted are quite irrelevant. Whole chapters, such as that on excommunication, are simply superfluous. No one ever denied that the bishops of Rome, like all other bishops, might lawfully refuse their communion to individuals or churches. The important thing to be proved is that individuals or churches out of communion with Rome are out of the pale of the Catholic Church. Many texts have no reference, direct or indirect, to Rome, but it is modestly assumed that whatever authority the Easterns attribute to their patriarch is a reminiscence of "the authority which by Divine Right was conferred to the Roman Pontiffs." The liturgical evidence is exceedingly meagre. The extracts from the "Syrian Liturgy" do not extend further than extract 108; those from the "Syro-Chaldaean" stop at 112; three extracts from the "Syro-Maronite" (119, 123, and 124) are certainly not ancient. Of the extracts from the "Syriac fathers" (or rather fathers whose writings are preserved in Syriac) all but three belong to part i. Of the remaining three, one is the corrupt form of a well-known passage of St. Ignatius, who is erroneously imagined (p. 84 note) to have written in Syriac; another (109), attributed to St. James of Sarug, is acknowledged to be apocryphal; and a third (154), attributed to St. Athanasius, is a notorious forgery. The documents attributed to the Council of Nice are also well-known forgeries. The reference (174), stating that to the Roman bishop "the pontifical power over the whole world has been given as it has been defined in a canon of the Constantinopolitan Council," is a ludicrous misrepresentation of a canon which the popes have always execrated. The references to Sardica, Ephesus, and Chalcedon, are familiar to us from Latin and Greek sources, and (in Syriac at least) add nothing to the information we already possess. I must, however, warn English readers against the translation of extract 176, quoted from the Council of Ephesus to show that popes "are above Councils." The Council is made to say that it came to its decisions "*unavoidably compelled* by the canons, and by the letters of our most holy Father, and co-minister, Celestine, Bishop of the Roman Church." The Greek original has been the verb ἀναγκάζειν, which, as every decent scholar knows, does not imply the least kind of authority or superiority. Anyone, however inferior his position, who proves his point constrains (ἀναγκάζει) the person he convinces. Now the word ܐܠܙܡ in the Syriac version exactly corresponds to the Greek. It need mean nothing more than "rationibus movere." An excellent example of this use of the word will be found in Ebedjeshu's *Nomocanon*, tract. vii. c. 6, where a patriarch says he is *forced* to grant an exemption to a monastery; the only compulsion being that the reasons for so doing are satisfactory.

The chief strength of the book with reference to unlearned readers lies in those extracts which have not the least particle of claim to represent Eastern tradition. The

strong passages, without a single exception, represent not Eastern, but Roman, tradition.

Moses of Mardin, for instance, is quoted (211) as offering Pope Julius III. a profession of faith in his own name and in that of his patriarch. But the important passage following this extract is not quoted. Moses proceeds to say that hitherto he had made no profession, because his patriarch had charged him not to be overhasty, "donec ipsam professionem probe assequutus essem," that is, until he had well learnt his lesson in Rome. "And now I perceive," he adds, "that *your* profession" (he is speaking to the cardinals) "is like a light placed on a candlestick," &c., as in text 217, quoted in proof of "Their inerrancy." This is the profession made at Rome by a *convert*. And Assemani, from whom Archbishop Benni has borrowed his extracts, adds—"Haec ille; cujus tamen fidem Ignatius ejusdem Patriarcha *nequaquam ratam habuit*, ut postmodum compertum est."

The earliest and most sincere Eastern converts to Rome were the Maronites. They were formerly Monothelites, and are said to have had a devotion to Pope Honorius. William of Tyre in his history (lib. 22, c. 8) calls Maro a haeresiarch, and, when speaking of the union with Rome, says—"Abjurato errore quo diu periculose nimis detenti fuerant, ad unitatem Ecclesiae Catholicae reversi sunt, fidem orthodoxam suscipientes, parati *Romanae ecclesiae traditiones* cum omni veneratione amplecti et observare." This is to be borne in mind when reading text 134, and the like. Nor is it to be forgotten even when reading Nestorian or Monophysite writers. Archbishop Benni repeatedly quotes Benattibus, a Nestorian canonist. But the writings of Benattibus have been extensively corrupted. And Assemani (*B. O.* tom. iii. part i. p. 545) expressly says that, just as the Jacobites had altered the text of Benattibus, "ita Maronitae crediderim quaedam addidisse vel detraxisse, quae ad suam religionem confirmandam facerent."

What I have said of Moses of Mardin holds good with reference to Raban Ara (138) (who was a mere monk, not a Catholicus or Primas), to the Jacobite bishops who wrote to Innocent IV., and to certain Chaldaean prelates. In the middle of the sixteenth century, Sulâka, one of the claimants of the Nestorian patriarchate, came to Rome, abjured his Eastern doctrines, and, professing unconditional obedience to the pope, was consecrated under the name of John. The present views of Archbishop Manning might with equal justice be quoted as evidence of the traditional doctrine of the Church of England.

On one point connected with these Chaldaean prelates it is necessary to say a few words. Archbishop Benni has quoted Elias of Babylon (199) as saying—

"Even [the Metropolitan of] our See of Babylon was not elected by itself, as those of other heretics who have lawlessly multiplied Patriarchs in the world without the permission of the see of the great Church of Rome: but it was by the command of the Pope, and by an order of the Roman Church, that the see of Babylon was filled up. Thus much is to be found written in our Annals, and thus it is that we have before received [our] power up to this day."

Here is a positive historical statement which would be most important if it were true. But it is notoriously untrue. It is either a wilful falsehood or an incredibly ignorant blunder. Not once or twice, but over and over again, as Archbishop Benni cannot but be aware, has the honest and learned Joseph Assemani indignantly protested against this delusion, as an invention of the partisans of Sulâka under the stress of controversy with their own countrymen. The pope had created an Eastern patriarch. The Nestorians said, and with perfect truth, that such a thing had never been heard of. The adherents of Sulâka talk about their annals, but they had none in reality, except those which they possessed in common with their Nestorian opponents. And the only way in which they can be defended from the charge of deliberate falsehood is to suppose that they mistook Antioch, as being in the Roman empire, for Rome.

By far the strongest extracts (and the most numerous) are taken from Joseph II., bishop of Amida, afterwards Chaldaean patriarch. He certainly was a very remarkable man. He has left an interesting autobiographical sketch. In his pursuit of knowledge under difficulties he even attended Mohammedan schools, and read so many bad books that he considers it a divine mercy that hell had not yet overtaken him. But in this unhealthy literature he unfortunately did not reckon the Pseudo-Isidorian decretals, which he quotes twice (126, 154) in the extracts selected from him by Archbishop Benni. Are these decretals part of the primitive tradition of Antioch? Is not the mere fact of believing in them a proof that we have here to do with the corrupt traditions of the West?

The language of adulation, when addressed to a pope, is naturally expressive of orthodox ultramontane doctrine. "When you speak," says the author of a certain dedication, "men crowd to listen with that awful reverence as to holy oracles or divine prophecies." The person so addressed was Nell Gwynne, but it would not be difficult to quote similar language addressed by one Eastern ecclesiastic to another. And if it were addressed to the bishop of Rome, the author would naturally speak of St. Peter in the style common to Christians of all Eastern and Western churches, and all this, "with continual adorations, perpetual bowings, and sempiternal kneelings before the holy feet" (I am quoting Elias of Babylon), would produce exactly the kind of evidence suited for Archbishop Benni's book. Now this kind of testimony is what no Eastern ecclesiastic who wanted the pope's help would hesitate about for a moment. In his mouth it would mean no more than "I am, Sir, your most obedient servant." It is the bait which Orientals have repeatedly tried, and sometimes with success, to impose upon Rome, even when they were doggedly resolved to make no real concession. Archbishop Benni is aware of these attempts, for he avoids quoting certain testimonies which would have suited him admirably, had not the exposure of the fraud been close at hand. But he has not always been successful in avoiding cases of this kind. Assemani and Lequien consider the testimonies of 1247 as fraudulent as those of 1223; and Archbishop Benni is silent about the latter because Raynaldus has shown their insincerity, but he produces the former because Raynaldus was imposed upon by them as the Dominicans had been before him. But perhaps the most notorious fraud ever practised upon Rome was perpetrated in the name of Gabriel, who is introduced to us as "the 97th successor of the Evangelist St. Mark," and is quoted oftener than St. Ephrem—I need hardly say, in support of doctrines for which St. Ephrem might be searched in vain.

What has this Gabriel to do with the tradition of the Syriac Church? He was an Egyptian Monophysite by whom (or in whose name) Rome was most shamelessly deceived. The whole embassy described by Baronius in the appendix to his sixth volume was an impudent imposture, as is admitted by Roman Catholic as well as by Protestant writers. The Carmelite Thomas a Jesu is not less strong in his expressions than the Protestant Geddes. Renaudot and the Bollandist Sollier allow that nothing came out of the whole business. And, quite recently, a letter written by a contemporary, and to some extent an eye-witness, the famous Cyril Lucaris, Melchite patriarch of Alexandria, has been published, in which he speaks of—

"illam illusionem, potiusquam legationem, cum revera impostura fuerat cujusdam Coptae vel Eutychiani qui se Romam profectus Alexandrini

patriarchae legatum falso professus fuerit. . . . . At creato Paulo fraudeque detecta, ille bonus legatus Roma clam ejectus, ne forsan palam fieret comoedia, huc in Aegyptum se retulerat."

I have said that the chief strength of Archbishop Benni's book lies in those extracts which really represent Roman, and not Eastern, tradition. These are mixed up with others, and the unlearned reader is left under an impression that all the writers give more or less the same testimony, which is, indeed, very far from being the case. But if all the Roman witnesses were cut out, I should still refuse to accept Archbishop Benni's representation of the Eastern tradition, even as regards the patriarchal authority. In the first place, he has only given those extracts which describe one stage, and a very modern one, of the Nestorian patriarchate. He wishes to represent it as absolute, and therefore does not scruple to omit qualifying clauses of the utmost importance. He quotes, for instance (160), a synod forbidding metropolitans and bishops "to violate any order, command, or decision of the Patriarch," &c., but he leaves out the important addition, "when he commands *according to the will of Christ*." According to theories now in vogue, the will of Christ is inferred from the absolute nature of the authority which commands. But it was not always so, even in the Roman Church. I am, however, quite willing to grant that absolutist ideas were dominant (on paper at least) at the time that Ebedjeshu wrote his *Nomocanon*. But these ideas were not primitive, any more than the tendencies in behalf of hereditary succession in the patriarchate. The *Nomocanon* itself bears witness to this. Under the head, "They are above Councils," we are treated to extracts from the Synod of Dadishû, which say that "Bishops cannot summon any Synod against their Head and leader," that he is to judge his inferiors, but that "his own judgment is to be reserved to Christ." But every reader of the *Bibliotheca Orientalis* knows that the supposed Synod of Dadishû is a forgery, and every reader of the *Nomocanon* of Ebedjeshu knows that provision is made in the canons for the synodical judgment and deposition of the patriarch for heresy or other misconduct (see tract. viii. c. 20, can. 4 and 5, also c. 21). More than one patriarch has, in fact, been synodically deposed. Even the forged letter of the "Occidentals" given in the ninth part of the *Nomocanon* reserves the judgment of the patriarch to the *other patriarchs*, or to the sovereign. It is easy to understand why Archbishop Benni passes over all this in silence.

If we exclude the irrevelant evidence, and that which is manifestly purely Roman, there still remains that of the spurious Arabic canons attributed to the Council of Nice. The importance of these has been much exaggerated in consequence of their being accepted by the different Eastern communions. From the hostile feeling which keeps these communions apart, it has been argued that none of them would borrow from another, and that what is common to them all must be anterior to the schism. But *à priori* arguments like this require to be very rigorously verified. It was on exactly similar grounds that the Samaritan recension of the Pentateuch was formerly supposed (but most erroneously, as every scholar is now aware) to be of the utmost antiquity and purity. These Arabic canons contain gross anachronisms which prove them to be of much more recent date than the beginning of the schism. The hostile feeling referred to has not, in fact, been of a nature to prevent borrowings, especially of forgeries bearing names which did not awaken sectarian animosity. Nor has it been as persistent as is commonly thought. The Moslem invasion was productive of pacific and even kindly intercourse, sometimes closely approaching to religious intercommunion, between the separated churches, and great writers like Elias of Damascus on the Nestorian and Barhebraeus on the Jacobite side wrote treatises to prove that the great Eastern communities were equally orthodox in fact, that their differences were verbal, and that party spirit alone kept them asunder. There are repeated instances on record (see Lacroze, *Histoire du Christianisme des Indes*, tom. ii. p. 115) of Nestorians applying to Jacobites for bishops; the identity of *rite* being considered by them as of greater importance than the difference of dogmatic formula. And as for borrowing of literary forgeries, there is the well-known case of the Jacobites adopting the Nestorian fable of the transfer of the patriarchal dignity to the see of Seleucia. There is nothing in the Arabic canons on the dignity of the Roman see to shock either Nestorians or Jacobites, because they all consider that see as having disappeared from the Church many centuries ago. The canons therefore merely represent to them fragments of ecclesiastical discipline which have long since become obsolete. We have at present no means of determining the date of this forgery. The manuscripts which contain the canons are not of very great antiquity. The earliest writer who can be referred to as recognising their existence is Elias of Damascus; but no sensible person will accept such a reference as extract 156 as a proof that they existed at the time of this writer. A collection of canons admits of an indefinite amount of increase, for which the author whose name it bears is in no way responsible. A very large number of the MSS. of Dionysius Exiguus contain documents which he certainly had not included in his collection. We require, then, to see the collection of Elias of Damascus as a whole, and to know its literary history as we know that of Dionysius Exiguus, before we can be sure that he really knew of the spurious Arabic canons of Nice. As to the propagation of canons supposed to be favourable to Rome, there is no historical difficulty whatever. The catholicism of Rome was for a long time most powerful, nay dominant, in the East. Besides the Latin kingdom of Jerusalem, there were the principalities of Tripoli and Edessa, the latter extending beyond the Euphrates. The principality of Antioch lasted for more than a century and a half. There was the nation of the Maronites, and there was the Armenian kingdom under the house of Rupen. In Alexandria one of the Melchite patriarchs was in communion with Rome, and sent a deputy to the Lateran Council. It is not improbably to his influence that the "Filioque" has found its way into the canons attributed to St. Hippolytus. This, too, is the time of the daring fraud of the "ancient missionaries" denounced by the learned Dominican Lequien in his *Panoplia contra Graecos* (p. xiv), and of those "spurious and lying testimonies" forged in support of papal authority which imposed upon St. Thomas Aquinas and all Latin theologians for many centuries.

The Arabic canons themselves, however, furnish us with a clue which enables us to conjecture their origin with a great amount of probability. De Marca long ago called attention to the canon which placed the island of Cyprus under the jurisdiction of the patriarch of Antioch. *Is fecit cui prodest.* The Maronite patriarchs of Antioch exercised jurisdiction in Cyprus over several bishops and churches of their own communion, and it was most probably in their interest that the canon was forged in justification of an ecclesiastical arrangement directly at variance with ancient rule. If the fraud owes its origin to a Maronite hand, it is not to be wondered at if in some of the canons great authority is ascribed to the Bishop of Rome.

Fraud and forgery are not pleasant words, but they are unfortunately unavoidable in a discussion of the pontifical claims which Archbishop Benni has at heart. And if the whole truth must be spoken, his own book is itself no better

than a pious fraud; in saying which I do not wish to imply that the Archbishop is not the dupe of his own legerdemain. Far less would I wish to make any imputation on the excellent Italian priest by whom the book has been made accessible to English readers, and whose perfect sincerity in the pursuit of truth and knowledge is beyond all suspicion.

P. le Page Renouf.

The Patriarch and the Tsar. The Replies of Nicon. By William Palmer. Trübner and Co., 1871.

The general impression this book leaves upon us is that there is a good deal of fine confused cursing up and down it. Nicon overwhelms his adversaries with torrents of invective from the Bible and the Fathers and the Councils against the sins which he chooses to impute to them (and his instinct is generally sound), and now and then clenches the matter with a vigorous bit of denunciation of his own. To appreciate the full oddity and the full impressiveness of the book it ought to be read through; perhaps the best single passage to which to refer the reader is the peroration which contains an elaborate series of instances of boldness and audacity, drawn up because Nicon had been accused of audacity and wished to retort the charge. The following is a curious specimen of "boldness," "With boldness the children of Israel 'groaned by reason of their bondage.'" Of course Nicon was a barbarian, and his sense of the ridiculous had received at the best a very one-sided development: he accumulates forty pages of quotations from the Old Testament in the New, to prove that uninspired writers ought never to dispense with an appeal to authority. Feeling himself that this was, if possible, a superabundance of testimony, he puts a cross at the beginning and at the end, that weak brethren may skip; but in general the torrent of quotation flows unchecked. Prince Nikita Orloeffsky was employed to draw up a sort of handybook of Russian law, rather too much in the interest of the Tsar. Among other things this code enacted that the church property in the suburbs of Moscow and other cities should revert to the State. Nicon will not allow that the church has or can have property, and writes out several chapters of the Pentateuch about the Levites and the suburbs assigned to them, because they had no heritage, and then breaks out into something like eloquence:—

"Consider, thou fighter against God, Prince Nikita, how thou speakest of those suburbs as belonging to the patriarch, and to metropolitans, and bishops, and monasteries. Do they not all belong to God? And we belong to Him, all, except thou and such as thou. *Ye* are not His."

Again, Nikita had enacted penalties against those who perjure themselves after kissing the cross—a form of oath consecrated, one might have thought, by the example of St. Vladimir, who commended it in his historical testament to the respect of his sons. But Nicon could not remember any Greek precedent to authorise the national oath, so he writes out two or three curious pages of St. Chrysostom against swearing in the abstract, to prove that unauthorised oaths are a mortal sin, which he reviles Nikita in a running fire of parentheses for committing. These instances are sufficient to show that Nicon's replies are quaint enough to compensate for their prolixity, and there is one very picturesque account of a scene with the imperial commissioners in which he had an opportunity, which he used to the full, of imitating St. Basil defying his persecutors. To most Western readers it will be new to find the Canons of Carthage and Sardica, including the one on appeals to Rome, part of the recognised common law of the Russian Church in the seventeenth century, while the official history of the apostacy of the Pope, which is dated from Formosus, and his consequent deposition from his primacy among the patriarchs almost makes the efficacious businesslike romance of the Pseudo-Isidore respectable.

Students to whom these considerations are familiar will be apt to complain that an isolated translation of a pamphlet, which even without the appendix attains the dimensions of a history, is hardly the most useful supplement to such an history as Mouravieff's, especially as the questions of the Boyar Simeon Streshneff, and the answers of the Metropolitan, Paisius Ligarides of Gaza, are only given in an analysis, which is not full enough to enable us to judge of this plausibility. We have only the skeleton of the secularist indictment, while the hierarchical defence is given *in extenso*.

For the replies of Nicon are quite sufficient to prove that the real question at issue was whether the Patriarch or the Tsar was to be supreme in Russia, and that we cannot resolve it away into an ordinary quarrel between barbarous nobles and an overbearing favourite. Nicon's own *ex-parte* statement gives the impression that in the actual dispute he was substantially in the right (though it is strange that he should have imagined he was honouring the sacraments by refusing them to criminals under sentence of death), but that his difficulties were in great measure of his own creation, and that he did not choose his ground for resistance well.

Nicon's aim was to restore in Russia the purity of the Byzantine Church, just as it was the aim of the Tractarians to restore in England the purity of the Church of the Fathers. Like them he hated liberalism and modernism as much as slovenliness, though he had more to do with the latter, and only knew the former in the shape of importations of Polish pictures and quotations from Aesop's fables. He had all their energy, all their singlemindedness, all their obstinacy, all their scrupulosity. He could not have their culture—which would not have saved him, as it did not save them, from attributing an unreal homogeneousness to the past, and trying to build upon a mirage.

When first chosen to the patriarchate, he exacted a pledge of spiritual obedience from the Tsar and the nobility. When the Tsar absented himself from public worship, he protested solemnly in the presence of the people that he could no longer act as patriarch. He seems to have been influenced partly by the duty, as he regarded it, of fleeing from persecution, partly by a sense that, as the Tsar by encroachments on church property and by subjecting ecclesiastical persons to his own courts had broken one side of the compact, he could no longer be held to the other. He really "struck," and it was not for two years that his opponents formed the design of treating this strike as a resignation vacating the chair. Meanwhile Nicon had had time to recollect himself and to reconnoitre the strong points of his position. The Tsar had recognised him as patriarch after his protest, and there was no ecclesiastical authority in Russia competent to deal with a patriarch. It was worse than useless to hope to cope with him by importing a Pangloss *in partibus* like Paisius, who had committed two plain and almost unpardonable offences against ecclesiastical law by living in Latin communion and accepting Latin orders, and again by interfering in Russia beyond his nominal diocese at all.

The incurable weakness of Nicon's position was that the Tsar was the real centre of everything in Russia. One Tsar had fetched some patriarchs from Constantinople to make him a patriarch of his own; another could always fetch some more when he was tired of the particular plaything called Nicon. The *prestige* of the Tsar more than half subjugated Nicon himself; his bitterness against his other opponents goes to the full measure of what a prelate in the seventeenth century permitted himself; his bitterness against the Tsar

never carries him beyond the measure of what a prelate or at least a religious newspaper might think permissible in the nineteenth. G. A. Simcox.

First Part of the Royal Commentaries of the Yncas by the Ynca Garcilasso de la Vega. Translated and edited, with Notes and an Introduction, by Clements R. Markham. London: printed for the Hakluyt Society. Vol. I., 1869; Vol. II., 1871.

Mr. Markham's translation was so much the more necessary as Garcilasso's great work was to this day almost untranslated. Sir Paul Rycaut's elucubration, published in London in 1688, and dedicated to James II., is only an abridgment, omitting no less than fourteen out of the twenty-six chapters in the first book and seventeen out of the twenty-eight in the second. Besides, the worthy knight (for such was Rycaut's title), who happened to be but very slightly acquainted with the Spanish tongue, had a trick of wildly guessing at the sense, which process was very ingenious indeed, but not so accurate as it might have been. Of the innumerable blunders with which he interspersed his version of the *Royal Commentaries*, Mr. Markham cites one which is characteristic. Speaking of "five Indians in Cuzco who played the flute very well from any music-book for the organ that was placed before them," Garcilasso adds, "*Eran de Juan Rodriguez de Villalobos vecino que fue de aquella ciudad*"—"They belonged to Juan Rodriguez de Villalobos, formerly a citizen of that town" (l. ii. ch. xxvi.). Rycaut renders it: "They belonged to one Juan Rodriguez, who lived at a village called Lobos, not far from this city."

In the short preface with which the first volume opens, Mr. Markham has summed up very exactly the little we know of Garcilasso's life. He was born at Cuzco in 1540 from Garcilasso de la Vega, "one of the few honourable cavaliers of noble blood among the conquerors of Peru, and Ñusta Isabel Chimpa Ocllo, grand-daughter of Ynca Tupak-Yupanqui. He was brought up amidst the civil wars which raged for years in the newly conquered empire.

"Almost every week, he tells us, some of the relations of his Indian mother came to visit her; and on these occasions their usual conversation was on the subject of the former grandeur of the fallen dynasty, of its greatness, of the mode of government in peace and war, and of the laws ordained by the Yncas for the good of their subjects. The half-caste boy listened eagerly to these conversations; and at last, when he was about sixteen or seventeen years old, he began to put questions to an old Ynca nobleman, who was his mother's brother, and received from him the story of the origin of the Ynca dynasty."—"The young Ynca had a wonderful start of all contemporary travellers, for he was born, as it were, in the midst of his work, and began to store his material as soon as he could speak."

However, he did not use it so soon, for after his father's death in 1560 (not in 1550, as Mr. Markham, through a printer's mistake, seems to say), being just twenty years of age, he left America for ever, went to seek his fortune in Spain, became a captain in the army of Philip II., and never dreamt of composing his countryman's history until forty years later, at which time he must have forgotten a great part of what he had heard in his boyhood. So he wrote to all his surviving schoolfellows, "asking them each to help me by sending me an account of the particular conquests which the Yncas achieved in the provinces of their mothers," which they did accordingly. He then made careful extracts from such of the Spanish historians as had spoken of Peru, Cieza de Leon, Agustin de Zarate, Gomara, Acosta, and, above all, Blas Valera, whose papers, half destroyed by the English in 1596, are now entirely lost. At least the fourth part of the *Royal Commentaries* is copied almost word for word from those historians, so that I think there is a little exaggeration in Mr. Markham saying that without Garcilasso's work "our knowledge of the civilisation of the Yncas, the most interesting and important feature in the history of the New World, would indeed be limited." If, by some mishap, the *Royal Commentaries* had been lost, we would find in Cieza de Leon and the others nearly all the material that a "rather garrulous" Ynca has drawn out in his long-winded narratives, especially possessing, as we do now, the works of some posterior writers, Herrera, for instance, or Montesinos, whose importance for the early periods of Peruvian history is almost unrivalled. I know Mr. Markham is not of the same mind, and sets but little value on the information of Montesinos, whom he looks upon as a second-hand authority. If I be allowed to express my opinion here, I think Montesinos is now treated by Peruvian scholars as Manetho was by the chronologists of the seventeenth and eighteenth centuries. Before the dawn of Egyptology, almost all the critics had adopted entirely the traditional data of Herodotus, Diodorus, and other classical writers of greater or less authority: they held the Manethonian lists of Egyptian kings to be mere fictions, and did not give them much more reality than that Mr. Markham seems inclined to give to Montesinos' lists of Peruvian sovereigns. We know how the case of Manetho *v.* Herodotus ended, and how it was proved that after all "that impostor of a Sebennytian priest" was perfectly right. I am very ready to admit, not that all the traditions collected by Montesinos from the mouth of the *Amautus* are historical truth itself, but that they are a nearer approach to historical truth than some of the traditions inserted in Garcilasso's *Royal Commentaries*.

I need not say that Mr. Markham's translation is most accurate. Mr. Markham's accuracy as a translator has been well known since he published for the Hakluyt Society the *Narrative of Pascual de Andagoya*, the *Travels of Cieza de Leon in the Years* 1532–1550, the *Life and Acts of Don Alonzo de Guzman*, 1518–1543, and other equally interesting works from the time of the Conquest. The notes, philological as well as historical, derive a great interest from the fact of Mr. Markham having personally explored Peru and learned the Quichua tongue. The two maps in the second volume, exhibiting one the plan of Cuzco, ancient and modern, the other the Sacsahuaman or great Ynca fortress of Cuzco, are very serviceable to make the reader understand the chapters which contain the description of the imperial city of Cuzco (book vii. ch. viii.–xiii.) and of its fortress (book vii. ch. xxvii.–xxix.). G. Maspero.

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Philology.

An-Nadîm's Index of Arabic Literature. [*Kitâb al-Fihrist*, mit Anmerkungen herausgeg. von Gust. Flügel. Nach dessen Tode besorgt von Joh. Rödiger und Aug. Müller. Zwei Bände. Mit Unterstützung der Deutschen Morgenl. Gesellschaft. Zweiter Band, die Anmerkungen und Indices enthaltend. Von Aug. Müller.] Leipzig: Vogel.

Not much later than it was promised appears the second volume of this very important work (see *Academy*, vol. iii. pp. 17–19), by which the text already published is for the first time made fully available for study. One is almost sorry that the publication of the first part was not delayed till the second could appear with it, for no doubt many an one will have been too impatient to put off the study of the text, much as he may have wished for the notes, while to read the commentary afterwards by itself is of but little use, even if it be possible.

The commentary is Flügel's own work. The editor, Dr. Müller (a *Privatdocent* at the university of Halle) has been at the pains to subject the almost completed but not finally revised manuscript to a careful but considerate redaction. He has made few additions of his own.

It is clear that Flügel worked at these notes for many a long year. Only a man of his untiring industry and wide reading, especially in the literary histories and bibliographical works of the Arabs, could accomplish such a task. He also benefited by the counsel of his old friend, Professor Fleischer, the undoubted chief of living Arabic scholars; I seem to detect this wholesome influence in other passages besides those in which it is mentioned.

The importance of the commentary consists not so much in the explanation of the subject-matter as in the literary notices. And rightly so, not only because the work of An-Nadîm himself is predominantly bibliographical, but also because a complete explanatory comment, even if such could be produced by a single scholar, would have assumed far too large dimensions. The literary notices are all the more copious, sometimes rather too much so, as when he quotes the secondary and the original authorities side by side, *e.g.* the *Marâçid* together with *Yâkût*. With regard to the Arab scholars mentioned in the *Fihrist*, the material supplied by printed texts is quoted almost *in extenso*, and much from manuscripts besides. But the notes also contain much that illustrates the text in other ways, *e.g.* the translation of many difficult passages, especially the poetical ones—a great boon to the reader. Here and there, too, the subject-matter is for good reasons explained at greater length. We are thus presented with many valuable additions and corrections to the earlier work of Flügel on the section relative to Mani. His notes on the equally important but extremely obscure section on the heathen of Harrân are naturally less copious, because here he was limited to conjectures. The present writer has been also much occupied with these chapters, especially the darkest of all, that on the mysteries, and thinks he is in a position to solve some of the difficulties, especially by a retranslation of the strange-looking sayings into Syriac. But we are not here upon solid ground; at any rate matters of this kind are better treated in a monograph.

The commentary also contains much that relates to the criticism of the text. I notice especially that the deficiency complained of in my review of the first volume—the omission of the variants to the section on Mani—has been completely remedied, the variants being supplied by the editor according to a new collation.

It is but natural that a work of such innumerable details should not be without mistakes and hiatuses. Every Orientalist who is in any degree at home in one of the many departments touched upon in the *Fihrist* will be able here and there to offer corrections and additions, without any disparagement to the uncommon merits of the author. Flügel himself often modestly admits that he was unable to explain this and that point, particularly where the subject is one which only concerns the Arabist indirectly. I mention this in order to prevent the few small additions and corrections which a varied reading has suggested to me in several passages from being interpreted in the light of a disparagement to the author.

To the careful discussion of the word *ḥibr* (Anm. 6, p. 9) I may be allowed to add that it seems to be used of the common black ink in two late and incorrect Syriac receipts for the preparation of that fluid (Wright's *Catalogue of Syriac MSS.* pp. 580*b* and 581*a*).—Page 23, line 23, the corrupt and misread word *mohtawî* conceals the Syriac *bêth mawtĕbhê*—the name given by the Nestorians to those books of the Old Testament which belong neither to the Pentateuch nor strictly to the Prophets. The fact that this catalogue of the books of the Bible is really of Nestorian origin was mentioned in my review of the first part. This accounts further for the mode of writing "Ruth" with an *'Ain*, which struck Flügel as peculiar; in line 7, where a Jewish authority is used, the word is naturally given according to the Hebrew orthography without that letter.—In the discussion of the original conclusion of the great historical work of Tabarî and its appendices (Anm. 5 to p. 234), special reference should have been made to Ibn-al-Athîr, viii. 68, of which more than half the first part is entirely based on Tabarî.—The identity of the Mandaeans and the *Moghtasila* (Anm. 10 to p. 340), which I formerly accepted myself, is no longer tenable. The Elkesaites or *Moghtasila* have had great influence on the ceremonies and in part also the dogmas of the Mandaeans, but in other respects the two are very different. The celebrated verse in p. 142, 16, is not erotic, but refers to the relation of Nâbigha to his princely patron, with whom he had fallen into discredit (cf. Ahlwardt's edition, No. 17, v. 28).—It must be due to a momentary forgetfulness that Flügel speaks of the poet 'Omar b. abî-Rabî'a as if an entirely unknown person (Anm. 17, p. 306).

The indices by Dr. Müller are comprehensive. They are obviously of particular value in a work of this kind, which within a comparatively small compass (I had supposed the *Fihrist* to be a much larger work from what I knew of the contents) contains such a vast amount.

As long as Orientalists continue to be instructed by the work of the excellent bookseller An-Nadîm, so long will the name of Flügel survive as that of its first editor and expositor, who by discretion and persevering industry has accomplished more than many a scholar his superior in genius and width of view. In conclusion, hearty thanks to both the young scholars, by whose exertions this posthumous work has become accessible to us. Th. Nöldeke.

The Semites in their Relation to the Hamites and Japhethites. [*Die Semiten in ihrem Verhältniss zu Chamiten und Japhetiten.*] By J. G. Müller. Gotha: Besser.

The table of generations in the 10th chapter of Genesis contains the ethnological theories of the Hebrews about the nations with whom they were acquainted at the time of the first kings. These all belong to Blumenbach's Caucasian race, and group themselves into three families of nations, with the three sons of Noah, Ham, Shem, and Japheth, for progenitors. It is probable that the popular Hebrew opinion of that time reckoned amongst the sons of Ham all the peoples that were akin, in language and civilisation, to

the Egyptians; amongst the children of Shem, all those that were similarly related to the Hebrews, who are designated as descendants of Shem; amongst the sons of Japheth, all the tribes standing in a kindred relation to the Medes and Greeks—a view which nearly every one who has studied the passage in question has read it as conveying.

The author of the book before us judges quite otherwise of this tenth chapter, inasmuch as he takes it to contain a scientific truth, rather than a popular belief. At least this is the only intelligible explanation of the way in which he dwells on its supposed inconsistencies, and undertakes to bring them into harmony with acknowledged scientific certainties. After the author has determined on etymological and antiquarian grounds that the five sons of Shem, Elam, Asshur, Arphaxad, Lud, and Aram, are Indo-Germans, he observes that the same must hold good for Eber, Joktan, and Jerah, the ancestors of the Hebrews, the Arabians, and the Chaldaeans, who were descendants of Arphaxad. But if this remark is applied to the whole nations, it would follow, as the author concludes, that the Hebrews, Arabians, and Chaldaeans were Indo-Germans, and spoke Indo-Germanic languages. But this view is opposed by their language, which we know, and which is, closely related to the language of Canaan; and Canaan is mentioned as a descendant of Ham. If these two facts are regarded as equally certain, nothing is left but to declare the Semites to be Hamitic Indo-Germans! According to Professor Müller there are properly speaking neither Semites nor Semitic languages, only Hamites and Indo-Germans. What we call Semites are only Indo-Germans who have adopted Hamitic languages, and what we are accustomed to call Semitic languages are at bottom only Hamitic dialects adopted by Indo-Germanic nations.

Though all these conclusions are correct from the logical point of view, there is much to be urged against them. In the first place, it is exceedingly hazardous to argue from the unknown to the known, *i.e.* from the nationality of the unknown Arphaxad to the nationality of the known Jews, Arabs, and Chaldaeans. In the second place, the proof on which the relationship of the so-called Semitic with the Hamitic languages depends is so far incorrect that it rests upon a complete misconception of the whole state of the question. None of the scholars who have pronounced the Semitic and Hamitic languages to be related suppose the relation to be as close as that between the Hebrews and Phoenicians, as the author, in support of his hypothesis, appears to assume.

The author seems altogether to have overlooked the contradictions into which one falls as soon as one begins to look upon the table of generations as a piece of ethnology, and is driven to accept the consequences that follow from it. For if we realise to ourselves the relation of this table to its author, we find only two possible alternatives: either the author started from a tradition still living amongst his countrymen, or he had made independent researches respecting language, customs, and other points of ethnological significance. On the first supposition it would be unreasonable to separate those Semites whom he looks upon as Indo-Germans from the other children of Japheth; while on the second hypothesis it would be impossible to defend him from the charge of shallowness, in placing Phoenicians and Egyptians in the same linguistic family.

We have therefore no choice but to follow the example of most unprejudiced Biblical scholars, and regard the genealogical table as a piece of popular ethnology of limited scientific value. It is consequently labour in vain to try to harmonize each point in it with the rest and with the results of modern science. It is self-evident from this that in forming our opinion of the Semites as a nation we must restrict ourselves to such authentic data as language, literature, civilisation, &c., which determine the judgment of an ethnologist. We also see that the Semites, although linguistically related to the Hamites, yet are clearly distinguished from them and form a family by themselves. The Semitic languages are distant collaterals, not descendants, of the Hamitic, just as the Germanic languages are not daughters, but sisters, of Sanskrit. Indeed, Semites and Hamites stand much farther apart than the different groups of the Indo-Germanic family, for these agree in the formation of the cases as well as in their pronouns and roots, while Semitic and Hamitic languages only agree in their pronouns and a few roots, their conjugations and declensions being entirely different.

In conclusion we cannot refrain from observing that, although Professor J. G. Müller has collected a number of important facts respecting the history of Semitic civilisation, and has accompanied them by some excellent remarks, he has been led by his philological deficiencies in the field of the Semitic languages to a variety of unfounded hypotheses which will seriously impair the value of his work to theologians as well as to ethnologists. Friedrich Müller.

THE ENGLISH MSS. OF TERENCE USED BY LENG AND BENTLEY.

Dr. Francis Umpfenbach, whose edition of Terence (Berlin, 1870) exhibits for the first time a complete collation of the most ancient MSS. of that author, including the Bembine, devotes an interesting article in the *Philologus* of this year (pp. 442–477) to a discussion on the MSS. not collated in his edition, but quoted by Lindenbrog, Leng, and Bentley. This discussion derives additional interest from the new light which Dr. Umpfenbach has thrown on the vexed question of the relation of the various families of Terentian MSS. to each other. Ritschl divided them into two classes: a more ancient, represented by the venerable Bembine, the Victorianus, and perhaps the Decurtatus; and a more modern, in which the recension of Calliopius, a grammarian of a comparatively late period, is followed. This theory is now disproved by the discovery that both the Victorianus and Decurtatus exhibit the Calliopian recension in a modified form, and corrected from the commentary of Donatus. This modified Calliopian recension appears also in parts of the Ambrosian, in the Vienna as well as in the Cologne fragments, and in the Laurentianus xxxviii. 27; it in fact constitutes a third family, distinct, on the one hand, from the Bembine, which stands alone in a class by itself, and, on the other, from the MSS. exhibiting the unmodified Calliopian recension. (See Umpfenbach's edition, pref. pp. i–iii, lxviii–lxix.)

After a discussion, more or less detailed, of the *vetus codex* of Lindenbrog, which A. Fritsch inclines to identify with a Paris codex now numbered 7905, and an article by Fritsch himself on the Codex Parisinus 7903A, a MS. belonging to that modified Calliopian group, of which the Victorianus and Decurtatus are the best known specimens, the English MSS. employed by Leng and Bentley are treated.

(1) Of the *Regii*, or MSS. in the King's Library, Bentley quotes several. The most valuable of these, described by him as *chartaceus sed ex optimo exemplari transcriptus*, is identified with a paper MS. of the fifteenth century now in the British Museum, and numbered Regius 15. A. xi.—a MS. of the modified Calliopian group, though differing from the Victorianus and Decurtatus in the order of the plays, which is that of the pure Calliopian recension, *Andria, Eunuchus, Heautontimorumenos, Adelphi, Hecyra, Phormio.* Where two *Regii* are mentioned, Dr. Umpfenbach considers it certain that the second is that marked 15. A. xii. of the tenth century; that he employed others as well seems rightly inferred from such expressions as *unus ex Regiis recentior* (see Bentley's note on *Hec.* v. 4, 12). Leng also used a MS. belonging to the King's Library; this, it would seem, was distinct from either of the two *Regii* above mentioned as Bentley's.

(2) Bentley speaks several times of a MS. which he calls *Academicus* 900 *annorum*. Among the MSS. which Leng used were two lent him by the Bishop of Norwich, which he styles severally *Nα* and *Nβ*. In the characteristic passages, *Ad.* iii. 2, 26, *animam; Phor.* iii. 3, 16, *tum igitur;* probably also in the omission of *Phor.* ii. 3, 7, *neque eius—negat*, Dr. Umpfenbach concludes that Bentley's *Academicus* 900 *annorum* is Leng's *Nα*. The writer of this article is indebted to the kindness of Mr. J. E. B. Mayor, late Librarian of the University Library of Cambridge, and just appointed to the chair of Latin recently vacated by Professor Munro, for a collation of the only MS. in that library which can be supposed to represent Bentley's *Academicus* 900 *annorum*. It is marked Ff 6 4, and *did* actually belong to John Moore, Bishop of Norwich, as Mr. Mayor concludes from the book-plate *munificentia regia* 1715, and the signature *J. Norvicensis* which appears on the first page. But that it cannot be Bentley's 900-year codex is placed beyond all doubt by a comparison of the readings which follow with those quoted from Bentley by Umpfenbach, p. 467, even if it were not certain that Ff 6 4 was not written in the ninth century.

Readings of Ff 6 4.

Andria . . .	iv.	4	54	*uolum?.*
	v.	4	25	*tibi* not over erasure.
Eun.	iv.	4	47	*ei oi.*
	,,	7	19	*armis* without erasure.
Heautont. . .	i.	1	71	*incerto.*
	iii.	1	1	*lucescit.*
	,,	,,	43	*Satrapes.*
	,,	,,	48	*pitissando.*
	v.	1	4	*dicta.*
	,,	3	6	*facia.*
Ad.	i.	1	16	*dissimili.*
	iii.	2	26	*animum.*
	,,	3	68	*Demea* (without *o*).
	,,	4	5	*hac audiuit.*
Hec.	iv.	4	1	*tibi quoque edepol sum iratus.*
Pho.	i.	4	15	*via.*
	,,	,,	52	*deficies.*
	ii.	3	8	the line is not wanting.
	iii.	2	6	An. *ei metuo lenonem ne aliquid suo fuat capiti.* Ge. *idem timeo ego.*
	,,	,,	41	*sterquilinium.*
	,,	3	16	*dum igitur.*
	iv.	3	14	*ut eius tentarem* [*sic*, for the latter part of the MS. is a much later transcript] *sententiam.*
	,,	,,	38	*libuit* (without interlineation).
	v.	3	9	*natam* (not after correction).

Nor, on the other hand, can the only other MS. of Terence now in the Cambridge University Library, that marked Ff 4 39, and which formed part of the original library given by Archbishop Rotherham, be the missing *Academicus*, for, besides that it does not agree in *And.* iv. 4, 54; v. 4, 25; *Eun.* iv. 4, 57, the three cardinal passages in which it was collated by Mr. Mayor, it cannot be older than the fifteenth century. (See pp. 472, 511, vol. ii. of the Catalogue of MSS. in the University Library of Cambridge.)

(3) Leng used for his edition (1701) a MS. belonging to Frevile Lambton, Esq., *ex agro Dunelmensi, i.e.* in the county of Durham. Frevile Lambton's pedigree may be found, as indicated to me by Mr. Mayor, in Surtees' *Durham*, iii. 36. He was buried August 28, 1731, *aet.* 70. He was owner of Hardwick Park, Sedgefield, in that county. The MS. which is called by Leng *Dunelmensis* had at the beginning of every scene coloured figures of the actors, and at the beginning of each play a pictured *aedicula* or small cabinet containing the masks. Two leaves were wanting, one containing *And.* iii. 1, the other *And.* iv. 3. Both Krauss and Brix agree in supposing this codex to be identical with that called by Bentley *veterrimus;* it would be interesting to prove whether this conjecture is well founded; but the MS. has not been forthcoming for the last 150 years, and, like the far more valuable Cologne MS. of Silius Italicus, is perhaps no longer discoverable. Leng calls this much the finest of all his MSS., and any one who would bring the lost treasure to light would confer a service which would be appreciated by every student of Latin philology.

(4) After a short description of the *Petrensis* and *C. C. C.*, the one belonging to Peterhouse, now St. Peter's College, the other to Corpus Christi College, Cambridge, two MSS. used by both Leng and Bentley, Dr. Umpfenbach comes to the *Shippenianus*, a MS. lent to Leng by Robert Shippen, Fellow (afterwards Principal) of Brasenose College, Oxford. Here, at any rate, we are able to clear up a doubt, for this MS. is certainly that now in the library of Brasenose, numbered xviii. in Coxe's Catalogue (*Catalogus Codicum MSS. qui in Collegiis Aulisque Oxoniensibus hodie adservantur*, Oxonii, 1852), and assigned by him to the eleventh century.

Of the other codices of Terence briefly noticed in the *Philologus*, nothing need be said. The Oxford *Donatus*, occasionally cited by Bentley, may be No. xlv. in the library of Lincoln College, a parchment MS. of the fifteenth century: it is perhaps more probable that it was one of those in the Bodleian.

R. Ellis.

UNIVERSITY ORGANIZATION.

Some scientific men, and some resident and other members of the Universities of Oxford and Cambridge, have been holding a conference to consider the low state of learning and science in the two older universities—its causes and its remedies. The impulse to the movement at this particular time has been given by the commission which is now enquiring into the revenues of the colleges, and which is expected to report next session. The wildest and most diverse schemes are floating in the air for the appropriation of these endowments, each of which schemes will no doubt find backers when the time comes. The fear is that there may be a scramble, and that a government dependent for its existence on a House of Commons majority may find it expedient to distribute the treasure-trove among the clamorous. The friends of learning and science, who might not unreasonably claim the whole, come forward asking to be first considered. They based their combination and their further proceedings upon a resolution which ran in these words:—

"The chief end to be kept in view in any redistribution of the revenues of Oxford and Cambridge is the adequate maintenance of mature study and scientific research, as well for their own sakes, as with the view of bringing the highest education within reach of all who are desirous to profit by it."

This resolution was signed by about seventy names, and was followed up by a conference or consultation of the persons signing, as to the development which should be given to the general proposition thus affirmed. The meeting was held at the Freemasons' Tavern on the 9th November. Among those who took a part in the proceedings were Sir Benjamin Brodie, Drs. Carpenter, Burdon-Sanderson, Appleton; Professors Rolleston, Huxley, Seeley, Clifford, Robinson Ellis, Thiselton Dyer; Messrs. Mark Pattison (Rector of Lincoln College), Ray Lankester, Henry Sidgwick, Newton (of the British Museum), A. J. Ellis, Sayce, Bywater, Sidney Colvin, Simcox, Cheyne, &c.

A discussion was taken on the following topics:—Research in Physical Science compared with that in other sciences in England; National Importance of Mature Study as a means of increasing Knowledge; Importance of Research as improving the Quality of Education; the Abolition of Prize Fellowships; Necessity of an Increase in the Number of Professors; the Introduction of new Branches of Study, *e.g.* Archaeology; the better Organization of the Teaching in the already existing Branches; &c.

It was distinctly stated in the course of discussion that this was not a political movement, and that its object was not to back up the present, or any, government in any political measure. Those present were there to consider purely academic and scientific interests. Great dissatisfaction was expressed at the present bestowal of the endowments. An annual revenue, vaguely estimated at 170,000*l.*, is spent in educating about 2000 students. Of these two thousand, it is a low estimate that more than half are "passmen," and passmen may be said to learn nothing worth learning, but spend three years in arriving at the degree of a B.A. Of the other, and smaller, half of the student body, the education is more or less successful. But there was not the same unanimity as to the exact value to be assigned to the results of the education of the "honour" students. Dr. Rolleston thought that great advantage was obtained for the public, by passing a number of mediocre men through a mill which makes them useful machines in their country. At the same time he intimated that examinations for fellowships, where the candidates were older, and therefore ought to have made special studies, was an unsatisfactory repetition of the examination for degree

He thought that examination was in its place and useful as a stimulus for younger pupils.

Dr. Carpenter dwelt on the necessity of providing a maintenance for men whose hearts were in the work of research. If England was behind Germany in original investigation, it was not, as is sometimes said, because Englishmen are inferior to Germans in ideal power, but because the German universities are so arranged as to afford a career to men who choose to devote their lives to study. In England such young men, having no means of making a livelihood by the pursuit of science, are obliged to turn their attention to a "practical" profession.

Sir Benjamin Brodie wished to found in the universities certain specific institutions for the promotion of scientific research. He knew we should be told that this was not an object about which the nation should care. But he pointed to certain institutions which England does keep up, and at very considerable cost, which have solely science for their object. Such are the Royal Observatory at Greenwich; the Meteorological Observatory at Kew, and, above all, the British Museum. The universities with all the means at their disposal did nothing of this kind, the Radcliffe Observatory and the Bodleian Library at Oxford being both private foundations. He would not trust to the growth of professorships singly, but would like to see certain specific institutions representing the various departments of human knowledge. Such institutions should not be disconnected from the work of teaching, but should fulfil the very highest educational work, viz. the training up for the service of the country a body of teachers in the respective sciences.

Professor Seeley argued the uselessness of the fellowships as at present bestowed. He met the argument usually urged by the defenders of fellowships, viz. that they give talent a start in life, by asking why the professions should be specially provided with such advantages rather than any other career? The fellows of colleges were not a class of men with whom any fault can be found. They are all occupying themselves in some way usefully, only not in science, learning, or mature study.

The Rector of Lincoln deprecated the notion of pulling down the present tuitional system, and setting up a professorial in its place. This was the idea of the Commission of 1854, and it had proved an entire failure at Oxford. The tutors had beaten the professors out of the field: for the tutors kept tight hold of the university examinations, and with this powerful leverage to work with, they made it impossible for a professor who gave instruction in the higher parts of his subject to get a class to attend him. He wished to set about reform not by destroying the existing teaching machinery, but by raising its level. Nor would he abolish the fellowships, but convert them. The present mode of bestowing fellowships was indefensible. A fellow had no duties. He would convert the college fellowships into a body of teachers, on a graduated scale, so arranged that the whole body should be connected with education; but while the lowest grade should be wholly occupied in teaching, the highest grade, to rise to which time would be required, should be exempt from the drudgery of lecturing. In this way only could the love of learning and the spirit of research be introduced among the tutors. The best of the tutors felt keenly the pernicious effect of the grind to which they were at present subjected, and would gladly be relieved from it. But the system was too strong for them. As to the proposal of affiliating colleges, or sending teachers out of the universities to the centres of population, he should not see any objection to doing so, provided that these branches were in close connection with the organized hierarchy of instructors whom he would set up in the place of the college fellows.

Mr. Newton urged the desirability of introducing the study of Archaeology into the universities, of organizing it in connection with the existing collections, and of reuniting it to the pursuit of historical research. The study of archaeology requires, first, museums where practical acquaintance can be made with the monuments, and curators for the charge of those museums; and, next, professors to bring before students the last results of archaeology throughout Europe. The British government and private enterprise had done much for the collection of archaeological materials in this country. Their systematic employment was a task which ought to be fulfilled by the universities.

After the discussion, which was broken off at this point by the lateness of the hour, the persons present agreed to form themselves into a "Society for the Organization of Academical Study."

Intelligence.

The last number of the *Altpreussische Monatsschrift* (vol. ix. parts 5 and 6) has an interesting though somewhat superficial account of the High German dialect of East Prussia, by G. Hoffheinz. It appears to be of a highly composite character. Not only has it been strongly modified by the Low German of the bulk of the earliest colonists, but has also adopted many words from the Slavonic dialects of the original inhabitants. It is important to observe that the writer distinguishes between the *j* of *Jeist* and that of *Jott* (= *Geist* and *Gott*), the former being a pure *j*, the latter a more guttural sound, which precise one it is impossible to tell from his account. Here, as elsewhere, the weakness of his phonetics is to be regretted. Thus, after stating that *s* before *t* and *p* becomes *sch*, he goes on to say that the same is the case in the pronunciation of Greek, which he expresses by writing σχπουδη for σπουδή!

A new review has been set on foot at Hongkong, under the title of *The China Review*. It is edited by Mr. N. B. Dennys, the former editor of *Notes and Queries on China and Japan*, the extinction of which useful serial has been so much regretted. The place of honour in the first number is given to a paper on Dr. Legge's *Shihking*, by the Rev. E. J. Eitel. The review is intended to appear every two months.

A new edition of the *Mahabhashya*, Patanjali's great commentary on the grammatical Sutras of Paṇini, with the commentary called *Bhashya-pradipa*, and a new commentary by Pandit Rajarama, from the Benares College, has just been published in that city. This is the first complete edition of this important work ever printed; as the late Dr. Ballantyne's edition comprises only the fourth part of the first *Adhyâya*, and therefore only the thirty-second part of the above complete edition.—*Trübner's Record.*

The *Göttingische gelehrte Anzeigen*, No. 44, contains a review of recent works on the Assyrian language and antiquities by Schrader, Sayce, Lenormant, and Finzi. The well-known writer who signs himself H. E. expresses himself without the slightest reserve in favour of the decipherers of the inscriptions, and only exhorts them to caution in the comparison of other languages. H. E. differs from Professor Schrader (*Academy*, vol. iii. p. 340) in ascribing but little scientific value to the syntax in Mr. Sayce's grammar; the reader will do well to verify H. E.'s report of the contents of that book for himself.

On December 3, Mr. George Smith, of the British Museum, will read a paper before the Society of Biblical Archaeology on "A Cuneiform Inscription containing the Chaldaean Account of the Deluge." We hope this important text, which is said to resemble the story in Berosus, will be published as early as possible. It is on one of the clay-tablets found by Mr. Loftus at Warka.

M. de Campos Leyza has written a *Clef de l'Interprétation hébraïque* in 612 large octavo pages (Paris: Maisonneuve). He there "demonstrates" that there are about fifty fundamental roots, of which about forty are onomatopoetic. The work, we regret to say, is absurdly unscientific, and only shows how much the study of Hebrew in France lags behind that of other Oriental languages.

Contents of the Journals.

Jüdische Zeitschrift (Geiger), vol. x. No. 4.—The Prefaces of Saadia to *Agron* and *Galuj*. [Based on an account by Firkowitsch of the newly discovered prefaces to Saadia's lost works, *Agron* and *Galuj*. The Hebrew prefaces (there is also an Arabic one) to the former work is also given in full from the Hebrew serial *Lebanon*. Firkowitsch states that he also possesses other works of Saadia, including a fragment of his commentary on the Pentateuch.]—On the Moabite Inscription; by J. Auerbach. [Reads, l. 17, 18, (כל or את) לֵו יהוה ואקרף, *i.e.* "Mesha burnt all the Levites of Jehovah before Chemosh;" לוי = לֵו: cf. Olshausen, *Lehrbuch*, p. 413. Geiger also proposes to read, l. 13, 14, אֵשׁ חֶרֶת, "the men of Cheroth": cf. 1 Sam. xxii. 5.]—On Jer. xx. 17. [חֶרֶת, not st. const. of חֶרֶה, but a noun, found in *Berachoth*, 44*b*, 57*b*, *Abodath Eliliin*, 29*a* = "womb."]—An Unknown Commentary on Sifra; by M. Steinschneider. [MS. No. 59 at Munich.]

New Publications.

Ménant, J. Les Achéménides et les Inscriptions de la Perse. Paris: Maisonneuve.

ERRATA IN No. 60.

Page 433, col. 2, line 19, for "seizes" read "serves."
" " " " " 33, for "some" read "none."

The essential point of Pasteur's communication consisted in regarding any portion of a living organism when deprived of access to oxygen as capable of acting as a ferment in respect to fermentible substances in contact with it.

THE ACADEMY.

"Inter silvas Academi quærere verum."

Vol. III.—No. 62.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.
The Editor of The Academy *cannot undertake to return communications which are not asked for.*
The Editor cannot reply to questions from authors respecting the notice of their books.
The next number will be published on Wednesday, January 1, and Advertisements should be sent in by December 28.

NOTICE TO SUBSCRIBERS.

This Number completes the Third Volume of THE ACADEMY: which will be ready by the 1st of January, comprising 24 Numbers, bound in cloth, price 15s. Covers may then be had of the Publishers, price 2s. The Index and Title-page will be published with the next Number, January 1.

General Literature.

Love is Enough; or, The Freeing of Pharamond a Morality. By William Morris. Ellis and White, 1873.

The conception and arrangement of Mr. Morris' last poem are singularly refined and perfect; and it is written throughout with an intensity and seriousness which many readers will be inclined to contrast favourably with the half querulous half indolent *insouciance* which runs through much of the *Earthly Paradise*, and finds a definite expression in the *Apology* and *L'Envoi*. The poem begins with a conversation between Giles and Joan, who are two married peasants, in a crowd at the pageant of an emperor's marriage. They speak in octosyllabic couplets, and the imagery of their speeches is homely, and Joan mistakes the marshal's sergeant for a knight: otherwise it may be doubted whether any peasants out of Arcadia ever expressed themselves with such elegant simplicity and propriety. Then after a short song, which, like all in the poem, begins with the words, "Love is Enough," the emperor and empress appear and exchange lofty courtesies about their love in heroic triplets, each of which is followed by a burden. Then we have the mayor in alliterative lines begging leave to present a play. He feels called to apologize for the subject, which seems to depreciate rank and prosperity; as equally of course he regards the rank of the emperor and empress with loyal complacency; equally of course they give a gracious dispensation for the play to proceed.

The story of the play deals with familiar elements; but they are treated in an abstract passionate way that is anything but familiar. Pharamond succeeds his father, who is killed in battle, and for five years works wonders in defence of his kingdom. Through all these years he has been haunted by the vision of a maiden in a valley shut in by mountains, over which the only pass lies through a yew wood. At last he breaks down under his longing; and, after passing nine days in lethargy, sets off with his foster-father to find the reality of the vision. It seems they met with many adventures in their search; but these are only used for a scene of dreamy reminiscences; it is hardly worth while to enquire which come from Calprénede, which were invented for a story which upon reflection the poet did not care to tell. It is not till the search has lasted for years, and hope has failed, that Love reveals himself, and then withdraws to make way for the beloved in the very valley of the vision where Pharamond has lain down in a mist to die. While Pharamond has been longing for her, Azalais has been longing, not yet for him, but for love; and so when she sees him, she too recognises that she has been longing for the meeting.

After the first raptures are over, Pharamond, to please his foster-father, and to gratify his natural self, or what is left of it, goes back to his kingdom to resume it if he can. He finds that Theobald the constable (whose *lâches* did much to aggravate his early difficulties) has usurped the throne to the general satisfaction. Accordingly he goes back to his love under the impression that he is too good for a king, and that there would be little pleasure in conquering his subjects after conquering their enemies. The emperor and empress are much pleased with the play, and wish in vain that they could make friends with the players; but they are cut off by their rank from a felicity which is reserved for Giles and Joan. After each scene there is a musical interlude, which becomes more and more like a hymn; and Love delivers an address to the audience, which becomes more and more like a sermon by a saint; and the talk of Giles and Joan as they go home from the show lets the reader down gently and happily to common life again.

When we pass from the conception to the execution, it is impossible to speak too highly of the rich rapturous melody of the songs, which are all in long anapaestic stanzas with double rhymes, that have an echo here and there of Mr. Swinburne—perhaps inevitable, but hardly welcome. We extract the last and the sweetest:—

"Love is Enough! *Ho ye who seek saving,*
Go no further; come hither; there have been who have found it,
And these know the House of Fulfilment of Craving;
These know the Cup with the Roses around it;
These know the World's Wound and the balm that hath bound it:
Cry out, the world heedeth not, 'Love, lead us home!'

He leadeth, He hearkeneth, He cometh to you-ward;
Set your faces as steel to the fears that assemble
Round his goad for the faint, and his scourge for the forward:
Lo his lips, how with tales of last kisses they tremble!
Lo his eyes of all round that may not dissemble!
Cry out, for he heedeth, 'O Love, lead us home!'

O hearken the words of his voice of compassion:
'Come, cling round about me, ye faithful who sicken
Of the weary unrest and the world's passing fashion!
As the rain in mid-morning your troubles shall thicken,
But surely within you some Godhead shall quicken,
As you cry to me heeding, and leading you home.

Come—pain ye shall have, and be blind to the ending!
Come—fear ye shall have, mid the sky's overcasting!
Come—change ye shall have, for far are ye wending!
Come—no crown ye shall have for your thirst and your fasting,
But the kissed lips of Love and fair life everlasting!
Cry out, for one heedeth who leadeth you home.'

Is he gone, was he with us?—ho ye who seek saving,
Go no further; come hither; for have we not found it?
Here is the House of Fulfilment of Craving;
Here is the Cup with the Roses around it,
The World's Wound well healed, and the balm that hath bound it:
Cry out! for he heedeth, fair Love, that led home."

The following lines are perhaps as fair a sample as can be isolated of the tone and doctrine of Love's discourses:—

"Have faith, and crave and suffer, and all ye
The many mansions of my house shall see
In all content: cast shame and pride away,
Let honour gild the world's eventless day,
Shrink not from change, and shudder not at crime,
Leave lies to rattle in the sieve of Time!
Then, whatsoe'er your work-day gear shall stain,
Of me a wedding-garment shall ye gain

No God shall dare cry out at, when at last
Your time of ignorance is overpast;
A wedding-garment and a glorious seat
Within my household, e'en as yet be meet."

The last line seems hardly finished; and there are other indications here and there that Mr. Morris has lost something of his easy mastery in abandoning the ruder form of the heroic couplet which he inherited from Chaucer. The writer himself seems to be aware of a more serious fault: with all his gracious delightful fervour, Love argues and insists too much; his discourses are not merely a commentary on the poem, they are a defence of it, almost a criticism; and it is only a very youthful literature which is ingenuous enough to permit itself such confidences. Perhaps, too, it might be said that the several disguises of Love, who sometimes appears as a maker of images, sometimes as a maker of pictured cloths, have little value for the reader; though, if there could be found worthy actors and a fit audience, they would add another grace to the pageant.

It is hard to pronounce upon a single trial whether the revival of alliterative rhythm will be a permanent addition to our poetical resources. We are inclined to think that Mr. Morris himself has gained by it a greater directness and energy of expression, and consequently more of the eloquence of passion, and this without any sacrifice of delicacy; but after all he has not yet shaken our impression that the harmony of regular metre was a decided artistic progress.

Here is an extract from the speech of Azalais, as she sees Pharamond asleep:—

"As one hearkening a story, I wonder what cometh,
And in what wise my voice to our homestead shall bid him.
O heart, how thou faintest with hope of the gladness
I may have for a little if there he abide.
Soft there shalt thou sleep, love, and sweet shall thy dreams be,
And sweet thy awaking amidst of the wonder
Where thou art, who is nigh thee—and then, when thou seest
How the rose-boughs hang in o'er the little loft window,
And the blue bowl with roses is close to thine hand,
And over thy bed is the quilt sewn with lilies,
And the loft is hung round with the green Southland hangings,
And all smelleth sweet as the low door is opened,
And thou turnest to see me there standing, and holding
Such dainties as may be thy new hunger to stay—
Then well may I hope that thou wilt not remember
Thine old woes for a moment in the freshness and pleasure,
And that I shall be part of thy rest for a little."

Perhaps the anapaestic movement is here as elsewhere too unbroken, indeed there are whole paragraphs that only want rhymes to remind us of Mr. Swinburne when he writes in a minor key. But we feel it is ungracious to criticize music at once so rich and so simple: the idyllic grace of Azalais' awaking shyly to the consciousness of love furnishes the ideal relief after the passionate scene in which Pharamond's hushed intense expectation passes through sweet music into the trance in which she finds him.

The charm of the *Earthly Paradise* was that it gave us the picturesqueness of earth with the atmosphere of fairyland; we drifted along a swift current of adventure under a sky heavy with sweet dreams, through which the dew of death fell without dimming the sunshine: we were amused and yet enthralled. In his new work Mr. Morris demands more of the reader; instead of abandoning himself to a passive fascination, he has to be penetrated with a profound and earnest passion: we have to live in the poem, not to dream of it. Consequently it will not be surprising if *Love is Enough* attracts fewer readers than the *Earthly Paradise;* though those who are attracted will be held longer under a deeper spell. Those outside the charmed circle will perhaps complain that the figures which move within are shadowy, because their own desire does not burn within them.

G. A. Simcox.

Björnson's Sigurd the Crusader. [*Sigurd Jorsalfar.* Af Björnstjerne Björnson.] Copenhagen: Hegel.

This drama is what is called "a piece for the people," *folke-stykke*, that is to say, a work which addresses all classes, of whatever culture, of whatever age, and which aims at linking them all together in the sympathetic remembrance of glory in the past. Björnson is a consistent, though a violent, democrat, and lays his art at the feet of the people, giving them a stage-play which they can understand, and which will ennoble them. Such is his aim; but, being a true artist, he cannot be bound by his own theories even, and what he writes, though on the surface patent to all, in truth demands a subtle and cultivated attention to appeal to.

A Jorsalfar was a man who had performed the pilgrimage to Jerusalem or Jórsalir; such a man was called in Icelandic Jórsala-fari, or Jerusalem-farer, whence the Norwegian form Jorsalfar. Several heroes in the Sagas bear this appellation, but none equal in fame the great King Sigurd Magnusson. In his day, Norway was reigned over by two rulers, bearing joint power. For Magnus, dying, had left his crown to his sons Eystejn and Sigurd, to be worn by each. But one crown will not cover two heads; the brothers jarred and quarrelled, and the unification so laboriously won by Harald Fair-hair seemed on the point of being lost. Then Sigurd, wild for travel, threw up the reins of government and sailed into the south. In Morocco, in Spain, in Apulia, he won renown; eight times he smote the heathen and stormed Sidon; before the tomb of Christ he knelt, and swam over Jordan. Then his silken sails flew up the Levant, and his glory culminated in a splendid entrance into the imperial city of Micklegarth. All this while Eystejn had made laws, built churches, laid down roads, protected fisheries, and with fair words won the lost province of Jæmteland. Back came Sigurd, insolent with success, and by his wonderful achievements dazzled the eyes of all. Again the brothers, Eystejn, the modern man of progress, Sigurd, the type of a mediaeval warrior, clashed and differed. The match that lit the train was an outrage committed by one of Sigurd's men, and with this begins the drama.

A Jorsalfar of Sigurd's had killed one of Eystejn's men, and in the first scene before us, he tries to steal the dead man's bride out of the palace. He is caught and shut up in prison, and Sigurd chooses to consider this a personal insult to himself. The greater part of the first act is taken up with the excited conversation which the alarming position of affairs draws from Sigurd's warriors. We learn incidentally that Borghild, the fairest woman in Norway, has been long promised marriage by King Eystejn, but that he has delayed so many months that she has suffered shame of it, and immediately it appears that Sigurd will make her the instrument of his revenge. Suddenly the scene changes, and we are in the house of Borghild at Dal. She is alone, at night; weary with waiting, shamed in her love. Like another Mariana, she is ready to die of weary waiting. Sigurd, unannounced, presents himself to her, splendid and masculine, like a sea-eagle bathed in sunset colour, with the gold and the silk of the East upon him. The dialogue here becomes masterly. He offers her his hand and a seat on the throne by his side; he appeals to their joint grudge against Eystejn, to her sense of his neglect, and, pleading passionately with her, wins her. All combines to fight against her constancy: her weariness, pique, and shame, the vigorous beauty of Sigurd so suddenly presented before her, conquer her resolve, and she flies with him. At the very moment, the horsehoofs of messengers from Eystejn, bringing a bridal escort for her, clatter into the courtyard, but it is too late.

In the next act, the brothers quarrel in open hall over

the beer-horns. To prove his triumph, Sigurd commands Borghild to be led in, gorgeously attired, surrounded by her maidens. Sigurd, sure of his point, calls upon her to choose between them, and she, still resentful, instantly prefers himself. But as Eystejn goes, he speaks a word of grave sorrow to her, and her heart relents. The old passion floods her heart again; she turns to Sigurd: "You thought I loved you? Ha! ha! I took you only as poison to destroy my love for him!" When he approaches her, she swoons with horror. Sigurd turns mad with baffled passion and the sense of failure which is death to men of his stamp. When he recovers his senses, he resolves on a new voyage to chase away chagrin, but just before he starts, he has a meeting with his brother; old grievances are removed, old wounds healed, and instead of faring out over seas again, he stays at home and helps Eystejn in his plans of social progress. We are not told what becomes of Borghild.

Such is *Sigurd Jorsalfar*, a poem with some incongruities of ancient practices and modern theory, and a mere sketch at best. Still it is a sketch by a master, and in itself masterly, with much excellent by-play that it is not possible to be just to in a short review. EDMUND W. GOSSE.

Hamann's Life and Works. [*Johann Georg Hamann's Schriften und Briefe.* Zu leichterem Verständniss im Zusammenhange seines Lebens erläutert und herausgegeben von Moritz Petri.] Parts 1 and 2. Hanover: Carl Meyer.

THE complaint that Hamann's life and writings are not so well known or so highly valued as they ought to be has been repeated so often as almost to answer itself. A writer who has been rediscovered with enthusiasm several times during the last half-century, whose works have been collected into eight volumes, whose life has been written in three or rather in five volumes, whose monument has been restored at government expense, who occupies a page in the *Biographie universelle*, and a chapter in any German history of literature, cannot exactly be said to suffer from neglect. One admirer, who has published a *Fingerpost to Hamann*, says that in all his acquaintance he can count but ten grown men who know anything of Hamann, and that the youth of the day are not anxious to be better informed than their fathers. It does not occur to Herr Disselhoff that the result might be nearly as distressing if he were to enquire after readers who had conscientiously studied at first hand other more famous and less obscure authors of Hamann's day—Herder and Jacobi themselves, to say nothing of Mendelssohn, or Moser, or Hippel. The fact is that nothing will ever make Hamann popular, while his eminence is already conceded on all hands. Even his self-elected champions do little to increase his fame, because the difficulty of his writings, both in style and substance, is not to be explained away by pious admiration: it is easy to agree with him without understanding him, very difficult to understand him, as Goethe did, without agreeing with him, and yet hardly worth while to agree with him merely for the sake of fathoming his oracles, or of being persuaded that they were worth fathoming. Most of the modern essays, lectures, and the like, devoted to the "Magus of the North" open with what is very like a list of testimonials, the expressions of opinion by men who knew Hamann, or were capable of appreciating his real and singular genius, valuable in themselves and in a way conclusive, but not a substitute for a complete and adequate representation of his personality as it appears in the altered light of another century. Every writer on Hamann quotes Goethe's most just and penetrating sentences; but if nothing can be added to them, why write a book? As criticism they are very nearly sufficient, but if the object is only to make the present generation acquainted with the person of him who called them forth, it seems to us that two useful things might be done. The only edition of his works is that published by Roth in 1818, very uninviting as to paper and type, with letters and pamphlets chronologically intermingled, and no notes. The only complete account of his life is in Gildemeister's conscientious, voluminous, and thoroughly unreadable work, in which, again, letters, extracts from his works, and biographical details succeed each other in historical order, on the ground that his life and writings are necessary to explain each other. Herr Petri proposes to follow a similar course, the only difference being that he publishes the works *in extenso* amongst the letters and notices; but the principle seems to be altogether a mistaken one. Hamann's writings may be worth reprinting; if so, they certainly require an elaborate series of explanatory notes: his language was a riddle to begin with. Conceive the style of Carlyle or Richter, their native obscurities of diction enhanced by tags of Hebrew and a little Arabic, and used to express the profound and startling theological conceptions passing through what we may call a stammering brain, an active and powerful mind with the one drawback, an impediment in its speech; hence a circuitous, allusive way of saying what in itself might not be unintelligible; and an editor would have enough to do who undertook to restore the significance of all the apparently unimportant phrases, which refer, perhaps, to a forgotten criticism, by a forgotten critic, of a forgotten author, and are meaningless without a knowledge of the whole train of ideas associated in Hamann's mind at the moment of writing. And this would be only half the annotator's work, for the fugitive sheets and occasional pamphlets which make the bulk of Hamann's authorship stand in the closest relation to some of the most influential writings of his time; they represent the rebound from the dominant sentiment of the moment, but with an intricate refinement, an intellectual fantasticalness which makes a "fingerpost" by no means superfluous to decide even the elementary question whom or what the Magus means to destroy by a given spell. We can easily conceive a German editor, with the patience, the learning, and the insight into the intellectual life of the last century necessary to make Hamann's works intelligible in this way, but such an undertaking could not have the smallest pretension to popularity; its value would be real, but restricted to the class of literary and religious antiquarians. This, however, refers only to the writings published during the author's life: his letters, much the most intelligible, the most interesting, and not the least able of his compositions, require far less explanation, and, if reprinted by themselves, in a convenient form, would probably find access to a larger circle of readers than Hamann has ever yet obtained. The other desideratum will be easily supplied whenever Germany has a Sainte-Beuve; the main facts of Hamann's life are well known, there are ample data for passing judgment on his character, his person is reflected in his works, but it is given to few to see what is in sight; we want a portrait to help us to recognise all the slighter lines and lights and shadows, in the face of the original, and this is especially the case with uncommon features and a mobile expression. A thin pamphlet, by C. Carvacchi, *Biographische Erinnerungen an J. G. Hamann*, gives the most readable and compendious account of his life that has been published, but a "portrait," a literary biography of moderate dimensions and polished form, is conspicuous by its absence.

The first part of Herr Petri's work includes letters down to 1759, and Hamann's first literary undertaking, the *Socratische Denkwürdigkeiten*, published in the same year.

For this period, the present work is more complete and luminous than Gildemeister's in the biographical portions, but the notes on the *Denkwürdigkeiten* resemble nothing so much as the paraphrases of Holy Scripture sometimes published, by ill advice, for the perusal of Evangelical children, and do not allow us to hope much from the assistance of such an editor in unravelling the yet more profound perplexities of his later productions. Johann Georg Hamann was born in 1730, one of the two sons of a respectable and pious Königsberg doctor. He was carefully educated, if anything, too carefully, in ancient and modern languages, theology, mathematics, music, and other accomplishments, for the artificial breadth of interests given to him as a mere youth no doubt made it more difficult for him to fix on the choice of a profession, which would take him from the learned leisure of his father's house. Ultimately (in 1752) he decided for tuition, partly because he had educational theories, partly because his acquirements would be less useless to him than in other vocations, and chiefly because he wished to travel and see the world. A friend procured him the post of tutor to a young baron of nine, resident with a widowed mother at Riga. A short experience of his office discouraged Hamann, who wished "for a mind to form, and found a spoilt and idle baby"; he wrote to his pupil's mother a letter detailing his views, grievances, and wishes, with rather unparliamentary frankness, and in return was still more unceremoniously invited to leave the house. His zeal, no doubt, had been greater than his discretion, but his good will was acknowledged by a brother of the ungrateful baroness, who procured him a more eligible tutorship with a noble family in Courland. Here his character and abilities were valued as they deserved, but he was not happy in his office, so far as we can judge, only because there is a period of irritable arrogance in the development of most remarkable men, during which it is impossible for them to be happy anywhere. He resigned his post at the end of a year, and, returning to Riga, was domesticated in the house of a Königsberg fellow-student, now a merchant, Berens by name, who tried to interest him in the social and political importance of commercial pursuits, and led him to translate a French book by Dangeuil on the latter subject. Here he lived happily, bought books, and ran into debt, so that he was glad to accept a flattering invitation to return to Courland on his own terms. Still restless and discontented, he took the opportunity of a summons to his mother's death-bed to break off finally from an engagement that was burdensome to him, and (in 1756) to form fresh ties of a rather mysterious nature with the Berens family. There were four sons, to the youngest of whom Hamann had occasionally acted as tutor; the third, Christopher, was his most intimate friend, a man of wide culture, knowledge of the world, and an ardent advocate of all the new lights of the *Aufklärung*; the brothers had a sincere regard and a high admiration for Hamann, to whom they offered employment as foreign clerk and travelling agent, thus leading the way to his English expedition, the turning-point in his life.

After his mother's death, he paid a short visit to Berlin, and entered into personal relations with the chief *littérateurs* of the capital, then proceeded, *viâ* Amsterdam, with funds supplied by the Berens, to London, where, according to his own account (the only one we possess), he had weighty communications to make to the Russian ambassador and other important personages. Whatever his business may have been, he failed entirely in its discharge; he fell into bad company, spent all his money, led a disorderly life, solaced apparently by a confused hope of converting his associates, held no communication with his family or employers, and was in a fair way of becoming bankrupt at once in health, honesty, and purse, when, by a sudden resolution, on the 8th of February 1758, he took lodgings with "Mr. Collins in Marlborough Street," began to live on gruel, and bought a Bible. Up to this time his life and opinions had certainly not been as Evangelical as his habitual phraseology, which by itself might have excused Gervinus' charge that "the traditional Königsberg pietism infected him like a plague." At Riga his Christianity had been dormant, and Berens had seen in him a possible and a valuable convert to the spirit of the age, but after his career of debauchery, in the artificial loneliness of his London lodgings, the prodigal son awoke to the error of his ways, and has recorded the consequent searchings of heart under the title *Gedanken über meinen Lebenslauf*, dated April 1758. Having bought a Bible, he began to read the Old Testament through methodically, and the first glimpse we have of the Hamann to be hereafter known to letters is his discovery, not that the history of the Jews is the type of the Christian's trials and temptations, which has been said before, and is not more exciting than an ordinary sermon, but that the career of the chosen people was a close reflection and living prophecy of the spiritual history of him, Johann Georg Hamann, with whose salvation, therefore, God had been incessantly concerned since the beginning of the world. Stories of sudden conversion are, as a rule, monotonous, but the following is original enough to deserve quotation :—

> "In the books of Moses I made the strange discovery that the Jews, however unruly a people they seem to us, yet in some cases asked nothing from God but that which He desired to do for them, that they acknowledged their disobedience as readily as any penitent sinner, and yet forgot their sorrow as speedily again, and all the while called only for a redeemer, an intercessor, a mediator, without whose help they could neither fear nor love God as they ought. In the midst of these considerations, which seemed to me very mysterious, I was reading the fifth chapter of the fifth book of Moses on the evening of the 31st of March. I fell into a deep meditation, and I thought of Abel, of whom God said: 'The earth hath opened her mouth to receive thy brother's blood.' I felt my heart beat, I heard a voice in the depths thereof sighing and groaning, like the voice of blood, like the voice of a murdered brother, whose blood would be avenged if I did not give heed to it in time, and continued to stop my ears against it;—the voice that made Cain a fugitive and a vagabond. I felt all at once my heart melt, it overflowed into tears, and I could no longer — — no longer conceal from my God that I was the murderer of my brother, the murderer of my brother His only begotten Son."

It has been observed that his sense of spiritual depravity did not quicken his sense of remorse for more ordinary transgressions, but it would not be fair to draw an inference from thence against his sincerity. It is good Christian doctrine that Hamann's sins *were* forgiven on the 31st of March 1758; and though the ungodly may find it hard to suppress a smile when, on the following page, he argues that, as God has forgiven him his sins, surely Berens may be expected to forgive him his debts, it would be the height of injustice to set him down as a hypocrite. Hamann was a curious mixture of fanaticism and common sense, but he was strictly upright and honourable in worldly matters, and even his piety was free from the admixture of charlatanism which disfigures the religion of Lavater and Jung Stilling. His doctrines were dangerous because a very strong and lively conviction that a child of God can do no wrong tempts the erring saint to remove the landmarks of right and wrong in other cases besides his own; but Hamann's nature was sound and healthy at bottom, and, except perhaps in one particular, his conduct was changed only for the better by the sanctification of his natural self-esteem.

After his conversion he found friends who enabled him to return to Riga, where the Berens received him with undiminished friendliness, and a present from his father enabled him to discharge some of the debts which, faith notwithstanding, continued to burden his secular conscience.

His letters to Dr. Lindner—third in the triumvirate of friends with Hamann and Christopher Berens — are our only guide to the gradual change of sentiments, almost, but never quite, leading to an actual breach between the two last. In spite of his originality and independence of mind, Hamann — and it is one of the amiable sides of his character—always felt the want of a friend to whom to confide his overflowing emotions, but the emotions which occupied him on his return from London were particularly distasteful to Berens; and Lindner, although an ecclesiastic, and a judicious mediator between the two, obviously had most sympathy with Berens. Phrases like "Let him have his business, let me keep my leisure;" "Whether I found the newest sect, or he the greatest firm; *sottise de deux parts*," seem to give the key of the disagreement. And it is evident that, in the then overstrained state of Hamann's mind, he must have been a puzzle, and not a pleasant one, to his sober friends. But their complaints against him were only of sentiment and language; their esteem continued, and even a distant affection, while in money matters the Berens' generosity nearly justified Hamann's pious reliance on Providence. A separation was decided upon when Hamann proposed to marry his friend's sister, without any particular affection, it would seem, and in spite of their discordant views, reasoning, with an ambiguous affectation of candour, that they should not neglect means for his conversion—and what better means than a believing wife for an unbelieving husband, "or *vice versâ*, as St. Paul says?" He is perfectly free from "venom or doubleness," but his first concern is with his own soul, and he rides roughshod over his friend's prejudices; when he has given offence, he claims to have it forgiven for friendship's sake or Christian charity, and feels more strongly the present duty of his friend than his own past shortcoming; in the midst of sensible answers to a criticism of which perhaps he acknowledges the fairness, he will fly off into a tirade of Pauline humility, or cut the discussion short with an irrelevant text, "Who art thou that judgest? it is Christ that died," or the like. In fact, the whole correspondence of this date is a most singular study of what we may call sentimental Antinomianism.

On the rejection of his suit, he returned to Königsberg, and, living with his father, spent his time in reading, or rather devouring, everything—from the Koran to Humphry Clinker—that he could lay his hands upon. In 1759, at the instigation of Kant and Berens, he published his *Socratische Denkwürdigkeiten*, which, however, was not calculated to give much satisfaction to those friends, the "two" alluded to in the motto, "Vel duo vel nemo." The style is execrable, but the meaning made an impression on the few who fathomed it, and it was favourably noticed at Berlin, where probably that condition had not been fulfilled. The general drift is to shadow forth a parallel between Socrates and the Sophists and Hamann and the philosophers *à la mode de Sanssouci*, and again between the Socratic ignorance and the Gospel "poor in spirit"; but as each sentence is the masquerading habit of a thought which it would take a chapter to express, we must be excused a further commentary. In 1763, he contracted with his father's maidservant what is called a *Gewissensehe*, either because it is not of the kind to satisfy the most tender consciences, or because a more than ordinarily tender conscience is needed to ensure permanent respect for its validity. All Hamann's biographers have been puzzled to reconcile this step with the not unmerited inscription on his tomb, *Viro Christiano*, and it will never now be decided whether he was influenced by an original theory of Christian liberty, or by supposed prudential considerations, for it was not thought fit to publish the letters bearing on the subject in his collected works; and though Roth said, in the preface to them, in 1818, that provision had been made for their safe keeping, Gildemeister was told, forty years later, they had been destroyed. The informal union was happy enough, but in spite of the laxity of opinion and practice in Germany at the time there was some difficulty in finding godmothers for the three daughters who, with one son, completed the family, for the support of which Hamann was obliged to accept a situation as copying-clerk, his eccentricities and the Gallo-mania of his superiors debarring him from more important employment. Besides occasional reviews of books, he published, in 1772, *Kreuzzüge eines Philologen*, a collection of twelve essays, *à propos* of which he said: "The title of every book is a riddle, the answer to which tells, if not its contents, at least their value": in other words, we are to regard the author as a Red Cross Knight tilting against most of the prevailing opinions in religion, science, and literature, in the name of the Word, the λόγος. It is difficult to give any idea of his manner of writing without quotation, and even more difficult to find a passage that shall be in any way intelligible out of its proper place in the author's archipelago; for one way in which he acknowledges his own obscurity is by demanding "readers who can swim"—from one island of meaning to another, just as, when his handwriting was illegible, he put in the margin, "Imaginez et sautez." The following is taken from the "Ninth Crusade," headed, "Aesthetica in Nuce," a rhapsody in cabbalistic prose:—

"Salvation cometh from the Jews—I had not seen her yet; but I expected—to your shame, Christians!—sounder conceptions in their philosophic writings.—But you feel the sting of that worthy name by the which ye are called as little as the glory taken by God in the reproachful name of the Son of Man — — — —

"Nature and Scripture therefore are the materials of the imitative, beautiful, creative Spirit — — Bacon compares matter to Penelope;—her impudent suitors are the worldly wise and those learned in the letter. You know the history of the beggar who appeared at the court of Ithaka; for has not Homer translated it into Greek, and Pope into English verse? —

"But wherewithal shall we awaken the expiring language of nature from the dead? — — By pilgrimages to Arabia Felix, by crusades to the Eastern lands, and by the restoration of their magic, which old woman's cunning must make our prey, for no other is so good.—Cast down your eyes, idle bellies! and read what Bacon wisely says of magic. —If silken feet in dancing shoes will not bear you on so arduous a journey, let hyperbole show you the right way—καὶ ἔτι καθ' ὑπερβολὴν ὁδὸν ὑμῖν δείκνυμι."

He may well say, in the "Apostille": "The rhapsodist has written with * * * * and — — — —, obelisks and asterisks, like the little masters and pedants of his time"; but there were a few able and willing to read between the lines, and fill in the blanks, and even before the *Kreuzzüge* were collected, the Magus of the North, as Moser christened him, was recognised as a power. In 1775, Wieland's *Mercur* spoke of him as the leader and representative of a party. He kept up a half friendly, half controversial correspondence with Mendelssohn and Nicolai. Lessing thought his writings a valuable test of the pretensions of the liberal gentlemen "who give themselves out for Polyhistors"; Herder, generally so arrogant, almost acknowledges himself as his pupil; Jacobi submitted to his sway; and many now forgotten notabilities—Kraus, Scheffner, and others—professed to owe all they were to his influence.

To estimate this influence, we must remember the divisions of the literary world of Germany at the time. The common sense, French, Voltairean rationalism, which had its stronghold at Berlin, had, unfortunately for itself, taken up arms against the rising national romantic literature heralded by *Werther* and *Götz*. The national party was divided into those who, like Goethe, were "decidedly not Christian,"

and those who, like Herder, wished to convict the prevailing irreligion of shallowness. Standing almost outside these two tendencies were Lessing and Hamann, men of very unequal merit, but each "a voice crying in the wilderness" for thoroughness and light. As Lessing to the temporising, confused, rationalistic Evangelicalism of his theological adversaries, so Hamann to the dogmatic enlightenment of the uninspired hierophants of the *Literaturbriefe*. Of course, Lessing was pulling one way, and Hamann the other, and the seed sown by the former fell in most favourable ground; but they were alike in their disgust at whatever was neither cold nor hot, and alike too in suggesting proportionately more than they executed. If his contemporaries had been candid, they might have described Hamann's attraction, that, like Blake, he was "uncommonly good to steal from." Herder was accused of appropriating his *Metakritik* without acknowledgment; one admirer has found Hegelianism discovered in one phrase and rejected in the next in favour of a real Objective Trinity, and his writings came practically to possess more meaning than he intended, because, the sense of his really profound thoughts being made to a certain extent doubtful through their oracular expression, those who were attracted by the ideas suggested developed them each in their own direction, without ceasing to give Hamann credit for originating them. A very opportune tribute to the fascination of his strange compositions was paid, in 1784, by one Buchholz, a hypochondriacal man of fortune, who abruptly invited Hamann to regard him as a son, and accept a capital sufficient to provide for himself and the education of his children. But for this unexpected benefaction, Hamann's later years would have been sadly clouded by anxiety and hardship, and he would scarcely have accomplished what is almost his most considerable work, *Golgatha und Scheblimini*, under which astounding title he published an answer to Mendelssohn's *Jerusalem*. "The place of the skull, and Sit thou at my right hand," is certainly a riddle of a title, but the *opusculum* contains some very telling and lucid criticisms of the Social Contract and the State of Nature. There is a running ironical parallel between the true Moses and his namesake who attempts to make Jew and Christian blend in colourless Deism, though between them there is the Mount Golgotha, and one only is called to sit at the right hand of God; but for the major part of the moral application one must, as Goethe says, give up the hope to "what is commonly called understand."

Herr Petri's second part includes, besides the *Kreuzzüge* and some less important pamphlets, letters down to 1769. The last year of his life was spent in visiting his benefactor, Buchholz, the Princess Gallitzin, and Jacobi, from the latter of whom he fled lest he should be killed with kindness; the Princess's social circle was also too animated, and, we gather, too civilised to suit his age and infirmities; so, declining to fix himself at Münster, he was about to return home when a fever declared itself, and he died almost suddenly, in 1788, in the arms of Jacobi, at the house of his adopted son, and attended by the princess, who obtained permission to have his remains interred in her garden, a less secure resting-place, as it proved, than the common cemetery. Whether German Christians will be persuaded to renew their failing faith by diligent study of the Northern Magus seems more than doubtful; but it is well that all should know that there is such a man, and that his writings are an almost virgin mine of original mystical interpretations and startlingly acute criticisms—startling because acuteness is not commonly the chief distinction of those who wish to criticize Hamann's enemies. But a system, even a theological system (except Luther's catechism), will be sought in vain, for men in general, he thought, lived on fragments, "crumbs," and he was not capable of supplying anything else. In his own phrase, he was shortsighted, he saw with strong and healthy eyes, but only what was close to him; unlike most men, he feels in the abstract and thinks in the concrete, and therefore all his thoughts express themselves in images or allegories. We have his own warrant, too, for thinking him obscure; after a few years he could no longer remember all that his own writings had meant when composed, and all that they had meant to him it was impossible for strangers ever to understand.

H. Lawrenny.

LITERARY NOTES.

It is reported that Mr. Whymper, who has returned with valuable collections from a second scientific tour in Greenland, has a work upon that Danish dependency in contemplation.

In the *Fortnightly Review* (November and December) Mr. Booth has devoted one of his clear and dispassionate studies of Socialism to Fourier and Fourierism; as an *account* of Fourier's doctrines it leaves nothing to be desired, but he is too fantastical a writer to show to advantage in a *précis*, without an independent appreciation of his merit, such as Mr. Booth might easily have given. In *The New Heloisa*, part of a chapter in Mr. Morley's forthcoming work on Rousseau, the comparatively moral influence of the work is brought out, together with the fact, sometimes unduly neglected, that the conservative reactionary Romanticism of Chateaubriand and his school was derived directly from Rousseau: Hugo and De Musset caught the ball at its rebound.

In the November number of *Preussische Jahrbücher*, Herman Grimm discusses the claims of Minna Herzlieb and Bettina Brentano to be considered the original of Ottilie in the *Wahlverwandtschaften*. He inclines to give Minna the preference, but considers that Goethe's *Briefwechsel mit einem Kinde* scarcely deserves the neglect and distrust with which it is now fashionable to treat it: he had seen the originals of some of the letters, and though the printed versions are garbled, they have a good deal of "foundation in fact."

Art.

THE CESNOLA COLLECTION OF CYPRIAN ANTIQUITIES.

The Cesnola Collection of Cyprian Antiquities, which has been recently exhibited at 61, Great Russell Street, is now being packed for shipment to New York. Until these antiquities have been properly arranged in a museum, and the facts connected with their discovery duly stated in the publication now being prepared by General Cesnola, and until they have been compared with what has been already acquired from Cyprus in other museums, it is perhaps premature to advance any very positive theory as to the sources of Cyprian art and the date of its development. It may, however, be well to note here some of the problems which present themselves to the archaeologist after a survey of the Cesnola Collection.

1. A certain number of the larger statues found at Golgos by General Cesnola, and by Mr. Lang at Dali, seem modelled from Egyptian types; while some of the details of costume and of the necessary symbols are clearly derived from a non-Egyptian source (see the torso engraved in Gerhard's *Denkmäler u. Forschungen*, 1863, pl. clxxi.; and Stark's memoir, *ibid.*). These figures seem to be all portraits of kings. Are these Egyptian kings, dedicated during the time when the island was subject to Amasis, or are any of them memorials of that earlier subjection of Cyprus (the Kefa of hieroglyphic texts) which, as may be inferred from Egyptian monuments, had taken place as early as the reign of Thothmes III., or even earlier?

2. Are these statues, again, portraits of Cyprian kings executed when the island was under Egyptian influence, as Stark suggests in the excellent memoir already referred to?

3. On a series of silver coins struck in Cyprus, of which the date probably ranges between B.C. 500 and 400, we find Cyprian characters, and inscriptions in the same character have been found by General Cesnola at Golgos, by Mr. Lang and others at Dali. This character has been recently read by Mr. George Smith, of the British Museum, who used the bilingual (Cyprian and Phoenician) inscription, found by Mr. Lang at Dali, as his key (see *Trans. of the Soc. for Biblical Archaeology*, No. 1, p. 129). We find in these Cyprian inscriptions certain letters which present a striking resemblance to some of the Lycian characters, but we do not recognise, as in the Lycian alphabet, Greek letters in their mature forms. It is probable that a large proportion of the Cyprian inscriptions are of a date subsequent to the Archaic period. The earliest of them may be the inscription on the stelé with a figure in relief of an archer found by Mr. Lang at Dali, and now in the British Museum, and the bilingual inscription from Cyprus, now in the Louvre, in which KAPYI EMI, in Archaic Greek characters, is the equivalent of the Cyprian (see *Revue archéol.* N. S. vi. p. 247). Some of the Cyprian inscriptions in the Cesnola Collection may be as late as the third century A.D. It is remarkable that as yet hardly a Greek inscription has been found in Cyprus, either on coins or on other monuments, which can be referred to an earlier date than the time of Evagoras; and this negative evidence affords reasonable presumption that the Cyprian population predominated in numbers, if not in political power, over the Greek in most parts of the island. Whence did the race using the Cyprian alphabet come? Are they Phrygians as Engel supposed? Did they intermarry and become politically blended with the Greek and Phoenician settlers? Or were some of the small kingdoms into which Cyprus was divided from a very early time purely Greek, and others Cyprian and Phoenician?

4. In all the sculptures from Cyprus which can be fairly referred to the archaic period, and which are not close imitations of the Egyptian, the type of features is very peculiar. The forehead recedes; the cheek-bones are high; the cheeks, sunken; the nose, chin, and lips, unnaturally pointed; the facial angle, much sharper than in early art. It is singular that we must look to Etruria rather than to the Greek world for types analagous to the Cyprian. The two curious reclining figures in painted terracotta from Cervetri, in the Campana Collection of the Louvre, have the same receding foreheads and angular features as may be seen by comparing the engraving of the figures in the *Monum. of the Roman Inst.* vi. pl. 59 (see Brunn, *Annali*, xxxiii. pp. 398, 399), with the figure and head from the Cesnola Collection (*Revue archéol.* N. S. xxii. pl. 23).

5. From the history of Cyprian sculpture as developed in extant monuments, we may infer that art in this island passed through the same phases as in Etruria. First came an Archaic style, with a certain affinity to the Archaic Greek style, but differing from it very decidedly in the type and in many details of costume and ornament. Then succeeded a Hieratic style, through which archaic types were mechanically reproduced, and after that the disturbing influence of mature Greek art. It is probable that it was part of the Hellenizing policy of Evagoras to invite Greek artists to Cyprus, just as the Carian princes, ruling over a mixobarbaric population, drew Athenian art to Halicarnassus. But it should be noted that neither in Cyprus nor in Etruria does this Greek art, introduced at a late period from without, appear to have flourished except as an exotic. It gave rise to no school of Greek artists in Cyprus.

6. As there were undoubtedly Phoenician settlements in Cyprus, and as Phoenician inscriptions both on coins and other monuments are found there, it is to be presumed that some of the works of art found in the island are Phoenician. How are we to distinguish these works from the rest? What are the characteristics of Phoenician art? Or had they, as some assert, no art of their own, being merely the carriers by sea of the produce of other races? No complete answer to this question can be given till we have compared the antiquities from Cyprus presumed to be Phoenician with those found in other Phoenician or Graeco-Phoenician sites, such as Rhodes, Santorin, Cerigo, Sardinia, Palermo, the Etruscan sea-board, and the Phoenician settlements on the coast of Spain. In the meantime we may draw attention to the admirable memoir, by M. A. de Longpérier, in the *Journal asiatique* of 1858, in which he was the first to point out the remarkable resemblance between the art of the silver bowls from Kitium in the Louvre and those found in a tomb at Cervetri, and with the bronze bowls found by Mr. Layard at Nineveh, some of which have Phoenician inscriptions. The bronze bowl found by General Cesnola, which is published by Ceccaldi in the September number of the *Revue archéol.* for this year, is much ruder in work than the Kitium bowls, and may be a Cyprian imitation of Phoenician art. There is a well known kind of fictile ware, with geometrical patterns painted in brown on a drab ground, which is found at Mycenae, Tiryns, Ialyssus, and other very ancient Greek or Graeco-Phoenician sites. It seems now clearly established that the Phoenicians traded in this ware, if they did not manufacture it, because on more than one fragment from Mr. Layard's excavations, and on a large vase in the Cesnola Collection, we find Phoenician inscriptions. The tombs at Cyprus have yielded this ware in large quantities, and in very fine preservation: while, on the other hand, scarcely any of the later Greek fictile ware has been found in the island. It is not improbable that this archaic fabric of ware was prolonged in Cyprus to a comparatively late period, from the same causes which led to the prevalence of a Hieratic style of sculpture, and it would be interesting with this view to compare the specimens of this ware from Cyprus, in the first Vase Room of the British Museum, with the similar vases from Ialyssus presented by Professor Ruskin to the same museum.

7. Among the terracottas found in Cyprus are some very curious little figures, some on horseback, some driving four-horse chariots. These are modelled solid, and sometimes painted in grotesque colours. They are of the rudest art and fabric. Similar figures of horsemen were found by me in a sepulchral chamber on the site of the Mausoleum, which I have shown to be of a much earlier period than the Mausoleum itself. From the extreme rudeness of these terracottas, it has been thought that they represent an earlier stage of art than any of the other Cyprian antiquities; but may they not be rather children's toys, or objects dedicated by very poor persons?

8. Among the Cesnola statues may be distinctly recognised two varities of the type of the bearded Venus, Hermaphroditos, worshipped at Amathus (see Engel, *Kypros*, ii. pp. 221–232). I hope to say more respecting these types on a future occasion.

C. T. Newton.

ART NOTES.

A letter signed J. Spencer Northcote appeared in the *Times* of November 26, in which attention was called to a danger of a serious nature now threatening the safety of the Catacombs. Up to the present time the right of making excavations in them has been reserved to the ecclesiastical authorities, and for many years has been exercised by a Commission of Sacred Archaeology, of which the Cavaliere di Rossi was a leading member. If in the course of excavations damage was done to the superficial soil, it was assessed and paid for; where the commission found that their labours were likely to be extensive and prolonged, they would induce the Pope to purchase the fee simple of the soil. In this way he became the possessor of the two vineyards between the Via Appia and the Via Ardestina, under which the famous Catacomb of St. Callixtus has been rediscovered. Recently, a discovery, scarely inferior in importance, has been made in a field the other side of the Via Appia, of the Catacomb of Pretextatus, and considerable progress had been made, when proceedings were suddenly interrupted by the proprietor bringing an action against the excavators. Di Rossi was the defendant, and a decision favourable to the archaeologists has been given in two courts of law. But the decision only proclaims that the commission and not the landlord are in possession of the crypt, but does not decide the question as to the legitimacy of this possession. The Italian code has been promulgated in Rome. The ministry are, indeed, preparing a project of a law by which questions of this kind are to be settled, defining accurately all

rights relative to monuments standing on private property. But it is to be hoped that special attention will be bestowed on this matter of the Catacombs, and that their public character will be clearly pronounced, so that all that has been done may be preserved to us, and the accomplishment of all that remains to be done facilitated.

We learn from the *Cologne Gazette* that the National German Museum at Nuremberg has recently made considerable acquisitions of importance to artists, and to those who are interested in the origin of printing. These acquisitions consist of a series of engravings on metal and wood, commencing with the fourteenth century, and carried down to the last years of the fifteenth. At this point, the chain is taken up by the collections already in the possession of the museum, consisting of the works of Wohlgemuth, his pupils, contemporaries, and successors down to the seventeenth century. A second series is wholly devoted to printing, and contains first examples of xylography, and these specimens of the first books printed in movable type by Gutenberg, Pfister, Fust, and Schöffer. Next come the books of the most celebrated printers of the fifteenth century. The collection is especially rich in works illustrated by wood engravings, of which it possesses many that are extremely rare, and some which are supposed to be unique. Engravings in mezzotint, &c. form the third series; and the fourth, which has been long in existence, is dedicated to the history of engraving on copper. The collection of MSS. has also been recently enriched by the purchase of a fragment of a Bible of the commencement of the sixth century, in twenty-four leaves, which forms the first of a series consecrated to the history of writing.

The restoration of the cathedral at Mainz is carried on actively. The works at the east end have already progressed so far that the architect Wessicken is about to set free the space occupied by the ruined and destroyed crypt, portions of which have been discovered from time to time. The excavations afford matter of great interest both to architects and archaeologists. The broken remains of tombs and monuments which are brought to light often show claims to considerable importance as works of art, and it is expected that much light will be thrown on certain architectural questions concerning the construction of the cathedral which are at present doubtful.

The present number of *Im Neuen Reich* contains an appeal to the flagging interest felt by the public of Germany in the proposed National Monument to be erected on one of the hills of the Niederwald. The writer objects to the site chosen, and points out that it takes the excitement of battle to induce Germans to clamber up inaccessible hills, and, again, one of the first necessities of a place which it is proposed to make a point of universal pilgrimage is a *Restauration*; this has not been properly provided for in the plan. We then pass from these practical hints to suggestions of an aesthetic nature, the principal of which is that the road of approach should be lined on both sides with the statues of the most distinguished German emperors, the eye and thoughts being thus led gradually up to the final crowning monument.

The *Gazette des Beaux-Arts* for December 1 commences with an article, by M. Paul Mantz, on the Retrospective Exhibition at Milan. M. Mantz draws special attention to the masterly and concentrated force exhibited by Bernardino Zenale in two portraits contributed to the exhibition by the Marquis Giuseppe Arconati. Zenale, who was a contemporary of Lionardo, is chiefly known by his admirable painting, in the Brera, of Lodovico Sforza (Il Moro) and his wife, Beatrice, kneeling before the Madonna. The Marquis Pietro Isambardi contributed a very remarkable female portrait, by Beltraffio. Luini was well represented, but there were also a great many poor imitations passing under his name. The Prinetti collection contributed a fine and authentic Lorenzo di Credi, a Virgin by Gaudenzio Ferrari, which was a very typical example of the master, and a very important Paris Bordone. Amongst the most striking sixteenth-century portraits, M. Mantz places a Moroni, from the gallery of the Marquis Arconati. One of the most curious features of the exhibition was, says M. Mantz, the number and beauty of works representing the Dutch and Flemish schools.—M. Georges Duplessis reviews M. Didot's *L'Étude sur Jean Cousin*, a portion of which has already appeared in the pages of the *Gazette*.—M. Louis Decamps continues his articles on the New York Museum.—M. Louis Gonze gives a third notice of the Musée de Lille.—M. Alfred Michiels commences an essay on the origin of painting in Germany by a short article on the school of Bohemia.—M. Réné Ménard has a short paper on Subterranean Rome.—M. Léon Mancino writes on Bethnal Green Branch Museum.—M. Louis Desprez reviews *La Vie militaire et religieuse au moyen-âge*, &c., by M. Paul Lacroix.

On the 4th, 5th, 6th, and 7th of December, the collection of M. F. L., well known to Parisian amateurs, was brought to the hammer, at the Hôtel Drouot, by M. Charles Pillet. The catalogue comprised sculptures in wood and ivory, bronzes, a very remarkable snuff-box, by Lioux de Savignac, presented to Louis XV. by the town of Bordeaux, precious stones, miniatures by van Blarenberghe, paintings by Boilly, Breugnel, Paul Brill, Corneille de Heem, Loutherbourg, Michel, Ostade, van de Velde, Wynants, de Vos, Gevricault, &c.

Richard Schöne, till now in Halle as professor, has accepted the office of "vortragender Rath im Cultus-Ministerium (für Kunst)." He is a capable man, and his appointment is an excellent one. Zahn (Hofrath), who holds the same position at Dresden, refused the post, which was given to Schone.

New Publications.

Bernays, Michael. Zur Enstehungsgeschichte des Schlegel'schen Shakespeares. Leipzig: Hirzel.

Bruun, Chr. V. Bibliotheca Danica. (Systematic Catalogue of Danish Literature from 1482 to 1830, according to the collections at the Royal Library at Copenhagen.) Copenhagen: Gyldendahl.

Crowe and Cavalcaselle. Lives of Flemish Painters. Murray.

Eliot, George. Middlemarch. Blackwood.

Gerard, C. Les Artistes de l'Alsace pendant le moyen-âge. Tome I. Colmar: Barth.

Gesta Romanorum. Von H. Oesterley. Fasc. 2. Berlin: Weidmann.

Kraus, F. X. Die christliche Kunst in ihren frühesten Anfängen. Leipzig: Seemann.

Sacchi, F. Notizie pittoriche cremonesi. Cremona: Ronzi e Signori.

Theology.

The Song of Solomon. [*Schir haschirim*, oder das salomonische Hohelied übersetzt und kritisch erläutert von Dr. H. Graetz.] Wien: Braumüller.

The character and date of the Song of Solomon has been a vexed question among commentators. There are champions of its unity as well as of its fragmentary character; some scholars call it a dramatic work, others a lyrical composition consisting of different songs; some assert Solomon as its author, whilst others suppose it to have been written in the time of the Jewish restoration, and Dr. Graetz even in the days of the Seleucidae. Under these circumstances it was a somewhat bold assertion of a modern critic to say that the latest enquiries had placed the dramatic form of this book above all doubt. On the contrary, the two last writers on this subject, Dr. Graetz and Dr. Diestel (in Schenkel's *Bibellexicon*), deny it entirely, and I think justly. For if it were really a dramatic composition, with a clear distinction between the actors, there would not be so many entirely different opinions as to its argument, that not even the number of the principal actors has been fixed to the

satisfaction of all. Some introduce, besides Solomon and the so-called Sulamith, a third person, the betrothed of Sulamith, but Delitzsch admits only the first two actors, not to speak of the action itself, which is almost entirely a fiction of the commentators, not at all resulting from the text.

Then as to the acts. Ewald is of opinion there are five; Delitzsch, six; E. Meier, seven; Hitzig, nine! The first and the last of these so-called acts, which are identical in all these arrangements, consist of twenty-six and fifteen lines of the printed text! How, in any dramatic representation, can fifteen lines be sufficient to form an act? If some tragedy of Aeschylus, Sophocles, Shakespeare, Goethe, had been handed down to us without a list of the actors and the distinction of the different speeches, it could, I dare say, be so far rearranged that no reasonable doubt should remain about the main argument and development of the action. But with regard to the Song of Solomon we have *quot capita tot sensus*, a fact from which I conclude that it is no dramatic work at all. The sober criticism of men like De Wette, Bleek, Magnus, therefore, never accepted the idea of the Song of Solomon being a drama, which has not even the merit of being original, for Philander von der Linde (F. B. Menke) already in 1710 declared that it was the first opera—not to mention the statement of Origen, that it was composed in the manner of a drama.

Those who, like the present writer, have been discontented with the arbitrary manner in which the Song of Solomon has been treated will read some parts of the book of Dr. Graetz with satisfaction and even with pleasure. He shows clearly that this so-called drama is devoid of action, and that all attempts to elicit anything like a plot are in vain, and it must be owned that none of our Western or classical designations for the different kinds of poetry can be strictly applied to the Song. But when he tries to show, throughout the whole book, a single maiden relating her adventures to a company of other women (the daughters of Jerusalem), Dr. Graetz seems to be no nearer the truth than his predecessors. He thinks that the poet declares his intention of giving both dialogues and a narrative, by adding ענה דודי ואמר לי, ii. 10; but this only proves that the following words are related as those of another person. Besides, Dr. Graetz cannot deny that (v. 9) the supposed hearers speak themselves, so that the daughters of Jerusalem cannot be the auditory, but spoken of in the recital. This one passage gives the deathblow to the whole theory. The Song is neither a drama nor an epic poem recited to the daughters of Jerusalem, and the often repeated words, "I charge you, O daughters of Jerusalem, not awake love, until it cometh of itself," are certainly no warning against this passion, but have some other sense.

This leads us to the question of the general tendency of the book. Those who defend its unity, whether dramatic or epic (we may omit the allegorizers), generally look for some religious or moral idea, such as monogamy, or faithfulness in love, or the representation of a marriage founded on true love—but, alas! the lovers in the Song of Solomon do not marry each other, and faithfulness is not mentioned in the whole book; it is a mere illusion to find such things in our poem. Dr. Graetz also takes pains to prove that there is a moral idea, and so he points out a number of passages in which he thinks it to be evident.

Thus in vi. 8, 9, he sees a commendation of true and chaste love in opposition to the voluptuous pleasures of the harem—the poet praising his *only* and *pure* love. It may be answered that it is almost a general and necessary law in erotic poetry of the higher kind that a lover has but one mistress, whom he praises as faithful and chaste. To suppose the contrary is impossible, passionate love being "strong as death," and—

> "Love-devouring Death do what he dare,
> It is enough I may but call her mine."
> (*Romeo and Juliet.*)

It is scarcely permissible to draw such precise conclusions from such a natural expression. The passage in question (vi. 4–10) may be fitly explained thus:—"Thou art of surpassing beauty; and though there are many ladies of high rank, I prefer thee to them all: thou alone art my dove," &c. In chap. v. 1, Dr. Graetz thinks that frugal simplity is contrasted with the luxurious banquets given by the *jeunesse dorée* of that time. But according to his own interpretation, the words אכלתי יערי עם דבשי שתיתי ייני עם חלבי have a metaphorical sense: "to eat his honey" means to hear her sweet song; "to drink his wine" is to enjoy her love (p. 167). How is one opinion (p. 32) to be reconciled with the other? The meaning of the passage is pretty clear: "My love is a paradise full of sweet fruit . . . a garden with a well of living water (iv. 15); I entered that garden and ate its fruit." There is not so much as an allusion to luxury and temperance.

This same idea is expressed, according to Dr. Graetz, in the words עד שהמלך במסבו נרדי נתן ריחו; here נרדי is supposed to be her lover, who shows his gallantry ("his perfume") whilst the king is sitting at a banquet. The meaning is said to be that she and her lover enjoy their happiness in simple modesty, and have the dislike of Horace to *persicos adparatus*. But this too is inadmissible; the only natural meaning of נרדי, "my nard," is *her* loveliness.

Granting that viii. 11, 12, contains the idea that the maiden does not want a guardian of her virtue, or even that virtue defends itself, as almost all modern commentators explain the passage—though the sense of the 200 shekels remains doubtful—a hint like this is not sufficient to prove a moral tendency throughout the whole poem. Finally, in vii. 1, Dr. Graetz discovers a polemic against the public dancers; and in the words, iii. 7–11 (איש חרבו על ירכו מפחד בלילות), he finds the idea that true love makes a man valiant and strong, but profligate love effeminate and timid.

From these instances he concludes that the Song of Solomon is written in opposition to sensual love, public dancers and singers, and life in towns and at the court with its luxurious and effeminate customs. Such a tendency could only exist at a particular period, which has now to be ascertained.

It is impossible to follow Dr. Graetz in a system of exegesis which turns the simplest expressions of an erotic song into covert moral exhortations. On the other hand, his remarks on the date of the language, and consequently of the poem itself, are well worth reading. Modern commentators are averse to dwell on the importance of phrases like כרמי שלי, מטתו שלשלמה, שלמה = ܫܠܡܐ, which indicate a very late period. Wishing to make the poem as ancient as possible, they neglect those passages which are adverse to this opinion, *e.g.* words not used in the older Hebrew literature, as כֹּתֶל, "wall" (anc. קיר), מַדְרֵגָה, "terrace" (anc. מעלה), סְתָו, "winter" (שְׁתָוָא, ܣܬܘܐ (anc. חרף), קוצות, "curls" (ܩܘܨܐ, rad. ܩܨ, "tondere," גֹּזֵה), אָמָן, "artist" (ܐܡܢܐ), נטר, "to keep" (anc. נצר), הציץ, "to look," though the words enumerated by Graetz may not be all decisive. Besides these comparatively modern words, the Song also contains foreign words: *e.g.* פרדס, ארגמן, and vii. 6, כרמל, which, like כרמיל, certainly means "cochineal," red hair being a mark

of beauty in the East. The use of these Persian words favours the view that the poem arose subsequently to 500 B.C. But this is very little compared with the use of a Greek word, אפריון, φορεῖον, which it is ridiculous to derive from פרה, "quoniam super eo foecundi sint et multiplicentur." The etymologies proposed by Ewald and Hitzig are rejected by such a learned Hebraist as Delitzsch. The words מֶזֶג and כֹּפֶר are supposed by Graetz to be also of Greek origin; but I question the justice of this opinion, as well in this as in two other passages of the Song—iv. 1, where he proposes to read כְּפָרִים עִם וְרָדִים, instead of נרדים, so that ורד would be ورد, سوسن, ῥόδον; and iv. 4, where he explains תלפיות, a really difficult word, by the Greek τηλῶπις. Both these conjectures are ingenious, but of no value as evidence.

It may be sufficient to add that Dr. Graetz also points out some direct allusions to Greek customs, *e.g.* the crown of the bridegroom (iii. 11), and the pillars of marble (v. 15). He is mistaken in adding to these the use of apples as a symbol of love or fertility; the modern Nestorians also use them at their nuptials (see my *Neusyrisches Lesebuch*, p. 19). In conclusion he gives an elaborate comparison between Greek writers of idylls and the author of the Song of Solomon. Those who maintain the antiquity of the latter will do well to attempt a satisfactory refutation of the evidence brought forward by Dr. Graetz; though I fear it will prove easier to deny than to refute. On the other hand, Dr. Graetz himself is in a similar position, for he omits the passage about Thirza (vi. 4) which furnished the defenders of a high antiquity with their principal argument; only his evidence is more copious than that of his opponents.

The result of his combinations is that the poem was written B.C. 230–218, as a warning and example to the Jewish gentlemen of Jerusalem and Alexandria. I have nothing to say against this date, but much against the tendency, since I fail to see how a poem containing passages like ii. 6 can inculcate a better lesson than certain modern novels. It is more likely that the poem consists of different songs, solo, duo, descriptive, telling of possibly far distant ages, and subjected in the course of time to numerous alterations. These songs were then collected in the decline of Hebrew literature, as we gather from some linguistic indications referred to above. Some of them may also have been composed at a late period; the common objection that erotic poetry ceases to be written in times of political decay being refuted by comparison of other literatures.

After the introduction, Dr. Graetz gives a reprint of the Hebrew text, and a translation with a commentary. It is a pity that he did not insert his corrections in the text, a reprint of the Masoretic text being useless, as it is in everybody's hands. The corrections themselves have different degrees of merit; some of them are very probable, *e.g.* i. 3, תמרוק (for תורק); i. 7, איפה (for איכה), &c. But I cannot enter here into further details. The chief importance of the book lies in its vigorous opposition to the prevalent dramatic hypothesis, which renders the true understanding of the text quite impossible.

For this and for other reasons it is an acceptable and even necessary addition to our critical literature, though scarcely any one will accept the main conclusion of the author.

ADALBERT MERX.

Observations on the Collation in Greek of Cureton's *Syriac Fragments of the Gospels* with Schaaf's Edition of the Peshito and the Greek Text of Scholz. By J. R. Crowfoot, B.D. Williams and Norgate.

MR. CROWFOOT has now completed his laborious collation of Cureton's *Syriac Fragments of the Gospels* with the Peshito Syriac and the Greek text of Scholz. In a former number of the *Academy* (vol. ii. p. 63) we pointed out that Mr. Crowfoot's Greek text could not be accepted as a reproduction of the Gospels in their original form. We find, however, from the *Observations* now published, that this was not the object which Mr. Crowfoot proposed to himself, but rather to fix the character and prove the critical importance of the Fragments themselves. In this respect we think that his work is very valuable. Undoubtedly the discovery made by Dr. Cureton of the remains of an old translation of the Gospels in a manuscript, itself of the early date of the latter half of the fifth century, is the most remarkable fact connected with New Testament criticism in recent times; and as there is a striking agreement between the text of these fragments and that of the Cambridge Codex Bezae, the most unlike of all texts to that generally received, the discovery was very unpalatable to those scholars who by the laborious collation of the general run of MSS. had arrived, or supposed that they had arrived, at a text substantially settled. Naturally, therefore, a warm controversy arose; for if the Curetonian Fragments are of the high antiquity claimed for them, scholars must either accept them, and with them the objectionable Codex D, as of paramount authority, or must give adequate reasons for disregarding the text which they offer to us.

As Mr. Crowfoot points out, the antiquity of the Curetorian Fragments has been satisfactorily proved, independently of his labours, while his work was going on. The publication of the Homilies of Aphraates by the most eminent of our Syriac scholars, Professor Wright, of Cambridge, has placed in our possession evidence of the most important kind. We know for certain that ten of these Homilies were written in A.D. 337, twelve more in A.D. 344, and the last in A.D. 345; and their value is increased by the fact that they are not a translation, but were originally written in Syriac by the author. In this work, then, more ancient than any manuscript now extant, the quotations are made, partly from the same text as that contained in the Curetonian Fragments, and partly from the Peshito. The manner of the quotation is such as to incline us to receive Mr. Crowfoot's opinion as the correct one, namely, that the Peshito version was then coming into use, and superseding the Curetonian; just as subsequently the Hharkleian superseded the Peshito.

We still however retain our opinion that the Curetonian must be used with great discretion. As might be expected in so ancient a work, the translation is loose and inaccurate, and betrays very frequently considerable ignorance of Greek. Deservedly the Peshito took its place, just as Jerome's version drove the old version out of the field, and our Authorised Version that of Coverdale. But the main point is, not the relative value of the translation, but of the texts from which they were made.

A competent scholar who would publish a Greek Testament, with the variants really contained in the numerous Syriac versions, and in works like that of Aphraates, would be doing good service to textual criticism. At present the references to the Syriac are often untrustworthy. Mr. Crowfoot has performed a valuable service in another direction, namely, in establishing the claims of the Curetonian Syriac, as containing a text of the highest antiquity.

R. PAYNE SMITH.

Commentaries on Genesis. [*Weiland Dr. Fr. Tuch's Commentar über die Genesis.* 2. Auflage, besorgt von Professor Dr. A. Arnold, nebst einem Nachwort von K. Merx.] Halle: 1871. [*Commentar über die Genesis.* Von Franz Delitzsch. 4. gänzlich umgearbeitete Ausgabe.] Leipzig: 1872.

IT is a remarkable testimony to the value of Tuch's *Commentary on Genesis* that there should still be a demand for

it, thirty-three years after its first publication. It is impossible, indeed, to suppress a regret that the author was prevented from rewriting his work in accordance with maturer critical views and more recent Oriental researches. But the task which the author had neglected could not be performed by a strange hand. Dr. Arnold, therefore, wisely confined himself to incorporating the author's manuscript notes, which consist chiefly of illustrations from Oriental literature, and inserting a few indispensable corrections, and some references of his own to the works of contemporary scholars. He has also added Tuch's essay on Genesis xiv. from vol. i. of the *Zeitschrift* of the German Oriental Society. Owing to his untimely death, the latter part of the printing had to be superintended by Dr. Merx, to whom the reader is indebted for one of the most valuable features of the new edition. This is a *Nachwort*, or "after-word," appended to the original introduction, and containing a historical survey of the criticism of the Pentateuch since the date of Tuch's first edition. Without aspiring to the completeness of the literary summary given by Dr. Delitzsch, it is far more striking and suggestive, owing, doubtless, to the superior consistency of Dr. Merx's position. It is also distinguished for moderation. The writer evidently inclines to the hypothesis of Graf, so far as the late origin of the ritual legislation is concerned, but he is not blind to the weakness of that hypothesis on the side of literary analysis. One of the most interesting parts of the essay is the comparison of Ewald's critical terminology with that of other writers, from which Dr. Merx concludes that the literary critics of the Pentateuch are in all essential points practically agreed. Further progress is expected from a more complete analysis of the Levitical legislation.

The second of the above-named commentaries has been much more thoroughly revised. It may now be said to be, on the whole, the best handbook to the bibliography, the history and mythology, the geography and archaeology, required for the study of Genesis. The title-page mentions contributions from Professor Fleischer and Consul Wetzstein. The former (see pp. 52, 57, 532, 551) have, I believe, mostly appeared in the third edition; the latter are new, and were described in the *Academy*, vol. iii. p. 350. The author's own philological notes are also highly suggestive, and great credit is due to the compiler of the excellent indices. An even greater merit, on account of its rarity, is the frank sincerity of the author, who admits that the criticism of the Pentateuch should be conducted on purely literary principles, and that the unitarian hypothesis is no longer tenable. It is unfortunate that such admirable qualities should be marred by a passion for theosophy, which treats the supernatural details of the unhistoric narratives of Genesis as so many revelations of the invisible world.

T. K. Cheyne.

Intelligence.

Bishop Colenso continues his criticism on the *New Bible Commentary* (Longmans). Not having thought it worth while, however, to give a detailed review of that work, we can only afford a brief and meagre notice of this very skilful but very severe examination. (Cf. our first notice, *Academy*, vol. ii. p. 535.) In part ii. the author dissects (no other word is suitable) the introduction to Exodus by Canon Cook, and the commentary on that book by the Canon himself and the Rev. S. Clark, a process which is applied in part iii. to Mr. Clark's work on the Book of Leviticus. The results are but a shade less unfavourable to the commentators than before. No scholar can deny their substantial accuracy in many points, though, with regard to the matter of fallacious and evasive reasoning, more allowance should perhaps have been made for the difficult position of beneficed clergymen under archiepiscopal supervision. As we anticipated in our former notice, the writers have been shown to have a defective acquaintance with the criticism of the opposite side. A still more serious charge proved against Canon Cook is that of inaccuracy in stating the facts as to the *usus loquendi*, since upon these depends one of the most important arguments in the Pentateuch controversy. The Bishop admits, however, that Mr. Clark's contributions are more moderate in tone, and, at least in Exodus, less biassed by prejudice than those of his fellow-contributor. It is only fair to say that the ability displayed here, and in the sixth part of his work on the Pentateuch, is such as to place Bishop Colenso in the first rank of living critics, though the *Examination* would perhaps have been more effective had the author been rather more sparing of his hypotheses.

The object of the contributors to the *Protestanten-Bibel Neuen Testamentes* is to condense the most probable results of a rational (not rationalistic) criticism in a form adapted to the ordinary language. Its title to mention in these pages consists in the fact that the list of contributors contains several of the most respected names among contemporary scholars, *e.g.* Holtzmann (on the Synoptic Gospels, Ephesians, Colossians, and Philemon), Lipsius (introduction to the Pauline Epistles and commentary on Romans), Hilgenfeld (on 1 and 2 Peter, Hebrews, and Jude), Holsten (on Galatians). The translation is that of Luther; a few corrections are inserted between the text and the notes. It was a happy idea to divide the editorship between a clergyman and a layman; the pithy words of the latter (Dr. v. Holtzendorff) in the preface express truths which are still far from commonplace. See especially his remarks on the only true sense in which the New Testament can be said to contain contradictions (p. viii). The style of the notes, which are, if anything, too few rather than too many, is not exactly elegant, but free from rhetoric and pedantry.

The second volume of Hausrath's *Neutestamentliche Zeitgeschichte* carries the narrative from the foundation of the Christian Church to the second sojourn of St. Paul in Corinth. The third volume of this great work is still to come. It may be as well to remind the reader that the object of the author is to trace the connection of Christianity with the course of the world's history on the basis of a critical examination of the records, the results of which are to be taken as proved. Even on the literary side, the work compares not unfavourably with *Les Origines du Christanisme* of M. Renan. The only important defect we have seen noticed is the want of a first-hand knowledge of later Hebrew literature. The author has just brought out a second enlarged edition of his popular work, *Der Apostel Paulus.*

Dr. H. Strack, of Leipzig, has completed his *Prolegomena* to the Old Testament, the first part of which we announced some time ago. It is a full and accurate summary of all that is as yet known respecting the lost as well as the extant MSS. of the Hebrew Bible, and may be heartily recommended as a supplement and corrective to the current introductions to the Old Testament. (Cf. the review in Geiger's *Zeitschrift*, 1872, p. 140.)

A monograph by Dr. Clem. Brockhaus (*Aurelius Prudentius Clemens in seiner Bedeutung für die Kirche seiner Zeit*) treats of the archaeological illustrations to be derived from the poems of Prudentius, which coincide remarkably with the pictorial representations in the Roman catacombs.

No scholar who busies himself with the history of ancient religions can afford to ignore Mr. C. P. Tiele's *Comparative History of the Egyptian and Mesopotamian Religions.* The author, who writes in Dutch, is acquainted with recent researches, and has a sober, critical judgment. The portion on Phoenician and Canaan may be specially recommended.

The *Bibliotheca Sacra* for October announces a volume of *Emendations of the Authorised Version of the Old Testament*, by Elias Riggs, translator of Winer's Chaldee Grammar, and now missionary at Constantinople.

Contents of the Journals.

The **Revue Archéologique** for November contains a paper by M. V. Guérin on the situation of the tomb of the Maccabees. He agrees with M. Sandreczki (who seems to have been anticipated by Father Forner) in identifying Modin with the village el-Medieh, but differs from that gentleman in placing the sepulchres not at Khirbet-el-Yehoud but at Khirbet-el-Gherbaouï (M. Guérin's spelling). Both ruins are in the neighbourhood of el-Medieh, but only at the latter are there unmistakeable traces of a monument such as that described in 1 Macc. xiii. 27–29.

Studien und Kritiken, 1873, No. 1.—The visible and the invisible Church (Gottschick).—The myths of Jesus in Judaism; by Rösch. [Attempt to account for the historical origin of these traditions.]—On some New Testament sayings of cognate meaning:—Acts xvii. 31; x. 35; Romans xv. 16; i. 18–32; ii. 14–16; by Michelsen. [(*a*) Connects ἐν ἀνδρὶ with πίστιν παρασχὼν πᾶσι. (*b*) "Men of all nations shall become members of the spiritual Israel." (*c*) λειτουργὸς = preacher of the Gospel; τῶν ἐθνῶν, a genitive of the subject; γίνηται = be performed.]—The evidence for the birth-year of Luther;

by Köstlin. [Uncertain whether 1483 or 1484.]—On Hutten's work, *de Schismate extinguendo*; by Lindner. [The work consists of six letters, five from the universities of Oxford, Prague, and Paris, the sixth from the Kaiser Wenzel, and all relating to the great papal schism. Lindner thinks, however, that they are all by the same, and that an English, hand; their object being to establish the doctrines of Wycliffe on the Papacy. He traces them to Oxford.]—Kleinert on Deuteronomy; rev. by Riehm. [An able and suggestive but unsuccessful work.]—Works on practical and apologetic theology.

Monatsschrift für Gesch. u. Wiss. des Judenthums, October.—Gibea and Geba, Gibeat-Saul and Gibeat-Benjamin; by Dr. Grätz. [Distinguishes three places called Geba or Gibeah: (*a*) the residence of Saul, near Ramah; (*b*) the town of Geba, west of Michmash; (*c*) the village of Gibeah, near Jerusalem, where Titus encamped.]—Studies on the LXX. and Peshito to Jeremiah; by P. F. Frankl. [Tends to show that several translators were concerned in the LXX. version.]—The Targum on the Psalms (conclusion); by W. Bacher. [Ascribes it to the same writer as the Targum on Job; fixes the date before 476, because of allusion to the two capitals, Rome and Constantinople.]——November.—The doxologies in the Psalms; by Dr. Grätz. [The doxology is thought to have been, properly, not merely the conclusion of each of the four books of the Psalter, but to have belonged to every psalm when used liturgically. This doxology consists of two parts: 1. The formula, ברוך ה' אלהי וגו', preceded by אמרו, which is an exhortation to the people to take part in praising God; 2. The response of the people, viz. the single or double Amen, and sometimes Hallelujah.]—Studies, by P. F. Frankl (continued).—Halacha-criticism, by Zuckermandel.

Theologisch Tijdschrift, November.—The Church of Scotland; by L. W. E. Rauwerhoff. [A summary of the lectures of Drs. Stanley and Rainy, followed by a singularly fair criticism of their respective positions, which we could wish to see translated into English.]—The Epistle to the Galatians in Tischendorf's eighth edition; by J. J. Prins. [The result is that Tischendorf has really improved the text, under the influence of *Cod. Sin.*, in six more or less important passages (i. 10; iii. 1; iv. 14, 15, 25; v. 1), not to mention less significant changes. But in many other passages he has retrograded under the same influence.]—The tribe of Levi; by A. Kuenen. [A review of part of Dr. Land's papers on the state and religion of ancient Israel in *De Gids* for 1871. The question at issue is whether the Levites were originally a tribe or a party.]—Dijserinck's translation of the Apocrypha, part 1; rev. by A. Kuenen.

New Publications.

Clemens Romanus. Epistolae. Ad ipsius cod. Alex. fidem ac modum repetitis curis ed. C. de Tischendorf. Leipzig: Hinrichs.

Colenso, J. W. The New Bible Commentary . . . . . critically examined. Part III. Longmans.

Franz, A. M. Aur. Cassiodorius Senator. Ein Beitrag zur Geschichte der theolog. Literatur. Breslau: Aderholz.

Gass, W. Symbolik der griechischen Kirche. Berlin: Reimer.

Reuss, E. History of Christian Theology in the Apostolic Age. Vol. I. English Translation. Hodder and Stoughton.

Schweizer, A. Die christliche Glaubenslehre nach protestantischen Grundsätzen dargestellt. 2. Band (Schluss). Leipzig: Hirzel.

Strack, H. L. Prolegomena critica in Vetus Testamentum Hebraicum. Leipzig: Hinrichs.

Tiele, C. P. Vergelijkende Geschiedenis van de Egyptische en Mesopotamische Godsdiensten. Amsterdam: Van Kempen.

Philosophy and Physical Science.

DUTCH PSYCHOLOGY.

Van der Wijck's Psychology. [*Zielkunde.* Door Dr. B. H. C. K. van der Wijck, Hoogleeraar in de Wijsbegeerte te Groningen. Eerste Deel.] Groningen: J. B. Wolters.

Dr. van der Wijck is one of the most distinguished of the many able teachers and writers who are doing so much to make their country take the high position it is now taking in scientific and philosophical investigations. His previous writings, the most important of which is perhaps the small tract, *Oorsprong en Grenzen der Kennis*, have made him well known throughout Holland, where he is regarded as the legitimate successor of his master, Professor Opzoomer. The present work will do much to extend his reputation; it is the first part of what will be, when it is completed, a very thorough and exhaustive system of Psychology. It contains an elaborate exposition of the author's method; two chapters, partly introductory, on the four degrees of human knowledge, and the connection between the soul and the body; and a very full and interesting discussion of the first part of psychological investigation—man as a sentient being. The second part of the work, which has not yet been published, will contain the results of Professor van der Wijck's researches regarding the intellectual and emotional life of man, and will conclude with a chapter upon the nature and exercise of will. This Dutch Psychology will therefore occupy the ground covered by Professor Bain's two large treatises on the Senses and Intellect, and on the Emotions and Will.

The chief interest which Dr. van der Wijck's work has for us, apart from its scientific value, is the position it occupies with regard to the works of English writers upon the same or kindred subjects. The author evidently means to take up an intermediate position between representative English and German psychologists. He wishes to avail himself of the results of English experiments and observation, without committing himself to the materialistic tendencies which are found in some of the more prominent among our psychologists, and he desires to make full use of German research and speculation, without accepting every German theory and assertion. This middle position between English and German psychology is the most striking characteristic of the book, and must be kept in view when we criticize it. Dr. van der Wijck has fitted himself for the accomplishment of his purpose by a careful study, not merely of English and German philosophy, but of the literature of the two countries. He is as familiar with Goethe, Carlyle, and Thackeray, as with Sir W. Hamilton, Herbert Spencer, Fechner, and Lotze; and this acquaintance gives a literary grace to his style which is often wanting in scientific treatises.

Professor Lotze, of Göttingen, and Professor Bain, of Aberdeen, are selected by Dr. van der Wijck to represent the best German and English schools of psychological investigation, and the *Zielkunde* is an attempt to mediate between these two philosophers. They, in the author's opinion, stand in the fore-front of psychological investigation in England and Germany, and, however worthy of notice other psychologists may be, are the only really representative men.

This selection of representatives shows us Dr. van der Wijck's own position. He accepts all the facts of the extreme sensational, not to say materialist, school, and at the same time is as strenuous an opponent as one could wish of the materialist or even sensationalist theories. He combines the materialist premises of Mr. Bain with the spiritualist conclusions of Professor Lotze.

In his final results, in sympathy, and in his whole conception of the science of psychology, Dr. van der Wijck seems to stand in a much closer relation to the German than to the English psychologist. Professor Bain has many things in common with Professor Lotze: a keen eye for fact, a sympathy with physical investigation, and the desire to bring mental science into as close a relation with physiology and biology as is compatible with its independent existence, but the real standpoint of the one psychologist is very far removed from that of the other. With Professor Bain psychology is merely the natural history of the mind in so far as it is related to the body. His psychology has no relation to metaphysics, except what is contained in the negative statement that there is not and that there can be no mental science and no philosophy except this enumeration and classification of phenomena. His psychology is a demonstration that metaphysic is impossible; and his essays in the

Fortnightly Review show that he more and more inclines to seek for a purely materialist basis for this psychology.

Lotze, on the other hand, has done more than any other living writer to combat the materialistic tendencies of modern thought. His early medical training has made him more tolerant of physical theories than most other psychologists are, and has taught him to observe carefully the physical correlatives of mental phenomena; but he is no materialist. His aim is rather to accept every physical datum that can be given, recognise every physical and materialist explanation of mental phenomena ever brought forward, and from them to draw the conclusion that there must be much in the mind of man that no physical theory can account for. Psychology is with him the debatable land between physics and metaphysics—the first science where the mechanical laws of nature do not exercise unlimited rule, and where the ideal element, limitless and beyond law, must be recognised and accounted for. He is perpetually saying to the sensationalist and materialist, "I accept every fact you can give me, every scientific deduction you can make, and I will, out of your own data and deductions, create a system of spiritual psychology, metaphysics, and philosophy of history, in which the *ideal*, and not the *mechanical*, will be the leading, ruling element."

These, then, are the two psychologists between whom Dr. van der Wijck tries to mediate. He is not a materialist, nor has he the materialist tendencies of Professor Bain, but he as fully admits the close relations between physiology and psychology. He does not agree with Lotze in sharply distinguishing the mechanical from the ideal, but he denies that psychology is merely a branch of physical science, and that its laws are only applications of the laws of physical science. According to Dr. van der Wijck, psychology is the science of that class of facts which have the common name of Consciousness. It is the science of the phenomena of consciousness, not of what lies behind these phenomena; but the science of the phenomena is a warrant that there may be a science of what lies behind them. Psychology does not state that metaphysic is impossible—it introduces metaphysic.

Psychology and physiology are so nearly allied that it is often difficult to distinguish where the one science begins and the other ends, and to define precisely the relation of the one to the other. Speaking generally, the two sciences deal with the same set of facts, considered relatively as external andinternal. Physiology is one of the natural sciences, and the one which corresponds to psychology; it deals with external phenomena only. Psychology is not one of the natural sciences, but it stands in close relation to them; it deals with both external and internal phenomena. Psychologists who claim for their science a distinct and independent existence must therefore be able to show that the internal phenomena of conscious life and the internal perception on which their existence rests are real things, not mere assumptions. If internal perception does not really exist, then Heine and Comte are right when they say that to think of psychology as more than a mere branch of physiology is as antiquated a conception as that which gave a separate existence to alchemy and astrology.

Is there, then, any distinction between external and internal perception, or is the internal only a refined form of the external? This question, on the answer to which depends the existence of psychology as a separate science, is, Dr. van der Wijck seems to think, merely a narrower form of the wider one:—Is there any fundamental distinction between the soul and the body, and, if so, what is the precise relation between them? For although the distinction between psychology and physiology is one that may be held both by materialists and spiritualists, and although a thinker who denies that there is a spiritual substratum for spiritual phenomena may easily grant that the facts of internal perception are in themselves so distinct from those of external perception, and so thoroughly independent of anything save their own peculiar liability to retention and association, that they well may furnish the basis of a separate science, still the answer given to the question regarding the fundamental relation between the body and the soul almost always *does* determine the very existence of psychology, or at least the character and importance of the science. For practical purposes, therefore, it is not enough to decide whether there is a sufficient distinction between the phenomena of external and internal perception to afford a basis for the existence of psychology. The psychologist must investigate carefully the relation which exists between the body and the soul, and have some conception of the nature of the substratum which lies behind the phenomena of external and internal consciousness. Dr. van der Wijck discusses the whole of this very interesting subject in his third chapter—on the relation between the soul and the body—perhaps the most important in the volume. The summary of the chapter deserves to be quoted as an example of the author's careful and critical method, equally removed from hasty generalisation and over-confident speculation. The results are summed up under the following heads:—

"1. The *incomplete* data which tell us of the union between the soul and the body have furnished four hypotheses regarding that union, two of a dualistic and two of a monistic kind.

"2. The first form of dualism, pseudo-materialism, the common form in which the two factors are made to half-resemble each other, is a hypothesis full of inconsequences.

"3. The second form of dualism, an honest dualism, according to which brains and mind have something to do with each other merely because they are neighbours, seems to be improbable when tested by facts.

"4. The first form of monism, materialism, is the distracted metaphysic of men who suppose that metaphysic has nothing to do with the matter.

"5. The second form of monism, idealism, is the only hypothesis regarding the union of the soul and the body which at the same time agrees exactly with the facts, and which is also a theory consistently and correctly deduced from them.

"6. Every one knows and knows only his own soul. We make inferences about the souls of other men from physical events, which, at least so far as we ourselves are concerned, always accompany psychical changes.

"7. It is very uncertain how the life of the soul makes itself manifest in the realm of things; but this is certain, that in whatever way it does make itself manifest, it invariably is observed to be the reverse or the *other*, never the product, of the external phenomena."

In his answers to the wider, as well as to the narrower, problem of the relation of external to internal conscious life, Dr. van der Wijck desides that psychology, while it is indebted in a variety of ways to physiology, is a distinct science, relating to a distinct set of facts, which depend on a distinct class of laws. The great evidence for internal perception is to be found in memory and recollection; they lay hold of and detain the internal perceptions, and so, as it were, give being and place to them, and bring them under the power of logic and within the scope of science. In psychology, sensations are the material element, and the laws according to which sensations combine and separate are the formal element—*i. e.* the facts of external and internal perception and the laws of association furnish the two factors of the science. But while Dr. van der Wijck thus gives a very important place to the principle of association, he does not consider it the one principle in psychology, as our English psychologists are accustomed to do. In the psychological writings of Mr. J. S. Mill and Professor Bain, the principle of association is continually used to beg the questions argued about. They main-

tain that the product which results from the inseparable association of several psychological elements is often quite distinct from any and all of its various factors, and by the introduction of this idea of chemical combination into mental science get over a serious difficulty which stands in the way of their theory. Thus conscience, according to Mr. Mill, is only the combination of various desires, which, when combined into one complex feeling, possess an entirely new character; but when Mr. Mill wishes to show that conscience is only educated desire, he reverts to its origin and growth, entirely ignoring that upon his own theory it has become a new whole, and is something quite different from the sum of its parts. Dr. van der Wijck does not make this very convenient, if not very accurate, use of association, and in this relation prefers to follow Professor Lotze, who introduces the idea of *development*. Thus, with Lotze, intelligence is not made from sensation by a process of association simple or complex: it *developes* out of sensation, and so becomes a new and distinct fact, which cannot be resolved back again into its primary elements, nor treated as if it were merely the sum of them. This idea of *growth* is discussed by Dr. van der Wijck with great freshness and critical power in his chapter on the four degrees of mental development, and is used to explain the phenomena of the several senses. The manner in which this idea is introduced and applied gives its chief scientific value to the book.

We have not space to refer to Dr. van der Wijck's description of the various senses, nor to his theory of the relation of what Lotze would call the mechanical and the ideal elements in each, and must refer the reader for further information to the book itself. It is a great pity that so much valuable work should be inaccessible to so many English readers, for we are in great need of a good handbook of psychology, and Dr. van der Wijck's would be very useful and well fitted to supply the deficiency. We shall expect with interest the second part of the book, which treats of the deeper and more attractive problems in psychology, and hope that both parts will ere long be translated and published in England. THOMAS M. LINDSAY.

Notes of Scientific Work.

Zoology.

The Zoological Remains in the Kitchen-middens of Denmark.—Some twenty years ago the Royal Academy of Sciences of Copenhagen appointed a committee, composed of Professors Forchhammer, Worsaae, and Steenstrup, to make enquiries into the history and contents of the kitchen-middens, which have hitherto been found more frequently and in a less disturbed state in Denmark than in any other country. The committee successively examined more than forty of these ancient depots of culinary refuse, and Professor Steenstrup has just published an abstract of a report read before the International Congress of Prehistoric Archaeology at Copenhagen (*Bulletin du Congrès internat.* Copenhagen, 1872, pp. 135–174). These depots vary much in size; one of the largest—that of Meilgaard, in Jutland—has a length of nearly 500 feet, and a depth of as much as 12 feet; others having scarcely one-twentieth of this extent. They belong to the Stone age, and are made up chiefly of shells lying in an irregular manner, without any trace of an arrangement analogous to that of deposits formed by the action of water. These shells consist, one and all, of species still used as food for man, viz. oysters, mussels, periwinkles, and cockles; and all the individuals are adult, young specimens being entirely absent. Mixed with these shells are enormous numbers of bones, especially vertebrae, of the fishes of the cod-, flatfish-, and eel-tribes. The remains of birds are chiefly those of natatorial and grallatorial kinds; those of ducks are the most numerous, while the bones of the wild swan—which, at the present period, visits Denmark in the winter only—are not uncommon. But most interesting of all are the remains of the now extinct great northern diver (*Alca impennis*), the former occurrence of which in Denmark is thus placed beyond doubt, though no traces of it have hitherto been found in other parts of the country; and of the capercailzie (*Tetrao urogallus*), which is also extinct in Denmark. The discovery of the latter bird in the kitchen-middens sheds an unexpected light on the vegetation of the country at the period during which these deposits were formed. As it is known to live only in fir-forests, the leaves of which form its principal food, it must have been obtained by the inhabitants at that prehistoric time when the pine flourished in Denmark—a tree which has been succeeded by the oak, and, still later, by the beech. Mammalian remains are likewise very common, especially those of the common deer, roe-deer, and wild boar. On the other hand, it is remarkable that no traces of either the eland or the reindeer have been discovered, though bones of these two species have been met with in the peat-bogs of the country. The fallow-deer does not appear to have reached Denmark before the middle ages, and has evidently been imported. The remains of the *Bos primigenius* or the *Bos urus* of Linnaeus and Nilsson are less abundant; and while all proof has hitherto been wanting of the existence of this large ruminant in the Bronze and Iron ages, it is beyond question that it lived in Denmark during the period of the pine. This is supported by the fact that beside those remains from the kitchen-middens, an entire skeleton has been found in a stratum composed of pine-trunks, and it was ascertained that the contents of the stomach of the same individual consisted of the foliage of that tree. Of the bones of carnivorous animals, Professor Steenstrup determined the presence of those of the domestic dog, fox, rock- and pine-marten, otter, and seal (*Halichoerus grypus*), as well as of the wild cat, lynx, and bear—these three species being now extinct in Denmark. Remains of the wolf are very scarce, although this animal has been exterminated only in the last century. Bones in small number of the porpoise, beaver, hedgehog, and water-rat, make up the list, in which, singularly enough, neither the hare, rabbit, nor squirrel is mentioned. On examining the bones of these animals, it was found that the long marrow-bones of the ruminants and wild boar are invariably split by a blow on the conchoid surface, which must have been done for the purpose of extracting the marrow. Long bones of birds which do not contain marrow had never been treated in this manner. Moreover, all the mammalian bones show unmistakably signs of having been gnawed by some carnivorous animal, that removed all the softer and more spongy portions, or destroyed bones of a similar texture, such as the vertebrae or crania of birds, altogether. As this has been done in a uniform, almost systematic, manner throughout the various layers of all the deposits, M. Steenstrup comes to the conclusion that it is the work of an animal living in a state of domesticity with the people who formed the deposits. Comparative experiments made by the reporter have proved that dogs which have free and daily access to the bones of mammals and birds leave exactly the same bones, or the same parts of bones, which have been found in the kitchen-middens.

Notes on the Birds of Damara Land and the adjacent Countries of South-West Africa. By the late Ch. J. Andersson. Arranged and edited by John Henry Gurney. London.—The editor pays a just tribute to the indefatigable zeal of the late Ch. Andersson by devoting an introductory chapter to a biographical sketch of this unfortunate traveller. The birds enumerated in the body of the work amount to 428 species, of which by far the greater number were obtained by Andersson himself; a few, however, that he did not meet with, but which have been satisfactorily ascertained on other authority to have been seen in the districts referred to in the present volume, are included in order to make the list of the birds known to inhabit these countries as complete as possible. As sufficient descriptions of most of the species have already been published in the works of Layard and others, the editor has contented himself with extracting fram the manuscripts of Andersson, who had contemplated publishing a work on the birds of South-West Africa, such portions as contain personal and original observations. The nomenclature and the principal references, as well as numerous additional notes on specific distinction, geographical distribution, &c. are the work of the editor.

Chemistry.

Tridymite.—In a continuation of his "Mineralogische Mittheilungen" in *Poggendorff's Annalen*, No. 10, 279, Professor Vom Rath communicates some further information respecting the occurrence of this interesting mineral. From a letter addressed to the author by Professor Wolf, of Quito, it appears that it has been met with at a village named Tumbaco, lying at the foot of a small extinct volcano, Ilaló, three hours north-east of Quito. In driving a shaft through the volcanic tuff that covers the district, a block of very porous andesite was hit upon, the druses of which, varying in size from 2 m.m. to 1 c.m. in diameter, were filled with little tables of tridymite. The crystals likewise apparently lie in the mass of the rock itself, in which crystals of a triclinic felspar, hornblende, and magnetite could be seen with a pocket-lens; quartz, though it frequently accompanies tridymite, was not observed in this block. Some of the thin hexagonal plates were from 3 to 4 m.m. in diameter.—Dr. Krantz also observed the occurrence of this form of silica in a reddish-brown porous trachyte from Stenzelberg, in the Siebengebirge. The rock contains crystals of a lime-soda felspar, hornblende, augite, and magnetite, while the cavities are lined with the

little tabular crystals of tridymite more thickly and abundantly than in the earlier specimens from other localities. An examination of this rock has impressed the author with the belief that the silica constituting the crystals has not been derived from the rock itself, but that solutions or vapours containing silica have during their passage through its mass deposited that substance in the form of tridymite in the cavities.—After many a fruitless research for tridymite in the rocks of the district round Naples, of Ischia, Cumana, and Monte Olibano, it has been found by Professor Vom Rath in a block erupted by Vesuvius in 1822. The rock is a finely grained mixture of sanidine, garnet, and augite. The druses are for the most part filled with sanidine, and on some of the crystals of this mineral little rounded masses of hexagonal plates of tridymite occur. It is interesting to find that the physical characters of these very crystals were described by Scacchi twenty years ago in his paper on Vesuvian and Monte Somma silicates formed by sublimation.—Tridymite has also been detected in the eruptive rocks of the Palatinate by Streng, who has found it in the porphyrite of Waldböckelheim (*Jahrbuch für Mineralogie*, No. 5, p. 628).

Dulcitamine.—This name has been given by G. Bouchardat (*Bulletin de la Société chimique*, xvii. p. 539) to a new organic base, $C_6H_{15}NO_5$, derived from the sugars. The hydrochlorate is produced by the action of ammonia on the hydrochloric or hydrochromic ether of dulcite, $C_6H_{14}O_6$, at 100° in the following way :—

$$C_6H_{11}ClO_4+H_2O+NH_3=C_6H_{15}NO_5HCl.$$

Dulcitamine expels ammonia from its compounds, acts powerfully on litmus, and absorbs carbonic acid from the air. The hydrochlorate forms double salts with the chlorides of gold and of platinum, and in all its properties bears a great similarity to glyceramine, $C_3H_9NO_2$. It establishes new resemblances between the triatomic alcohol, glycerine, and the hexatomic alcohol, dulcite.

The Manganese in Vegetable Tissues.—An elaborate paper by A. Leclerc, on the quantitative determination of the amount of this metal present in soils and trees by a method devised for the purpose, and adopted some time since at the "Station agronomique de l'Est" at Nancy, is published in the *Comptes rendus*, 11th November, p. 1209. After the name of each of the following woods is given the percentage of manganic oxide, Mn_2O_3, present in its ash : fir, 4·507 ; oak, 1·488 ; beech, 5·307 ; elm, 7·454 ; lime, 3·744 ; alder, 1·965 ; &c. The percentage of the same oxide in the soil of the fir was 0·037; in that of the oak, 0·186 ; and in that of the beech, 0·110. What portion of the wood of each tree was chosen for the experiment is not stated.

Kongsbergite.—This name has been given by F. Pisani (*Comptes rendus*, 18th November, p. 1274) to a new native amalgam of silver from Kongsberg, in Norway. It occurs in cubes, the sides of which are a centimetre in length, and strongly truncated by octahedral faces. It has the composition : silver, 95·10 ; mercury, 4·90 ; which corresponds with the formula $Ag_{18}Hg$. Another specimen of so-called native silver from the same locality had the composition Ag_6Hg, or that of arquerite.

Action of Palladium-Hydrogenium on Organic Compounds.—Saytzeff, in the *Journal für praktische Chemie*, No. 13, p. 128, states the results of his experiments with this agent. Chloride of benzoyl is converted into benzoic aldehyde ; this reaction does not take place when platinum-hydrogenium is employed. Nitrobenzol is changed into aniline, nitrophenol into amidophenol, and nitrocarbol, or nitromethane, CH_3NO_2, into methylamine. Oxalic acid furnishes traces of formic acid.

The Incandescence of Iodine Vapour.—According to G. Salet (*Poggendorff's Annalen*, No. 8, p. 320) the vapour of iodine may be raised to redness like a solid or liquid body, that is to say, at high temperature it emits only slightly refrangible rays, which give a continuous spectrum. If it be heated in a glass tube, it will be observed to emit light at a temperature at which the glass is barely luminous. An interesting form of the experiment is described in which the iodine is rendered incandescent with a battery current in an exhausted tube, when the light emitted becomes very distinct.

Pyrology, or Fire Analysis.—This is the title of a most astonishing paper by Captain W. A. Ross, in the current number of the *Proceedings of the Royal Society*. For his experiments the author uses the flame of a lamp containing cocoa-nut oil and an ordinary mouth blowpipe, or, as he terms them, a "hydrocarbonous pyrocone" produced by a "pyrogene." One or two of the reactions which he observed, by submitting substances to the action of the "reducing" and "peroxidating pyrocones," will suffice to indicate the nature of his paper. Silica and alumina, which, by the way, he calls "two omnipresent and almost universally combined earths," become quite black and apparently decompose ; the alumina "appears to become partially fused," while the silica presents a steel-black mass with shining metallic points in it. Sulphur, when the flame is regulated as he directs, also assumes a metallic appearance, and "has no further tendency to burn," but possesses the (as he rightly names it) "remarkable property" of giving in a bead of phosphoric acid reactions similar to those of copper, viz. green hot and blue-green cold, &c. He even detects nitrogen with the blowpipe. By repeatedly dipping a bead of phosphoric acid into concentrated nitric acid or ammonia, and heating it as often in the "hydrocarbonous pyrocone," a metallic-looking film is formed, and the bead, "thus impregnated with nitrogen," develops colour which serves to distinguish this element from alkalies, "the volatisable oxides," &c. Still more unaccountable perhaps than any of Captain Ross' results is the fact of their having engaged the serious attention of the learned body in whose journal his paper has appeared.

Phosphotungstic Acid.—By adding phosphoric acid to a hot solution of bitungstate of soda, and allowing the liquid to cool, triclinic crystals of a sodium salt containing the two acids separate. By converting them into the barium salt, decomposing this in hydrochloric acid, and removing the barium with sulphuric acid, the solution on concentration deposits fine regular octahedra, having a strong refractive power and adamantine lustre, of the double acid phosphotungstic acid. Scheibler, who made this compound (*Chemisches Centralblatt*, 45, 709), has obtained another form of the double acid, by using the ordinary tungstate in the place of the bitungstate, which is distinguished from the above in not crystallising in the cubic system. The two kinds of the double acid appear to correspond to the fullest extent with the two varieties of silicotungstic acid prepared by Marignac. The variety of phosphotungstic acid that forms octahedra is remarkable for its behaviour with solutions containing organic bases. From a liquid containing $\frac{1}{200000}$ of strychnine, or $\frac{1}{10000}$ of quinine, those bodies are thrown down as voluminous flocculent precipitates, which soon become more compact, and can readily be collected on paper, and washed out with slightly acid water.

Normal Hexylic Alcohol, a Constituent of the Essence of Heracleum Giganteum.—A very interesting paper by A. P. N. Franchimont and T. Zincke on the chemical examination of a large quantity, more than 500 grammes, of this essential oil, which had been placed at their disposal by Dr. Hugo Müller, is printed in the *Archives néerlandaises*, vii. 3ième liv. This oil consists of a mixture of about three-fourths butyrate of hexyl and one-fourth acetate of octyl. By means of the octylic alcohol the authors prepared a nonylic acid.

New Publications.

Bruhns, C. Meteorologische Beobachtungen angestellt auf der Leipziger Universitäts-Sternwarte in den Jahren 1870–1871. Leipzig : Hinrichs.

Clebsch, A., und Dedekind, R. Riemann's gesammelte mathematische Werke. Leipzig : Teubner.

Fresenius, H. Ueber das Corallin. Wiesbaden : Kreidel.

Goebel, K. Ueber Kepler's astronomische Anschauungen und Forschungen. Halle : Buchhandlung des Waisenhauses.

Gonnard, F. Notes sur divers Minéraux du Département du Puy-de-Dôme. Lyon : Pitrat.

Hull, E. A Treatise on the Building and Ornamental Stones of Great Britain and Foreign Countries. Macmillan.

Jahnel, J. Ueber den Begriff Gewissen in der Griech. Philosophie. Berlin : Calvary.

Kolbe, H. Das chemische Laboratorium der Universität Leipzig. Braunschweig : Vieweg.

Lagardelle, F. Notes anthropologiques sur les Huttiers de la Sevre. Moulins : Desrosiers.

Lang, V. v. Krystallographisch-optische Bestimmungen. Wien : Gerold's Sohn.

Martius-Malzdorff, J. Die körperliche Ecke oder der Raumwinkel. Berlin : Springer.

Obermayer, A. v. Ueber das thermoelectrische Verhalten einiger Metalle beim Schmelzen. Wien : Gerold's Sohn.

Rauch, P. M. Die Einheit des Menschengeschlechtes. Augsburg : Butsch Sohn.

Settimani, C. Nouvelle Théorie des principaux éléments de la Lune et du Soleil. Florence : Barbera.

Stieler's Hand-Atlas über alle Theile der Erde und über das Weltgebäude. Neu bearbeitet von A. Petermann, H. Berghaus und C. Vogel. Lief. 1–10. Gotha : Perthes.

Strzelecki, F. v. Theorie der Schwingungscurven. Wien : Gerold's Sohn.

Susemihl, F. De Politicis Aristoteleis quaestionum criticarum. Part V. Berlin : Calvary.

Tuckermann, E. Genera Lichenum. An Arrangement of the North American Lichens. Amherst (Mass.).

Tyndall, J. The Forms of Water in Clouds and Rivers, Ice and Glaciers. King and Co.

Ule, O., und Hummel, A. Physikalische und chemische Untersuchungen. Leipzig : Fleischer.

Vogel, F. W. Jahrbuch der Bienenzucht für 1873. Mannheim: Schneider.

Vaillant, L. Remarques sur les Zones littorales. Paris: Cusset.

Vierordt, K. Die Anwendung des Spectralapparates zur Photometrie der Absorptionsspectren und zur quantitativen chemischen Analyse. Tübingen: Laupp.

Weger, H. Der Graphit. Berlin: Lüderitz.

Weil, A. Die Gewinnung vergrösserter Kehlkopfspiegelbilder. Heidelberg: Wassermann.

Wilson, A. Elements of Zoology. Black.

History.

The Roman Annalists. [*Die römische Annalistik von ihren ersten Anfängen bis auf Valerius Antias.* Kritische Untersuchungen zur Geschichte der älteren Republik von K. W. Nitzsch.] Berlin: Gebrüder Bornträger, 1873.

Goethe once said that we only understand things of which we are able to trace the development, and the expression characterizes exactly the intellectual basis of the scientific methods of the present century; our method, like our whole culture, is preeminently historical. Philology, since it has ceased to be exclusively occupied with the comparatively short period of greatest brilliancy in the life of a nation, has acquired a different character and a different horizon. It has turned its attention to the less cultivated and polished language of earlier times, or reaching even farther back, it seeks for parallels and derivations in allied languages to place in the proper light facts which, according to the old method, must have remained unexplained. Jurisprudence, which formerly dated its existence from Justinian, now concerns itself by preference with the history and development of Roman law from the Twelve Tables onwards. Even the exact physical sciences have not been able to resist the common tendency, and in some of them the historical method is the only possible. Geology, for instance, may be called a plastic presentation of the history of the revolutions of the earth. All the most exciting scientific questions of our time refer to the origin and growth of the universe, and the modifications to which its individual parts have been subject. As was to be expected, the historical method could not long fail to be applied to history itself. The first modest attempts were made upon the mediaeval historians; here the work and the workmanship is coarser, so that it is easier to resolve the former into its elements. But before long, encouraged by Niebuhr's success, the same methods and the newly won experience were applied to the authors of Greek and Roman antiquity with brilliant results. Every year sees the appearance in Germany of a number of monographs "de fontibus, &c." or "de ratione quae intercedat, &c." England still stands towards the movement in an attitude of suspense, and receives its conclusions with a degree of mistrust, when the reports of ancient historians are resolved into their component parts by severely analytic criticism. Wrongly so, as it seems to me. To find a parallel in modern times, let us put ourselves in the place of a historian wishing to write the history of the recent Franco-German war a century or two hence, but limited to a single work compiled from the reports of the German general staff, from the correspondence of the *Figaro* or the *Gaulois*, and perhaps from the journals of a delegate from the Geneva committee. Common sense will compel him to distinguish between the different parts of what his authority gives uncritically as a whole. He will have to ask himself in every case which of the various sources supplied a given piece of intelligence, and what degree of credibility, what sympathies, and what tendencies he must presuppose in the writer. And in thus distinguishing, will he not have to pay special attention to trifling external indications, such as whether distance is reckoned by miles or kilometres, whether a quotation is taken from a French or a German author; the circumstances of which nation are described with special knowledge and sympathy, &c.?

Our position is exactly similar in respect to Livy's great historical work, which is based upon authorities of just such heterogeneous nature and quite as various grades of credibility. Nitzsch is not the first who has approached it with the critical scalpel. It is ten years since Nissen's *Kritische Untersuchungen über die Quellen der vierten und fünften Decade des Livius* (Berlin, 1863) made an epoch in the study of Livy by pointing out for the first time—though only for two decades—not only the way in which he made use of the sources at his command, but also the authority that he must have followed for each separate section. Nissen had dedicated this work to his former instructor, Nitzsch, who now in his *Römische Annalistik* includes especially the three first decades in the circle of his researches, in order to distinguish the data before us according to their value and credibility, that we may not be reduced to the melancholy alternative of either rejecting everything like Cornewall Lewis, or accepting everything like, for instance, Bröcker. While Mommsen and Rubini have dwelt chiefly in their investigations on the politico-juristic side of Roman history, and in this direction have achieved the most brilliant results, Nitzsch works chiefly by external criticism of the text of our literary authorities. The two methods, so far from excluding each other, if rightly applied, serve for mutual support.

The kernel of the present work, round which the rest crystallizes, is the circumstantial comparison of Liv. ii. i.–iv. 8 with Dion. Halic. v. i.–xi. 65, and had already been published in three articles in the *Rheinische Museum.* In the present work, the course and conclusions of this investigation are briefly recapitulated, and in connection with this follows a history of Roman annals down to Fabius Pictor, and then again down to Valerius Antias. The course of the special investigation is extremely interesting and instructive to follow. From discrepancies in the accounts of *cognomina*, and the beginnings of the years given in different parts of Livy, as well as by Dionysius of Halicarnassus, Nitzsch infers the use of different authorities, and distinguishes an earlier and a later source. Besides some circumstantial descriptions (p. 51), he refers to the earlier authority all the short annalistic notices which for the most part report laconically of scarcity, war, inundation, epidemics, &c. Then Plutarch's *Life of Publicola*, which is admitted to be based on the work of Valerius Antias, is brought into requisition for the sake of comparison with those passages which Livy and Dionysius both derive from the later sources. Nitzsch shows very ingeniously how the writer takes every opportunity of exalting the members, both male and female, of the Valeria gens; how he must belong to the age of Sulla, because he introduces into the earlier history of Rome ideas which were then being formed for the first time; this is apparent from the position assigned to the tribunes of the people, which was entirely changed by Sulla, from the conception of the plebs, from the supposition that a law was not valid without the *senatus auctoritas.* When we consider that Valerius Antias was a contemporary of Sulla, and continued his history down to the death of Sulla, we may readily admit the correctness of our author's view that the more recent of the two authorities was none other than Valerius himself.

In the second section of his book (pp. 189–355), the author gives a "history of Roman annal-writing" down to Valerius Antias; he begins with the *annales maximi*, and naturally

has to discuss Livy's extraordinary statement that all historical monuments had been destroyed when Rome was burnt by the Gauls, while notwithstanding fragments plainly belonging to an earlier date than 390 B.C. can be distinguished amongst the materials which have reached us. Niebuhr and Schwegler explained this curious phenomenon by supposing the existence of short chronicles and family papers. Mommsen assumes that the earlier fasti were both restored and falsified after the conflagration. Nitzsch, on the other hand, assumes a double foundation for the *fasti:* first the records of the high-priests of the temple of Saturn, and, secondly, the fasti of the *aediles plebis* in the temple of Ceres. The author is led to this assumption of aedilian fasti by the peculiar care with which the fortunes of the temple of Ceres are recounted, and by the interest manifested in the Hellenic institutions of Rome, and in the history of Upper Italy. As to the first point, although before the *lex Ogulnia* there was no plebeian pontifex maximus, yet it seems to me that even a patrician would have sufficient reasons for paying attention to the fasti of the temple of Ceres, the centre-point of the religious and sacred interest of a class of such growing importance and influence as the plebs. The second point, on the contrary, seems to be unfavourable to the author's assumptions, for interest in Hellenic culture might be looked for anywhere rather than amongst the plebs, a stationary peasantry, which in those times, as at present, had a conservative aversion to everything of foreign origin. This is clearly seen in Cato, who, sprung from this class, is the best representative of the old plebs in its virtues as well as its failings. Intercourse with Greece, and attachment to Greek civilisation, was a privilege of highly educated aristocratic circles, such as the Scipios. A further argument against the assumption of special aedilian fasti is supplied by the remarkable agreement in our accounts, which do not at all admit of subdivision into two groups. This difficulty in the way of his hypothesis has not of course escaped the author, and he endeavours to remove it by assuming both sources to have been combined and harmonized at a comparatively early period. In the course of his investigation, Nitzsch suggests the further question, when and by whom the fasti were withdrawn from the temple and made public. The first question has been answered by Mommsen to the effect that the last arrangement of the fasti in the shape which has reached us must date from soon after the second Samnite war. Nitzsch accepts this view, and proceeds to connect with it the plausible supposition that the publication of the fasti was carried out by Cn. Flavius, the *protégé* and partisan of Appius Claudius, to whom the plebs was indebted for publishing the *legis actiones*, and the calendar. This also explains how all these notices express so much reverence for the house of Claudius, and so decided an animosity against the Fabii.

Popular poetical legends and ballads formed another important element used by the Roman annalists in their works. Even Niebuhr had called attention to the well-known passages in Cato and Varro in which it is told how noble boys used at that time to recite the praises of their ancestors to the sound of the flute. But while English writers familiarised themselves with this important conception, and even succeeded in imaginary imitations of the old poems, it was almost entirely abandoned in Germany, apparently under the influence of the Hegelian philosophy of history, according to which the Romans, as the people of law, could not, it was supposed, also have possessed a considerable body of popular poetry. It is Nitzsch's merit to have brought this undoubtedly correct idea of Niebuhr's again into esteem, and to have developed it in greater detail by parallels from the historical poetry of Scotland, Germany, and Servia. This wider view, which also includes the literature of mediaeval historiography, enables the author to draw illustrations from similar appearances in that literature, and so to elucidate the obscure and difficult passages of ancient history-writing: several brilliant examples of this kind are to be found in the present work. The discussion on Fabius Pictor, his literary position, his conception of the constitution and the political history, are also very well worth reading. Nitzsch compares him very aptly with the aristocratic annalists of the sixteenth and seventeeth centuries. As with Valerius Antias the glorification of the Valerii, so with Fabius Pictor the glorification of the Fabian house, and especially of Fabius Maximus Cunctator, is an object of which the writer never loses sight. Valerius has of late been made an universal scapegoat, and though generally, not quite always, with good reason. The careful and deliberate research which Nitzsch has brought once more to bear on the question leads, however, to the result that the greater part of the accusations brought against him is well founded. Valerius Antias is far inferior as an historian to his predecessor Fabius Pictor; in Nitzsch, his sincerity and reliability appear in the most deplorable light: not only because he introduces his own views and political conceptions into the earlier history of Rome, but from the absurd way in which he thrusts his own family into the foreground on every occasion, which is only less intolerable than his disinterested delight in lying, and a habit of colossal exaggeration, especially in reference to numbers. We must unfortunately agree with the author that Valerius Antias marks an epoch in the history of Roman annals, for whereas formerly the annals stood alone, after him a rich memoir-literature arose to dispute the field with them, but they did not end with him, and it is therefore to be regretted that the author, who possesses rare aptitude for the work, should not have continued to trace the annals down to their latest degeneracy.

It would also have contributed to the practical convenience of the book if the author had not disdained to supply a summary table like that given by Nissen (*l. c.* p. 340), in which the authorities for each chapter are briefly indicated.

But such trifles cannot of course affect the value of the book, which we cannot recommend too warmly, especially to those to whom this mode of analysing ancient authorities is still unfamiliar. V. Gardthausen.

Intelligence.

The Leipzig publishing firm of S. Hirzel has distinguished itself within the last generation by issuing standard historical works of various descriptions. German literature owes to it the substantial collection of the *Staatengeschichte der neuesten Zeit*, and an important series of publications under the superintendence of the Munich Historical Commission, *Chroniken der deutschen Städte*, both still in progress, as well as some widely popular books, viz. Gustav Freytag's *Bilder aus der deutschen Vergangenheit*, and the same author's excellent biography of Karl Mathy. In this respect Hirzel's catalogue alone would furnish very interesting evidence how considerably both the sound study of history and historical art has been advancing for more than thirty years. Such observations are suggested by three books which Hirzel has published within the last few days.

The highest praise in every respect is due to the second and concluding volume of *The Life of F. C. Dahlmann*, by Anton Springer, which at this time, indeed, is enjoyed by a very large circle of readers all over Germany. It takes up the narrative where the first volume, published about two years and a half ago, left off, viz. after the celebrated crisis in 1837, when the Duke of Cumberland, as King of Hanover, expelled seven professors from the university of Göttingen for adhering to the constitution to which they had sworn. Dahlmann, the two Grimms, and Gervinus were for a considerable time without home, study, or professional chair, since not one of the German governments of the day ventured to provide for them in the teeth of the Bundestag, by which Hanover was supported. Their cruel and unjust

treatment, however, roused public opinion almost for the first time. In order to support those among them who were in want, means were collected by a liberal association of wealthy patriots, chiefly publishers, as well as some authors at Leipzig and Berlin. Dahlmann was thus enabled to spend four quiet years, busy with his history of Denmark (3 vols. in the collection of Heeren and Ukert), which raised his name to the first rank of German historians. In 1842 Frederick William IV. gave him the chair of history and public law in the university of Bonn, which he held until his death in 1860. There would, indeed, be very little worth mentioning from the literary, academical, and personal life of the professor if it were not for the reason that he became one of the fathers of constitutional theory and of the aspiration after national unity which has borne fruit in the present generation. By his famous lectures on Politics (the term being meant in the sense of Aristotle) and on various branches of history, by two small books, almost pamphlets, on the English and French revolutions, but immensely popular in their day as political programmes (both published in 1844 and 1845 by Hirzel's firm), and chiefly by the prominent share he took at Frankfurt, Erfurt, and Berlin, in the endeavours to frame a national constitution for Germany, he displayed a consistent power of mind, word, and character, such as did very few other collaborators in that great but unsuccessful struggle. This character is now delineated by the biographer with masterly art and taste, where possible, in the nervous and pregnant utterances of Dahlmann himself. Extracts from his letters, sayings, and speeches, are intermingled with letters from his correspondents, among whom the most illustrious names are not wanting. In addition to Bunsen's and Stockmar's *Memoirs*, the present volume contains perhaps the most attractive disclosures with regard to the constitutional throes from which twenty years later modern Germany took its origin. Very curious is a project of federal reform submitted to Dahlmann from London by Prince Albert, but still more its criticism by the late King of Prussia, almost inconceivable on account of its vapid, romantic, and entirely unserviceable dreaminess, whereas a letter by the Prince of Prussia, the present Emperor, shows that he as early as then entertained the same notion with Dahlmann, namely, that liberty without power would not be of much use to the Germans.

A book of a very different kind is *Franz von Sickingen*, by H. Ulmann, Professor of History in the University of Dorpat. The hero is probably much less known in England at present than he was in his own time, in the days of Henry VIII. The materials for his personal biography are scanty enough, yet having been an important actor in that great drama of the world's history, the first upheaving of the Reformation period, within the frontiers of his country as well as without, his connections and his deeds had to be searched for in the stores of many a home record-office, and in the recent official publications of foreign countries as well. This has been done by the author with untiring perseverance at Weimar, Cassel, Coblenz, Vienna, Munich, Frankfurt, Strassburg, Dresden, &c., not omitting what is to be found in print in the collections of Le Glay and Lanz, as well as Brewer's wonderful *Letters and Papers of the Reign of Henry VIII.* Dr. Ulmann knows at the same time how to handle his researches and how to write a vivid description of the man and his time which throws all former attempts into the shade. Sickingen, much more than Götz von Berlichingen, is the representative of the free knights of the empire, who, unfortunately for themselves and for the community at large, were never moulded as a political estate into the unwieldy constitution of the Holy Roman Empire, but waged lawless war alternately against the cities and their commerce, against the princes and their territories, or against the emperor himself. This book for the first time discloses the short and romantic, but chequered, career of that powerful knight, who, from his strongholds in the Palatinate (now still existing, but merely in picturesque ruin), with his horsemen, his bands of "Landsknechte," and his artillery, attacked the walls of Worms and of Metz, and, after having been the ally of Francis I. one day, immediately afterwards was on terms again with Maximilian. Nothing, however, is more interesting than his joining the great movement started by Luther himself, the most celebrated man of his own order, the fiery knight Ulrich von Hutten, being his chief guide. For a short time Sickingen seemed, indeed, to head the imperial party of Charles V. soon after his election. Yet the Diet of Worms, 1521, was the turning-point in his life. The confederation of the knights, with Sickingen as their chief, was a power far too strong and too dangerous, not only for the members of the empire and the imperial government, but for the material and spiritual prosperity of the nation. By his attack on Trier in 1523 he drew down upon himself and his order a catastrophe similar to that which a few years later overtook the German peasantry. His death after the capture and amidst the smoking ruins of his Ebernburg, with the allied victorious princes looking upon the dying man (according to the most authenticated reports), abounds in dramatic and tragical effects.

The third work published by the same firm belongs to the class of hitherto unprinted or little known materials for local history of a distinct period. *Basler Chroniken*, "herausgegeben von der historischen Gesellschaft in Basel," vol. i., edited chiefly by two young historians, Professor W. Vischer, at Basel, and Dr. Alfred Stern, at Göttingen, are unquestionably suggested by the excellent collection of the chronicles of the German cities, undertaken by the Munich Commission. They show what magnificent materials are still to be found in the archives of a small but in some respects leading community like the city and canton of Basel. The volume contains one of the chief sources for the Reformation period of the little state, viz. the chronicle of Fridolin Ryff and his continuator, Peter Ryff, written in German, and from the other side of the movement four accounts, which were written in the Charterhouse of Klein-Basel, the first three in Latin, and the fourth in German. We have seldom met with a more lively description of the highly disturbed social aspect from the very midst of the dissolution of an important monastic foundation than that preserved in the last document (1522–1532), which is not unlikely the work of the last vicar of the house, who remained in the precincts after the prior and part of the monks had left. Every piece is most carefully edited, with an abundance of introductions, notes, addenda, indices, and maps, in the true spirit of methodical investigation, and with a philological and palaeographical exactness such as hitherto has been very rarely applied to Latin or vernacular texts of that period. The series is to be completed in four volumes, and will be another striking monument of that spirited little republic, distinguished again and again both by its wealth and by its taste for learning and literature.

The publication is announced of the eighth and last volume of Gregorovius' *Geschichte der Stadt Rom.* The author, whose work procured him not long since the honour of Roman citizenship, concludes it by an eloquent expression of satisfaction that he has been permitted, while writing in Rome of the history of Rome's struggles and sufferings, to witness their only possible and natural conclusion, the "new birth of a people of free citizens."

Contents of the Journals.

Von Sybel's Historische Zeitschrift, part iv., contains a description by Lipsius of Irenaeus' position in the development of the Church System; and an account of the Hanseatic League's factory at Bruges (in England privileges were granted to the merchants of Cologne, the "homines Imperatoris," as early as Aethelred's time), which consolidated the privileges previously granted to German merchants.—A notice follows of the question whether Copernicus is more fairly regarded as a Pole or as a German, and a summary of the German and French books on the late war.—Among the shorter reviews are one of Monod's book on Gregory of Tours, whose genuinely barbarous Latin has yet to be restored from the MSS.; and one of Haddan and Stubbs' *Councils of Great Britain and Ireland*, which is highly praised by Pauli.

New Publications.

Newman, J. H. Historical Sketches. (The Turks in their relation to Europe; M. T. Cicero; Apollonius of Tyana; Primitive Christianity.) Pickering.

Tessier, J. L'Amiral Coligny. Étude historique. Paris: Sandoz et Fischbacher.

Philology.

Tituli Statuariorum Sculptorumque Graecorum, cum Prolegomenis. G. Hirschfeld. Berlin, 1871.

What with the spread of casts, careful engravings and photographs, and what with important discoveries of recent years, like that of the Mausoleum at Halikarnassos, and the monuments of Xanthos, in Lycia, a certain standard of appreciation has now been pretty generally arrived at with respect to the great masters of Greek sculpture, from Pheidias downwards, in merit and in time. As far as they are concerned, little more can be done at present except to correct details in the estimate already formed, and by careful and minute examinations of such of their works as exist to bring the proper services of each artist into such a light that we may be able to realise the manner and rate of the decline. As regards the forerunners of Pheidias, materials are more scanty and opinions more divided; but, meanwhile, it seems to be felt that the best way of coming to a just judgment on their respective merits is by this same method of examining closely the technical and artistic details

of such early works as exist, and comparing the results with the written records that remain.

One of the consequences of this moderate temperament of criticism, which now takes the place of the old familiar platitudes, is an extraordinary assiduity in the collection of every scrap of ancient record touching artists and works of art, whether handed down by writers or left by artists themselves upon their works. In proof of this it will be sufficient to refer to the various publications of learned societies, such as those of Rome and Berlin, to Overbeck's *Antike Schriftquellen* (1868), and to the work now before us, the purpose of which is, first, to give a complete list of the known inscriptions placed by Greek sculptors on their works, and, secondly, to present such considerations as arise from a thorough comparison of the same. On comparing them geographically, we see where the principal centres of the art were, and on comparing them chronologically, we see how these centres moved from time to time, how the art of sculpture in the round, as opposed to relief, which had long been practised, took first footing in the islands of Crete, Samos, Chios, Naxos, and Aegina, how, after flourishing among the Dorians in Crete, it passed over to their kindred in the Peloponnesian towns of Sikyon, Corinth, and Argos, and how, finally, after being taken up by the Ionians, it reached its culmination in the works of Pheidias at Athens and Olympia. The chronological arrangement, however, except in the case of early inscriptions, where the form of the letters alone is almost sufficient to determine the date, is often beset with difficulties, and opens up, among other questions, one of considerable interest, if for no other reason than the quantity of discussion it has already raised. It is now, indeed, generally accepted that, in using the verb ποιεῖν, the early sculptors, from Olymp. 40–60, chose the imperfect tense, as Θαρύμαχος ἐποίει, that from Olymp. 70–158 the rule was to use the aorist ἐποίησεν, and that from Olymp. 158 downwards the imperfect again came into regular use. But in the times of Winckelmann, Lessing, Letronne, and R. Rochette, when almost the only artists' inscriptions known were such as had been found in Italy, and before the distinction had been sharply drawn between archaic and what is called archaistic work, there was not enough evidence to show that both tenses had not always been concurrent; that, in fact, the later use of the imperfect was simply an archaicism. The difficulty was complicated by an unhappy statement of Pliny (*N. H.* § 26) that Greek artists, as if from a modest sense of incompleteness in their works, generally employed in inscribing them the equivalent for *faciebat*, and that he was not aware of more than three instances of the equivalent for *fecit*. These instances not being produced, it was open to assume that his equivalent for *fecit* might as well have been the aorist as the perfect tense of ποιεῖν, though the latter seemed to suit the drift of the context better, and to be justified by its absence from inscriptions. The aorist ἐποίησεν was certainly the usual equivalent for *fecit*, and those who maintained it to be the true interpretation in this case pointed confidently to the rarity of that tense in the inscriptions then known, and supposed Pliny to have spoken loosely from personal observation of the inscriptions around him. Whatever may have been the meaning he attached to *fecit*, it is now clear that he was entirely wrong in saying that Greek artists in the time of "Apelles and Polycletus" systematically employed the imperfect. Not by way of excuse, but as a means of accounting for his statement, it should be remembered that not only was ἐποίει in constant use among the later Greek artists in Italy, but that wealthy Romans who had carried off masterpieces of sculpture from Greece, leaving the bases behind as cumbrous material, would naturally, in having fresh inscriptions put on, which they were zealous in doing, use the form current in their day.

While claiming, on this and several other interesting questions, to have done little more than to have stated clearly the results of researches made by others, Dr. Hirschfeld comes forward with a new and original theory concerning the custom of Greek artists in adding their father's name to their own, as Λύκιος ὁ Μύρωνος. It is in itself probable that in ancient times a son followed the profession of his father even more frequently than now, and this is not unlikely to have been especially the case among artists, in whom zeal for their profession has always been a marked characteristic. It is also probable that an outsider who could force his way in such a profession would be conscious of rare talent, and endowed with sufficient vigour to raise him to eminence. As compared with these probabilities, we have the facts that the names of the fathers of Myron, Polykleitos, Alkamenes, and Agorakritos, all celebrated artists, are unknown; that, out of seventy-four instances in which the name of a sculptor's father occurs in inscriptions, it is thirty times the name of an artist known from other sources; that, in the inferior art of gem-engraving, out of about twenty indisputably genuine engravers' names, the only instance which records the name of the artist's father happens to be that of the well-known Dioskourides: while in the art of vase-painting and vase-making we find, out of about seventy artists, only four instances of the father's name being added, and of these, three were distinguished in the same profession. Relying on these facts, Dr. Hirschfeld boldly lays it down as a law that an artist did not append his father's name unless his father had been at the same time his master and instructor. Unfortunately for the utility of this law, it has to be admitted, on the example of Praxiteles, that artists who were sons of artists did not in all cases add their father's name, so that Myron and the other three sculptors mentioned with him above may have been guilty of filial disrespect, rather than entitled to the praise of having made their own way in their profession. Still, this substantial advantage would be gained, that the list of ancient sculptors would be increased by forty-four. Without accepting the theory as completely established, we would not for a moment withhold from Dr. Hirschfeld the praise which he has most undoubtedly earned by the thoroughness, clearness, and modesty of his work, the utility of which will be readily recognised by those who are seriously occupied with the history of Greek art.

Alexander S. Murray.

Researches in Furtherance of Assyrian Archaeology. [*Ricerche per lo Studio dell' Antichità assira.*] By Felice Finzi. Turin: Loescher.

The premature death of its young and gifted author makes the review of this work a melancholy task. The wide reading and linguistic knowledge of Professor Finzi show how much he might have done for Assyrian studies, had his life been spared. The book falls into three divisions. The first consists of an introduction, mostly historical, originally written as an independent production. The statements contained in it cannot always be trusted; and we are sorry to find the insanity of Nebuchadnezzar alleged to be referred to in his standard inscription, and the accuracy of the Assyrian canon impeached by the assumption of a forty-years' break to make way for a Pul whom the inscriptions declare identical with Tiglath-Pileser. The second part of the book is geographical. It will be found useful; but many of the comparisons made by the author, in utter disregard of pho-

netic similarity, will be questioned by most readers. A chapter on ethnology is added, as well as some interesting remarks on home and foreign products. The Accadian name of the horse, however, is not *satra* (which the writer compares with סוס !), but *kurra*. This signifies the animal of the Elamite "mountains," or "the east," and may denote the original home of the Babylonian horse, just as the camel was the beast of "the sea" (*a-abba*), or as *gut*, "the ox," seems connected with Guti on the west.* The last section of the volume deals with the mythology, and is the most valuable part of the work.

The book must be read with caution, for, learned and suggestive as it is, there is much in it that is hasty, much that is questionable, much that is positively erroneous. This, however, is inevitable in such tentative studies; but we must regret the small regard that is paid to philological laws in the comparison of words. The ethnological views are no doubt right in the main, though we should altogether demur to the early and important presence of an Aryan element in Babylonia, which is assumed throughout. It may seem ungracious to advert to the misprints which abound in almost every page, especially as the forbearance of the reader is requested for them in the preface. They are too numerous, however, not only in the Assyrian, but in Arabic, Hebrew, Greek, Latin, Turkish, German, English, and Italian words, to be passed over, since they materially detract from the value of the volume. We hope that they will be corrected in a future edition by some competent hand. Death has deprived us of the author himself, and, though we trust that there are others in Italy who will take up the work which he has had to lay down, there are none from whom we could have expected more, or whom science could less have afforded to spare.

A. H. Sayce.

* It was also called *khar* (*W. A. I.* iii. 68, 2, 64), which may possibly be an Accadian attempt to pronounce *Akharru*, the Semitic name of Phoenicia, or the "West."

Contents of the Journals.

Journal Asiatique, No. 73.—Was Jerusalem taken by the army of the Calif of Egypt in 1096 or in 1098? [M. Defrémery shows that the former date is inconsistent with Kemâl-eddin's narrative of the events which took place in Syria and Palestine between the death of the Sultan Tutuch and the arrival of the Christians before Antioch.]—Royal Chronicle of Cambodia, translated, with remarks, by M. F. Garnier.—Topographical and archaeological results of the excavations undertaken at Jerusalem by the Palestine Exploration Fund, by M. Clermont-Ganneau.—The standard of the Assyrian measures fixed by the cuneiform texts [to be continued], by M. Oppert. [An admirable paper.]—A stele of the temple of Herod (discovered by M. Ganneau), by M. J. Derenbourg. [Shows, *inter alia*, that the "fatal consequences" of the intrusion of a pagan spoken of in the latter part of the inscription refer, not to a judicial sentence, but to a kind of nemesis pursuing the offender.]—Weber on the Saptaçatakam of Hâla, rev. by G. Garrez.—Letter to the editor, by Mme. Grimblot. [Corrects some misapprehensions, and communicates some English translations of Pali texts by Mr. Gogerly.]—Latest Syriac publications of Dr. Wright, rev. by M. l'abbé Martin. [It seems that there is a MS. of the Acts of St. Philip at Paris, which contains a more ancient text than that which is given by Dr. Wright. The variants, however, are not always very important. The Catalogue of the Syriac MSS. of the British Museum is praised for its exactitude and good classification. A longer notice, supplementary to M. Martin's previous essay on *James of Edessa and the Syriac Vowels*, is given of the fragments of that author's Syriac grammar, printed by Dr. Wright (cf. *Academy*, vol. ii. p. 447), which "are destined to make an epoch in Syriac studies," and "give a much more favourable idea of Jacob's grammatical lucubrations than his letter to George of Sarug, and his treatise on the points have as yet done."]—Note on the chapter of the *Farhang-i-Djchangiri*, relative to dactylonomy, by S. Guyard. [Adopts Mr. Palmer's explanation of a passage in Firdusi; see *Journal of Philology*, vol. i. No. 4, &c.]

Archaeologia Cambrensis, October.—Chevalier Lloyd and G. T. C.'s articles are valuable as containing many Welsh proper names. Professor Evan's Studies in Cymric philology have several brilliant points, but the subjects he touches require a more thorough treatment. Ferguson fails to make it clear how he reads the Bridell Ogham. We miss Stephens in this number—neither he nor the editor should pay any attention to the barking of enthusiasts.

Revue Celtique, Nos. 3 and 4 in one (December 1871 to August 1872).—Corrected readings from Gaulish coins, by A. de Barthélemy.—An article by Pictet on DRU in the Celtic names of rivers. [Not exhaustive.]—Bulliott shows the *dea Bibracte* to have been a fountain divinity of Mont Beuvray.—D'Arbois de Jubainville's article on the influence of Gaulish on Merovingian Latin is highly interesting: French *mon*, *ton*, *son*, owe their special form to Gaulish.—A useful list of O. Cornish names by Stokes.—The Luxembourg Folio, re-edited by Rhŷs, new readings and explanations of the Welsh glosses, curious specimens of pious Latin of the style of Gildas' *Lorica*.—Valuable addenda to Welsh bibliography, by Evans.—Variants of Lagadeuc's Catholicon, by Stokes.—Breton proverbs, by Sauvé.—Breton traditions, &c., by Le Men.—The true and falsified versions of Lobineau's history of Britanny contrasted, by Levot.—Among the miscellaneous contents of the volume, D'Arbois de Jubainville points out some of the grave inaccuracies of the *Gram. Celtica* (second edition), which owe their origin to Ebel's not having consulted an improved edition of the Cartulaire de Redon, and taken into account the readings of Gaulish coins.

Zeitschrift für Deutsche Philologie, iv. 1.—J. Harczyk: Zu Lamprecht's Alexander. [Shows by a comparison with the old French original that the Vorau, and not, as was previously assumed, the Strassburg MS., gives the earlier text.]—Geschichte der deutschen Litteratur, aus W. Wackernagel's Nachlass. [Fragment in continuation of the well-known work; sketches the general characteristics of the seventeenth century.]—J. W. Schulte: Zum Heliand. [The *Praefatio* is a sixteenth-century forgery. Opposes the theory of Behringer that the *Heliand* was based on Tatian's Gospel-harmony.] F. Bauer: Müssiggenger. [A special class of *Bürger*, distinguished from the *Handwerker* by not belonging to any guild.] Schlangen- und Krötenjagen. By the same. [Account of a heathen custom still prevalent in Baden.]—L. Meyer: Zur *Germania* des Tacitus. [Notes on doubtful passages, with criticisms of previous explanations.]

New Publications.

Catulli Veronensis Carmina Selecta sec. recog. R. Ellis. Oxonii: Typ. Clarend.

De Tassy, Garcin. Rhétorique et Prosodie des Langues de l'Orient musulman. Seconde édition revue, corrigée et augmentée. Paris: Maisonneuve.

Dieterici, F. Die Lehre von der Weltseele bei den Arabern im X. Jahrhundert. Leipzig: Hinrichs.

Hartel, L. Eutropius u. Paulus Diaconus. Wien: Gerold's Sohn.

Kenner, F. Ueber eine griechische Inschrift aus Erythreae. Gerold's Sohn.

Lucili, C. Saturarum Reliquiae. Emend. et adnot. Luc. Müller. Accedunt Acci (praeter scaenica) et Suei carminum reliquiae. Leipzig: Teubner.

Mayor, J. E. B. Thirteen Satires of Juvenal; with a Commentary. Second edition, enlarged. Part II. Macmillan.

Müller, A. Griechische Philosophen in der arab. Ueberlieferung. Halle: Waisenhaus.

Murray, A. S. Manual of Mythology, founded on Petiscus, Preller, and Welcker. With plates. Asher.

Nettleship, H. The True Aim of Classical Education. Harrow: Crossley and Clarke.

Nizard, C. Étude sur le Langage populaire ou patois de Paris et de sa banlieue. Paris: Lib. Franck.

Pfizmaier, A. Gedichte aus der Sammlung der zehntausend Blätter. Wien: Gerold's Sohn.

Riddarasögur, Parcevals Saga, Valvers Páttr, Ivents Saga, Mirmans Saga; zum ersten Male herausgegeben und mit einer literarhistorischen Einleitung versehen von Dr. Eugen Kölbing. Strassburg: Karl Trübner. (London: Trübner).

Simcox, G. A. and W. H. Demosthenes and Aeschines on the Crown. Clarendon Press.

Vahlen, T. Aristotelische Aufsätze. Wien: Gerold's Sohn.

Westphal, R. Die Verbalflexion der lateinischen Sprache. Jena: Costenoble.

ERRATA IN No. 61.

Page 457, col. 2, line 30, *dele* "the first part."
" 460 " " " 13 from foot, for "Cheroth" read "Chereth."

With reference to paragraph 2, col. 2, page 457, it should be noticed that there are three of the receipts referred to; see, for the third, the preface to Wright's *Catalogue*, p. x, foll.

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